

NATIONAL STRATEGY
for Smart
Specialization
ALBANIA
2025-2030

Acknowledgements

We would like to extend our sincere gratitude to the European Commission for their invaluable support in the development of this strategy.

We extend our heartfelt thanks to all the public and private sector institutions and organizations within the Republic of Albania for their unwavering dedication and substantial contributions towards the development of the Smart Specialization Strategy (S3). We are also profoundly grateful to the Joint Research Centre of the European Commission for their consistent engagement and active participation.

*The finalization of S3, a complex and comprehensive process involving numerous national institutions, would not have been possible without the support and coordination of Deputy Prime Minister **Mrs. Belinda Balluku**, the head of the Interministerial Committee of S3, to whom we extend our special thanks.*

*Additionally, the unwavering commitment and expertise of the Smart Specialization National Team have been crucial for finalizing the Smart Specialization Strategy (S3). Their deep insights and comprehensive understanding of local dynamics have been fundamental in shaping a strategy that is both ambitious and attuned to Albania's unique developmental needs and aspirations. Special thanks go to the S3 core team: **Ass. Prof. Linda Pustina** - Head of the S3 Team since the beginning of this process in Albania, whose passion and professionalism have been instrumental in contributing to and pushing forward the process by coordinating with all relevant institutions and partners; **Dr. Florensa Haxhi** - Lead Expert involved especially in strategy and action plan drafting; and **Mr. Arben Shkodra** - representing the private sector and coordinating with stakeholders during the entire process, with a particular focus during the Entrepreneurial Discovery Process (EDP) phase. Their ongoing participation underscores a commitment to ensuring the successful implementation and sustainability of the S3 initiatives.*

Special thanks go to national and international institutions/organizations that have contributed to the development of this strategy in different phases over the years:



AIC Albanian Investment Corporation



ETF Working together Learning for life
European Training Foundation



POLICY ANSWERS
RSI POLICY making, Implementation AND Support in the WEStERn BalkanS



EU4INNOVATION
European Union, Sweden, Sverige

Introduction

In recent years, countries and regions in the European Union (EU) have developed Smart Specialization Strategies (S3) as a new tool for boosting innovation and regional development¹. The S3 approach, which is gaining increasing interest worldwide, represents a place-based innovation policy concept that seeks to identify promising areas, referred as priority domains, for public and private intervention in terms of promising innovation niches and domains where knowledge-based value-added can be increased. It stresses the potential of cross-sectoral linkages, besides traditional industries and promotes diversification on the basis of these linkages.

Being a participatory process, the priority domains are not defined top-down by policymakers alone, but rather agreed through a comprehensive dialogue between the stakeholders of the territory, called the Entrepreneurial Discovery Process (EDP), that includes policymakers from different government ministries and agencies, private-sector stakeholders, academia, and civil society or the so-called “Quadruple Helix”.

¹ This section is based on: https://neighbourhood-enlargement.ec.europa.eu/system/files/2022-01/C_2021_9730_F1_ANNEX_EN_V1_P1_1674689.PDF

Such priority domains are identified based on the economic, innovation, and scientific strengths of the country, expert knowledge, and stakeholder dialogue, the latter being one of the main features of the strategic process.

The introduction of S3 to the Western Balkans has to be seen within the context of the EU's enlargement strategy that provides an accession perspective and envisages support for several policy areas including socio-economic development. As such, S3 became part of the WB6 regional agenda, as part of the Smart Growth pillar in MAP REA 2017-2020 and part of the Common Regional Market Action Plan 2021-2024 in the context of the Berlin Process, and of the EU Agenda for the Western Balkans 2021-2027. S3 is also part of the Chapter 20 “Enterprise and Industrial Policy” and 25 “Science and research” EU Acquis in the framework of Albania EU integration.

To support Western Balkan economies in crafting their Smart Specialization Strategies (S3), the Joint Research Centre (JRC) of the European Commission has developed a comprehensive S3 Framework. This framework delineates all the necessary steps from the initial design to the final draft of the strategic document, serving as a guideline for implementation. Unlike typical regional or sectoral strategies, this specialized strategy employs a specific methodology that has been approved by the JRC and the European Commission. Throughout the development process, the European Commission has supplied essential expertise, conducted targeted training sessions, and meticulously monitored and validated each phase of the strategy framework.

Nowadays, a strong focus on innovation policies is even more urgent due to the growing need of addressing the societal challenges of the last decade. Albania is at a crossroads, facing a world that's changing faster than ever. It's a time full of challenges, but also full of opportunities. Recognizing the need to keep pace and forge ahead, Albania embarked on a journey of smart specialization back in 2016 with the first event titled “National Event on Smart Specialization” supported by TAIEX. This initiative was officially supported by TAIEX and registered in the S3 platform of the European Commission's Joint Research Centre (JRC) in 2017.

Recognizing the importance of the Smart Specialization Strategy (S3) for the Albanian government, an Inter-ministerial Committee for S3 was established by Prime Minister's Order, supported by the S3 National Team and led by Deputy Prime Minister Ms. Belinda Balluku (see Annex 1). The Committee is tasked with monitoring, drafting, and implementing the S3 Strategy. Its main duties include ensuring progress in drafting and implementing S3, promoting high-level institutional coordination, examining the final draft of S3 and related documents, recommending necessary legal measures, coordinating with other related initiatives, and promoting financial planning for S3 measures. The Committee conducts thematic discussions to support the drafting and implementation of S3.

The National S3 Team (S3T) is a technical-level structure composed of representatives from various institutions/organizations, reporting to the Deputy Prime Minister and directly contributing to the strategy development process by gathering and analyzing data, defining the vision, strategic objectives, and specific action plan, and ensuring the implementation of all components specified in the activity plan (roadmap). Key tasks include drafting the strategy, evaluating and revising legal bases and guidelines, coordinating with international and local partners, and participating in national and international

meetings related to smart specialization. The Head of the S3T is responsible for communications, work organization, and reporting, and may engage experts and set up technical working groups. The S3T invites domestic and foreign experts, civil society, and other stakeholders to participate in meetings as needed for the strategy drafting process.

The Albanian S3T developed a national S3 Roadmap based on the JRC Framework, maintaining a regional perspective. Positioned as an umbrella strategy, S3 is situated between the National Strategy for Development and Integration (NSDI) and sectorial strategies, meaning that sectorial strategies will refer to and adapt to both S3 and NSDI. Following the roadmap, Albania completed the initial context analysis through quantitative and qualitative mapping of the country's economic, innovative, scientific, and technological potential, identifying priority areas for further exploration during the Entrepreneurial Discovery Process (EDP) phase. Since its inception, Albania has made remarkable progress in shaping its S3 framework, guided by the principles outlined by the JRC and the European Commission. The establishment of a dedicated S3 team in 2018, which carefully developed an S3 roadmap aligned with the JRC framework, was an important step toward in this process. This roadmap emphasized a regional perspective, positioning S3 as a strategic umbrella bridging the National Strategy for Development and Integration (NSDI) and sectorial strategies.

This process not only complements but also amplifies the national strategy's goals, fostering an environment conducive to innovation and entrepreneurship. It underscores the vital role of innovation in Albania's economic growth and aligns with the European Union's objectives, reflecting Albania's EU aspirations. The strategy supports green and digital advancements per EU guidelines, guiding strategic investments to address challenges like retaining skilled professionals, enhancing business acumen, and nurturing a startup-friendly environment. It builds on existing frameworks to support small businesses, foster innovation, and develop skills for a knowledge-based society. Emphasizing digital services, transparent governance, and technology-driven economic support, the strategy's development was driven by the Entrepreneurial Discovery Process (EDP). This inclusive, bottom-up approach engaged stakeholders from government, academia, the private sector, and civil society to define a strategic vision and transformative activities, ensuring the strategy meets Albania's unique needs and economic potential.

The S3 is underpinned by several overarching priorities that seek to transform Albania into a hub of innovation and sustainable development. Among those 3 main priority domain has been identified:

- **Renewable Energy and Natural Resources:** This domain targets the establishment of Albania as a leader in renewable energy and sustainable resource management. It aims to integrate environmental sustainability with economic growth, focusing on technologies and practices that reduce environmental impact while enhancing energy security. This sector's development is crucial for Albania's future, positioning it as a responsible actor on the global stage committed to combating climate change.
- **Sustainable and Diversified Tourism:** By capitalizing on its unique cultural and natural landscapes, Albania seeks to redefine itself as a destination for sustainable tourism. This priority aims to attract a global audience while preserving the ecological and historical integrity of its sites. The

strategy supports infrastructure improvements, marketing efforts, and community-based projects that enhance visitor experiences and promote local economic development.

· **Healthy and Sustainable Food Chain:** Emphasizing the shift towards organic farming and sustainable food production, this domain aligns with global trends towards health and sustainability. It supports the adoption of practices that ensure food safety, enhance food security, and reduce the environmental footprint of agriculture. By fostering this sector, Albania can improve the well-being of its population and create a model for sustainable agricultural practices in the region.

To enable the development of priority sectors, it is essential to undertake measures and invest in several areas. These actions are fundamental steps for achieving the objectives of these priority sectors:

- **Human Capital Development:** focusing on investing in education and training programs that enhance skills at all levels, particularly in STEM and S3 priority areas, and promoting lifelong learning to address the reskilling and upskilling needed for the circular economy and AI advancements will support preparing the workforce necessary for future challenges. By fostering a culture of innovation in schools, engaging the diaspora, and providing incentives for skilled professionals to return, the strategy will aim to retain talent and prevent emigration.
- **Support Research & Innovation:** by creating a collaborative environment between academia, businesses, and government. Strengthening agreements for internships, dual VET schools, and innovation fairs is essential. Enhancing technology transfer processes by developing innovation hubs, tech parks, and clusters, which facilitate cooperation and the dissemination of technological advancements across various sectors. Encouraging a culture of innovation, particularly among the youth, will keep our brightest minds in Albania and attract global talents. This approach is key to maintaining a competitive edge in a rapidly changing world.
- **Supporting Business and Innovation Environment:** fostering a business-friendly climate, emphasizing simplified procedures and regulatory improvements, foreseeing incentives for S3 priority domains, ensuring alignment with EU standards. Improving access to finance and credit and financial support, along with supporting public R&I funding through informative platforms and strategic communication, are key components. Encouraging sustainable practices and digital solutions across sectors, supported by favorable fiscal policies and regulatory frameworks, will attract investment and drive economic growth.
- **Digitalization and Connectivity:** Accelerating the digital transformation of the public and private sectors and improve connectivity. This encompasses expanding digital infrastructure, enhancing internet accessibility, and promoting the use of digital technologies across various industries to improve efficiency and connectivity, including AI and machine learning.

The S3 strategy is not just a roadmap but a commitment to a future where knowledge, innovation, and sustainability lead Albania's development. This approach aims to keep Albania agile, competitive, and visionary amid rapid global changes. In the following sections, we will explore the core of the National S3 Strategy, focusing on key sectors vital to Albania's growth and the areas identified by the Entrepreneurial Discovery Process. Spanning 2025 to 2030, Albania's National S3 Strategy will guide the nation through current challenges, laying a robust foundation for future prosperity and growth.

The following sections will provide a detailed exploration of the National S3 Strategy, emphasizing the key initiatives and priority domains vital for Albania's future development. These sections will highlight the innovative pathways identified through the Entrepreneurial Discovery Process. Spanning from 2025 to 2030, the S3 Strategy is designed to address current challenges and guide Albania towards a prosperous and thriving future.

Contents

1. Global Context and Trends
2. The National Strategic Framework
3. EU Policy and Instruments
4. Regional Context
5. The Smart Specialization Process in Albania
6. The Mapping of Economic Potential
7. The Entrepreneurial Discovery Process
8. Strategic sectors and priority domains
9. Action Plan
10. Financial Framework
11. Governance
12. Monitoring and Evaluation
13. Communicating S3

Annex 1 – Composition of Interministerial Committee and S3 National

Team Annex 2 - Mapping of economic potential

Annex 3 – The EDP Process

Annex 4 - The Regional Workshops

Annex 5 - Action Plan

ANNEX 6 – Communication Plan

ANNEX 7 – List of abbreviations

1. Global Context and Trends

In today's rapidly evolving global landscape, the European Commission has identified 14 Global Megatrends that are reshaping the world as we know it. These trends are powerful, transformative forces that are redefining how societies and economies operate, influencing everything from technological advancements to demographic shifts². They present both challenges and opportunities, not just for Europe but for nations across the globe, including Albania. These Megatrends are part of an ongoing effort to monitor and analyze long-term trends that have significant impact.

In policy-making and strategic planning contexts, including Albania's, these trends offer a framework to anticipate future challenges and opportunities, thereby shaping long-term strategic responses. The European Commission plays a crucial role in guiding not only EU policies but also influencing the strategic planning efforts of member states and candidate countries. This support is essential for aligning national strategies with broader EU objectives and ensuring coherent policy development across the region.

As an initial step in the prioritization process, a long list of priorities has been compiled to identify socio-economic-technological areas that may present opportunities or challenges for Albania. This compilation takes into account global technological, social, and economic megatrends, relevant domestic policy strategies, and specialization trends of EU member states. Topics such as climate change and the energy transition, the digitization of processes and products, changes in the nature of work and education systems, demographic balances and migrations, and the impact of urbanization are the main megatrends influencing Albania's socio-economic landscape.

Trends in AI

Artificial Intelligence (AI) is advancing rapidly, reshaping industries and daily life. One significant trend is the enhancement of Natural Language Processing (NLP), making AI systems better at understanding and generating human language, which is crucial for applications like chatbots and translation services. In computer vision, AI now excels at analyzing images and videos, with notable impacts on healthcare diagnostics, autonomous vehicles, and security. Another crucial trend is the rise of Edge AI, which processes data locally on devices, reducing latency and improving privacy. Quantum computing also holds potential for solving problems beyond classical computing's capabilities, with significant implications for AI development. Additionally, AI is making strides in agriculture, optimizing crop yields, monitoring soil health, and automating farming processes to increase efficiency and sustainability. Furthermore, AI is revolutionizing healthcare with advancements in diagnostics and personalized treatments, accelerating drug discovery, and enhancing patient care. In the finance sector, AI is being leveraged for fraud detection, risk management, and high-frequency trading, resulting in more secure and efficient financial systems, while in transportation, AI is driving advancements in autonomous vehicles, optimizing traffic flow, and predicting maintenance needs to ensure smoother and safer travel. Moreover, AI-driven predictive

² This section is based on https://knowledge4policy.ec.europa.eu/foresight/tool/megatrends-hub_en

analytics are becoming a cornerstone of business strategies, allowing companies to analyze vast amounts of data to forecast trends and make informed decisions.

As these technologies develop, ethics in AI is gaining increased attention. Addressing biases in AI models to ensure fairness across demographics is critical. Transparency and explainability are essential for building trust, as users need to understand AI's decision-making processes. Privacy concerns are paramount, necessitating robust data security and compliance with regulations like GDPR. Moreover, the impact of AI on employment is significant, prompting efforts to retrain workers displaced by automation.

Education initiatives are also focusing on integrating AI ethics, ensuring that future professionals are equipped with the knowledge to navigate the ethical implications of AI technologies since balancing innovation with ethical considerations is crucial to ensure its benefits are widely shared. Additionally, AI is being leveraged for social good, addressing challenges like climate change and healthcare to achieve Sustainable Development Goals.

Climate change³

The world faces numerous environmental challenges driven by human activities. Excessive greenhouse gas emissions from burning fossil fuels significantly contribute to global warming. Deforestation for agriculture and urban development exacerbates this by reducing the number of trees that absorb carbon dioxide.

Pollution from industrial activities, waste disposal, and chemical use contaminates air, water, and soil, impacting ecosystems and human health. Overuse of natural resources leads to depletion and environmental degradation. The loss of biodiversity due to habitat destruction, pollution, and overexploitation threatens ecosystem stability and human survival. Climate-related natural disasters, such as hurricanes, floods, droughts, and wildfires, are becoming more frequent and severe.

Rising global temperatures are melting polar ice caps and glaciers, contributing to sea-level rise and endangering coastal communities. Ocean acidification harms marine life, particularly corals and shellfish. These changes disrupt agricultural productivity and water availability, impacting food security and increasing water scarcity. Climate-induced migration is on the rise, leading to urban pressures and potential conflicts over resources.

Albania is addressing these challenges by signing the Paris Agreement in 2016, pledging to reduce greenhouse gas emissions and adapt to climate impacts. Albania's National Climate Change Strategy and Climate Change Law mandate integrating climate measures into national legislation. The National Energy Strategy 2018-2030 aims for a 15% improvement in energy efficiency, and the National Energy and Climate

³ "The Fourth National Communication of Albania on Climate Change" - *Ministry of Tourism and Environment & United Nations Development Program. (2022). Republic of Albania: Enabling activities for the preparation of the fourth national communication and the first biennial update report under the United Nations Framework Convention on Climate Change. Global Environment Facility.* <https://www.undp.org/albania/publications/fourth-national-communication-albania-climate-change>

Plan (NECP) 2022-2030 supports these goals. Albania also participates in the LIFE Programme and the Sofia Declaration on the Green Agenda for the Western Balkans, promoting environmental sustainability.

Addressing these global challenges requires urgent, coordinated efforts to mitigate climate change, adapt to its impacts, and protect the environment for future generations.

Energy Efficiency

Energy efficiency is emerging as a pivotal global focus, driven by the urgent need to combat climate change and reduce carbon footprints. Innovations in this field are rapidly advancing, with smart grids leading the way in transforming electricity networks. These grids use digital technology to manage and monitor electricity flow efficiently, enhancing the reliability and sustainability of energy distribution. Energy-efficient appliances are becoming the norm, with smart thermostats, LED lighting, and advanced HVAC systems reducing energy consumption significantly. Sustainable building designs are also gaining traction, incorporating green building practices such as improved insulation, energy-efficient windows, and renewable energy systems to reduce the environmental impact of structures. The global push for renewable energy sources, including solar and wind power, is being bolstered by significant advancements in energy storage technologies. These innovations ensure that energy generated from renewable sources can be stored and used efficiently, even when the sun isn't shining or the wind isn't blowing. Worldwide, policies promoting energy efficiency are being implemented, supported by substantial investments in research and development aimed at creating more sustainable energy solutions. This global shift towards energy efficiency is not only helping to mitigate climate change but also driving economic growth through the creation of green jobs and industries.

Trends in Food

The global food sector is undergoing transformative changes driven by technology, sustainability, and evolving consumer preferences. Precision agriculture is at the forefront of this transformation, utilizing AI, drones, and the Internet of Things (IoT) to optimize crop yields and manage resources more efficiently. These technologies enable farmers to monitor soil health, predict weather patterns, and manage pest control in real-time, resulting in more sustainable farming practices and higher productivity. There is a significant global shift towards plant-based and lab-grown foods, driven by the increasing demand for sustainable and ethical consumption. These alternatives are not only reducing the environmental impact of food production but also addressing issues related to animal welfare and food security. Consumers around the world are becoming more conscious of their food choices, leading to a surge in the popularity of plant-based diets and meat substitutes. Additionally, blockchain technology is enhancing food traceability and safety, ensuring transparency from farm to table. This technology allows consumers to track the journey of their food, verifying its origin, and ensuring it meets safety standards. This increased transparency is building consumer trust and promoting more sustainable and ethical food production practices globally.

Trends in Competitiveness

In the global economy, competitiveness is increasingly influenced by digital transformation, innovation, and sustainability. Countries and businesses are investing heavily in technology to maintain their competitive edge. The rapid adoption of advanced technologies such as 5G, blockchain, and AI is revolutionizing industries, enhancing efficiency, and creating new opportunities for growth. Digital skills are becoming essential in the workforce, with a strong emphasis on continuous learning and adaptability. The rise of remote work and the gig economy is reshaping labor markets worldwide, emphasizing the need for flexibility and lifelong learning. Businesses are focusing on upskilling their employees to keep pace with technological advancements and remain competitive in the global market. Sustainable practices are also becoming a key competitive factor, as consumers and investors increasingly prioritize environmentally responsible companies. Businesses that adopt sustainable practices, such as reducing carbon emissions and investing in renewable energy, are gaining a competitive advantage. This global shift towards sustainability is driving innovation and creating new markets for green products and services.

Education systems

The education sector is undergoing significant transformation, driven by several key trends. Digital learning and educational technology (EdTech) are revolutionizing how students learn, with online platforms, digital resources, and educational apps offering flexible and personalized experiences. Personalized learning tailors education to individual needs, facilitated by adaptive learning technologies and data analytics, while blended learning models combine traditional classroom instruction with online learning for a more engaging and flexible educational experience. Artificial intelligence (AI) and machine learning are being utilized to develop intelligent tutoring systems, automate administrative tasks, and provide real-time feedback, creating more efficient learning environments. There's also a growing emphasis on STEM (Science, Technology, Engineering, Mathematics) and STEAM (adding Arts) education, preparing students for future careers in a technology-driven world. Alongside this, the focus on soft skills like critical thinking, creativity, communication, and collaboration is becoming more pronounced, recognizing their importance for modern workforce success.

Global citizenship education is gaining traction, aiming to develop informed and responsible global citizens by educating students about global issues, cultural awareness, and sustainability. The concept of lifelong learning emphasizes continuous education and skill development throughout an individual's life, essential in a rapidly changing job market. Inclusivity and accessibility are also key focuses, with efforts to make education more inclusive for students with disabilities and from marginalized communities using assistive technologies and inclusive teaching practices. Project-based and experiential learning, which involve real-world projects and hands-on activities, are enhancing practical experience and learning outcomes. Schools are increasingly focusing on mental health and well-being, integrating social-emotional learning (SEL) into curricula and providing mental health resources and support. Additionally, green education and sustainability practices are being incorporated to raise environmental awareness and promote stewardship.

Lastly, microcredentials and alternative certifications are becoming popular, recognizing specific skills and competencies, and providing flexible learning options that help individuals quickly adapt to changing job requirements. These trends reflect an evolving education landscape that prioritizes technological integration, personalized and lifelong learning, and a holistic approach to student development.

Digital agenda

The digital agenda is transforming economies, societies, and governance structures worldwide through several key trends. High-speed internet and mobile networks, including the rollout of 5G, are making connectivity more accessible globally, enabling advanced digital applications. Big data and analytics are revolutionizing industries by driving decision-making and innovation, while artificial intelligence (AI) and machine learning are automating processes and enhancing customer experiences. The Internet of Things (IoT) is connecting devices and sensors, transforming sectors like agriculture, healthcare, and smart cities with real-time data and intelligent systems. Cloud computing offers scalable and flexible resources, supporting remote work and collaboration without significant upfront IT investment. Digital finance, including fintech innovations and blockchain technology, is reshaping the financial landscape, increasing inclusion, and enabling new business models.

Governments are adopting digital technologies to improve public services, enhance transparency, and engage citizens through e-government initiatives. However, the rise in digitalization also brings heightened cybersecurity and data protection concerns, necessitating robust measures to maintain trust. Sustainable digital practices are gaining attention, with efforts to reduce the environmental impact of digital technologies and promote a circular economy. Digital literacy and inclusion remain global priorities, ensuring everyone has the skills and access needed to participate in the digital economy.

International collaboration is crucial for addressing challenges and leveraging opportunities, with global standards and policies helping to harmonize digital practices across borders. As these trends continue to evolve, they collectively shape a resilient and inclusive digital future.

Demographic balances and migration

The population of Albania on January 1st, 2023, is 2,761,785, experiencing a decrease of 1.1%, compared to January 1st, 2022. Recent demographic developments also show that Albania's population is shrinking and aging⁴. This is due to a low birth rate and more importantly, negative net migration. Most studies project that the demographic decline will continue. The urban population has increased from one-third in the early 1990s to an estimate of almost two-thirds (62%) in 2020 and is expected to continue to rise. The largest city is Tirana, as of January 1, 2022, occupied about 32.9% of the total population, continuing to be one of the most populous regions of the country, followed by Durrës and Fier with 10.4% and 10.0% respectively.

According to the latest Human Development Report, published in 2020 and reflecting data from 2019, Albania placed 69th among 189 countries with a Human Development Index (HDI) value of 0.795. Tirana

⁴ "The Fourth National Communication of Albania on Climate Change" - Ministry of Tourism and Environment & United Nations Development Program. (2022). Republic of Albania: Enabling activities for the preparation of the fourth national communication and the first biennial update report under the United Nations Framework Convention on Climate Change. Global Environment Facility. <https://www.undp.org/albania/publications/fourth-national-communication-albania-climate-change>

(0.820), Vlorë (0.802) and Durrës (0.802) have “very high HDI values”, followed by counties like Gjirokastrë (0.794), Korçë (0.790) with “high HDI values”.

Albania's Smart Specialization Strategy takes under consideration these global trends and challenges, from the urgent need for environmental sustainability and the transforming power of technology, to the evolving landscapes of work and education, the dynamics of population growth, and the rapid pace of urbanization. Understanding and adapting to these trends is key in shaping a sustainable and prosperous future for Albania in the global context.

Changes in the nature of work

The way work is changing is dramatically influenced by technology, the global nature of business, and economic uncertainties. Automation and new technologies are reshaping job roles and the skills required, emphasizing the importance of digital and technological capabilities. There is a critical need to adapt curricula at all levels of education and to focus on upskilling and reskilling the workforce. The COVID-19 pandemic has accelerated the trend towards remote work, altering the traditional balance between work and personal life. Initiatives like the European Green Deal are promoting sustainability in workplaces, aligning with the values of the younger generation regarding their expectations from their jobs.

Companies are increasingly prioritizing environmental initiatives and pursuing work that serves a purpose beyond profit. New trends in work organization, such as flexible hours and the expanding gig economy, are emerging. However, these modern work arrangements also present challenges, such as ensuring financial stability and maintaining a healthy work-life balance. In the future, work is expected to be viewed more as a means for personal fulfillment and a way to contribute to societal and environmental well-being. Employees are seeking employers who prioritize sustainability, and organizations driven by strong purposes are poised to thrive.

Overall, these global trends are shaping the future of industries, driving economic growth, and promoting a more sustainable and equitable world.

2. The National Strategic Framework

As the National Framework for Smart Specialization (S3) is being developed for Albania, it is worth mentioning that it is strategically aligned and correlated to a number of strategic documents described below.

National Strategy for Development and European Integration (NSDEI): The NSDEI's 2030 is the most important strategic public document in Albania, whose vision for the country is characterized by a high quality of life, strong human capital, resilient institutions, and a dynamic, regionally integrated economy.

This thoughtful design ensures that S3 doesn't just parallel NSDEI's objectives but also actively supports and enhances them.

The NSDEI for 2022-2030 aims to strengthen the integration of socio-economic and environmental targets with overall governance reforms. It represents a pivotal phase, particularly as Albania works towards European Union accession and grapples with global challenges such as the COVID-19 pandemic. The strategy underlines the commitment to EU-oriented reforms and focuses on areas like agriculture, energy, digitalization, tourism, and anti-corruption efforts, with European integration as the guiding principle.

In the context of sustainable development, Albania has demonstrated resilience and adaptability, marked by economic recovery post-pandemic, effective health service strategies, and a steady advancement towards the Sustainable Development Goals (SDGs). The focus on human rights, regional cooperation, and a variety of initiatives underlines Albania's progressive approach towards creating a more inclusive, prosperous society.

In line with the NSDEI, S3 focuses on key areas such as agriculture, energy, tourism, digitalization and human capital, pivotal to Albania's path towards European Union accession and overcoming global challenges like the COVID-19 pandemic. This alignment demonstrates Albania's commitment to sustainable development, as evidenced by its resilient economic recovery and steadfast progress toward the Sustainable Development Goals (SDGs). Moreover, S3 incorporates the principles of human rights and regional cooperation, essential for fostering a more inclusive and prosperous Albanian society.

Ultimately, the S3 is envisioned as a strategic complement to the NSDEI. Its design and alignment with the NSDEI are instrumental in crafting a future where Albanian citizens can enjoy improved living standards, inclusive economic opportunities, and closer integration with the broader European community.

Strategic alignment will be done also with other relevant sector strategies for S3 priority domains (Energy Development Strategy, Tourism Strategy, National Strategy for Agriculture and Rural Development and the cross-cutting domains strategies) - S3 will be in correlation with the strategic documents that are in the process of development related to: green transition, Digital Agenda, Climate change, Circular Economy, SME development, Export Promotion and others:

Energy Development Strategy - The Ministry of Infrastructure and Energy in Albania, in line with the National Energy Strategy (2018-2030) and Energy Community recommendations, has finalized the draft for the National Energy and Climate Plan (NECP) covering the period 2021-2030. This plan aligns with Albania's Smart Specialization Strategy (S3), particularly in advancing energy security, integrating the internal energy market, and enhancing energy efficiency. It focuses on diversifying energy sources, improving energy-saving measures, and developing smart energy technologies. The NECP also prioritizes the decarbonization of the economy, aiming to reduce greenhouse gas emissions in accordance with the Paris Agreement's Nationally Determined Contributions. Furthermore, it underscores the importance of research, innovation, and competitiveness in the energy sector, highlighting funding for research and development, essential for Albania's sustainable growth and European integration aspirations.

Tourism Strategy - The Albanian Ministry of Tourism and Environment is developing the 2024-2030 Tourism Strategy, emphasizing public engagement through surveys to build a comprehensive, forward-thinking platform that guides market trends and strengthens public-private sector relationships. This strategy focuses on creating elite, sustainable tourism that respects the environment. Early feedback indicates strong public support for tourism development that enhances residents' quality of life and emphasizes the importance of local community involvement in tourism decision-making. The National Tourism Development Strategy 2024-2030 is set to be finalized in the spring, aiming to foster sustainable, inclusive growth and innovation in Albania's tourism sector that fully align with the S3 strategy framework.

National Strategy for Agriculture and Rural Development - The National Strategy for Agriculture and Rural Development 2021-2027, designed by the Ministry of Agriculture and Rural Development under the Instrument for Pre-Accession Assistance (IPA), focuses on modernizing agriculture, enhancing rural development, and aligning Albania's agricultural sector with EU standards. Key elements include improving agricultural productivity, sustainable land management, diversifying rural economies, and enhancing the quality of life in rural areas. This strategy aligns with the Smart Specialization Strategy (S3) through its focus on innovation, sustainable practices, and economic diversification, contributing to Albania's overall growth and European integration objectives.

Business Investment Development Strategy (BIDS) - The Business and Investment Development Strategy (BIDS) 2021- 2027 is the central orientation of the Albanian Government for medium-term economic development focusing on SMEs and investments. The Vision of this strategy is to have a competitive Albanian economy, driven by innovation and based on knowledge, which creates new and higher-quality jobs, using the opportunities offered by digital transformation and transformation of the international value chain, with emphasis on sustainable development, European integration and regional integration.

The purpose of the policy is broken down into three objectives, such as Investment Attraction and Internationalization, SME development, Entrepreneurship and innovation, and Human capital development.

The Business and Investment Development Strategy (BIDS) 2021- 2027 aligns seamlessly with the Smart Specialization Strategy (S3) by recognizing and acknowledging the important contribution that SMEs can make - as the backbone of the economy - and startups for a more innovative and knowledge-based economy, creating quality jobs and improving the economic structure.

Education as a cross-cutting domain - National Education Strategy 2021-2026 aims at the gradual improvement of the educational system following the established priorities. According to the Strategy vision, special attention is put on Higher Education, Research and Innovation as sectors that directly influence the improvement of the educational system based on the labor market needs. The Vocational Education and Training Strategy 2023-2030 aims at improving the performance of the existing VET system from the perspective of quality of delivery and educational outcomes, effectiveness and relevance for learners (young and adult), as well as for the labor market and further education.

Digital Agenda- The Albanian Digital Agenda and Action Plan for 2022-2026 focuses on advancing digital technologies in informatics, data processing, artificial intelligence, and cybersecurity to enhance the global competitiveness of businesses, public administration, and citizens. It sets objectives for government service digitalization, cybersecurity skills development, and improving digital citizen engagement. The plan emphasizes the importance of digital transformation across all sectors, including

education, with a focus on digital skills development. Implementation will be measured by global and European indices, ensuring progress in digital policy, security, and infrastructure. This strategy signifies Albania's dedication to digital advancement for economic growth and societal well-being.

Scientific Research⁵– The approved strategy related to higher education and scientific research in Albania, known as the National Education Strategy 2021-2026, aims to provide a comprehensive vision for Albania's future. This strategic document aims to tackle significant constraints to development and enhance the quality of life through improved governance, economic growth, and social inclusion, building on previous strategies and acknowledging the current global challenges like the COVID-19 pandemic. It also emphasizes the importance of aligning with European Union standards and boosting Albania's integration into regional and global economies. The government has also approved the National Strategy for Scientific Research, Technology, and Innovation 2023-2030, which places particular emphasis on the development of education as a fundamental constitutional right and a public responsibility. Through this strategy, the aim is to create, develop, and safeguard knowledge through teaching, scientific research, the training of high-level specialists, and young scientists, in alignment with the country's development priorities, while contributing to the enhancement of democratic standards nationwide. MES supports the strategic priorities and development interests of the country, the integration of teaching with scientific research, and the promotion of international cooperation in the field of higher education, within the framework of national and regional economic, social, and cultural development.

Albania has recently approved **the National Strategy for the Development of Innovative Entrepreneurship** to boost its startup ecosystem. This initiative, led by the State Minister for Entrepreneurship and Business Climate, is based on the predefined priority domains of the Smart Specialization Strategy (S3), with high potential for innovation and economic growth, ensuring that resources are effectively allocated to areas where Albania has a competitive advantage. The startup support program within this strategy is structured in three phases: supporting initial ideas, developing prototypes with a customer base, and scaling businesses with established products and market presence. This comprehensive approach aims to foster innovation, drive economic growth, and enhance Albania's technological capabilities in strategically important sectors.

The Diaspora Strategy – The "National Strategy for the Albanian Diaspora 2021-2025" outlines a comprehensive framework for engaging the Albanian diaspora in the socio-economic development of Albania. It recognizes the diaspora as a vital asset, aiming to strengthen and facilitate Albania's relationships with host countries and enhance the diaspora's role in Albania's development. The strategy focuses on leveraging the diaspora's potential through better organization and integration, improving educational and cultural ties, and utilizing remittances and investments more effectively. It also aims to protect the rights of Albanian communities abroad while encouraging their participation in Albania's economic and social spheres through targeted policies and initiatives. The strategy ensures that the Albanian state adapts to global conditions and the European integration process, emphasizing a systematic, inclusive approach that includes revising previous strategies and setting a clear, actionable

⁵ National Strategy for Scientific Research, Technology, and Innovation 2023–2030 and its Implementation Action Plan (Approved by Decision of the Council of Ministers No. 542, dated 20.9.2023, and published in the Official Gazette Year 2023 – Number 139

path forward. The Albanian Diaspora Strategy aligns seamlessly with the Smart Specialization Strategy (S3) by fostering an integrated approach to socio-economic development and leveraging the diaspora's potential to contribute to Albania's innovation and economic growth.

3. EU Policy and Instruments

As Albania aligns its Smart Specialization Strategy (S3) with the overarching goal of European Union integration, it actively participates in various EU innovation-focused programs. These programs play a crucial role in shaping the S3 strategy, as they provide platforms for Albania to integrate European best practices in innovation, research, and digital transformation.

Albania's Smart Specialization strategy, aligning with European policies and financing sources, expresses the nation's dedication to building on European development principles as it engages on this path. This represents a vision, not merely a strategy, for integrating the special ecosystem into the larger framework of the European Education Area, the European Research Area, the European Innovation Area, and the Common European Market. The Smart Specialization Strategy (S3) for Albania is designed to harmonize with several key EU policies, ensuring a coordinated approach to regional development, innovation, and economic growth. Here's how S3 contributes to and aligns with some of these policies⁶:

1. The New European Innovation Agenda: S3 aims to position Albania at the forefront of deep tech innovation and start-ups, developing new technologies to tackle societal challenges and enhancing market access.
2. The European Industrial Policy: Through S3, Albania strengthens its industrial competitiveness, promoting a sustainable, resilient, and digitalized economy that fosters job creation and positions its industries as accelerators of innovation and growth.
3. The European Green Deal: S3 supports the transformation of Albania into a resource-efficient economy, aligning with the EU's goals for a competitive, green economy.
4. A Europe Fit for the Digital Age: S3 facilitates Albania's digital transformation, making it conducive for businesses and contributing to achieving a climate-neutral Europe by 2050.

⁶ <https://s3platform.jrc.ec.europa.eu/>

<https://clustercollaboration.eu/eu-cluster-partnerships>

https://s3platform.jrc.ec.europa.eu/en/w/interregional-cooperation-and-smart-specialisation-a-laqqing-regions-perspective?p_l_back_url=%2Fsearch%3Fq%3DInterregional%2BCooperation%2Band%2Bsmart%2BSpecialisation%253A%2Ba%2BLaqqing%2BRegions%2BPerspective

https://s3platform.jrc.ec.europa.eu/documents/20125/263444/Vademecum_JRC_Fernando%20Merida.pdf/ed3601b7-7a04-a4e1-eca7-c3607411a9ec?version=1.1&t=1619520736009

https://s3platform.jrc.ec.europa.eu/documents/20125/263444/Vademecum_Osvaldo%20La%20Rosa_presentation_def.pdf/73a1977b-b4ec-6efe-9156-246c6b906f9d?version=1.1&t=1619520730374

5. The Credible Enlargement Perspective for the Western Balkans: S3 incorporates initiatives to boost entrepreneurship, support technology transfer, and foster the circular economy, enhancing EU engagement with the Western Balkans.
6. The Economic and Investment Plan for the Western Balkans: S3 is instrumental in spurring long-term economic recovery and regional economic integration, supporting necessary reforms for EU integration and job creation.
7. The Western Balkans Agenda on Research and Innovation and Education, Training, Youth, and Sport: enhances cooperation with the EU, focusing on smart specialization. This agenda supports not only education and training but also research, innovation, and other related areas, promoting comprehensive development and alignment with the EU's strategic priorities..
8. Common Regional Market Action Plan for 2021-2024: S3 increases the region's competitiveness and attractiveness, fostering integration with the EU single market.
9. Green Agenda for the Western Balkans: S3 aligns with the sustainable economy goals of the European Green Deal, promoting a circular economy and sustainable agricultural practices.
10. The Digital Agenda for Western Balkans: Supports the digital economy transition and enhances the benefits of digital transformation across Albania.
11. The New Growth Plan for the Western Balkans. The New Growth Plan aligns with the Smart Specialization Strategy (S3) to boost economic growth and prepare Albania for EU accession. Key areas include developing economic infrastructure and advanced digital services, improving skill development and education, promoting research and innovation, advancing technology, uplifting rural areas through sustainable agriculture, enhancing tourism and environmental preservation, and fostering renewable energy and efficient resource management. This alignment ensures a comprehensive approach to innovation, competitiveness, and sustainable development.
12. EU Strategy for the Adriatic and Ionian Region (EUSAIR): aims to support economic and social prosperity in the region. The Smart Specialization Strategy (S3) plays a pivotal role in this effort by facilitating targeted investments and fostering innovation across key sectors. By aligning with EUSAIR's objectives, S3 helps to implement specialized strategies that leverage regional strengths, enhance competitiveness, and drive sustainable development. This coordinated approach ensures that resources are effectively utilized to promote growth and socio-economic convergence in the Adriatic and Ionian region.
13. EU Agenda for Skills: S3 enhances the skills of the Albanian workforce, supporting lifelong learning and vocational education to meet labor market needs.
14. The EU Agenda for Critical Raw materials (CRM): S3 aligns with the European Critical Raw Materials Act, that aims to ensure a stable and sustainable supply of critical raw materials crucial for Europe's industries and which identifies a list of critical and strategic raw materials crucial for technologies for the green and digital transition and sets benchmarks for the strategic raw material supply chain to be reached by 2030. Measures foreseen in S3 for the period 2025-2030 support the EU's agenda to reduce dependency on single-country suppliers and strengthen industrial resilience, with a focus on becoming an EU strategic partner in the raw materials sector.

Instruments Supporting the Implementation of S3 Objectives

Several EU instruments are crucial in implementing and achieving the objectives of the S3:

1. Horizon Europe 2021-2027: As the EU's most ambitious Research and Innovation program, it offers opportunities that align with the S3 objectives, encouraging innovation and technological advancements in Albania.
2. LIFE Programme: Supports Albania's transition towards a sustainable, circular, and climate-neutral economy, which is a core objective of S3.
3. Digital Europe Programme (DEP): Facilitates the integration of digital technologies in businesses, which is critical for the digital transformation goals under S3.
4. Creative Europe: Promotes cultural diversity and supports the cultural sectors in Albania, enhancing the soft power and cultural innovation aspects of S3.
5. IPARD: Assists Albania in preparing for EU membership, supporting rural development and agricultural sectors which are key aspects of S3.
6. Erasmus+: Offers educational and training opportunities that are vital for building the human capital necessary to achieve S3 objectives.
7. EU Single Market Programme: Improves the functioning of the internal market, which is essential for the successful implementation of S3 in aligning Albania with EU standards.
8. EU Regional and Urban Development Programs: Often include components that foster innovation, supporting urban and regional development initiatives under S3.
9. Western Balkans Investment Framework (WBIF): Focuses on socio-economic development, supporting S3-related innovation projects in energy, environment, and social infrastructure.
10. Innovation and Technology Transfer Projects and Initiatives: Facilitate the transfer of new technologies and innovations, critical for the success of S3 in Albania.
11. Open Science in Europe (NI4OS-Europe): Facilitates access to scientific information, data, and resources, enhancing research and innovation ecosystems across Albania and aligning with S3's emphasis on open science principles.
12. Cross-border programs and other sector-specific IPA (Instrument for Pre-accession Assistance) programs: play a crucial role in this context. These programs facilitate regional cooperation and integration, providing funding and resources for joint projects in education, training, and skill development. For instance, the IPA II supports projects that align with S3 priorities such as sustainable tourism, renewable energy, and agriculture, fostering innovation and capacity building across borders.
13. EU programs related to the raw materials sector, such as the European Innovation Partnership on Raw Materials and Horizon Europe: support research, innovation, and sustainable practices in resource management.

This outlines how the Smart Specialization Strategy (S3) is not only a standalone policy but also a critical component of Albania's broader alignment with European Union strategies and objectives. Through these alignments and the supportive instruments, S3 is poised to significantly impact Albania's development trajectory, enhancing its integration with the EU and fostering sustainable growth.

4. Regional Context

The six Western Balkan (WB6) countries are in the process of finalizing or have already started the implementation of their S3 strategies and have already identified priority areas with the potential for intelligent specialization in the coming years. It is of particular importance that the countries in the region focus on taking initiatives and collaborative efforts among government actors, researchers, businesses, and other societal actors to deliver innovative results that contribute to the development of each of the Western Balkan economies and the region. The intelligent specialization process should serve as a tool to identify regional priority sectors in conjunction with national ones. The idea is for each country to specialize in a field where it has more advantages and potential in terms of human and capital resources, enabling the region to benefit and enhance its competitive advantage.

The collaboration between the WB6 countries. Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia, intensified when the Leaders of the Western Balkans endorsed the Multi-annual Action Plan on Regional Economic Area in the Western Balkans (MAP REA), at the Trieste Summit held on 12 July 2017. The MAP REA, aimed to enable an unobstructed flow of goods, services, capital and highly skilled labor; making the region more attractive for investment and trade; and accelerating convergence with the EU, thus bringing prosperity to Western Balkans citizens. On November 10, 2020, the leaders of the WB6 endorsed at the Berlin Process Summit held in Sofia, the Common Regional Market (CRM) 2021-2024 Action Plan. It builds on the achievements of the Regional Economic Area (REA).

The Smart Specialization Strategy has been included both in the Regional Economic Area (REA) and its Multi Annual Action Plan (MAP REA), and the Common Regional Market (CRM AP). This means that it is a regional as well as national priority for the WB6 countries and collaboration between them during this process is crucial.

Therefore, it is of crucial importance that the WB6 countries collaborate to facilitate the exchange of ideas and experiences on key aspects that should be incorporated in the S3 Strategies to maximize their potential for boosting the economic performance of each country and the region. Furthermore, a special emphasis should be placed on the role and importance of collaboration between each of these countries in enhancing the performance of their shared priority sectors. In this context, in addition to the 28 national EDP events, the National S3 Team, organized 3 bilateral meetings with institutional, academic, and business representatives from Kosovo, North Macedonia and Montenegro with a view to promoting smart specialization, based on the identification of priorities of common interest with these neighboring countries with the aim to develop cooperation paths⁷. The meetings were organized in collaboration with the National S3 Teams of the three countries during the period June - July 2023. Their goal was to identify and prioritize activities that bridge innovation, scientific research, and economic development in common S3 priority domains.

These regional workshops played a vital role in promoting cross-border cooperation, sharing knowledge, and enhancing regional integration. The findings and recommendations from the workshops from each

⁷ <https://s3albania.org/wp-content/uploads/2023/10/Raporti-Takimet-Bilaterale-1.pdf>

meeting will serve as input for the drafting and implementation of the Smart Specialization Strategy in accordance with EU regulations and serve as the bases for bilateral and multilateral agreements in fields of common interests. The recommendations will also help the countries to better absorb and utilize EU funds allocated for the implementation of this strategy through increasing the collaboration and engaging in mutual projects.

Albania - Kosovo Bilateral Workshop: Identified as shared priority domains worth exploring together the ICT and Food processing domains.

Albania – North Macedonia Bilateral Workshop: Identified as common priority sectors for cooperation sectors such as agriculture, manufacturing, energy, and raw materials.

Albania – Montenegro Bilateral Workshop: Identified as shared priority domains the sustainable agriculture and food value chain, energy and sustainable environment, and sustainable and health tourism, as well as Information and Communication Technologies (ICT), as a horizontal priority.

The challenges, solutions and proposal for each joint workshop are presented in detail in Annex 2.

In summary, the potential for cooperation identified through the three bilateral workshops focused mainly on:

1. Joint Platforms and Networks - Developing joint platforms for research and innovation, especially in ICT and food processing, to facilitate knowledge exchange and collaborative projects.
2. Bilateral and Regional Agreements - Establishing formal agreements for cooperation in education, research, and technology adoption across the Western Balkans to streamline efforts and maximize resource utilization.
3. EU and Regional Funding - Leveraging EU funds and regional programs to support joint initiatives, infrastructure development, and capacity building. Programs like the Western Balkans Agenda on Youth, Sport, Innovation 2021-2027, and the Common Regional Market Action Plan 2021-2024 are pivotal.
4. Promote Smart Specialization based on identification of priorities: Use smart specialization to identify priorities of common interest with neighboring countries and develop cooperation paths.
5. Sustainable Development Projects - Focus on sustainable practices in agriculture, energy, and raw materials to ensure long-term economic and environmental benefits. Joint research and innovation projects in these areas can drive sustainable growth.

The regional perspective emphasizes the importance of Albania and neighboring countries focusing on initiatives and collaborative efforts to develop innovative results that contribute to each of the Western Balkan economies and the region as a whole. The idea is for each country to specialize in a field where it has more advantages and potential, thereby benefiting the region and enhancing its competitive advantage.

5. The Smart Specialization Process in Albania

Initiation and Coordination

The S3 development process was formally initiated in 2016 under the responsibility of the Ministry of Education, Sports, and Youth and guided by the European Commission's Joint Research Centre (JRC) methodology. The decision was also linked to higher education reform, as there was a need for better cooperation between institutions of higher education (IHE) and businesses to align more closely with regional development objectives and labor market demands. A national event organized in December 2016 with the support of TAIEX brought together a large number of actors and institutions, and from roundtable discussions, an informal working group with various experts was formed, which worked towards the development of S3. In 2017, Albania registered in the S3 Joint Research Centre (JRC) platform of the European Commission, and in 2018, the informal working group with representatives from various institutions, including business and academia, was formalized by order of the Minister of Education, Sports, and Youth. More key actors joined, creating a broader group, including the Ministry of Education, Sports, and Youth, the Ministry of Finance and Economy, Prime Minister Office Department for Development and Good Governance, the National Agency for Scientific Research and Innovation, the Union of Manufacturers, the Regional Development Agency, HEIs, the Municipality of Tirana, etc.

S3 Roadmap and strategy preparation

Albanian S3 Team developed an S3 Roadmap based on the JRC Framework for developing a Smart Specialization Strategy at national level and, at the same time, keeping a regional perspective.

S3T has directly contributed to the strategy development process by gathering and analyzing data, defining the vision, strategic objectives, and specific action plan, as well as ensuring the implementation of all components specified in the activity plan (roadmap), including updating this plan in collaboration with JRC and the European Commission.

The Interministerial Committee, established through the Prime Minister's Order, was tasked with the crucial responsibilities of monitoring, drafting, and implementing the S3 Strategy. Led by Deputy Prime Minister Ms. Belinda Balluku, the committee played a pivotal role in ensuring progress within the framework of drafting the S3. One of its primary functions was to promote high-level coordination of institutions to guide and lead the work in alignment with the objectives of the S3 strategy.

Methodological Framework

Drawing on the Joint Research Centre (JRC) Smart Specialization Strategy (S3) framework, Albania's S3 development process followed a rigorous and structured approach through several distinct phases. The analysis of strategic framework, meticulously reviewed existing national strategic documents to lay a solid foundation. The initial decision made in accordance with the S3 roadmap was to establish the Smart Specialization Strategy (S3) as a central, umbrella strategy that bridges the National Strategy for Development and Integration (NSDI) and various sectoral strategies. This strategic positioning ensures that sectoral strategies will align and refer both to the S3 and the NSDI, facilitating a cohesive and integrated approach to national development. This alignment allows for a more coherent policy

environment where sector-specific strategies are harmonized with overarching national development goals, enhancing the effectiveness and synergy of Albania's strategic planning efforts. This was followed by in-depth quantitative and qualitative assessments aimed at evaluating the country's economic, innovative, and scientific capacities. Such a methodical approach ensured that the strategy development was comprehensive and grounded in robust evidence.

This strategy is uniquely tailored with a specific methodology endorsed by the JRC and the European Commission, distinguishing it from other types of strategies like regional or sectoral ones. Throughout the process, the European Commission contributed crucial expertise, facilitated essential training sessions, and performed ongoing monitoring and validation of each stage of the strategy's roadmap. This support was instrumental in ensuring that the S3 adhered to high standards of strategic planning and execution.

Mapping Phase: Identifying Priority Domains

In the mapping phase, quantitative analysis of economic sectors was carried out to identify potential priority sectors for the country's smart economic development. An S3 Analytical Team has been established composed by of experts from different sectors (see annex 1).

This process identified six priority areas where Albania has potential to specialize intelligently: Agriculture, Fisheries, and Forestry; Manufacturing Industry; Energy; Tourism; Information and Communication Technologies (ICT); Business Process Outsourcing (BPO)-

From a qualitative analysis which followed, the cross-sectoral areas were considered for further assessment: Blue Economy, Healthy Food, Renewable Resources Energy and Extended BPO.

The Mapping phase, encompassing both quantitative and qualitative analysis, commenced at the end of 2020 and spanned two years. This phase faced several setbacks, primarily due to disruptions caused by the COVID-19 pandemic. Detailed insights into this phase, including its methodology, challenges encountered, and the significant findings, are thoroughly elaborated in Chapter 6 of the document. This chapter provides a comprehensive overview of how data was collected and analyzed, the impact of the pandemic on the progress of the mapping activities, and the initial priority domains identified through these analyses.

Entrepreneurial Discovery Process (EDP) Phase: Refining Priority Domains

During the EDP phase, which started in October 2022 and lasted until July 2023, stakeholders engaged in structured dialogues to refine and validate the preliminary priority domains identified in the mapping phase. Through a comprehensive consultation methodology outlined by the JRC of the EC was implemented comprising roundtables, workshops, interviews, and consultations, stakeholders from the quadruple helix contributed insights into growth trajectories, challenges, and opportunities within each domain - SWOT analysis; strategic objectives; long-term vision, and policy formulation. This approach, characterized by a bottom-up engagement strategy, involved 33 events: 2 opening/closing events, roundtables and workshops (29 national events and 3 bilateral regional workshops) with quadruple helix stakeholders, totaling more than 1,650 actively participating representatives. These interactions yielded concrete proposals and fostered cross-sectoral collaboration, culminating in a report foundational to the strategy, validated by the JRC. This collaborative endeavor led to a sharper delineation of priority areas

such as Agriculture and Food Processing, Sustainable Energy, and Sustainable Tourism and horizontal domains such as Environment, Digitalization and Interconnectivity, Innovation and Scientific Research, Education and Diaspora. This phase helped to transform strategic objectives into concrete policies and actionable initiatives.

A concluding event for the Entrepreneurial Discovery Process (EDP) was held on October 31, 2023, showcasing the results of the EDP and outlining the next steps towards finalizing the Smart Specialization Strategy (S3). This event presented a critical opportunity to share insights from the EDP report and discuss outcomes from bilateral meetings with neighboring countries. More than 260 attendees included a broad spectrum of stakeholders involved in the EDP phase, such as members from the quadruple helix framework (government officials, academia, business, and civil society), high-level government officials, representatives from S3 Interministerial Committee, academic leaders, and business and civil society representatives. The conference also saw participation from ambassadors, diplomatic missions in Albania, the European Union Delegation in Tirana, and representatives from international organizations. Additionally, the EDP facilitated enhanced regional collaboration, allowing Albania and neighboring countries like Kosovo, Montenegro, and North Macedonia to exchange experiences and develop concrete project ideas for improved cooperation. This initiative not only fostered regional partnerships but also aligned with the broader goals of the S3 by integrating cross-border insights into Albania's strategic development. More details regarding this important phase are provided in Chapter 7 of this strategy.

Stakeholder Engagement Overview

This participatory process has ensured that priority domains were defined through comprehensive dialogue among stakeholders, effectively linking innovation and scientific research with economic growth. Engagement efforts included a wide range of participants from academia, industry, government bodies, and civil society from the Quadruple Helix, highlighting the crucial role of entrepreneurship and businesses in identifying strategic development priorities. To facilitate stakeholder dialogue within the six thematic domains identified as relevant, the National S3 Team has organized a series of events, including national events, sectoral workshops, roundtables, and bilateral meetings, involving over a thousand participants from various sectors. Throughout the EDP, working groups have validated the outcomes from the mapping phase, which will be utilized to draft the final S3 document.

The feedback received was systematically categorized and analyzed, focusing on recurring themes and the most frequently cited challenges and opportunities. The analysis helped to identify critical areas where stakeholders felt the strategy could either improve or needed to refocus its efforts to better align with Albania's economic and technological landscape.

Main Achievements during the S3 Process

Albania's journey toward drafting its National Smart Specialization Strategy (S3) has been marked by significant achievements and milestones. This section presents a comprehensive overview of the progress and successes during the S3 drafting process, reflecting Albania's commitment to fostering innovation and strategic economic development.

Governance and Strategic Coordination: Since February 2023, the Deputy Prime Minister has led the S3 process, achieving improved governance and high performance. The Interministerial Committee, involving all relevant ministers and stakeholders, supports this effort. The strategic mandate is clear and

ready for implementation, with broad political and stakeholder agreement, demonstrated by high participation in the EDP closing event.

Stakeholder Engagement, Collaboration and Networking: The S3 process has achieved broad territorial involvement and high interest from quadruple helix stakeholders, raising awareness at the highest political levels. Improved collaboration through institutional networks of S3 coordinators and numerous roundtable consultations with industry representatives.

The S3 strategy has been linked with the Growth Plan for WB6, adopting a bottom-up approach from the JRC that promotes a new vision for stakeholder involvement.

New ideas and approaches emerged from meetings of the S3 team and coordinators, enhancing stakeholder involvement in strategy consultations.

Sectoral Reforms and Economic Initiatives: New thematic sectoral reforms, such as raw materials, have been widely consulted with stakeholders and prioritized based on the potential identified.

Increased number of roundtable consultations with industry representatives, resulting in concrete outcomes on business competitiveness and legal measures to support the use of new technologies for a lower carbon footprint.

Decision to revitalize the National Economic Council to enhance business presence in decision-making and EU integration platforms.

Ongoing review of the law on the Chamber of Commerce to improve its functioning and support mechanisms for businesses, based on best practices.

Government-led deregulation and digitalization processes are underway to benefit the business sector.

VET education remains a priority for the Albanian government, with strengthened regional collaboration, joint project participation, and new regional cooperation ideas.

Communication and Visibility: A dedicated S3 website (<https://s3albania.org/>) has been established, available in Albanian and English, providing comprehensive information on the S3 process, meetings, news, events, and relevant documents.

Each institution affiliated with the S3 Interministerial Committee has included a link to the S3 website.

S3 has featured prominently in media, with programs and news segments on RTSH and other TV networks, including the new TV program "Smart Albania" on RTSH1, showcasing successful professionals and opportunities for entrepreneurship and professional growth in Albania, and other TV programs dedicated to business sector, all designed to inform the public about opportunities within Albania's evolving economic landscape.

Active S3 profiles on social media platforms like Facebook, LinkedIn, and Instagram further enhanced its visibility. A media plan is in place to inform and engage stakeholders, addressing challenges and objectives from consultations.

Collaborative Efforts and Continuous Development: The extensive consultation process during the EDP phase revealed a need to strengthen collaboration among quadruple helix actors, facilitating a winning strategy and adding value to priority sectors. Roundtables and workshops have been crucial in bringing actors together to share experiences, identify collaboration opportunities, and propose interventions and measures to facilitate these collaborations.

Specific measures related to a continuous EDP process will be included in the S3 strategy, with some measures already being considered by different actors.

Numerous project proposals and partnership suggestions have been submitted as part of regional collaborative efforts. The S3 Team is actively participating in the S3 Community of Practice (CoP) Maritime Sustainable Blue BioEconomy.

The Smart Specialization Strategy is a prominent agenda item for the Albanian government, guiding investments in priority sectors and advancing a knowledge-driven society, involving all stakeholders and the network of S3 National Team and coordinators in each ministry and institution.

Innovation and Sectoral Development: Significant strides have been made in sectoral development, particularly with the opening of the regional center for EIT raw materials in Elbasan, based on the agreement signed between the Ministry of Infrastructure and Energy and EIT Raw Materials. It marks a decisive moment in Albania's path towards the modernization and advancement of the raw materials sector and its preparation for the challenges of the future.

The Albanian EIT Raw Materials Regional Innovation Center, as a center for innovation, cooperation and sustainable practices, will be an important step in the transformation of the raw materials sector in Albania, reinforcing the Albanian Government commitment to achieve the objectives of the EU Act on critical raw materials (EU CRM Act) and to turn Albania into a strategic partner of the EU for this sector. Considering that the raw materials sector is part of the priorities of the growth plan for the Western Balkans, this initiative will contribute substantially to the regional development and strategic positioning of Albania also within the EU value chain. The center, established in December 2023 and launched in April 2024, symbolizes a major step forward in enhancing Albania's capabilities in raw materials and sustainable resource management.

Various comprehensive studies have been prepared over the years in the context of the S3 process. One notable study, "Report on Country Intervention: Assessing Opportunities for Cluster Development in Albania," supported by Policy Answers, an EU-funded project, focuses on the development of clusters, particularly in the priority domains of S3. This report emphasizes the importance of tailored support for the development and expansion of clusters, highlighting the strategic value they bring to Albania's economic growth.

Another significant document, the “Brief Policy Paper on Enterprise and Industrial Policy Instruments given Accelerated Integration under Chapter 20 of Accession Negotiations - Enterprise and Industrial Policy,” supported by the EU-funded project Saneca, provides a comprehensive analysis and set of recommendations designed to enhance Albania's enterprise and industrial policy instruments under Chapter 20 of the EU accession negotiations. This paper highlights the significance of various EU-funded programs and initiatives, explaining their access and utilization modalities, and offering strategic insights into maximizing their benefits for Albania's integration into the European Union. It serves as an invaluable resource for the business community in Albania, offering practical guidance on leveraging EU support for economic growth and seamless integration into the European market⁸.

Future Outlook and Continuous Improvement: The S3 drafting process has laid a solid foundation for future initiatives, including the continuous improvement of the strategy through regular updates and the integration of feedback from ongoing stakeholder engagements. The Economic Transformation Plan (TBI), which integrates the analysis of sectoral challenges from the S3 strategy, exemplifies the government's commitment to applying innovative and transformative approaches to priority sectors.

In view of the above, the drafting of Albania's National Smart Specialization Strategy has been a multifaceted process involving high levels of governance, stakeholder engagement, innovative methodologies, and strategic sectoral development. These achievements not only demonstrate Albania's proactive approach to economic and social challenges but also position the country well for sustainable growth and integration into broader regional and European economic structures.

6. The Mapping of Economic Potential

Albania conducted the initial steps of context analysis, following the S3 Framework, by quantitatively and qualitatively mapping the country's economic, innovative, scientific, and technological potential. Both quantitative and qualitative diagnostic stages dealt with relevant challenges related to data availability in the first case, and difficulties in reaching out with the stakeholders of the priority areas selected, for a number of reasons including mistrust, post-COVID effects and related constraints, as well as lack of information on Smart Specialization.⁹

The quantitative analysis was initiated at the end of 2020 and concluded in 2021, followed by the qualitative analysis that concluded at the end of 2022.

The methodology for mapping economic, innovation, and scientific potential in Albania was based on analyzing indicators such as employment, exports for economic potential, innovation enterprises and the share of enterprises that introduced a product innovation. To pinpoint comparative advantages, a multi-

⁸ <https://s3albania.org/publications/>

⁹ <https://s3platform.jrc.ec.europa.eu/w/the-identification-of-smart-specialisation-priority-domains-in-albania-a-mapping-exercise>

dimensional quantitative analysis was employed, focusing on NACE sectors that exhibited comparative advantages. The Location Quotient (LQ) was used as an indicator to determine comparative advantage by calculating the ratio of a sector's share in the country's economy to that of the size of the same industry in the EU27. The final selection of potential priority areas was based on three criteria:

Critical mass (CM): percentage share of employees in a specific industry in total number of employees in the economy.

Location Quotient (LQ): it measures the degree of specialization (or concentration) of an industry in a country as compared to the same industry in a larger context. This is obtained by dividing the size of a specific industry (measured by employees) in Albania by the size of the same industry in the EU27. The EU was chosen as the reference as the foreseen Smart Specialization strategy will focus at the country and not the regional level.

Relative wage index as the average wage (per industry) relative to average wages for all industries.

Critical mass: Only industries where Size is at least 0.10% will be potential candidates for having an economic potential; 0.10% is used because small industries are less relevant for economic policies.

An industry passes the **trend for the Number of employees** threshold if its average annual growth rate is at least 50% above the average annual growth rate for all industries combined; the threshold of 50% has been selected to allow the identification of a sufficiently high number of industries.

An industry passes the trend for **Average wages per employee** threshold if its average annual growth rate is at least 25% above the average annual growth rate for all industries combined; the threshold of 25% has been selected to allow the identification of a sufficiently high number of industries.

The domains that emerged from the quantitative analysis in Albania are:

- (NACE A) Agriculture, forestry and fishing: (A01.6) Support activities to agriculture and post-harvest crop activities; (A03.21) Marine aquaculture; (A03.1) Fishing;
- (NACE C) Manufacturing: (C10.8) Manufacture of other food products; (C24.5) Casting of metals;
- (NACE I) Accommodation and support service activities: (I55.9) Other accommodation;
- (NACE J) Information and Communication: (J61.3) Satellite telecommunications activities; (J62.09) Other Information technology;
- (NACE N) Administrative and support service activities: (N82.2) Activities of call centers; (N82.9) Business support services activities.

In order to support the national authorities in the follow up activities and complement the quantitative analysis, a qualitative analysis was conducted. This enabled them to delve deeper into the pre-selected domains and explore current and future perspectives for the EDP, by collecting non-numerical data on intangible factors.

The qualitative analysis combined an online survey with 60 in-depth interviews among relevant stakeholders of the territory to delve deeper into the sector dynamics, as well as to validate previous statistical results, and identify the sub-sectors and niches with high potential for innovation.

Main results from qualitative data collection have been systematized according to the identified domains. Cross-sectoral areas with relative opportunities and bottlenecks have been detected.

Information/data collection was done mainly through surveys and in-depth interviews (IDIs).

Identification of proposals of priority areas for entrepreneurial discovery process EDP:

The qualitative analysis indeed confirmed the outcomes of the quantitative mapping and integrated it with further details on the potentials. It explored the following sectors: Agriculture, Fisheries and Aquaculture; Manufacturing; Energy; Accommodation and support service activities; Information and Communication; Administrative and support service activities.

In particular, interesting development opportunities emerged in digital transition (with the automation of processes, the reorganization of supply chains, and the digital transformation that can lead to new business models) and more generally in digital technologies (from applications of artificial intelligence, IoT (industrial Internet of Things) sensors, data analytics, to robotics). The ecological transition also showed high potential, which concerns, on one hand, an intelligent use of renewable sources, energy efficiency solutions, but also attention to business models that are aligned with international standards and requirements. Likewise, experiences related to sustainable tourism were considered positive, especially when integrated with quality agriculture and responsible food processing. In the case of horizontal integrations, positive experiences included the integration of BPO services with IT solutions.

The analysis also identified the following subsectors as potentially interesting for further exploration during the EDP: Blue economy; Healthy food; Renewable resources energy; Extended BPOs (Business Process Outsourcing).

Summary of Qualitative Mapping Results Across Priority Domains

This section summarizes the findings from the qualitative mapping of each selected domain. It highlights the critical insights and potential opportunities identified within each sector, providing a concise overview of the strategic areas essential for Albania's Smart Specialization Strategy (S3). Each domain's analysis reveals key factors that could influence future economic growth and innovation.

Agriculture, Fisheries & Aquaculture, and Forestry: The analysis in agriculture has highlighted the sector's capacity for technological advancement and sustainability. Opportunities for innovation in agricultural practices could significantly enhance productivity and environmental sustainability.

Manufacturing: In the manufacturing sector, the focus has been on integrating modern technologies to boost production efficiency and product quality, which are crucial for improving the global competitiveness of Albanian manufacturing.

Energy: The energy sector analysis emphasizes the transition towards renewable sources, reflecting a critical strategic shift necessary for energy sustainability and independence.

Tourism: Tourism insights point towards leveraging Albania's natural and cultural heritage to promote sustainable and diversified tourism, which can attract a broader international market.

Information and Communication Technology (ICT): For ICT, the potential for digital transformation across various sectors stands out, indicating significant growth prospects through smart applications and connectivity enhancements.

Additional Sectors: Similar strategic insights have been noted in other sectors such as healthcare, education, and infrastructure, underlining the cross-sectoral impact of smart specialization initiatives.

For a detailed presentation, please refer to the “Identification of Priority Fields for Smart Specialization in Albania, the Mapping Process” Report in Annex 2 that includes a quantitative and qualitative mapping. This annex provides extensive data and detailed analysis, supporting the strategic directions and decisions outlined in this document.

Albania’s Innovation Ecosystem: Overview and Recent Developments

Although the mapping exercise to identify priority domains was conducted a few years ago, additional, relevant information, particularly regarding the scientific and innovation potential of the country, has been gathered, based on various reports and ongoing initiatives over the past years. The new insights provide a more updated understanding of Albania's innovation landscape, reflecting progress in areas such as R&D, participation in EU programs, and technological advancements. Some of the information collected, is detailed below:

1. Performance in the European Innovation Scoreboard (EIS) 2023

Albania is categorized as an "Emerging Innovator" in the European Innovation Scoreboard (EIS) 2023, with notable performance in environment-related technologies and sales of innovative products. However, it remains below the EU average in several innovation metrics, particularly in R&D expenditure and intellectual assets such as patents. Its overall innovation performance is at 41.1% of the EU average^{10 11}. Despite this, progress is evident, especially in tertiary education and high-citation publications, which show increasing participation in global knowledge networks¹²

2. Scientific Research and Participation in H2020, Horizon Europe Programs and other EU Programs

Albania's progress in science and research, as outlined in the EU Progress Report under Chapter 25, showcases a mixed picture. The increased participation in Horizon 2020, and outreach to the diaspora represent significant steps forward. However, the country faces ongoing challenges, particularly in boosting research investments and addressing gaps in private sector participation in research¹³.

Albania’s participation in Horizon 2020 (H2020) has seen moderate success, securing €13.97 million in net EU contributions across various projects. Despite a success rate of 8.74%, the country is making steady progress, and there's great potential for even more growth ahead. This highlights the need for improved awareness and support for institutions in their application processes. Efforts to increase engagement in Horizon Europe are ongoing and aim to enhance Albania’s global scientific footprint.

¹⁰https://research-and-innovation.ec.europa.eu/knowledge-publications-tools-and-data/publications/all-publications/european-innovation-scoreboard-2023_en

¹¹<https://www.balkaninnovation.com/news/166/european-innovation-scoreboard-2023-western-balkans-innovation-performance>

¹² <https://european-research-area.ec.europa.eu/documents/country-report-albania>

¹³ <https://european-research-area.ec.europa.eu/documents/country-report-albania>

Additionally, while initiatives like Erasmus+ and the Creative Europe program have fostered international collaboration, further efforts are needed to fully implement youth and cultural policies, particularly in expanding access to educational resources across Albania.

EU-funded programs and initiatives could significantly support Albania's integration into the European Union, offering resources that directly benefit the business community by fostering economic growth and facilitating smoother entry into the European market.

3. National and EU Innovation Support Initiatives

Albania has taken significant steps to foster innovation and support startups. A key milestone is the adoption of the National Strategy for Science, Technology, and Innovation (2023-2030), aimed at advancing research and development in the country, foreseeing the target of 1% of GDP by 2030¹⁴.

In recent years, the Albanian government has also focused on developing the innovation and startup ecosystem. The Strategy on Innovative Entrepreneurship was approved and has already begun its implementation. As part of these efforts, the Startup Agency was established to provide direct support to startups. Furthermore, approximately 300 mln ALL (3 million Euro) have been allocated as grants on a competitive basis from the state budget to foster startup growth¹⁵.

The new law on Science and Scientific Research in the Republic of Albania has foreseen the establishment of 'Centers of Excellence,' aimed at strengthening collaboration between research institutions and the business community, thereby promoting the commercialization of scientific research.

Complementing these national initiatives, other EU programs donor funds offer ongoing support, with a particular emphasis on strengthening academia-business linkages, startups and SMEs support for innovation initiatives, which are vital for creating a dynamic innovation ecosystem.

4. Patents and Publications

Although patent applications in Albania remain relatively low compared to regional averages, the government is taking steps to address this gap. The new Law on Science includes specific provisions aimed at enhancing the valorization of knowledge, with a focus on creating a more supportive environment for transforming research outputs into tangible innovations.

7. The Entrepreneurial Discovery Process

The Methodology of EDP

The Entrepreneurial Discovery Process (EDP) in Albania, serving as a pivotal aspect of the Smart Specialization Strategy, involved a sequence of collaborative endeavors and dialogues engaging stakeholders from the quadruple helix (government, academia, business sector, and civil society). This

¹⁴ [Draft Strategjia kombëtare pËr KËRKIMIN SHKENCOR, teknologjinë dhe inovacionin 2023-2030](#)

¹⁵ Included within the Medium Term Budget Program 2025-2027, approved by the Government and Parliament

process assumed a critical role in pinpointing and honing Albania’s strategic priorities across diverse economic sectors, ultimately aiding in the development of targeted, innovative, and consequential policies and initiatives.

The EDP¹⁶ was carefully structured to foster participation, ensuring comprehensive engagement across the six pre-identified potential priority areas: Agriculture, Business Process Outsourcing (BPO), Energy, ICT, Manufacturing, and Tourism. Stakeholders were carefully chosen to reflect diverse expertise and viewpoints, thereby enhancing dialogue and ensuring thorough exploration of each sector's distinct challenges and opportunities.

According to the S3 framework, the operational translation of these lines of activity was carried out on the basis of a methodology in which each stage—as part of a stage-gate process—should only start after the previous one had been completed. The entire process was divided into 7 stages, leading to the design and formal approval of S3. The Entrepreneurial Discovery Process was the fifth stage in the process of S3 design. It aimed at bringing together representatives from the quadruple helix to discuss the already evident or latent innovation prospects in various fields of economic activity and identify priority domains for intervention, starting from a SWOT analysis as a basis for formulating a medium-term vision and a mix of related policy actions.

In fact, a key aspect of the Smart Specialization Strategy was a participatory bottom-up approach based on the involvement of quadruple helix stakeholders (Business, Academia, Civil Society, and Central and Local Governance) to discuss and identify priority areas for intervention, as input for S3 definition.

The EDP consisted of 6 sub-stages:



Round tables and workshops, the main tools of the EDP, facilitated in-depth discussions, enabling stakeholders to bring forth insights based on their experience and expertise. The discussions focused on identifying strengths, weaknesses, opportunities, and threats in each domain, leading to a clearer understanding of the sectors' current states and potential paths for smart specialization.

Key topics considered as outcomes of the EDP were:

- Identification and final delineation of the domain and its sub-domains, based on credible proposals and collaborative dialogue.
- SWOT analysis conducted at both the priority domain and subdomain levels.
- Exploration of cross-innovation opportunities, highlighting notable synergies between vertical and horizontal domains, as well as cross-innovation possibilities within vertical priority domains.

¹⁶ <https://s3albania.org/wp-content/uploads/2023/10/Raport-Final-i-EDP-S3.pdf>

- Establishment of a long-term vision statement, reflecting consensus on the future trajectory of the priority area.
- Formulation of strategic objectives agreed upon to realize the long-term vision, ensuring they are SMART: specific, measurable, achievable, relevant, and time-bound.
- Contribution to the policy mix, encompassing specific objectives aligned with the strategic goals (SMART objectives), proposed policy actions to support objective achievement, and key performance indicators for monitoring progress during implementation.
- Development of an action plan outlining desired steps for implementing the policy mix, or at least identifying priority actions.
- Exploration of digital and green transformation possibilities, cataloging potential applications that offer benefits and opportunities in these areas.
- Assessment of impact on sustainable development and societal goals, including a matrix illustrating the contribution and influence of strategic objectives on Sustainable Development Goals or other national societal objectives.
- Discussion on the continuation of the EDP process, gathering stakeholders' preferences regarding ongoing dialogue beyond the formal conclusion of the EDP stage.

According to the above described methodology, the stakeholder's dialogue (EDP) preparation was based on the evidence resulting from the previous activity stage ("Mapping exercise"), conducted with the support of the JRC in 2022. The main results of the mapping exercise came together in a document that identified six pre-priority potential areas on which it was considered relevant to carry out specific insights in the EDP phase.

The six priority areas were the following:

- Agriculture, forestry and fishing
- Business Process Outsourcing (Administrative and support service activities)
- Energy
- ICT
- Manufacturing
- Tourism (Accommodation and support service activities)

EDP process

The identification of stakeholders was the initial step in setting up an effective Entrepreneurial Discovery Process (EDP). It involved selecting relevant stakeholders to be included in the dialogue, considering the thematic domains identified during the mapping phase. The S3 framework mandated that stakeholders be chosen from among the most representative subjects active within the respective thematic domains. Key players in the value chain of the thematic domain, innovative companies, university departments, research centers, chambers of commerce, business associations, and relevant governmental bodies such as ministries, regulatory bodies, and public agencies were involved in this process.

The selection of relevant stakeholders was conducted by the S3 national team, beginning with a desk analysis aimed at identifying subjects from academia, research, business and civil society.

A first round of EDP events covering the domains of Agriculture, Energy, and Tourism was held from October to November 2022. The remaining events took place between April and October 2023. To foster effective stakeholder dialogue, two different tools were used: roundtables and workshops. To ensure the effectiveness of each event, meetings were scheduled to avoid having roundtables and workshops related to the same domain on consecutive days. Workshops were also sequentially scheduled in different weeks to allow enough time to process the findings from the roundtables and to present and validate them during the national workshops. Additionally, roundtables played a significant role in spreading awareness of what S3 is and increasing recognition of its importance for innovation-driven development in Albania. After the initial roundtables held in 2022, to enhance the visibility of the EDP process and promote more informed participation, the Albanian government organized an EDP kick-off meeting in April 2023, attended by 175 representatives of the quadruple helix. The event took place in Tirana, with participants including 55 government representatives, 49 from business, 34 from academia, and 37 from civil society.

To foster stakeholder dialogue within the six thematic domains identified as relevant from the mapping exercise, a total of 33 events were organized by the S3 national team from October 2022 to October 2023. From these events, 28 national workshops and roundtables with the participation of 964 individuals, with 629 attending the roundtables and 335 participating in the workshops. An opening and a closing national event have been held, as well as 3 bilateral workshops with neighboring countries. In total, in the EDP process participated 1650 representatives from quadruple helix actors. This phase entailed the creation of a report, which formed the foundation for the strategy and was ultimately validated by the JRC. Furthermore, the S3 National Team and the coordinators from institutions part of the Inter-ministerial Committee convened on September 1, 2023, for a one-day meeting to discuss the findings and develop proposals regarding priorities for the Inter-ministerial Committee for S3.

A concluding event for the EDP has been held on October 31, 2023, where the results of the EDP have been presented to all stakeholders that participated in this EDP phase as well as next steps toward the finalization of S3 based on the insights from the report generated during the EDP phase and the outcomes of bilateral meetings with neighboring countries. This event gathered more than 260 participants from quadruple helix actors, ministers and high level officials of the Government and representatives of agencies and institutions part of the S3 Interministerial Committee, rectors and other representatives of academia, associations, business and civil society participated in this comprehensive activity. The conference was also attended by ambassadors and representatives of diplomatic missions in Albania, the European Union Delegation in Tirana and international organizations.

The S3 process served also as a very good opportunity to strengthen regional collaboration with neighboring countries, exchange experience, and jointly participate in projects and platforms. The 3 bilateral meetings we had during EDP with Kosovo, Montenegro and North Macedonia led to concrete ideas for regional projects for better cooperation.

The overall feedback on stakeholder engagement was highly positive, both qualitatively and quantitatively. Most invitees responded affirmatively to the invitations and confirmed their participation, with some suggesting additional qualified subjects to be invited, thereby helping to spread awareness of the S3 approach among stakeholders.

Furthermore, the Entrepreneurial Discovery Process underlined the importance of defining cross-cutting measures specifically related to improving the national innovation ecosystem. It suggested that investing in human capital by increasing scientific and technological skills at all levels was crucial. This involves

revising educational and training programs to focus on STEM disciplines and specific curricula related to S3 priorities, and investing more in lifelong learning. Additionally, fostering a culture of innovation in schools and among young generations aimed at enhancing talents and preventing their emigration was another objective, to be pursued with specific policy actions. Finally, it was imperative to define a specific support framework for technology transfer processes by enhancing linkages between technology supply side, technology adopters, and intermediary support service providers.

Drawing from this valuable experience, the bottom-up approach will serve as the primary stakeholder consultation methodology for major strategies and policy documents in Albania going forward.

EDP identified the following S3 priorities that have been discussed and adopted by the S3 Interministerial Committee.

8. Strategic sectors and priority domains

The identification of vertical key priority domains and horizontal priority domains/interventions emerged during the EDP as vital areas of focus due to their high economic, innovative, and research and development potential for creating new added value for the economy. The landscape of each sector, illuminated by the insights gained through the EDP, offered a vision refined by stakeholder contributions.

Priority domains identified based on the EDP process¹⁷

Domain 1: Renewable Energy and Natural Resources

With its favorable geographical location, abundant natural resources, and a growing commitment to environmental stewardship, Albania has made substantial strides in harnessing renewable energy to meet its energy needs. Moreover, the energy sector has also created even greater opportunities for investment, job creation, and economic growth. Recognizing the strategic importance of renewable energy, Albania has strategically targeted the renewable energy sector as a key area for the development of smart specialization paths.

Vision: Increasing the renewable energy production, being regional leader in renewable energy production and raw materials sector and assure exploiting and responsible management of its abundant natural resources, fostering environmental sustainability, energy security, green transition and increase competitiveness of the economy, through strategic investments, innovative technology, and sector reforms that will create sustainable and clean energy production in respect of the environment.

Sub sectors:

Renewable Energy: Enhancing the diversification of renewable energy sources for a sustainable future, combining Solar, Wind, Hydro, Geothermal and Biomass Energy by:

¹⁷ <https://s3albania.org/wp-content/uploads/2023/10/Raport-Final-i-EDP-S3.pdf>

- Promoting the development of solar and wind energy projects to diversify the renewable energy portfolio, harnessing Albania's ample sunlight and wind resources for clean power generation;
- Encouraging the utilization of waste-to-energy technologies, innovative technologies and biomass resources for clean energy production, reducing landfill waste and promoting resource efficiency;
- Promoting a diverse mix of renewable energy sources and emerging technologies to reduce dependence on a single source;
- Capacity Building and Research by boosting skills and research capabilities by fostering partnerships between academia, industry, and government
- Supporting modern and flexible grid infrastructure and energy storage that can efficiently handle the various nature of renewable energy resources and enable cross-regional energy sharing.

Raw materials: Enhancing exploration, exploitation and processing of mineral raw materials by:

- Exploring and exploiting raw materials while adhering to sustainability goals like the European Green Deal involves adopting eco-friendly practices. This includes minimizing environmental impact, promoting recycling, and ensuring responsible resource management to support a more sustainable future;
- Supporting and promoting initiatives that encourage collaboration between academia, business and government, sharing data, knowledge and resources, and encouraging technology transfer, that lead to technological advancement, economic growth and sustainable resource management, benefitting both society and the economy;
- Encouraging cooperation and participation in extraction, processing and refining EU supply chains and organizations/institutions as EIT raw materials.

Environmental Preservation/Sustainable Forest Management: Implement responsible forest management practices, including reforestation and sustainable timber harvesting, to balance economic gains with environmental conservation.

The SWOT analysis for Renewable Energy and natural resources in Albania highlighted several weaknesses that needed addressing to bolster the sector's development. The reliance on traditional energy sources resulted in the underutilization of abundant renewable resources like biomass and organic waste due to insufficient recycling facilities. The infrastructure for renewable energy generation and transmission is still limited, including a critical lack of energy storage systems. The regulatory framework is inadequate, lacking sufficient incentives and clear legal directives to promote renewable energy. There was also a notable absence of a comprehensive master plan for zoning and potential investment areas, compounded by a shortage of supporting data and land categorization for effective information management.

Furthermore, the renewable energy sector also has a scarcity of specialized workforce capacities tailored to emerging technologies. Academic programs and scientific research dedicated to renewable energy are insufficient, hindering knowledge and skill development. The absence of an energy market, including smart metering systems, limited efficient energy consumption and management. Lastly, there was a lack of incentives for businesses and citizens to adopt more efficient energy consumption practices.

The **SWOT analysis** for Renewable Energy and Natural Resources highlighted the following strengths, weaknesses, opportunities and threats of this domain:

Strengths	Weaknesses
<ul style="list-style-type: none"> ● Abundant renewable energy resources, including solar, wind, hydro, and biomass ● Increasing public awareness and support for clean energy ● Favorable geographic location for solar and wind power generation ● Potential for job creation and economic growth in the renewable energy sector ● High level priority and support from the government in terms of investments to increase capacities (including licenses for solar energy plants) and finalization of interconnection 	<ul style="list-style-type: none"> ● Reliance on traditional energy sources for electricity generation, resulting also in low level of biomass and organic waste usage for energy production due to the lack of recycling plants ● Still limited infrastructure for renewable energy generation and transmission and lack of energy storage systems ● Inadequate regulatory framework and incentives for renewable energy development (referring to the need for more legal acts) ● Lack of a masterplan for zoning and targeting areas with potential for investment in renewable energy (including lack of land categorization for more efficient information management, also as a consequence of the lack of supporting statistical data) ● Lack of specialized workforce capacities for emerging technologies, highly dynamic for the sector ● Absence of dedicated academic programs and scientific research ● Lack of an energy market (due also to lack of smart energy meter systems for measuring consumption) ● Lack of incentives to promote more efficient consumption among citizens and businesses

Opportunities	Threats
<ul style="list-style-type: none"> ● Growing demand for clean energy in domestic and international markets ● Access to European Union (EU) funding and support for renewable energy projects ● Potential for technology transfer and collaboration with international partners ● Potential for Investment/research in smart grids applying the concept of the Internet of Things (houses, buildings, hotels, roads, etc.) ● Development of energy market analytics linked to the liberalization of the sector and the creation of Albanian Energy Stock Market ALPEX ● Growing attention of citizens and businesses towards sustainable energy use practices ● Increasing incentives for attracting investment and development of the domestic supply chain for renewable energy ● Potential for use of biomass and organic waste as a renewable energy source ● Potential of the applications of AI and new technologies for the development of agro voltaic ● Growing demand for the provision of renewable energy systems applied to new buildings 	<ul style="list-style-type: none"> ● Dependence on imported energy resources and fluctuating prices due to geopolitical instability impacting the energy sector globally ● Competition from neighboring countries in attracting renewable energy investments ● Technical challenges related to grid integration and energy storage ● High cost of initial investments in renewable energy plants ● Cyber security issues related to management of energy systems, due also to lack of specialized skills ● Emigration of workforce ● Limited incentivizing/subsidizing framework only for large-scale producers ● Risk arising from climate change to the stability of the renewable energy supply (including water resources)

Domain 2: Sustainable and Diversified Tourism

Sustainable and diversified tourism was identified as another vital domain for Albania, contributing significantly to its economic growth and providing numerous opportunities for employment and regional development. The country's rich cultural heritage, diverse natural landscapes, and strategic geographic location make it an attractive destination for international and domestic travelers alike.

Recognizing the potential within specific sub-sectors, the S3 framework emphasizes strategic investments and promotional efforts in areas such as cultural heritage and traditions, health tourism, culinary experiences combined with agriculture and food security, as well as natural and rural tourism, which includes agrotourism, adventure, and sports tourism.

Vision: Transform Albania into a premier sustainable tourism destination, offering diverse and authentic experiences that celebrate its rich cultural heritage, beautiful landscapes, culinary delights, and wellness offerings that contribute to the well-being of its communities. We envision a dynamic, diverse, country-wide, all year tourism sector that contributes to the socio-economic development of the country while promoting responsible practices and preserving our natural and cultural treasures for future generations.

Sub sectors:

Cultural Heritage and Tradition Tourism: Preserve and promote Albania's historical and cultural sites, museums, and traditions to attract heritage enthusiasts, ensuring that Albania's cultural heritage will be preserved, restored, and promoted by:

- Developing a new tourism policy that aligns with a modern vision for the industry.
- Creating compelling narratives for Albania as a tourist destination.
- Improving infrastructure, including enhancing road connections and digital infrastructures at tourist sites.

Health and Wellness Tourism: Albania can tap into its natural beauty and therapeutic resources to develop this subsector by:

- Leveraging Albania's natural thermal springs and mineral-rich waters.
- Partnering with top medical institutions and healthcare providers to offer high-quality medical treatments and surgeries.
- Promoting Albania as an affordable and reliable destination for medical procedures, such as dental work, cosmetic surgery, and fertility treatments.
- Developing eco-friendly health resorts that emphasize sustainability and eco-conscious practices, attracting health-conscious and environmentally aware tourists.
- Integrating traditional Albanian healing practices and alternative medicine into health tourism offerings. This can include herbal remedies, and holistic therapies.

Agro tourism and Farm-to-Table Experiences: Promote rural tourism by connecting visitors with local farms and agritourism activities, emphasizing sustainable food production. This can be achieved in various ways. Examples include but are not limited to:

- Offering farm tours and experiences: Encouraging farms to open their doors to visitors and engage them in hands-on activities such as harvesting, cheese-making, milking etc.;

- Offering farm-to-table dining: Promote the consumption of locally sourced, fresh produce. This is of dual benefit as it encourages locally grown food and also supports small-scale farmers. Such experiences can also be accompanied by culinary workshops;
- Offering farmers' markets and agro-festivals: Organize regular farmers' markets and agro-festivals where local producers can sell their goods directly to visitors. These events can feature cultural performances and workshops to enrich the experience.
- Encouraging sustainable practices: Encourage farms to adopt sustainable and eco-friendly practices. Certify farms that meet specific sustainability criteria to attract eco-conscious tourists.

Ecotourism and Sustainable Tourism Development: Develop and promote ecotourism initiatives that contribute to develop and support ecotourism destinations communities, including hiking and wildlife conservation, adventure and sports tourism and agritourism, to capitalize on Albania's diverse landscapes and biodiversity. Prioritize sustainable tourism practices that minimize negative environmental and social impacts. This may include responsible waste management, conservation of natural resources, and reduced carbon footprint. Examples include but are not limited to:

- Investing in Waste Management, Environmental Protection, and Collaboration with Local Authorities;
- Ensuring reliable statistical data and understanding market trends, informed planning in the tourism sector is facilitated, which necessitates enhanced coordination between government, tourism institutions, and industry stakeholders to effectively monitor performance and develop sustainable strategies;

The high level of interest in the smart growth of Albania's tourism sector led to the organization of six roundtable discussions focused on potential paths of innovation, including Mountain, Health, , Sea and Agro Tourism, Diversified Tourism, and the Development of the tourism and hospitality market. These discussions highlighted several common and specific findings.

The national workshop, conducted in the context of EDP, reviewed these findings to identify strengths, weaknesses, opportunities, and threats for a smart specialization path in the tourism sector, underscoring Albania's potential in various sub sectors like sea, mountain, cultural heritage, adventure, and ecotourism. By focusing strategically on these areas and leveraging technological advancements, Albania aims to enhance its tourism competitiveness, improve visitor experiences, and maximize socio-economic benefits.

Addressing these weaknesses is crucial for Albania as it aims to capitalize on its natural and cultural assets and transform its tourism sector into a year-round source of sustainable economic growth.

The SWOT analysis for **Sustainable and Diversified Tourism** highlighted the following strengths, weaknesses, opportunities and threats of this domain:

Strengths	Weaknesses
<ul style="list-style-type: none"> ● Natural beauty: Albania can boast of having 4 UNESCO World Heritage sites and its nature is rich in beaches, rugged mountains, national parks, natural thermal springs and mineral-rich waters, offering diverse and attractive landscapes for tourists ● Cultural heritage: the country's rich history, archaeological sites, and cultural traditions provide unique opportunities for cultural tourism and heritage exploration ● Affordability: compared to other European destinations, Albania offers relatively lower costs, making it an appealing option for budget-conscious travelers ● Authentic experiences: Albania's relatively unexplored tourism landscape allows visitors to experience authentic and untouched destinations, contributing to a sense of adventure and discovery (“experiential tourism”) ● High strategic focus by Government on the development of the sector, which translates into a dedicated fiscal policy, an offering of supportive financial schemes and in the implementation of marketing strategy to promote Albania as an international tourist destination ● Geographic position and favorable climate ● Perception of Albania as a safe tourist destination 	<ul style="list-style-type: none"> ● Human capital/workforce: this includes limited skilled workforce, skills gaps and mismatch, seasonal employment, training and professional development, Language skills ● Seasonal concentration: the tourism industry in Albania is highly seasonal, with a majority of visitors arriving during the summer months, leading to underutilization of resources and limited year-round employment opportunities ● Infrastructure gaps: while improvements have been made, there are still gaps in infrastructure development, particularly in remote mountainous areas, limiting access and the overall visitor experience ● Quality of services: the quality of hospitality services, including accommodation, dining, and tourist facilities, needs further enhancement to meet international standards and customer expectations ● Low development of digital services within businesses and for accessing tourist services ● High weight of informal market and lack of business standardization ● Lack of sustainable tourism practices, in terms of regulations and guidelines to encourage responsible tourism, including waste management systems, energy-efficient practices, and conservation initiatives to protect cultural heritage and preserve natural ecosystems ● Inadequate development of Public transport services ● Low level of collaboration between business sector, academia and government ● Absence of a long term policy in tourism, due to weak planning capacity, resulting also in frequent changes in legal framework and in the lack of harmonization of urban planning rules that do not allow companies to plan their investments

Opportunities	Threats
<ul style="list-style-type: none"> ● Growing investments in the development of infrastructure to support tourism, including transport networks and connectivity, hotels, resorts, and recreational facilities, to accommodate increasing tourist demand ● Digital marketing and online presence: leveraging digital platforms and social media channels can significantly enhance Albania's visibility, attract a broader audience, and engage with potential tourists ● Potential for diversification of tourism products: adventure tourism, cultural festivals, gastronomy tours, and wellness retreats, can attract niche markets and extend the tourism season ● Collaboration and partnerships: encouraging public-private partnerships, engaging local communities, and collaborating with international stakeholders can unlock new opportunities, foster knowledge exchange and support sustainable tourism development 	<ul style="list-style-type: none"> ● Environmental sustainability: Balancing tourism growth with environmental conservation is essential to preserve Albania's natural beauty and prevent the negative impacts of overcrowding and overdevelopment ● Competitive destinations: Albania faces competition from other Mediterranean and Southeast European destinations that have well-established tourism industries and robust marketing strategies ● Geopolitical factors: Political instability globally or unfavorable international relations can impact tourist perceptions and deter potential visitors ● Safety and security concerns: Addressing safety and security issues and ensuring a safe environment for tourists is crucial to build trust and attract international travelers ● Pandemics and global crises: External shocks, such as pandemics or global economic crises, more than in other sectors, can impact the industry's growth and stability, disrupting tourism flows

Domain 3: Healthy and Sustainable Food Chain

Agriculture plays a crucial role in Albania's economy and society, serving as a foundation for economic stability, cultural preservation, and national food security. It is a primary source of livelihood for a significant portion of the population, particularly in rural areas, and contributes significantly to the country's GDP (18%) and employment (one third). Given its pivotal importance and the multifaceted challenges it faces—such as fragmented land holdings, limited access to modern technology and financial resources, the impacts of climate change, and the need to align with international standards—agriculture was chosen as a priority domain for the Smart Specialization Strategy (S3) to harness targeted improvements and innovative solutions for sustainable growth.

Vision: Transform the Agriculture Sector to deliver healthy food by focusing on the development of sustainable food chain based on tradition that maximizes productivity, enhances value addition, and fosters inclusive growth, ensuring the well-being of its citizens.

Sub sectors:

- **Sustainable Organic Farming and Certification:** Encourage organic farming practices and certification to meet the growing demand for organic products by:
 - Investing in food processing facilities, the strategy aims to modernize and expand capacity for producing value-added food products;
 - Offering farm-to-table dining: Promote the consumption of locally sourced, fresh produce. This is of dual benefit as it encourages locally grown food and also supports small-scale farmers. Such experiences can also be accompanied by culinary workshops;
 - Offering farmers' markets and agro-festivals: Organize regular farmers' markets and agro-festivals where local producers can sell their goods directly to visitors. These events can feature cultural performances and workshops to enrich the experience.
 - Encouraging sustainable practices: Encourage farms to adopt sustainable and eco-friendly practices. Certify farms that meet specific sustainability criteria to attract eco-conscious tourists.

- **Food Processing and Value-Added Products:** Establish Albania as a leader in the European agrifood sector by leveraging innovative technologies and sustainable practices to enhance economic value and global appeal of local foods by:
 - Investing in food processing facilities, to modernize and expand capacity for producing value-added food products;
 - Supporting the development of value-added products that utilize local agricultural inputs, to promote local brands and enhance the visibility of local products both domestically and internationally;
 - Implementing stringent food safety and quality standards, local processed foods are ensured to meet international standards, increasing their competitiveness in global markets.
 - Establishing the Agriculture Knowledge Information System (AKIS), vital information, best practices, and technological advancements are disseminated to stakeholders within the food processing industry.

- **Sustainable Fisheries and Aquaculture:** Develop sustainable fisheries and aquaculture practices and processing to ensure a steady supply of high-quality seafood by:
 - Developing sustainable fisheries and aquaculture practices, to ensure environmental sustainability and the health of aquatic ecosystems;
 - Implementing advanced processing techniques, to ensure the quality of seafood products is maintained, meeting market demands for freshness and safety;
 - Promoting the adoption of aquaculture technologies that reduce environmental impact and increase yield, a steady supply of high-quality seafood is contributed.

- **Medicinal aromatic plants (MAP), oils and extracts production:** Position Albania as a hub of excellence for high-quality, sustainable medicinal and aromatic products, by:
 - Providing training and support to farmers on the best cultivation practices, focusing on organic methods, the initiative enhances the quality and marketability of MAP products;
 - Establishing quality control standards and procedures, consistency and purity of MAPs are ensured throughout the production chain, from field to market;
 - Implementing good agricultural, collection, and processing practices, product quality is maintained, ensuring that MAPs meet both local and international standards;
 - Facilitating the formation of cooperatives or associations among MAP growers and producers, market presence is strengthened, resources are shared, and bargaining power in the marketplace is enhanced.

For the field of Agriculture, six roundtable discussions were conducted involving representatives from the quadruple helix, focusing on agriculture, livestock farming, agro-processing, the blue economy, and food security, aligning with the national government's 2021-2027 agricultural strategy. The discussions revealed several key issues to consider for defining an innovation sectoral agenda which served as a starting point for discussions at the national workshop to identify strengths, weaknesses, opportunities, and threats for developing an innovation-based strategy for Albania's agricultural sector.

The SWOT analysis for **Healthy and Sustainable Food Chain** highlighted the following strengths, weaknesses, opportunities and threats of this domain:

Strengths	Weaknesses
<ul style="list-style-type: none"> ● Abundant natural resources (including water) and biodiversity and land quality ● Inherited agricultural and livestock traditions, especially in the cultivation of medicinal plants, tobacco, olive and viticulture, with wide diffusion of organic practices (not certified), resulting in high quality of the products ● Presence of specialized producers/farmers in trade and export (but not reaching their full potential) ● Favorable climate conditions for early access of products to markets (compared to regional countries, product maturation times are shorter) 	<ul style="list-style-type: none"> ● Land fragmentation (law 7501) and small farms, resulting in a lack of agricultural cooperatives and generally in a lack of collaboration and weakness of organizations that represent the sector ● Low adoption of advanced technology, including utilization of ICT ● Inadequate logistics infrastructure, especially in rural areas ● Low collaboration between the academic sector, industry, and government ● Lack of skills aligned with market demands (due also to the low number of professional schools) ● Uncertain legal framework due to lack of long term policies (i.e. lack of policies on uncultivated land) and need for review of sectoral legislation (i.e. tobacco) and for improvements in the implementation of legislation (i.e. bureaucracy for land lease from local government), resulting also in Informality of the sector ● Unclear institutional framework, resulting in need of better role division and collaboration between local and central government institutions ● Inadequate funding and fiscal policies (including tax refund schemes) for firms to face high costs of production and for boosting research and development applied to agriculture and food sector ● Low compliance of products to quality and safety standards for export, resulting in limited space for Made in Albania brand, also because of disconnected value chain (e.g., packaging not produced in Albania)

<p style="text-align: center;">Opportunities</p>	<p style="text-align: center;">Threats</p>
<ul style="list-style-type: none"> ● Constantly growing trend in demand for organic products and exploration of new markets ● High transformative potential deriving from the diffusion of advanced technological applications in the agricultural and food processing sectors ● Strong growth trend of rural and agro-tourism ● Favorable government policies, including increased attention to incentivizing and attractive national policies and strategies for Foreign Direct Investments and policies on uncultivated land and efficiency on land use ● Opportunity for broad access to financing in the Green and Circular economy at an international level ● Potential for development of aquaculture on fresh water (lakes, rivers) ● Potential for development of composting as an energy producer and fertilizer 	<ul style="list-style-type: none"> ● International competition with higher quality ● Climate change, resulting also in higher erosion and forest degradation ● Global instability such as the COVID-19 pandemic and the Russia-Ukraine conflict, and trade restrictions, resulting also in increasing price of inputs ● Emigration and depopulation of rural areas ● Old age of the farmers ● Inefficient waste management from agricultural production and food processing ● Legal framework allowing to change easily the land status and its use for constructions

Cross-cutting domains

Horizontal and cross-cutting measures were identified related to human capital development, digitalization and interconnectivity, and improving the national research and innovation ecosystem. Investing in human capital by increasing scientific and technological skills through all the vertical priority domains is crucial. This includes a review of educational and training programs, based on a skills and qualifications need analysis, that provides for a significant strengthening of curricula, with a focus on STEM disciplines and specific curricula related to S3 priorities, the harmonization of the education system with the VET system, review of curricula from primary education till higher education and the creation of university curricula capable of accompanying Albania in digital and green transitions and strengthening the specialization of the national economy in the S3 priority domains. At the same time, investing in lifelong learning is essential to implement a broad program of reskilling and upskilling of workers, taking into account the challenges posed by circular economy and artificial intelligence.

Building up the culture of innovation in schools and among young generations aimed at enhancing talents and preventing their emigration is another goal to be pursued with specific policy actions. Firstly, it is important to develop a favorable context that allows young generations to stay and contribute to the smart growth of Albania. The turning on of public information portals/services dedicated to pushing curricula and job opportunities linked to the S3 specialization areas and the support for the creation of places devoted to encouraging open innovation (such as living labs and fab labs) and capable of accompanying the growth in demand for innovation coming from civil society and young innovators should be considered as relevant actions.

Secondly, a key role in this plays the direct involvement of the diaspora. The return of talented and successful Albanians is favored by introducing stable financial support to companies for hiring researchers and workers with high skills and work experiences coming from abroad, inspiring confidence in the younger generations towards smart, sustainable, and inclusive growth of the country. The brain circulation and involvement of the diaspora from their country of stay brings knowledge and skills to the Albanian market enabling also new ideas and innovation, knowledge transfer, new partnerships and joint projects, as an added value in the innovation ecosystem and closing the gaps for knowledge and skills evidenced by stakeholders' part of quadruple helix through the EDP.

A sound industrial/innovation policy framework is important to be defined with the aim of creating a favorable business climate for companies to develop research and innovation. This passes through an overall review of incentive schemes aimed at promoting the priority domains of S3 with specific aid measures, including through the adoption of sustainable fiscal policies, and the definition of a legislative and regulatory framework aligned with EU standards and which can encourage investments by local companies and foreign investments and the development of clusters. It will be important to achieve a strong simplification of the procedures for starting business investments and a policy toolkit to support businesses in accessing public funding dedicated to R&I, including through the establishment of informative platforms and a dedicated communication strategy. The strengthening of the R&I incentive framework must also be directed towards the cross-sectoral introduction of eco-friendly and sustainable practices and processes and towards the adoption of digital technological solutions, both in the private and public sector.

A key role should be assigned to the strengthening of collaboration between academia, businesses, and the government and a growing involvement of organizations representing civil society. This collaboration can be achieved by strengthening agreements between the educational system and businesses for company internships of students and researchers, dual VET schools and on the job training, collaborating in the organization of business forums and innovation fairs up to revitalizing economic diplomacy.

It is also essential to define a specific support framework for technology transfer processes (vertical and horizontal) by “strengthening of linkages between technology supply side, technology adopters and the intermediary support service provider” . The development by universities and research bodies of the so-called Third Mission activities, including through support to spin-offs, and creation of a national network of innovation intermediaries such as Industrial Innovation Hubs, Tech Parks and Clusters require specific public support. Within these places the quadruple helix stakeholders can cooperate stably, with the aim to provide easier access to KIBS and better matching of SMEs’ demand for innovation and foster the dissemination of technological innovations across sectors and territory.

Human capital development

Human capital is the foundation of the competitiveness of the economies and the innovation potential. Education is one of the most important factors, which directly influences human capital. The actual competitive advantage of a nation consists in its capacity for continuous provision of highly qualified human resources. This process requires a long-term vision and careful planning, since well-trained cadres needed by the economy (especially in the industries with high value added), cannot be provided easily and quickly.

In developing human capital development in Albania, it's crucial to recognize the interdependencies of this area with the three vertical priority domains of the Smart Specialization Strategy (S3) - agriculture, energy, and tourism - and the overall competitiveness of the country.

The previous phases of the S3 process highlighted:

- **Emphasis on Education and Training:** Recognizing that education is crucial for developing a competitive and innovative human capital base, there's a need for specialized programs and high-quality training to address the specific skills required in high-value-added industries.
- **Interdependency with Key Sectors:** Human capital development is closely linked with the vertical priority domains of agriculture, tourism, energy and natural resources, which are pivotal for Albania's overall competitiveness and economic innovation.
- **Enhancement of Research Infrastructures:** To foster innovation, there's a critical need to bolster research infrastructures, which would enhance collaboration between the research community and the business sector, aligning with European research standards.
- **Investment in Research and Regional Collaboration:** Recommendations include increasing investments in research infrastructures, fostering regional and international cooperation in higher education, and improving legal frameworks to support a robust research and innovation ecosystem.

Digital Infrastructure and Connectivity

Advancing in the field of Digitalization and Interconnectivity is essential for Albania as it navigates its transition towards a more modern and competitive economy. As the backbone of today's global economy, a robust digital infrastructure and interconnected systems not only enhance operational efficiency but also open up new avenues for economic growth, innovation, and access to international markets. By smartly investing in this sector, Albania can accelerate its integration with European digital networks, foster a culture of innovation, and significantly improve public and private sector services. This development is crucial for creating a sustainable digital ecosystem that supports Albania's long-term goals of economic resilience, social inclusivity, and enhanced governmental transparency.

The previous phases of the S3 process highlighted the necessity for:

- **Infrastructure Development:** Significant emphasis is placed on enhancing digital infrastructure to support economic sectors across Albania. This includes the expansion of broadband access and the modernization of technological tools in business and government services.
- **Integration with European Networks:** There is a focus on aligning Albania's digital networks with broader European digital and data infrastructures to foster better connectivity and cooperation, which is crucial for economic and social integration with the EU.
- **Enhancement of Public Services:** Digitalization efforts are also aimed at improving public service delivery through e-government services, which can make government more efficient, transparent, and accessible to citizens.
- **Support for Innovation and Startups:** Encouraging the growth of digital startups and innovative enterprises through funding, mentorships, and incubators is identified as a key to driving forward Albania's digital economy.
- **Cybersecurity Measures:** With increased digitalization, there is a recognized need to strengthen cybersecurity measures to protect data and infrastructures, ensuring safety and confidence in digital transactions and communications.
- **Digital Skills and Literacy:** Enhancing digital skills at all levels of education and in the workforce is crucial to take full advantage of digital transformation opportunities, thus reducing the digital divide and fostering a more inclusive digital society.

Advancing Research and Innovation for Smart Growth

Albania's Smart Specialization Strategy (S3) places substantial emphasis on enhancing Research and Innovation, recognizing them as pivotal elements for driving sustainable economic growth and boosting national competitiveness. Acknowledging the transformative impact of these sectors, the strategy adopts a comprehensive approach designed to cultivate an ecosystem that nurtures innovation and scientific inquiry. By advancing Research and Innovation, Albania aims to align more closely with European research standards, attract global talent, and foster economic sectors that can lead to high-value-added outputs. This strategic focus is essential not only for achieving technological advancement but also for ensuring that the country remains competitive in an increasingly knowledge-driven global economy.

The previous phases of the S3 process highlighted the necessity for:

- **Strengthening Education and Training:** The need for substantial enhancement of curricula with a focus on STEM disciplines and curricula related to S3 priorities. Emphasis on lifelong learning through reskilling and upskilling programs to meet challenges posed by new economic trends such as the circular economy and artificial intelligence.
- **Cultivating a Culture of Innovation:** Building innovation culture in educational settings and among the youth to prevent brain drain. This includes creating information portals and open innovation spaces like living labs and fab labs to stimulate local innovation.
- **Leveraging the Diaspora:** Encouraging the return of Albanian talents from abroad by providing financial incentives for companies to hire highly skilled workers from the diaspora, thereby facilitating knowledge and skill transfer to the local market.
- **Policy Framework for Innovation:** Establishing a robust industrial and innovation policy framework to create a favorable business climate. This involves simplifying business investment procedures, enhancing public funding access for R&D, and integrating sustainable and digital solutions across sectors.
- **Collaboration among Academia, Business, and Government:** Strengthening ties between universities and businesses through internships and joint ventures to enhance practical training and job opportunities in research and development sectors

Following the SWOT analysis and the formulation of policy mix proposals, the subsequent chapter 9 on the Action Plan details how the insights from the Entrepreneurial Discovery Process (EDP) have shaped the objectives and measures for pursuing the envisioned advancements in the priority domain. To achieve the vision, the action plan is focused on the development of specific trajectories of innovation within these sectors.

9. Action Plan

Albania's Smart Specialization Strategy (S3) represents a strategic commitment to fostering innovation-led socio-economic growth and bolstering competitiveness on a European scale. This section outlines a meticulously crafted action plan that transforms the strategic visions into actionable outcomes, demonstrating a comprehensive and structured approach that is both aspirational and executable.

At the core of this action plan is a dedication to actionable and measurable steps that align with the S3 objectives. This plan not only details practical initiatives but also assigns clear responsibilities and establishes a robust framework for implementation. It effectively interlinks various sectors, harmonizes efforts across different levels of government, and involves key stakeholders from academia, industry, government, and civil society, forming a cohesive blueprint for national advancement.

Designed to be adaptive and responsive, the action plan can adjust to changing circumstances, embrace new innovations, and tackle emerging challenges. It ensures alignment with Albania's broader national and regional policies, integrating the S3 strategy into the country's overall development agenda as a dynamic and synergistic component.

The detailed Action Plan Document (Annex 5) outlines objectives, measures, activities, roles, responsibilities, resource allocations, timelines, and monitoring and evaluation mechanisms. This section summarizes the main objectives and initiatives for each identified priority domain in the S3. Highlighted boxes provide examples of comprehensive interventions within the priority domains, explaining the concept, rationale, and benefits. These examples illustrate key aspects but do not encompass the entire action plan, which includes numerous other measures and activities for each domain.

Remaining Challenges

Albania faces several challenges as it navigates its path within the regional economic landscape, focusing on enhancing data quality, sustaining stakeholder involvement, and ensuring strategic alignment. The refinement of statistical indicators is essential for accurately understanding the innovation potential and effectively monitoring S3 priority areas. A commitment to refining these indicators supports the effective monitoring and evaluation of S3 areas, ensuring data analysis is both accurate and of high quality.

Maintaining robust engagement with stakeholders through the ongoing Entrepreneurial Discovery Process (EDP) is crucial. The EDP has been groundbreaking, involving numerous actors from all four helixes through a bottom-up approach. The challenge now is to create a sustainable consultation system that adopts an ongoing EDP approach for S3, serving as a model for other significant public strategies within the existing regulatory framework.

Ensuring that sectoral strategies are in harmony with the overarching goals of S3 is another critical task. This alignment is key to creating a cohesive and effective strategy as an umbrella framework that guides sector-specific initiatives.

Specific measures to address these challenges have been outlined in the action plan, focusing on upgrading data collection methodologies and enhancing analytical capabilities. Plans are in place to establish a system for ongoing EDP that involves continuous stakeholder consultations, ensuring that the

quadruple helix dialogue remains dynamic and influential in shaping public policies. The specifics of this ongoing EDP framework, including its operational structure and the entities responsible for its organization, will be detailed in the governance section of the strategy.

A thorough review has been conducted to ensure alignment with sectoral strategies and will be revised periodically to align with the S3 framework. This will involve setting up coordination mechanisms to integrate sector-specific initiatives under the umbrella of S3 objectives.

By addressing these challenges with targeted measures, the goal is to build a robust and sustainable innovation ecosystem that drives strategic objectives forward. This action plan reflects Albania's commitment to embracing change, driving innovation, and securing a prosperous future. It details a strategic pathway to realizing these objectives—collectively and inclusively, setting the stage for a transformative journey. With clear goals and robust strategies, Albania is poised to meet its challenges and secure a thriving, innovative future for generations to come.

Summary of Action Plan Objectives by each Priority Domain

Renewable Energy and natural resources

This Priority domain includes 3 subdomains:

- Renewable Energy
- Raw materials
- Protection of the environment

Renewable Energy and protection of the environment

Vision: Increasing the renewable energy production being regional leader in renewable energy production and raw materials sector and assure exploiting and responsible management of its abundant natural resources, fostering environmental sustainability, energy security, green transition and increase competitiveness of the economy, through strategic investments, innovative technology, and sector reforms that will create sustainable and clean energy production in respect of the environment.

*Building on this vision, the action plan outlines several **strategic objectives** that provide a structured path toward realizing these ambitious goals.*

Diversifying the Energy Portfolio (Reflects Strategic Objective 1.1 "Boosting investments in renewable energy, including through the liberalization of the energy market." And specifically Specific Objective 1.1, M.1 and M.2: "Raise awareness promoting RES and energy efficiency investments and initiatives... supporting schemes and financing alternatives."): Albania's abundant sunlight and wind resources provide an outstanding opportunity for the development of solar and wind energy projects. The strategic objective is to harness these natural assets to enhance our energy security and promote environmental sustainability. Moving forward, we plan to streamline permitting processes, seamlessly integrate these projects into the national grid, and actively support research and development in solar and wind technologies to advance efficiency and cost-effectiveness. Additionally, environmental protection

measures will be integral, ensuring that these energy projects maintain biodiversity and minimize ecological impacts.

Innovating with Waste-to-Energy (*Reflects Strategic Objective 2: "Encourage the utilization of waste-to-energy technologies, innovative technologies, and biomass resources for clean energy production, reducing landfill waste and promoting resource efficiency." And specifically Specific Objective 2.1: "Promoting the use of biomass, solar, alternative fuel, natural gas in industry energy consumption"*): Addressing the dual challenges of waste management and energy production, we are set to bolster the utilization of waste-to-energy technologies. This initiative is designed to decrease landfill use and enhance resource efficiency, aligning with our broader environmental objectives. In the coming years, we will implement supportive policies and offer incentives for businesses to invest in these innovative energy solutions, while fostering partnerships between municipalities and private entities. Environmental monitoring systems will be installed to ensure these facilities operate within strict environmental compliance standards, significantly reducing the pollution and greenhouse gas emissions associated with waste disposal.

Embracing Energy Diversity (*Reflects Strategic Objective 3: "Promote a diverse mix of renewable energy sources and emerging technologies to reduce dependence on a single source." And specifically, Specific Objective 3.1, M.1: "Promote integration and new RES investments."*): In our commitment to reducing dependency on traditional energy sources, we will continue to promote a diverse array of renewable energy sources, such as biomass, geothermal, and hydropower, as well as emerging technologies. Our national strategy is aimed at establishing a resilient and sustainable energy system. We will provide grants and tax incentives to encourage the adoption of these technologies and ensure their integration into our energy mix, with a strong focus on minimizing environmental impact and preserving natural habitat.

Enhancing Grid Infrastructure and Energy Storage (*Reflects Strategic Objective 4: "Support modern and flexible grid infrastructure and energy storage that can efficiently handle the various nature of renewable energy resources and enable cross-regional energy sharing." And specifically, Specific Objective 4.1 "Investing in the development of smart grids and storage systems...."*): To effectively manage the variable nature of renewable energy, it is imperative to develop modern and flexible grid infrastructure. Our goal is to ensure that our energy system can efficiently handle these resources and facilitate cross-regional energy sharing. Plans include substantial investments in smart grid technologies and large-scale energy storage solutions to stabilize the grid. Additionally, we aim to enhance international and regional cooperation to ensure a balanced energy supply and demand, incorporating environmental protection strategies to mitigate any adverse impacts on the ecosystem.

Implement responsible forest management practices (*Reflects Strategic Objective 5: "Implement responsible forest management practices, including reforestation and sustainable timber harvesting...." and specifically Specific Objective 5.1 "Sustainable energy use practices."*): Initiatives such as reforestation and sustainable timber harvesting will be employed to balance economic gains with environmental conservation. The Albanian forest policy will be amended to promote the use of efficient harvesting techniques that minimize waste and environmental impact. *To achieve these strategic objectives, the action plan details a series of specific measures and activities, each aligned with the overarching goals of enhancing sustainability and fostering innovation:*

Policy and Regulatory Framework (*Reflects Specific Objective 1.2 "Streamlining procedures for issuing permits and licenses... improving legal and regulatory framework...."*): The strategy emphasizes the need for a consistent policy and regulatory framework to promote alternative energy sources and enhance energy efficiency. Key initiatives include promoting the integration of new renewable energy investments, boosting investments through the liberalization of the energy market, and increasing liquidity within

ALPEX markets. Efforts also focus on enhancing cross-border cooperation and increasing the generation and storage capacities of the Albanian Power Corporation (KESH). These measures will be implemented through the establishment of a functional RES Operator, adoption of clear incentives for renewable energy technologies, and regular policy reviews to adapt to market dynamics and technological advancements. One of the pivotal reforms includes joining the Single Day Ahead Coupling, aiming to integrate Albania's electricity market into the EU network and potentially exempt it from the EU's Carbon Border Adjustment Mechanism.

Smart Energy Infrastructure (Reflects Specific Objectives 4.1 "Investing in the development of smart grids and storage systems..."): This plan also highlights the importance of establishing smart energy infrastructure, with a focus on developing smart grids, energy storage systems, and mechanisms for cross-regional energy sharing. Investments will be directed towards deploying smart grid technologies to enhance grid reliability, efficiency, and flexibility. Energy storage solutions, such as batteries and pumped storage, will be developed and implemented to support renewable energy integration and grid stability. Furthermore, fostering cross-border cooperation will facilitate the exchange of renewable energy resources and promote regional energy security.

Capacity Building and Research (Reflects Specific Objective 3.2 "Strengthening the partnership between academia, businesses, and the government to bridge the skills gap..." And specifically, M1 "Promoting research and Albanian researchers. Promoting EU projects."): Enhancing skills and research capabilities is another critical objective of the plan. This will be achieved by strengthening partnerships between academia, industry, and government to identify skill gaps and develop tailored training programs. The plan supports innovative projects in areas like renewable energy sources, energy efficiency, and e-mobility. Notably, the establishment of the Albanian Excellence Energy Institute (AEEI) will bridge the gap between industry and academia, spearheading Albania's decarbonization efforts and fostering a culture of innovation.

Promoting Sustainable Energy Practices (Reflects Specific Objective 1.1, M.1 "Raise awareness promoting RES and energy efficiency investments and initiatives..."): Lastly, the strategy focuses on promoting sustainable energy use through various initiatives. These include launching public awareness campaigns to educate citizens and businesses about the benefits of renewable energy and implementing policies and incentives to promote energy-saving practices. Investment in waste-to-energy initiatives will reduce landfill waste and generate clean energy, while supporting sustainable forest management practices will ensure a sustainable biomass supply. These measures collectively aim to cultivate a culture of sustainability and efficiency across Albania's energy sector.

Improve the quality of urban air and water bodies in Albania (Reflects Specific Objective 3.1: "Promoting support measures for integration of alternative energy sources..."): by implementing comprehensive management and monitoring practices. This involves updating standards, modernizing systems, and ensuring compliance with EU regulations. The goal is to reduce pollution-related health issues and promote sustainable environmental management.

Implementing Sustainable Forest Management Policies by ensuring the efficient collection and utilization of forest residues, such as branches, tops, and bark left behind after timber harvesting. Additionally, the introduction of forest certification standards is essential to guarantee sustainable management of forests. The plan includes initiating pilot projects for forest certification and for the implementation of biomass

plantations on non-forest areas, involving the cultivation of specific tree species for energy production. These measures aim to enhance sustainable forest management, support energy production, and contribute to environmental conservation efforts.

.....

The Objective of the two initiatives presented in the boxes below is to position Albania as a leader in sustainable energy through the establishment of the Albanian Excellence Energy Institute (AEEI) and the development of comprehensive renewable energy projects. By fostering innovation, enhancing research capabilities, and promoting the use of renewable energy sources, these efforts aim to achieve decarbonization, energy independence, and economic growth.

Comprehensive Renewable Energy Initiatives (reflects strategic objective No. 1, 2, 3, particularly with specific objectives 1.1, 1.2, 2.1, 3.1 and 3.2)

S3 emphasizes a shift towards sustainable development by harnessing a variety of renewable energy sources including solar, biomass, wind, and hydroelectric power. Focused on reducing its carbon footprint and achieving energy independence, Albania aims to integrate these sources into the national grid for improved stability and resilience.

Core Services and Facilities

- Solar Energy Promotion: Actively promote solar energy through incentives for solar farms and installations, enhancing the adoption of solar technologies across the country.
- Biomass Energy Production: Transform agricultural and forestry waste into biomass energy, managing waste efficiently while producing clean power.
- Wind and Hydroelectric Development: Enhance wind and hydroelectric capabilities to balance the energy mix, ensuring a stable and resilient energy supply.
- Establishment of the Albanian Excellence Energy Institute (AEEI): Bridging the gap between academia and industry, spearheading research and development to lead Albania's decarbonization efforts and foster innovation in sustainable energy

Innovative Elements

- Incentive Programs: Implement incentive programs for the development and adoption of renewable energy technologies, encouraging investment and participation.
- Research and Innovation: Foster research and innovation in renewable energy technologies, supporting the development of efficient and sustainable energy solutions.
- Integrated Energy Systems: Develop integrated energy systems that combine multiple renewable sources, optimizing energy production and distribution.

Rationale

The renewable energy strategy is driven by the need to achieve energy independence and reduce carbon emissions. By harnessing a variety of renewable energy sources, Albania aims to:

- Reduce Carbon Footprint: Lower carbon emissions by promoting the use of clean and renewable energy sources.
- Achieve Energy Independence: Reduce reliance on imported energy by developing domestic renewable energy capabilities.
- Promote Economic Growth: Drive economic growth and job creation through investment in renewable energy technologies and infrastructure.

Benefits

- Improved Energy Access: Provide reliable and sustainable energy access to all communities, enhancing quality of life and economic opportunities.
- Enhance the competitiveness of Albanian businesses by reducing energy costs and promoting sustainable practices
- Create opportunities for innovation and technological advancement in the renewable energy sector.

Initiative for Digital Metering and Energy Storage Enhancement *(aligns closely with Strategic Objective No. 3 and 4 in the "Energy Sector", particularly with Specific Objectives 3.1 and 4.1)*

The initiative focuses on enhancing energy management and increasing system security through two pivotal projects: the widespread installation of smart meters and the implementation of the hydro pumped storage project. These projects aim to modernize Albania's energy infrastructure, promote sustainable energy practices, and ensure a stable energy supply.

This initiative aims at equipping residential and commercial buildings in pilot area with smart meters to enable real-time energy usage monitoring. This empowers consumers to actively manage their energy consumption, participate in demand response programs, and significantly reduce energy costs. In addition, develop a hydro pumped storage facility to balance energy loads by storing excess energy during low demand periods and releasing it during peak times. This facility is essential for stabilizing the national grid and integrating renewable energy sources effectively.

Core Services and Facilities:

- Real-Time Monitoring and Management: Smart meters provide consumers with instant data on energy consumption, fostering efficient energy use and enabling informed decision-making.
- Energy Storage and Grid Stability: The hydro pumped storage project offers a robust solution for energy storage, critical for mitigating the intermittency of renewable energy sources and enhancing grid reliability.

Innovative Elements:

- Demand Response and Consumer Incentives: Integrate smart meters with demand response systems to incentivize consumers to reduce or shift their energy use during peak periods, contributing to grid stability.
- Renewable Energy Support: The storage project facilitates greater use of renewable energies by storing surplus power and distributing it according to demand, supporting Albania's sustainability goals.

Rationale: By combining smart meter technology with hydro pumped storage, Albania can create a more adaptive and efficient energy system. This integrated approach not only meets the needs of modern consumers but also supports the country's transition to a more sustainable energy model.

Implementation Strategy:

- Phase 1: Feasibility and Planning: Conduct comprehensive studies to align the projects with national objectives and ensure environmental compliance.
- Phase 2: Deployment and Construction: Roll out smart meter installations and commence the construction of the storage facility.
- Phase 3: Optimization and Expansion: Monitor systems to refine their operation and expand their reach based on initial successes and gathered data.

This unified initiative seeks to enhance Albania's energy infrastructure through technological integration, fostering an efficient, sustainable, and stable energy landscape.

Natural Resources - Raw materials

Vision: Transform and modernize Albania's mining sector to drive smart growth and become a significant contributor to Europe's critical raw materials supply chain.

*Building on this vision, the action plan outlines several **strategic objectives** that provide a structured path toward realizing these ambitious goals.*

Mineral Deposit Expansion (*Reflecting Specific Objective 1: Orientation of Mining Sector of Albania To Become EU Strategic Partner and a Valuable Contributor To The EU's Critical Raw Materials Supply Chain*): A key focus of our future strategy involves the expansion and exploration of mineral deposits by using advanced technologies. We aim not only to enlarge existing mineral reserves but also to discover new deposits of Critical Raw Materials (CRM) and Strategic Raw Materials (SRM). Our goal is to position Albania as a strategic partner within the EU's raw materials supply chain. By strategically tapping into and efficiently utilizing these resources, we seek to enhance Albania's role in the global market for critical materials, which are pivotal for various high-tech and green industries.

Mineral Processing and Efficiency (*Reflecting Specific objective 3: Strengthening of mineral processing, Increasing the efficiency of non-renewable resources by adopting new waste-free technologies, trying to approach the green and circular economy model of the Raw Material_priority domain*): Improving mineral processing capabilities remains another critical objective of our strategy. We plan to increase the efficiency of non-renewable resource usage by adopting new, waste-free technologies. This initiative will align Albania's mining practices with green and circular economy models, enhancing the efficiency and sustainability of mineral extraction and processing. This approach not only reduces the environmental impact but also supports a more ecologically responsible mining sector, paving the way for sustainable development.

Infrastructure and Research Empowerment (*Reflecting Specific Objective 4 Empowering of Infrastructure, Scientific and Human Research Capacities of the Raw Material_priority domain*): To achieve these ambitious objectives, our strategy emphasizes the need to empower infrastructure, scientific, and human research capacities in the mining sector. Investing in modern infrastructure and fostering innovation in mining technologies are crucial steps toward building a robust research and development base. This will support the sustainable and strategic growth of the mining industry in Albania. Additionally, we are committed to cultivating a skilled workforce that can drive forward our national ambitions in the raw material sector, ensuring Albania's competitiveness on an international scale.

*To achieve these **strategic objectives**, the action plan details a series of specific measures and initiatives, each aligned with the overarching goals of enhancing sustainability and fostering innovation.*

Strategic Development for the Mining Sector (*Reflects Specific Objective of the Raw Material_priority domain, particularly with activities under M.1: Strengthening the Collaboration with EU Institutions/Actors/Organizations Operating in the Raw Material Sector*). To position Albania as a strategic partner within the EU, our plan encompasses detailed activities and measures aimed at fostering collaboration, modernizing legal frameworks, and optimizing the use of Albania's raw material resources. The Regional innovation Center of EIT Raw Materials in Elbasan will play a pivotal role in this transformation, coordinating initiatives that connect local advancements with broader European interests. This center is crucial for stimulating technological and scientific dialogues and integrating

Albanian stakeholders into the European Raw Material Alliances (ERMA), thereby enhancing our influence and integration within the EU raw materials sector.

Aligning with European Standards for Future Growth *(Reflects Specific Objective 1 of the Raw Material_priority domain, particularly under M.2: Reforming the Institutions and Optimizing the Division of Responsibilities and M.4: Reviewing Legal and Regulatory Framework of the Mining Sector)*: We are initiating a comprehensive evaluation of our organizational structures to align our mining sector with European standards. This restructuring will streamline operations, clarify roles, and eliminate inefficiencies, thereby enhancing our compliance with the Green Deal and other EU directives. Adjustments in environmental, mining, and tax regulations are also planned to promote sustainable and efficient mining practices that are in harmony with the strategic EU objectives, especially the CRM Act.

Proactive Exploration and Regulatory Reforms *(Reflects Specific Objective 1 of the Raw Material_priority domain, particularly under M.3: Compiling a National Programme for General Exploration Targeted at Critical Raw Materials and M.4: Reviewing Legal and Regulatory Framework of the Mining Sector)*. Our National Exploration Program is set to aggressively identify and develop new critical raw material deposits. This program will update existing mineral maps, launch geochemical campaigns, and utilize cutting-edge technologies such as drones and airborne geophysical surveys. Concurrently, we are undertaking a comprehensive overhaul of our legal and regulatory frameworks, crafting a new national mining strategy and revising legislation to meet international standards and embrace environmental sustainability goals.

Modernizing Trade Practices and Ensuring Market Fairness. *(Reflects Specific Objective 1 of the Raw Material_priority domain, particularly under M.5: Tackling Unfair Trade Practices Related to Raw Materials and Increasing Enforcement and Control)*: Albania is committed to modernizing its mining sector by implementing mechanisms to ensure fair trade practices and effective market monitoring. These new systems will detect and counteract unfair trade practices and provide ongoing assessments of market dynamics and trends, protecting the sector from price volatility and unfair competition.

Ensuring Sustainable Funding and Effective Monitoring *(Reflects Specific Objective 1 of the Raw Material_priority domain, with funding and monitoring mechanisms embedded across activities under this objective)*. The implementation of these strategic objectives will be supported by a blend of state budget funding, EU funds, and contributions from other donors, providing the necessary financial and structural backing to achieve these ambitious goals. We are establishing robust monitoring and evaluation mechanisms to track the progress of our initiatives, with specific result indicators designed to reflect the strategic impact of these efforts on Albania’s development in the mining sector.

The objective of the initiatives detailed in the boxes below is to advance the development and integration of innovative technologies, specifically smart exploration and exploitations (aerial surveys and UAVs), within Albania's mining sector. This integration is intended to enhance monitoring, improve efficiency, and ensure sustainable mining practices that adhere to environmental regulations and safety standards.

Integration of Aerial Surveys in explorations of minerals *(Reflects Specific Objective 2 in the "Raw Material_sector", particularly under M.1: Promoting Applications of Advanced Technologies on Explorations)*

As part of the Smart Specialization Strategy (S3), Albania is focused on the development and application of aerial survey technologies for the explorations activities. These surveys are pivotal for identifying and evaluating potential mining sites efficiently and with greater accuracy.

Utilization of aerial survey technologies to conduct extensive geological surveys will provide vital data regarding mineral deposits and underground data, crucial for planning and operational decisions.

Innovative Elements:

- Aerial technologies elevate the precision of geological surveys, supplying detailed and reliable data that underpin informed decision-making.
- Rapid and extensive area coverage to identify potential mineral deposits, minimizing time and resource expenditure compared to traditional methods.
- This method can be defined as green technology with zero impact on the environment

UAS/UAV (Drone) technologies for Monitoring and Sustainable Management (Reflects Specific Objective 3 in the "Raw Material_sector", particularly under M.2: Promoting the Circular and Green Economy Models on the Mining Sector, and Specific Objective 4, specifically under M.1: Supporting the Open Research Infrastructure for the Sector Including Government Academia and Research Institutions)

Incorporating UAVs technology to monitor and manage mining activities represents a strategic enhancement to the operational oversight within the sector.

Deployment of drones equipped with advanced sensors and imaging capabilities to monitor ongoing mining operations and environmental conditions in real-time.

Innovative Elements and advantages:

- Drones provide continuous oversight of mining operations, facilitating immediate response to any operational or environmental changes.
- Enhances safety protocols by providing geodata of difficult-to-access areas, reducing the risk to employees.
- Continuous surveillance helps in adhering to environmental standards by detecting deviations in real-time, ensuring immediate corrective measures.
- Reduce human resources needed for monitoring.

The integration of these advanced aerial and drone technologies addresses the critical need for enhanced operational efficiency and environmental compliance in Albania's mining sector. The strategic use of these technologies is intended to:

- Deliver more accurate geological data faster than traditional survey methods.
- Provide a bird's-eye view of operations, improving the management and immediate responsiveness to any arising issues.
- Ensure that mining activities are conducted within the framework of environmental conservation and regulatory compliance.

Benefits:

- For the Mining Industry: Access to cutting-edge technology for improved exploration and exploitation management, leading to cost savings and enhanced resource management.
- For Environmental Protection: Facilitates better compliance with environmental regulations, promoting sustainable mining operations and minimizing environmental impacts.

Through these interventions and focused components, Albania seeks to significantly elevate its mining sector, combining technological advancements with a commitment to sustainability and safety.

Sustainable and diversified tourism

Vision: Albania as a premier sustainable tourism destination, offering diverse and authentic experiences that celebrate its rich cultural heritage, beautiful landscapes, culinary delights, and wellness offerings that contribute to the well-being of its communities. We envision a dynamic, diverse, country-wide, all year tourism sector that contributes to the socio-economic development of the country while promoting responsible practices and preserving our natural and cultural treasures for future generations.

*Building on this vision, the action plan outlines several **strategic objectives** that provide a structured path toward realizing these ambitious goals.*

Development of a Dynamic and Diverse Tourism Industry (Reflects Specific Objective 1 in the "Improve the Quality of Urban Air" sheet, particularly under M1: Prepare and Revise Urban Air Quality Plans to Reach National Goals and M2: Modernization and Upgrading of Monitoring Network; and Specific Objective 2 in the "Monitoring of Water Bodies" sheet, particularly under M1: Increasing the Quality of Monitoring and M2: Increasing Capacities for Monitoring; as well as Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative

Industries): Albania is committed to transforming its tourism sector into a vibrant, year-round industry that extends across the entire nation. This central objective seeks to cultivate a tourism environment that is dynamic and diverse, aimed at ensuring the industry's sustainability and broadening its appeal throughout the year. By integrating innovative digital technologies and enhancing educational programs, we aim to enrich the tourist experience and operational efficiencies, thereby creating a workforce well-versed in modern tourism requirements, including digital and green skills. This strategic focus is designed to elevate Albania's tourism sector, making it a resilient and attractive destination for tourists from around the world, regardless of the season.

Development of the Health and Wellness sub sector of Tourism by tapping into Albania's natural and therapeutic resources (*Reflects Specific Objective 2 in the "Monitoring of Water Bodies" sheet, particularly under M1: Increasing the Quality of Monitoring and M2: Increasing Capacities for Monitoring; and Specific Objective 1 in the "Improve the Quality of Urban Air" sheet, particularly under M2: Modernization and Upgrading of Monitoring Network. Additionally, aligns with Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative Industries*): Albania is strategically enhancing its tourism sector by developing specialized pathways that leverage its unique natural and cultural assets. Future plans focus on establishing a renowned health and wellness subsector, utilizing the country's therapeutic resources to attract global visitors seeking rejuvenation. Simultaneously, Albania is set to transform its cultural and heritage tourism through advanced digital technologies like augmented and virtual reality, making historical experiences more immersive and accessible.

Additionally, efforts to expand adventure and rural tourism aim to connect visitors with Albania's stunning landscapes and traditions through eco-friendly practices, promoting year-round tourism and sustainable rural development. **These initiatives will position** Albania as a diverse and attractive destination, ready to meet the evolving demands of international tourists.

Sustainable and Smart Tourism (*Reflects Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative Industries, with a focus on promoting eco-friendly practices and adopting best available techniques for innovation; and Specific Objective 4 in the "Improve Inspection" sheet, particularly under M1: Increasing the Capacities of Inspection Bodies for Environmental Permits Through the Use of Advanced Technologies*): This objective is focused on creating a dynamic and diverse tourism industry in Albania that operates year-round and country-wide. Key initiatives include digitizing the tourism sector, improving marketing strategies, and using electronic resources to enhance the accessibility and management of tourist services. Digital tools like apps and electronic maps **are envisioned** to provide tourists with information and security, thereby supporting tourism businesses and startups.

Development of niche tourism products and services with focus on culinary (*Reflects Specific Objective 2 in the "Monitoring of Water Bodies" sheet, particularly under M2: Increasing Capacities for Monitoring, with an emphasis on promoting the quality of bathing waters in elite tourism areas; and Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative Industries, focusing on promoting eco-friendly practices and sustainable agricultural processes.*): Albania is poised to carve out a distinct niche in the global tourism market by focusing on the development of culinary tourism. This initiative aims to showcase Albania's rich culinary heritage and diverse food culture, drawing food enthusiasts from around the world. **The future strategy involves** partnering with local chefs, restaurants, and food artisans to create unique gastronomic experiences that highlight traditional and contemporary Albanian cuisine. In addition, the focus is on combining cultural tours with nature walks, culinary experiences, winery, olive grove tours and adventure sports. These culinary tours and events will not only enhance the gastronomic appeal of Albania but also stimulate local economies and promote sustainable agricultural practices.

Development of skills in tourism and collaboration (*Reflects Specific Objective 4 in the "Improve Inspection" sheet, particularly under M1: Increasing the Capacities of Inspection Bodies for Environmental Permits Through the Use of Advanced Technologies, with a focus on training and capacity building; and Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative Industries, emphasizing adaptation of best available techniques and fostering innovation.*): Recognizing the critical need for skilled professionals in the evolving tourism industry, Albania is committed to enhancing education and training within the sector. Future plans include the establishment of specialized training programs that focus on modern tourism demands, such as digital marketing, sustainable tourism practices, preservation of cultural heritage and customer service excellence. Collaboration between educational institutions, industry stakeholders, and government bodies will be strengthened to ensure that the curriculum is aligned with industry needs and that students receive practical, hands-on experience. The future plans include the establishment of specialized training programs that focus on modern tourism demands, such as digital marketing, sustainable tourism practices, and customer service excellence. Collaboration between educational institutions, industry stakeholders, and government bodies will be strengthened to ensure that the curriculum is aligned with industry needs and that students receive practical, hands-on experience. A Tourism Skills Academy will be created to offer comprehensive training for tourism professionals, emphasizing digital and green skills. Internship and apprenticeship programs will provide hands-on experience for students, preparing them to excel in a competitive market. **This comprehensive approach aims** to equip Albanian tourism professionals with the skills necessary to excel in a competitive market and to foster an environment of continuous learning and innovation.

To achieve these strategic objectives, the action plan details a series of specific measures and initiatives, each aligned with the overarching goals of enhancing sustainability and fostering innovation.

Product Diversification (*Reflects Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative Industries, with a focus on promoting eco-friendly practices in industries; and Specific Objective 2 in the "Monitoring of Water Bodies" sheet, under M1: Increasing the Quality of Monitoring, ensuring environmental standards are upheld to support tourism development.*) is a cornerstone of this transformation. Albania is committed to expanding the range of tourism products available, ensuring they captivate interest throughout the year. By developing a variety of attractions and activities that appeal across seasons, we aim to minimize the traditional peaks and troughs associated with tourist flows, fostering a more stable economic environment for local businesses.

Digital Integration (*Reflects Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative Industries, with an emphasis on adopting digital technologies and promoting innovation across sectors, including tourism; and Specific Objective 4 in the "Improve Inspection" sheet, particularly under M1: Increasing the Capacities of Inspection Bodies for Environmental Permits Through the Use of Advanced Technologies, to enable digital monitoring and efficient compliance.*) plays a pivotal role in modernizing our approach. The goal is to embed digital technologies into the daily operations of tourism providers and leverage them to reshape the broader developmental strategies of the sector. From digital booking systems and virtual tours to apps that provide real-time information and enhance visitor safety, technology is enhancing the tourist experience while improving operational efficiency. This digital push also supports personalized travel experiences, allowing tourists to tailor their visits to their interests, further enhancing Albania's appeal as a tourist destination.

Collaborative Innovation in Tourism and Environment (*Reflects Specific Objective 3 "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative*

Industries, supporting collaborative projects, research, and the use of new technologies in the tourism sector to foster innovation; and Specific Objective 4 in the "Improve Inspection" sheet, particularly under M1: Increasing the Capacities of Inspection Bodies for Environmental Permits, enabling effective collaboration between stakeholders and enhanced use of advanced technologies for monitoring.): Albania is embarking on a journey to transform its tourism sector through the power of collaborative innovation. At the heart of this strategy is the establishment of intersectoral platforms that bring together stakeholders from government, industry, academia, and civil society. These platforms will serve as incubators for creative ideas, enabling diverse groups to co-create solutions that enhance the tourism experience. The launch of the Innovation Ecosystem Fund will provide essential seed funding to support collaborative projects and startups emerging from these interactions. Additionally, regular innovation challenges, including hackathons and competitions, will be organized to stimulate creative problem-solving. By fostering a culture of collaboration, Albania aims to position itself as a hub of tourism innovation, drawing on the collective expertise and resources of its stakeholders to drive growth and development.

Development of a Dynamic and Diverse Tourism Industry *(Reflects Specific Objective 1 in the "Improve the Quality of Urban Air" sheet, particularly under M1: Prepare and Revise Urban Air Quality Plans, enhancing environmental quality for tourism; and Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative Industries, promoting sustainable tourism practices, digital integration, and a variety of year-round tourism products.):* Albania is committed to transforming its tourism sector into a vibrant, year-round industry that extends across the entire nation. Central to this objective is the development of marketing strategies that highlight Albania as a year-round destination, emphasizing seasonal attractions and events. The digitization of tourism services will play a crucial role, with the implementation of digital tools such as apps and electronic maps to improve the accessibility and management of tourist services. Moreover, efforts to expand adventure and rural tourism will connect visitors with Albania's stunning landscapes and traditions through eco-friendly practices. By integrating innovative digital technologies and enhancing educational programs, Albania aims to enrich the tourist experience and operational efficiencies, creating a workforce well-versed in modern tourism requirements, including digital and green skills. These initiatives are designed to elevate Albania's tourism sector, making it a resilient and attractive destination for tourists from around the world, regardless of the season.

Development of Niche Tourism Products *(Reflects Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative Industries, focusing on promoting unique and eco-friendly industries like culinary tourism; and Specific Objective 2 in the "Monitoring of Water Bodies" sheet, particularly under M1: Increasing the Quality of Monitoring, ensuring water quality and environmental standards for tourism areas, which is vital for culinary and wellness tourism.):* In its quest to carve out a distinct niche in the global tourism market, Albania is focusing on the development of culinary tourism. This project is designed to highlight Albania's extensive culinary traditions and varied food culture, attracting global food lovers. Albania intends to collaborate with local chefs, eateries, and culinary artisans to craft distinctive dining experiences that showcase traditional and modern Albanian dishes. To boost Albania's appeal as a culinary destination, gastronomic tours and events will be organized, which will also bolster local economies and support sustainable farming methods. The focus will be on promotion of specific Albanian products for their unique characteristics, linked to their geographical origin as well as traditional know-how. Recognized as intellectual property, those products enable consumers to trust and distinguish quality products while also helping producers to market their products better and play an increasingly important role in trade negotiations between EU and other countries.

Annual food festivals and farm-to-table programs will connect tourists with local agricultural practices and products, further enriching the culinary tourism experience. Through these efforts, Albania aims to position itself as a premier destination for food tourism, offering visitors a taste of its vibrant culinary traditions.

Sustainable and Smart Tourism (Reflects Specific Objective 3 in the "Boost Innovative Industries" sheet, particularly under M1: Align Legal Framework to EU Directives for Boosting Innovative Industries, with a focus on sustainable tourism practices, digital transformation, and the promotion of eco-friendly and green technologies; and Specific Objective 4 in the "Improve Inspection" sheet, particularly under M1: Increasing the Capacities of Inspection Bodies for Environmental Permits Through the Use of Advanced Technologies, ensuring sustainability compliance and promoting the smart use of digital tools for tourism management and experience enhancement.): Albania is committed to creating a dynamic and diverse tourism industry that operates year-round and country-wide, with a strong focus on sustainability and smart practices. Key initiatives include the digital transformation of tourism companies through co-financing grants that enable the adoption of advanced digital solutions and automation tools. The development of an expansive open data database will support research and business collaborations, enhancing the overall efficiency and accessibility of tourist services. Additionally, a comprehensive e-commerce roadmap will be established, including the development of case studies and awareness campaigns on digital payments. Smart tourism initiatives will leverage digital tools to provide tourists with real-time information and enhanced security, supporting tourism businesses and startups. By promoting sustainable tourism practices that minimize environmental impact and support local communities, Albania aims to create a tourism industry that is not only economically viable but also environmentally and socially responsible. Through these measures, Albania is poised to become a leader in sustainable and smart tourism, attracting visitors from around the world while preserving its natural and cultural heritage.

The Objective of the **initiatives detailed in the boxes** below is to enhance the tourism appeal of Albania through the development of innovative tools focused on digital innovation. By employing Virtual Reality (VR) and Augmented Reality (AR), using advanced technologies to classify and diversify touristic areas, promoting local products and agrotourism, transforming old mining and industrial sites to tourism destinations, and improving environmental monitoring, these measures aim to provide immersive and engaging experiences for visitors, promote sustainable tourism, and boost local economic development.

Comprehensive Digital Tourism Enhancement Initiative (Reflects Specific Objective 3 "Boost Innovative Industries", particularly M1: Align Legal Framework to EU Directives for Boosting Innovative Industries; and Specific Objective 4 in the "Improve Inspection", particularly M1: Increasing the Capacities of Inspection Bodies for Environmental Permits Through the Use of Advanced Technologies.)

Redefine and elevate the tourism experience through the strategic application of digital technologies. This initiative aims to harness the transformative power of Virtual Reality (VR), Augmented Reality (AR), and comprehensive digital platforms to enrich the tourist experience at various levels. Albania's rich tapestry of cultural heritage and picturesque landscapes presents a unique opportunity to blend traditional tourism with modern technology. By implementing immersive technologies such as VR and AR, the initiative plans to bring Albania's history and culture to life in ways that are engaging, educational, and accessible to a global audience. These technologies will allow visitors to experience historical events, explore archaeological sites, and understand cultural narratives deeply and vividly, all through a digital lens. Additionally, the initiative seeks to enhance the accessibility and enjoyment of Albania's tourism offerings by developing interactive smart maps and dedicated mobile applications. These digital tools are designed to provide seamless navigation through Albania's tourist sites, enriched with multimedia content such as audio guides, video clips, and interactive stories. This approach not only caters to the digital-savvy generation but also makes tourism more inclusive for individuals with physical limitations or those unable to travel. Through this initiative, Albania is not just promoting tourism; it is striving to create a holistic and enriched visitor experience that leverages digital innovation to highlight its natural beauty and cultural wealth. The goal is to make Albania a must-visit destination on the digital global map, appealing to a broader audience and fostering a deeper connection between the visitors and the rich Albanian heritage. This strategic fusion of technology and tourism is expected to boost economic growth, enhance cultural preservation, and ultimately transform the perception of Albania as a pioneer in the digital tourism frontier.

Core Services and Facilities:

- VR and AR Experiences: Implement VR and AR technologies at key tourist sites, including museums and historical locations, to offer interactive and immersive visitor experiences.
- Interactive Smart Mapping: Develop smart mapping solutions that provide real-time navigation and enriched content about cultural landmarks and historical sites.
- Comprehensive Digital Platforms: Create integrated platforms that include virtual tours, extensive cultural and historical information, and user-friendly tourist applications.
- Advanced technologies to classify and diversify touristic areas

Innovative Elements:

- Immersive and Engaging Education: Utilize VR and AR to transform traditional visits into dynamic, interactive learning experiences, making history and culture accessible and engaging to all ages.
- Global Accessibility: Through comprehensive digital platforms, provide virtual access to Albania's attractions, allowing global users to explore and plan visits from anywhere in the world.
- Enhanced Visitor Services: Offer digital tools that simplify navigation, provide valuable insights, and facilitate easy access to tourism-related services.

Rationale: This initiative is designed to enhance Albania's appeal as a tourist destination by leveraging digital technology to improve visitor engagement, satisfaction, and accessibility. It aims to:

- Attract a Diverse Audience: Cater to a global audience with varying interests and needs, from history enthusiasts and cultural scholars to casual tourists.
- Promote Cultural and Natural Heritage: Use digital innovations to preserve and showcase Albania's heritage, promoting sustainable tourism and cultural understanding.
- Enhance Tourist Experiences: Provide enriched, educational, and convenient visitor experiences that encourage longer stays and repeat visits.

Benefits:

- For Visitors:
 - Enhanced Experiences: Visitors will enjoy more immersive and interactive ways to learn about and experience Albania's culture and history.
 - Convenience and Accessibility: Enhanced digital tools, including virtual tours and smart maps, will make it easier for tourists to navigate and explore Albania's offerings, enriching their overall experience.
 - Informed Decision-Making: Access to comprehensive digital content and resources helps visitors plan their trips effectively, maximizing their enjoyment and satisfaction.
- For Local Communities:
 - Increased Tourism: Enhanced tourist experiences and global accessibility are expected to attract more visitors, increasing tourism revenue and economic benefits.
 - Cultural Preservation: Digital tools help preserve cultural sites and traditions by providing educational content that raises awareness and appreciation among both locals and tourists.
 - Job Creation: Growth in tourism is anticipated to create new jobs in technology, tour operations, and customer service within the local communities.

By merging digital innovation in tourism with comprehensive visitor support, this initiative not only enriches the tourist experience but also positions Albania as a forward-thinking destination in the global tourism industry.

Enhancing Agritourism through Local Product Promotion (Reflects Specific Objective 2 in the "Monitoring of Water Bodies", particularly M2: Increasing Capacities for Monitoring, by promoting quality standards for bathing waters and agro-tourism areas; and Specific Objective 3 in the "Boost Innovative Industries", particularly M1: Align Legal Framework to EU Directives for Boosting Innovative Industries, focusing on promoting sustainable, eco-friendly practices in food production, tourism, and agriculture.)

This initiative aims to enrich Albania's tourism sector by promoting agritourism and the farm-to-table concept, which emphasizes the consumption and utilization of locally sourced agricultural products. By integrating agricultural experiences with tourism, this initiative seeks to boost local economies, support sustainable agricultural practices, and offer authentic Albanian cultural experiences to tourists and residents alike.

Key Features:

- **Farm-to-Table Experiences:** Support and incentivize restaurants and hotels to incorporate locally sourced ingredients into their menus. This effort not only promotes the freshness and quality of local products but also reduces the carbon footprint associated with food transportation.
- **Interactive Farm Visits:** Develop partnerships with local farms to offer tours and activities that engage visitors in hands-on agricultural tasks such as crop harvesting, cheese-making, and animal husbandry. These experiences provide a tangible connection to the food production process and enhance the educational aspect of tourism.
- **Digital Platforms for Agritourism:** Facilitate the development of applications and online platforms that make it easier for tourists and locals to discover and book farm-to-table dining experiences and agritourism activities. These platforms serve as a bridge between agricultural producers and potential customers, improving market accessibility for small-scale producers.
- **Local Markets and Agro-Festivals:** Organize regular farmers' markets and festivals that showcase local agricultural products and crafts. These events offer local producers a venue to sell their goods directly to consumers and serve as a cultural attraction for tourists.

Innovative Elements:

- **Culinary Integration:** Encourage culinary innovation by integrating traditional Albanian cooking methods with modern gastronomy, creating a unique dining experience that highlights local ingredients.
- **Educational Opportunities:** Offer educational programs and workshops at farms that teach visitors about sustainable farming practices and local agriculture, enriching their overall travel experience.
- **Marketing Support for Local Products:** Provide marketing support to local farmers and producers to enhance the visibility of their products through branding initiatives that emphasize quality and local origin.

Rationale: The focus on agritourism and local product promotion is driven by the need to diversify tourism offerings, support rural economies, and promote sustainable agricultural practices. By connecting tourists with local producers and environments, this initiative aims to:

- **Boost Local Economies:** Support local farmers and producers by opening up new revenue streams and reducing dependency on traditional supply chains.
- **Enhance Tourist Experience:** Offer tourists unique, authentic experiences that deepen their understanding of Albanian culture and traditions.
- **Promote Sustainability:** Encourage sustainable consumption patterns among residents and visitors, supporting Albania's overall environmental goals.

Benefits:

For Tourists:

- **Authentic Experiences:** Enjoy genuine interactions with local communities and gain insight into the agricultural heritage of Albania.
- **Fresh and Healthy Options:** Access to meals prepared with fresh, locally sourced ingredients that offer enhanced flavor and nutritional benefits.

For Local Producers:

- **Direct Market Access:** Gain direct access to the tourism market, which can lead to higher profit margins and increased business stability.
- **Enhanced Exposure:** Benefit from increased exposure through tourism-driven marketing and promotional efforts.

This strategic approach to integrating agritourism within the broader tourism and economic development framework positions Albania as a leading destination for eco-conscious and culturally enriching travel experiences.

Revitalizing the Closed Mines and abandoned Industrial sites and develop geoparks (Reflects Specific Objective 1 in Tourism section of the Action Plan, particularly M2: Promote mining heritage and industrial abandoned sites as added value for tourism.)

The S3 strategy includes measures to transform the closed mines and abandoned industrial sites into major tourist attractions. This initiative aims to preserve Albania's mining legacy and industrial heritage transforming these areas into open air auditors for educational purposes and recreational activities. Geoparks are the territories that showcase geological, archaeological, religious, and historical sites, offering educational and recreational experiences for visitors.

Core Services and Facilities

- Mining legacy and industrial heritage. Transforming these structures into the social service area for cultural events, scientific activities for students or potential museums for tourists.
- Heritage Preservation: Preserve the geological heritage as a non-renewable natural resource.
- Tourist Infrastructure: Developing tourist infrastructure to support visitors, including the establishment of mining museums, visitor centers, guided tours, and educational programs.
- Smart infrastructures: design and developing the smart mobile Apps dedicated to the Virtual Tour of Geosites and national parks.

Innovative Elements

- Educational Programs: Offer educational programs and guided tours that provide in-depth information about the geological and evolution of the sites.
- Recreation Spaces: Creating spaces that offer activities such as hiking, cycling, and nature exploration games.
- Sustainable Tourism: Promote sustainable tourism practices that minimize environmental impact and support local communities.

Rationale

The transformation of the closed mines and industrial sites is driven by the need to preserve Albania's industrial heritage and promote sustainable tourism. By repurposing these areas, Albania aims to:

- Attract Niche Tourism: Attract tourists interested in geology and industrial heritage.
- Promote Sustainability: Encourage sustainable tourism practices that support environmental conservation and local economic development.
- Enhance Education: Provide digital smart educational opportunities that highlight the importance of Albania's industrial and geological heritage.

Benefits

For Visitors:

- Unique Attractions: Experience unique tourist attractions that offer insights into Albania's industrial and geological history.
- Educational Opportunities: Participate in educational programs that enrich their understanding of the sites.

For Local Communities:

- Economic Development: Boost local economies through increased tourism activity.
- Cultural Preservation: Preserve and promote local geological and industrial heritage

Environmental Monitoring and Emergency Response (Reflects Specific Objective 1 in "Tourism", particularly M2: Improving Tourist Safety and Health Measures, with a focus on implementing monitoring systems for environmental safety; and Specific Objective 3 M1: Promoting Sustainable Tourism Practices, emphasizing environmental protection and sustainability in tourism activities.)

Albania's initiatives aim to significantly advance environmental monitoring and tourist safety through the strategic deployment of cutting-edge technologies. This comprehensive approach includes enhancing the capabilities of inspection bodies, focusing on environmental permits and introducing innovative systems for monitoring water bodies, beaches, and coastlines to support the blue economy and tourism. Additionally, an app for calculating the carbon footprint of tourist activities will be introduced, promoting sustainable travel.

Core Services and Facilities

- Advanced Environmental Monitoring: Utilize satellite technology and AI-driven systems to monitor environmental conditions, detect potential hazards, and manage emergencies effectively.
- Water and Coastal Monitoring: Implement specialized technologies for monitoring Albania's water bodies and coastal areas, ensuring the health and safety of these critical ecosystems.
- Carbon Footprint App: Develop a mobile application that helps tourists calculate and understand the carbon footprint of their activities, encouraging environmentally friendly travel choices.

Innovative Elements

- Through the use of advanced monitoring devices, real-time data on industrial pollution, water quality, and coastal conditions will be collected and analyzed.
- Leverage AI-driven alert systems and robust emergency protocols to provide a swift response to environmental threats, enhancing the safety of both tourists and local communities.
- Offer educational resources through the carbon footprint app and other digital platforms to engage tourists and locals in sustainable practices.

Rationale

Integrating environmental monitoring with tourist safety is crucial for preserving Albania's natural landscapes and ensuring a safe, enjoyable experience for visitors. This initiative also aims to bolster the inspection capabilities of environmental bodies through:

- Equip inspectors with the latest techniques and knowledge on using new technologies for environmental monitoring.
- Introduce advanced tools to improve inspection times and increase the identification of issues, ensuring higher compliance with environmental standards.
- Provide inspectors with training on modern sampling methods and the use of mobile devices in the field.
- Acquire state-of-the-art monitoring devices for tracking industrial pollution and safeguarding environmental health.

Benefits

For Visitors:

- Enhanced Safety: Enjoy a safer tourism experience with advanced monitoring and emergency response systems.
- Informed Travel: Receive real-time information and alerts about environmental conditions and potential hazards.

For Local Communities:

- Environmental Protection: Benefit from improved environmental protection and management.
- Community Safety: Ensure the safety of local communities through effective emergency response systems.

By implementing these measures, Albania aims to significantly enhance its tourism sector through digital innovation, the transformation of heritage sites, comprehensive tourism experiences, and improved environmental monitoring. These initiatives will drive economic growth, promote sustainability, and position Albania as a leading destination for tourists worldwide.

Healthy and Sustainable Food Chain

Vision: Transform the Agriculture Sector to deliver healthy food by focusing on the development of a sustainable food chain based on tradition that maximizes productivity, enhances value addition, and fosters inclusive growth, ensuring the well-being of its citizens.

*Building on this vision, the action plan outlines several **strategic objectives** that provide a structured path toward realizing these ambitious goals.*

Transform the agriculture sector into a sustainable and traditional-based food chain (*Reflects Specific Objective 1.1: “Sustainable Farming and Certification”, focusing on enhancing the economic viability of farms and sustainable investments to face climate change.*): Future efforts in Albania will focus on transforming the agricultural landscape by enhancing the economic sustainability of farms. The strategy aims to boost the economic viability of farms by reducing production costs and increasing sustainability through direct support measures. These measures will stabilize farmers' incomes and enable strategic planning and sustainable investments, preparing the sector to face modern challenges like climate change effectively.

Addressing Climate Change Mitigation and Adaptation (*Reflects Specific Objective 1.2, particularly M1: “Investments on Enhancing Processing Facilities and Marketing of Agro-Food and Fishery Products”, aiming to increase efficiency and support sustainability in the agri-food sector.*): Future actions will focus on enhancing the competitiveness and sustainability of the agricultural and fisheries sectors through investments in food processing and value-added products. This strategy targets modernizing infrastructure to increase the efficiency and quality of food products, thereby supporting climate change mitigation and adaptation efforts.

Sustainable and Efficient Management of Natural Resources (*Reflects Specific Objective 1.3: “Sustainable Fisheries and Aquaculture”, which emphasizes sustainable fishing practices, conservation of marine resources, and supporting the blue economy.*): The strategy extends to Sustainable Fisheries and Aquaculture, aiming to support sustainable fishing practices and conservation of marine resources. This includes grants to support the blue economy and develop marine tourism, diversifying income sources for the fishing industry while enhancing marine conservation awareness.

Rural Employment and Business Development (*Reflects Specific Objective 1.4: “Medicinal aromatic plants, oils and extracts production”, aiming to enhance production capacities, promote medicinal aromatic plants, and support sustainable agricultural practices.*): Albania is set to focus on agricultural sector diversification and value addition, especially for the production of Medicinal Aromatic Plants (MAPs), oils, and extracts. Efforts will be made to improve production and storage capacities, essential for maintaining the quality and efficacy of MAPs, and support the adoption of advanced agricultural practices and infrastructure.

Sustainable Development in Marine and Inland Fisheries (*Reflects Specific Objective 1.3: “Sustainable Fisheries and Aquaculture”, aimed at balancing economic growth with the conservation of marine resources for sustainable industry practices.*): Albania is committed to enhancing its marine and inland fisheries sectors to support sustainable rural development. This commitment extends to strengthening rural employment and enterprise development, specifically through promoting rural tourism and agritourism, which are vital for improving living conditions in these areas. By bolstering these sectors, Albania aims to retain and attract a skilled workforce, essential for the sustainable growth and prosperity of its rural communities.

Sustainable Management of Natural Resources (Reflects Specific Objective 1.3: “Sustainable Fisheries and Aquaculture”, aimed at balancing economic growth with the conservation of marine resources for sustainable industry practices.): The strategy extends to Sustainable Fisheries and Aquaculture, supporting sustainable fishing practices and the conservation of marine resources to ensure the long-term viability and environmental sustainability of these industries.

Optimize agricultural land use and meet consumer demands for safe, sustainable food (Reflects Specific Objective 1.1, specifically M2: “Comprehensive Land Management and Modernization”, focusing on digitizing agricultural lands, promoting organic farming, and improving market competitiveness.): Looking ahead, Albania plans to optimize land use and meet market demands for safe and sustainable food by aligning with EU standards. This includes initiatives like the digitization of agricultural land, promoting organic farming, and supporting local food chains to enhance food quality and environmental sustainability. By improving market orientation and competitiveness, Albania aims to create a robust agri-food sector that responds dynamically to consumer needs and global market trends.

To achieve these strategic objectives, the action plan details a series of specific measures and initiatives, each aligned with the overarching goals of enhancing sustainability and fostering innovation.

Increasing Economic Sustainability of Farms (Reflects Specific Objective 1.1: “Sustainable Farming and Certification”, emphasizing the use of AI and precision agriculture for disaster risk management and sustainable practices.): Albania is taking significant strides to enhance the economic sustainability of its farms, focusing on challenges such as climate change. The country is implementing innovative insurance pilot schemes to mitigate risks from natural disasters, providing financial stability to farmers. This initiative is complemented by the adoption of precision agriculture technologies, such as GPS and drones, which enable precise monitoring and management of crops. These technologies optimize resource use, reduce waste, and boost yields, marking a pivotal shift towards more sustainable agricultural practices.

Modernizing Land Management (Reflects Specific Objective 1.1, particularly M2: “Comprehensive Land Management and Modernization”, focusing on accurate land documentation, legal clarity, and the development of a land consolidation law.): A key component of Albania's strategy is the modernization of land management. The introduction of a Land Ownership Documentation Program ensures every agricultural land parcel is documented with clear property titles, thus establishing legal certainty and encouraging investment. Furthermore, the development of a land consolidation law aims to improve the efficiency and productivity of agricultural holdings by facilitating the voluntary reallocation of land parcels.

Expanding Organic Farming (Reflects Specific Objective 1.1, particularly M3: “Expanding Organic Farming...”, aiming to support the transition to organic farming through financial and technical assistance and alignment with global standards.): Albania is committed to expanding organic farming, which involves developing financial and technical support schemes to assist conventional farms in transitioning to organic practices. This expansion includes measures to support farms in obtaining Global G.A.P. certification, aligning local products with global quality and safety standards. The shift towards organic farming not only enhances the sustainability of agricultural practices but also boosts the competitiveness and market orientation of the agri-food sector.

Enhancing Agricultural Competitiveness (Reflects Specific Objective 1.1, specifically M4: “Increasing Competitiveness and Market Orientation of the Agri-Food Sector”, focusing on optimizing land use, sustainability, and aligning with market demands.): By optimizing land use and aligning production with consumer demands for safe and sustainable food, Albania seeks to transform its agricultural landscape. These efforts aim to enhance the welfare of Albania's citizens and position the country as a leader in sustainable and competitive agricultural production globally. The comprehensive approach to improving

agricultural practices underscores Albania's commitment to fostering economic resilience and sustainability within the sector.

The objective of the initiatives described in the boxes below is to leverage cutting-edge technologies to revolutionize Albania's agricultural and fishery sectors. By introducing innovative precision farming tools, IoT technologies, and digital land management systems, Albania aims to enhance productivity, sustainability, and efficiency across these sectors.

Precision Farming and IoT Technologies (Reflects Specific Objective 1.1 in Agriculture section of the Action Plan, particularly M1: Enhance agricultural productivity and sustainability by mitigating risks from natural disasters and optimizing resource usage through technology. and M5: Technological Enhancement for Agricultural Sustainability)

Albania, through its Smart Specialization Strategy (S3), aims to revolutionize its agricultural and fishery sectors by integrating precision farming tools and IoT technologies. These innovations are designed to enhance productivity and sustainability, creating a more efficient and environmentally friendly agricultural landscape.

Core Services and Facilities

- Deploy sensors and automated systems to optimize resource management, including water, fertilizers, and pesticides.
- Utilize drones for precise monitoring, management of crops and processes related to pesticides and fertilizers, etc, enabling real-time data collection and analysis.
- Implement IoT devices to connect various agricultural processes, allowing for seamless data integration and management.

Innovative Elements

- Sensors and IoT devices enable precise control over resource usage, reducing waste and increasing yield.
- Drones provide real-time monitoring capabilities, allowing farmers to respond quickly to changes in crop conditions.
- IoT technologies facilitate data collection and analysis, supporting informed decision-making and improving overall farm management.

Rationale

The integration of precision farming tools and IoT technologies is driven by the need to enhance the productivity and sustainability of Albania's agricultural sector. By adopting these advanced technologies, Albania aims to:

- Optimize resource usage and human resources, and improve crop management to achieve higher yields with fewer inputs.
- Reduce environmental impact by minimizing the use of water, fertilizers, and pesticides.
- Position Albania as a leader in agricultural innovation, attracting investment and driving economic growth.

Benefits

For Local Communities:

- Increase agricultural productivity, ensuring food security and supporting local economies.
- Promote environmentally friendly farming practices, preserving natural resources for future generations.

For Farmers:

- Resource Optimization: Utilize advanced tools to optimize resource usage, reducing costs and increasing profitability.
- Enhanced Monitoring: Benefit from real-time monitoring and data-driven insights to improve crop management and yield.

At national level:

- Establish Albania as a regional leader in agricultural innovation and sustainability.
- Drive economic growth through increased agricultural productivity and competitiveness.

AKIS Initiative (Reflects Specific Objective 1.2 in Agriculture section of the Action Plan , particularly M2: Innovative and Sustainable Agricultural and Breeding Practices and M3: Transfer of Knowledge and Innovation in the Agricultural Sector and Rural Development.)

The Agricultural Knowledge and Innovation Systems (AKIS) initiative focuses on integrating a comprehensive network of information and support services across the agricultural sector. This system aims to enhance decision-making by providing stakeholders with reliable and timely information, fostering innovation and practical knowledge transfer.

Core Services and Facilities

- Develop a robust network that connects farmers, research institutions, and advisory services, facilitating the exchange of knowledge and best practices.
- Provide farmers with access to expert advice and support, helping them implement innovative solutions and improve productivity.
- Link farmers directly with research institutions to promote the practical application of research findings and innovations.

Innovative Elements

- Facilitate the transfer of practical knowledge and innovations from research institutions to farmers, supporting continuous improvement and adaptation.
- Provide comprehensive support services, including training, technical assistance, and information resources, to enhance decision-making and farm management.
- Engage stakeholders across the agricultural sector to foster collaboration and drive collective progress.

Rationale

The AKIS initiative is driven by the need to create a more informed and connected agricultural community. By integrating a comprehensive network of information and support services, Albania aims to:

- Provide farmers with reliable and timely information to support informed decision-making.
- Foster innovation and practical knowledge transfer, linking farmers with research institutions and advisory services.
- Drive improvements in productivity and sustainability through better access to information and support.

Benefits

For Farmers:

- Gain access to the latest research findings and best practices, enhancing productivity and sustainability.
- Benefit from expert advice and support, helping to implement innovative solutions and improve farm management.

For Research Institutions:

- Promote the practical application of research findings, driving innovation and real-world impact.
- Engage in collaborative projects with farmers and advisory services, fostering a dynamic research environment.

Digital Transformation of Land Management (Reflects Specific Objective 1.1 in Agriculture section of the Action Plan, particularly M2: Comprehensive Land Management and Modernization.)

Digital transformation is at the forefront of modernizing land management practices in Albania. The introduction of digital land registries and GIS-based mapping systems aims to enhance land use efficiency and transparency, facilitating better planning and management.

Core Services and Facilities

- Implement digital land registries to streamline the registration and management of land ownership and usage.
- Develop GIS-based mapping systems to provide detailed and accurate land use data, supporting efficient planning and management.

Innovative Elements

- Digital tools provide greater transparency in land management, reducing the risk of disputes and improving accountability.
- GIS-based mapping systems support better planning and decision-making, optimizing land use and management.
- Digital registries and mapping systems make land information more accessible to stakeholders, promoting informed decision-making and collaboration.

Rationale

The digital transformation of land management is driven by the need to enhance land use efficiency and transparency. By adopting advanced digital tools, Albania aims to:

- Facilitate better planning and management of agricultural and rural land, supporting sustainable development.
- Streamline land registration and management processes, reducing administrative burdens and improving service delivery.
- Enhance transparency and accountability in land management, fostering trust and collaboration among stakeholders.

Benefits

For Local Communities:

- Benefit from greater transparency and accountability in land management, reducing the risk of disputes.
- Experience more efficient and accessible land registration and management services.

For Farmers:

- Access detailed and accurate land use data, supporting better planning and decision-making.
- Enjoy streamlined land registration and management processes, reducing administrative burdens.

Farmer's Portal (Portali i Fermerit) - Digital Marketplace Transformation (Reflects Specific Objective 1.2 in Agriculture section of the Action Plan, particularly M1: Investments on enhancing processing facilities and marketing of agro-food and fishery products, and A.7: Transform 'Portali i Fermerit' into a comprehensive digital marketplace to bridge the gap between agro-producers, retailers, and consumers, thereby improving market accessibility and product visibility.) This initiative aims to connect producers, retailers, and consumers, enhancing market access, product visibility, and efficiency in Albania's agricultural sector through a digital platform.

Transforming 'Portali i Fermerit' into a comprehensive digital marketplace aims to connect agro-producers, retailers, and consumers directly, facilitating a smoother transition of goods from farms to tables and enhancing the overall market efficiency. This digital transformation is designed to improve accessibility, increase product visibility, and foster a more integrated agricultural market in Albania.

Core Services and Facilities:

- Digital Marketplace Platform: Develop a user-friendly online platform that serves as a central hub for agro-producers to connect with retailers and consumers.
- E-Commerce Capabilities: Equip the platform with full e-commerce capabilities, including online ordering, payment processing, and logistics management.
- Real-Time Inventory Management: Implement real-time inventory management tools that allow producers and retailers to update and manage their stock levels efficiently.

Innovative Elements:

- Enable producers to reach a broader audience, expanding their market beyond local consumers and into regional and national territories.
- Utilize digital tools to streamline supply chain processes, reducing the time and cost associated with traditional market transactions.
- Provide all stakeholders with access to data analytics tools to track sales trends, consumer preferences, and market demands, aiding in better decision-making.

Rationale: The initiative to digitalize 'Portali i Fermerit' addresses several challenges currently faced by Albania's agricultural sector, including limited market access for small to medium-sized agro-producers and inefficiencies in traditional supply chains. By creating a digital marketplace, the initiative

- Make it easier for consumers to access fresh and local produce directly from the source, promoting healthier lifestyles and supporting local economies.
- Enhance the visibility of local agricultural products, helping producers to brand and market their goods more effectively.
- Lower the barriers for new and smaller producers to enter the market, fostering greater diversity and competition.

Benefits:

For Agro-Producers:

- Access a wider market, including international consumers, through the digital platform.
- Benefit from the online marketplace which can lead to increased sales volume and higher profit margins.
- Lower marketing and advertising costs due to the platform's built-in visibility and promotional tools.
- Optimize product sales and reduce losses from unsold inventory through advanced demand forecasting and inventory management tools provided by the platform.

For Retailers:

- Utilize efficient tools for managing inventory and orders, reducing overstock and stockouts.
- Connect with multiple producers to diversify product offerings, attracting a broader customer base.

For Consumers:

- Shop for fresh and local agricultural products from the comfort of their home, with the convenience of direct delivery.
- Gain insights into the source of their food, fostering trust and transparency between consumers and producers.

By transforming 'Portali i Fermerit' into a dynamic digital marketplace, the initiative not only supports the growth of **Albania's** agricultural sector but also aligns with broader efforts to modernize the country's economy and enhance digital inclusivity across industries.

Cross-cutting Domains

- Human capital development

The Action Plan aims to reshape the education sector and enhance talent retention, focusing on fostering deep and productive collaborations among academia, businesses, government, and civil society—the Quadruple Helix model. This ambitious strategy aims to not only tighten the link between education and market needs but also to stem the tide of emigration by making staying in Albania an attractive option for the youth, especially in rural areas.

One of the foundational arguments of this plan is that education, talent retention, digital and connectivity and research innovation are critical cross-cutting domains identified during the Entrepreneurial Discovery Process (EDP) phase. These areas have a broad and transformative impact across all vertical sectors. The cross-cutting nature of education, digital and connectivity and research and innovation, and talent retention is not only crucial for the success of priority vertical domains such as Energy, Agriculture, and Tourism, but also represents a key bottleneck for their development. Without addressing foundational issues in human capital, skill development, and research innovation capacity, achieving sector-specific goals becomes significantly more challenging. As such, the effectiveness of measures in these horizontal domains directly influences and unlocks progress in vertical domains, making them essential to the overall success of the plan.

The initiative starts with a thorough assessment of existing internship and apprenticeship programs, pinpointing opportunities for enhancement. The involvement of the business community is set to expand, actively participating in curriculum preparation and quality assurance, aligned with the standards of the Albanian Quality Assurance Agency. A key component of this strategy involves setting up a dynamic monitoring system that incorporates feedback from all stakeholders to continually refine these programs. This system will track key performance indicators and success metrics, ensuring that educational outcomes meet the evolving industry demands.

Moreover, the plan supports dual Vocational Education and Training (VET) schools that merge traditional academic learning with hands-on job training. This dual approach is designed to provide students with comprehensive educational experiences that are directly applicable in the workplace. The strategy also includes the development of online courses on the Albrain platform, which will benefit from the expertise of diaspora professionals, thereby enhancing the upskilling and reskilling of the Albanian workforce.

Legal reforms are also a critical aspect of the proposed changes. The review and adjustment of the legal framework aim to mandate greater business community involvement in educational development. New incentives, such as tax benefits and recognition programs, are proposed to encourage business investments in education and research, particularly those aligning with the S3 priorities. Such collaboration ensures that the talent pipeline being developed aligns with the demands of strategic sectors, such as tourism's need for digital marketing experts or agriculture's growing reliance on smart farming technologies.

On the lifelong learning front, the strategy introduces policies to support lifelong learning programs through the concept of micro-credentials, aligned with the respective EU recommendations, are designed to validate diverse educational paths and mastery of various skills. The collaboration between the educational institutions and the business sector is essential here, ensuring that the programs developed are directly aligned with the needs of the industry, thereby promoting on-the-job training and real-time skills application. As Albania positions itself in industries like renewable energy or digital agriculture, flexible and adaptive learning programs will be vital for professionals to keep pace with technological advancements.

Curriculum modernization is also targeted at all educational levels to better prepare Albania for the digital and green transitions. This involves revising the pre-university education programs to include practical subjects and modules that foster skills in environmental protection, active citizenship, and work culture. The higher education system will see a similar transformation, with curricula being revised to integrate business sector representatives in the development, review, and assessment processes. These changes will have a cross-cutting impact, providing a workforce skilled not just in theoretical knowledge but also in practical, sector-specific skills necessary for sectors like energy efficiency and sustainable tourism.

Efforts to retain talent and reduce emigration focus on enhancing the attractiveness of staying in Albania through better public services and improved educational and professional opportunities, particularly in rural areas. Financial and educational incentives are proposed to support young people in contributing to rural and smart development, such as updating financial support laws and developing incentive schemes that encourage the return of young professionals to their communities after their studies. This directly impacts rural sectors like agriculture and tourism, which rely heavily on a skilled workforce and innovative approaches to thrive in the global market.

The comprehensive approach taken by Albania aims to create a robust educational framework that not only meets the immediate needs of its labor market but also fosters a resilient, agile, and globally competitive workforce. This strategy underscores the cross-cutting nature of education and talent retention, which are critical to realizing the broader objectives of the Smart Specialization Strategy across key vertical domains such as Energy, Agriculture, and Tourism. By ensuring that these foundational areas are robustly developed, Albania is positioning itself to achieve sustainable growth and innovation across all sectors of the economy.

Outline of Strategic Objectives:

Enhancement of the Education Sector (*Reflects Strategic Objective 1: “Transform Education and Workforce Development to Support Albania’s Digital and Green Transitions”, Specific Objective 1.1: “Strengthen collaboration among academia, businesses, government, and civil society (QUADRUPLE HELIX) to enhance innovation and workforce readiness”, M1: “Enhance cooperation between the educational institutions and business sector”, Activity A.2*): Recognizing the critical role of academia, businesses, government, and civil society, the strategy aims to fortify collaboration among these quadruple helix stakeholders. This cooperative approach is designed to spur innovation and prepare a workforce ready for future challenges. Lifelong learning programs are being emphasized to ensure the workforce remains agile and resilient, equipped to handle the demands of a circular economy and the

nuances of artificial intelligence. A major thrust is towards modernizing the educational curriculum across all levels, aligning it with the needs of digital and green transitions. This modernization is not just about imparting knowledge but also about enhancing specialization in areas identified as priorities in the S3, thereby bolstering scientific and technological competencies from early educational stages.

The Smart Specialization Strategy for Albania, as articulated through the EDP report, outlines an innovative and focused approach towards addressing key issues in the education and skills development sector. The strategic objectives and measures aim to foster a robust education system, enhance vocational training, and promote lifelong learning, positioning Albania to navigate the digital and green transitions effectively. The aim is modernizing the curriculum across all education levels to better equip Albania for the digital and green transitions. It emphasizes the necessity of aligning the education system with the vocational training (VET) system and updating curricula from primary education to higher education to support Albania in these transitions.

Talent Retention (Reflecting Strategic Objective 1: “Develop youth capacities and retain human capital to promote growth in Albania”, Specific Objective 1.1: “Reverse youth trends towards emigration and abandonment of rural areas by increasing quality of public services offered and making it attractive for youth to remain in Albania and engage in rural development”, M1: “Invigorate youth employability, employment, and entrepreneurship through the Youth Guarantee and similar policies and improve programs and services that provide support for youth mobility and cooperation between them within the country and beyond”): A significant challenge for Albania has been the emigration of youth and the abandonment of rural areas. To counteract this trend, the S3 strategy is creating avenues for smart jobs and professional growth that can retain the young population within the country, especially in rural regions. Efforts are underway to reverse youth migration by improving the quality of public services and making rural life more attractive and sustainable. Special attention is being paid to nurturing the talents and holistic development of the youth, with a focus on fostering diverse talents through sports, arts, and crafts programs. These initiatives are not only about education but also about instilling a sense of belonging and opportunity. Aligning with the "Youth for Youth" concept, the strategy aims to build a comprehensive support system that resonates with the aspirations of the younger generation. Addressing the concerns raised by the EDP report, a strategic objective is to nurture the capacities of our youth, fostering an environment that not only halts the emigration trend but also transforms both rural and urban Albania into hubs of growth and innovation.

Leveraging the Diaspora (Reflecting Strategic Objective: “Engage diaspora and migrants in all aspects of smart and digital development in Albania leading to a more effective EU integration process” and Specific Objective 1.1: “Diaspora expertise provides effective contribution in generating human capital development especially in rural Albania” and Specific Objective 1.2: “Promote technological development based on diaspora contribution and research to stimulate economic growth”): In an era where connectivity transcends borders, Albania aspires to harness the untapped potential of its global diaspora and migrants, integrating their expertise into the very fabric of the nation's smart and digital development. This is not just an objective; it's a vision to lead Albania towards more effective European integration. With a wealth of knowledge and experience scattered across the globe, Albania's diaspora is a reservoir of untold opportunity. To channel this potential, the strategy aims to mobilize the expertise of the expatriates to

bolster human capital development, particularly in rural Albania where such contributions can be transformative. The strategy envisions a future where talented professionals, successful entrepreneurs, and skilled workers from the Albanian diaspora feel incentivized to return and sow the seeds of progress in their homeland. The aim is to extend to enhancing communication channels that provide the diaspora with up-to-date information on the myriad of possibilities and incentives for engagement and return to Albania.

To achieve these strategic objectives, the action plan details a series of specific measures and initiatives, each aligned with the overarching goals of enhancing sustainability and fostering innovation.

Enhancement of the Education Sector *(Reflects Strategic Objective 1: “Transform Education and Workforce Development to Support Albania's Digital and Green Transitions”, Specific Objective 1.2: “Enhance lifelong learning programs to foster a resilient and agile workforce through reskilling and upskilling of workers, taking into account the challenges posed by circular economy and artificial intelligence”, M1: “Strengthen policies to ensure lifelong learning and micro-credentials...”, Activity A.1):* Measures include reviewing pre-university educational programs to ensure students are equipped with relevant skills and knowledge for the evolving workforce, enhancing language skills to meet labor market demands, profiling higher education institutions (HEIs) based on regional development needs, and establishing innovative grants and incentives for schools and students to encourage better study results, participation in community and environment-friendly initiatives, and talent development. An important objective is to address the challenge of reversing the trend of emigration and rural area abandonment by young people, making rural areas more attractive for young people to stay and engage in development activities. It aims to enhance educational offerings and infrastructure for general pre-university and VET education, build up a culture of innovation in schools and amongst young generations to prevent emigration, and incentivize young people to contribute to future smart rural development by strengthening the education system and developing youth-oriented services.

Modernizing educational curricula *(Reflects Strategic Objective 1: “Transform Education and Workforce Development to Support Albania's Digital and Green Transitions”, Specific Objective 1.3: “Curriculum modernization at all levels to better equip Albania for the digital and green transitions, and for strengthening the specialization of the national economy in the S3 priority areas and increasing scientific and technological skills across all levels”, M5: “Comprehensive modernization of VET curricula and VET system based on labor market needs and future S3 specializations”):* Modernizing curricula at all levels is a foundational step in preparing Albania for the digital and green transitions, which is a critical area of improvement suggested by the EDP report. This objective underscores the urgency of developing a workforce that is well-versed in STEM disciplines and aligning education with the emerging sectors of the economy. Specific measures such as the comprehensive modernization of VET curricula based on labor market needs and future S3 specializations will directly tackle the identified lack of skills aligned with market demands. Furthermore, incentivizing innovation within pre-university and vocational training frameworks will bolster Albania's human capital, enhancing their potential to contribute to the country's smart growth

The Objective of the initiatives outlined in the boxes below is to enhance Albania's education sector through the development of curricula that align with market needs and the cultivation of new skills. These strategic measures are designed to prepare a professional and expert workforce, fully equipped to meet the demands of the future market. By implementing these initiatives, Albania is taking significant steps towards fostering an educational environment that not only responds to current labor market trends but also anticipates future workforce requirements, ensuring that its citizens are well-prepared for emerging opportunities and challenges.

Bridging the Digital Divide: A Comprehensive Initiative for Inclusive Education in Albania (Reflects Strategic Objective 1 in the Education section of the Action Plan: Transform Education and Workforce Development to Support Albania's Digital and Green Transitions, in "Education", Specific Objective 3: Curriculum modernization at all levels to better equip Albania for the digital and green transitions and for strengthening the specialization of the national economy in the S3 priority areas and increasing scientific and technological skills across all levels, Measure 6: Establish innovative grants and incentives for schools and students in Pre-university education ensuring better study results, better results in competitions, enhancing their participation in community and environment-friendly initiatives, and talent development) The project aims to revolutionize digital education in Albania by addressing several critical issues, including the lack of technological equipment, internet access, and digital skills among students, teachers, and those who have dropped out of school. This comprehensive initiative is designed to create an inclusive and modern educational environment that bridges existing gaps and prepares for future challenges. At the heart of this project is the development of an advanced online platform tailored to meet the diverse needs of Albania's educational community. The platform will feature a user-friendly interface in Albanian, ensuring easy access for students, teachers, and former students seeking to re-engage with education. It will provide various digital textbooks and learning resources across various subjects, enabling a rich and engaging educational experience. The Platform will include children with disabilities who were forced to leave the school due to their limited ability, because they have no opportunity to have the access for their education and other services. This platform will help them to get back in school but also to get involved in extracurricular programs and be able to have long-term access to digital devices.

The Learning Hub will allow teachers to create virtual classrooms for real-time interaction with students, enhancing the learning process through direct communication and interactive teaching methods. Additionally, the platform will include tools for online homework submission and testing, facilitating continuous engagement and assessment. As part of the S3 action plan for talent development and retention, the platform can also integrate extracurricular activities.

One of the main objectives of the project is to equip all students, teachers and individuals in the pre-university and vocational education and training (VET) systems with digital devices pre-installed with the platform. These devices will have restricted and controlled access to online content based on the age of the pupils and selected media/webpages. This will be complemented by providing internet access to ensure uninterrupted learning. To address the digital divide, the project will offer training to both students, teachers, and former students to improve basic ICT and digital skills, ensuring they can effectively use the provided digital devices and access the main platform for online learning.

The project will also focus on enhancing curriculum content by developing digital materials for all subjects, which will be included in the schoolbooks package alongside the tablet or digital device. Teachers will receive intensive IT training, covering professional networks. Didactic materials, lessons, and tutorials will be prepared and adapted for online teaching, addressing the needs of special categories of students and preparing for potential future challenges such as COVID-19.

To support vulnerable groups, the platform will include special provisions for students with disabilities, children who have dropped out of school due to lack of access and those from socio-economically disadvantaged backgrounds. Emergency and health support features will be integrated, providing dedicated lines for reporting domestic violence and accessing medical consultations, particularly benefiting those in remote rural areas. Additionally, the platform will offer cultural and recreational content, such as virtual tours of cultural heritage sites, access to online books, and physical activity programs, enriching the educational experience for students and their families, particularly for those lacking financial means.

This project will lead to improved digital skills among teachers, students, and former students, enabling sustainable digital learning. By providing long-term access to digital devices, it will facilitate modern teaching methodologies and after-school activities, ensuring inclusivity and access for all. The updated teaching and learning materials will enhance the quality of education, both online and in-person.

Furthermore, the project aligns with the Council of Europe's strategy, ensuring children's rights to education and social protection, especially for vulnerable groups. The platform will foster enhanced interaction between teachers and students, promoting interactive learning and effective communication. This will allow quality education to reach students in remote rural areas who currently receive teaching in joint classes. It will also support the Albanian diaspora's young generation by making the platform accessible to students living abroad, preserving their language, history, and culture, and connecting it to other measures and activities foreseen in the S3 for Diaspora. The revision of the legal framework necessary for implementing the relevant acquis, guaranteeing the best educational practices, is foreseen. This project offers a comprehensive solution for digital education in Albania and its diaspora, promoting equal access, enhancing digital skills, and supporting the overall development of students, teachers, and those who have previously dropped out of school.

- **Key Features of the Platform**

- **User-Friendly Interface:** Designed for easy use by students, teachers, and former students in Albanian.

- **Digital Textbooks and Resources:** Comprehensive digital library across various subjects.

- **Learning Hub:** Virtual classrooms for real-time interaction.

- **Homework and Testing Tools:** Online submission and assessment capabilities.

- **Extracurricular Activities Integration and Albanian language and culture teaching in Diaspora:** Support for other S3 action plan initiatives.

- **Main Objectives**

- Equip all students teachers, students with disabilities and former students with digital devices.

- Provide internet access for uninterrupted learning and other activities.

- Offer ICT and digital skills training for students and teachers, and former students.

- Develop and integrate digital curriculum materials.

- Conduct intensive IT training for teachers.

- **Support for Vulnerable Groups**

- Special provisions for students with disabilities, those who have dropped out of school, and socio-economically disadvantaged backgrounds.

- Emergency and health support features.

- Cultural and recreational content to enhance learning experiences.

- **Expected Outcomes**

- Improved digital skills for teachers, students, and former students.

- Sustainable digital learning environment.

- Enhanced inclusivity and access to education.

- Higher quality of education, both online and in-person

- **Additional Benefits**

- Aligns with the Council of Europe's strategy for children's rights.

- Enhances teacher-student interaction and communication.

- Supports the Albanian diaspora in preserving cultural heritage.

- Adapts legal framework to ensure best educational practices.

Comprehensive Curriculum Review (Reflecting Strategic Objective in the Education section of the Action Plan: Transform Education and Workforce Development to Support Albania's Digital and Green Transitions, in "Education", Specific Objective 3: Curriculum modernization at all levels to better equip Albania for the digital and green transitions, and for strengthening the specialization of the national economy in the S3 priority areas and increasing scientific and technological skills across all levels, M 1: Review pre-university educational programs to better meet current and future market needs, ensuring that students are equipped with relevant skills and knowledge for the evolving workforce)

One of the main initiatives in education, as a horizontal priority of S3, includes a comprehensive review of curricula at all levels. This review ensures reflection of best past experiences and alignment with modern requirements, focusing on digital literacy, environmental awareness, practical subjects and working skills. A better alignment between the preuniversity and university curricula is foreseen to close the gap. A comprehensive analysis is foreseen to evidence the gaps and needs for new subjects and transformation of existing ones, practical/in the field subjects, comparative analyses with previous curricula to evidence the pros and cons, as well as a wide consultation with parents, students, business community and universities

Core Services and Facilities

- Curriculum Alignment: Update curricula to include essential digital literacy and environmental awareness components, ensuring students are equipped with relevant knowledge and skills.
- STEM Integration: Integrate STEM (Science, Technology, Engineering, and Mathematics) education to promote critical thinking and enhance practical skills.
- Modern Methodologies: Enhance educational materials and methodologies to reflect the latest advancements and best practices in teaching.

Innovative Elements

- Digital Literacy: Emphasize digital literacy as a core component of the curriculum, preparing students for a technology-driven future.
- Environmental Awareness: Incorporate environmental education to foster a generation that values and understands sustainability.
- Critical Thinking: Promote critical thinking skills through problem-based learning and interactive teaching methods.

Rationale

The comprehensive curriculum review is driven by the need to prepare students for the challenges of a rapidly changing world. By aligning curricula with modern requirements, Albania aims to:

- Ensure students possess the knowledge and skills needed to thrive in the digital age.
- Foster a sense of environmental responsibility and sustainability and contribute concretely in environment projects.
- Develop a competitive workforce that can adapt to technological changes and drive innovation.

Benefits

For Students:

- Gain relevant skills and knowledge that prepare them for future careers and challenges.
- Experience an enriched learning environment that promotes critical thinking and practical skills.
- Books and learning material updated with new curricula and digital contents for preuniversity students.
- Students prepared with relevant working skills at all levels of education to be ready entering the labor market

For Teachers:

- Access to updated educational materials and methodologies that enhance teaching effectiveness.
- Opportunities for professional development through training in modern teaching practices.

Empowering Excellence: Incentive Scheme for Pre-University Students and Teachers (Reflecting Strategic Objective 3: Curriculum modernization at all levels to better equip Albania for the digital and green transitions, in "Education", Specific Objective 3.2: Establish innovative grants and incentives for schools and students in Pre-University education)

The Incentive Scheme for Pre-University Students and Teachers is a comprehensive initiative designed to elevate the educational landscape by recognizing and rewarding excellence and innovation in school practices. This scheme aims to create a dynamic educational environment where teachers are motivated to explore innovative teaching methods and improve overall school management. Through a combination of performance-based rewards and grants, this initiative not only seeks to enhance the quality of education but also to ensure equitable access to educational opportunities for all students.

At the core of this initiative is the implementation of a dual reward system that recognizes outstanding achievements by students and by schools and teachers and supports financially to continue their innovative approaches. The scheme introduces performance-based rewards that are directly linked to measurable outcomes in student performance and educational innovation. By aligning rewards with results, the scheme ensures that the incentives directly contribute to educational improvements.

In addition to rewarding current achievements, the scheme provides substantial grants aimed at fostering the adoption of new and effective teaching methodologies and management practices. These grants are designed to empower schools to implement progressive changes that can make a lasting impact on the educational experience.

Professional development is another critical component of the initiative. Recognizing that ongoing teacher development is crucial for sustained educational success, the scheme offers a variety of training and learning opportunities. These programs are tailored to help teachers stay at the forefront of educational advancements, thereby enhancing their teaching skills and leadership capabilities within school settings.

Advantages for Teachers:

- **Financial Rewards:** Performance-based bonuses for achieving and surpassing educational targets.
- **Professional Development:** Access to advanced training programs and workshops to enhance teaching skills and leadership abilities.
- **Innovation Grants:** Funding to support the implementation of new and creative teaching methods and classroom projects.
- **Career Advancement:** Opportunities for recognition and promotion based on exemplary performance and contributions to educational innovation.
- **Enhanced Job Satisfaction:** A supportive environment that values and rewards dedication, fostering a greater sense of accomplishment and motivation.
- **Collaborative Opportunities:** Participation in collaborative projects with peers, leading to shared best practices and a stronger professional network.
- **Resource Allocation:** Access to additional resources and materials to enhance classroom teaching and learning experiences.

For students, particularly those from disadvantaged backgrounds, the scheme offers financial aid in the form of scholarships and stipends. This aid is crucial in leveling the playing field, allowing all students to pursue their educational goals without the burden of financial constraints. By providing these supports, the initiative aims to reduce educational disparities and promote inclusivity within the educational system.

A significant aspect of the Incentive Scheme is the inclusion of a Student Rewards Program. This program is designed to recognize and reward students for their achievements in various areas, including:

1. **Academic Excellence:** Rewards for students who achieve outstanding results in their school exams during the year and overall academic performance.
2. **Recycling and Environmental Initiatives:** Incentives for students who actively participate in school-based recycling programs and other environmental sustainability projects.
3. **Extracurricular Activities:** Recognition for students who excel in sports, arts, and other extracurricular pursuits.
4. **Innovation Projects/Ideas:** Awards for students who develop innovative projects or ideas that contribute to the school or community.
5. **National and International Competitions:** Scholarships and rewards for students who win or perform exceptionally in national and international competitions.

Benefits:

- **For Teachers and Schools:** The scheme offers substantial benefits by providing a platform for professional recognition and career advancement. Teachers and educational institutions that demonstrate exceptional performance and innovative practices are publicly recognized, which not only enhances their professional profile but also sets a benchmark for quality education. Furthermore, the initiative includes career development opportunities through targeted workshops, seminars, and training sessions designed to enhance pedagogical skills and leadership capabilities. Financial support is also available to schools for implementing cutting-edge teaching practices and infrastructural improvements, fostering an environment conducive to educational innovation and sustained improvement.
- **For Students and Families:** Central to this initiative is the commitment to ensuring that all students, irrespective of their socio-economic background, have access to quality education. The financial support provided through scholarships, stipends, and aids plays a crucial role in this context. It will also help students to get motivated for better achievements in school results, better performance in extracurricular activities and be active citizen

Talent Retention (Reflects Strategic Objective 1: "Develop youth capacities and retain human capital to promote growth in Albania", Specific Objective 1.1: "Reverse youth trends towards emigration and abandonment of rural areas by increasing quality of public services offered and making it attractive for youth to remain in Albania and engage in rural development". This is achieved through M1: "Energize

youth employability, employment, and entrepreneurship through the Youth Guarantee and similar policies and improve programs and services that provide support for youth mobility and cooperation within the country and beyond”, and M2: “Innovate and improve primary health care and emergency services in rural/touristic areas by equipping them with advanced technologies and integrating services with specialized health workforce/professionals”.

Furthermore, it aligns with Specific Objective 1.2: “Advance talent development and holistic development of youth, by supporting and implementing a comprehensive array of amateur sports, arts, and crafts programs, and extracurricular activities”, specifically M1: “Implement a comprehensive talent development program by introducing a diverse range of extracurricular courses after school to cater to various talents and interests that are identified from an early age through national schemes.”):

The EDP report highlighted the trend of young people abandoning rural areas, pointing towards a need for attractive and sustainable development opportunities within these regions. By fostering a supportive environment through targeted educational strategies, and strengthening the connection between academia, business, and government, this objective directly addresses the brain drain. It aligns with EDP's recommendations for creating favorable conditions that motivate the youth to remain and engage in rural development, thereby contributing to the country's economic resilience and sustainability. The implementation of these objectives and measures aims to cultivate an innovation-friendly ecosystem that not only retains talent but also attracts it back from the diaspora. The proposed educational reforms, both at pre-university and higher education levels, are intended to provide the necessary skills and knowledge for Albania's future workforce to thrive in a modern economy. By enhancing the quality of education and training systems, Albania aspires to create a fertile ground for entrepreneurship and innovation, essential for smart specialization and sustainable growth.

To reverse the exodus of young talent from rural areas, the strategy includes a multi-pronged approach to make these regions more inviting and livable. This involves energizing youth employability, entrepreneurship, and bolstering public services to enhance the appeal of staying in Albania. Through initiatives like the Youth Guarantee, we aim to secure a prosperous future for young Albanians right in their homeland. Furthermore, by bringing advanced technological solutions to primary healthcare and emergency services in rural and touristic areas, we are ensuring that living off the beaten path does not mean being disconnected from essential services.

Attracting specialized health professionals to rural areas ensures that the citizens have access to top-tier medical care, while the infusion of smart technologies is set to revitalize social and cultural life in the countryside. The expansion of programs and services that support youth mobility and collaboration is also a cornerstone of our plan, making Albania a crossroads of cultural and intellectual exchange. To this end, enhancing inter-city transport specifically for the youth increases their mobility and enriches their opportunities for growth and development within the country.

Advancing the holistic development of young people, with a special focus on young girls, is another pillar of the strategy. The creation of a national agency to oversee after-school education and recreational activities marks our dedication to fostering healthy lifestyles and developing talents. A comprehensive talent development program introduces a broad spectrum of extracurricular courses, recognizing and

nurturing diverse talents and interests from an early age, with national schemes providing the necessary support.

The initiatives detailed in the boxes below focus on innovating healthcare services, particularly in rural areas, to ensure comprehensive care for all citizens and create avenues for retaining our youth. These initiatives aim to craft a vibrant, dynamic, and inclusive Albania, ensuring better living standards where young people feel empowered to stay, contribute, and drive the country’s development toward a prosperous future. By enhancing the attractiveness of living and working in Albania, especially in rural areas, and providing the support and resources for our youth to realize their full potential, we are setting the stage for a thriving nation that is resilient and ready for the challenges and opportunities ahead.

The Healthcare Package (Reflecting Strategic Objective 1 in the talent retention section in the Action Plan: Develop youth capacities and retain human capital to promote growth in Albania, Specific Objective 1.1: Reverse youth trends towards emigration and abandonment of rural areas by increasing the quality of public services offered and making it attractive for youth to remain in Albania and engage in rural development, specifically M2: Innovate and improve primary health care and emergency services in rural/touristic areas by equipping them with advanced technologies and integrating services with specialized health workforce/professionals.)

Aims to enhance the accessibility and quality of healthcare services in rural regions, focusing on retaining families and the younger generation by providing comprehensive health benefits and modern medical facilities locally. It employs innovative solutions and advanced technologies to address the shortage of healthcare professionals, offering superior services and consultations for both local residents and tourists.

Phase 1: Development of Integrated Healthcare Centers (IHC)

- Develop six models of IHCs in six different remote/touristic areas.
- These centers will include basic laboratory services, ECG, portable echograph, lab analyses, pharmacies, etc.
- Managed locally by general doctors or trained nurses.
- Virtually connected to general medicine doctors via telemedicine for consultations and prescriptions.
- Digital transmission of examination results and prescriptions to doctors and pharmacists.
- Collaboration with Albanian Post for medicine and lab analyses delivery; testing drone delivery for cost-effective solutions and urgent deliveries.

Phase 2: Expansion and Replication

- Utilize the developed models as templates for similar localities, expanding the reach and impact.

Integrated Healthcare Center (IHC) Concept

- Core Services
 - Basic laboratory services, ECG, portable echograph, lab analyses, pharmacy, etc.
 - Managed by local general doctors or trained nurses.
- Telemedicine
 - Remote consultations and e-prescriptions.
 - Digital transmission of examination results and e-prescriptions.
 - Online-connected pharmacists for e-prescription execution and local delivery.
- Logistics
 - Collaboration with Albanian Post for delivery services.
 - Integration of drone delivery where feasible.

Innovative Components

- Telemedicine Services
 - Remote clinical services for consultations and follow-ups via digital platforms.
 - Reduces travel needs and enables continuous care.
- Training for Rural Health Practitioners
 - Ensures healthcare providers in rural areas are trained in the latest medical practices and technologies.
 - Enhances the overall quality of care in these communities.
- AI and Data Analytics in Telemedicine
 - Leveraging artificial intelligence to analyze medical data, enhance diagnostic accuracy, and personalize patient care remotely.
- Mobile Clinic Services
 - Expanding services to include specialist care via teleconferencing.
 - Provides consultations and more clinic visits beyond basic medical services.

Rationale

Based on EDP consultations and healthcare statistics, remote areas have a limited number of doctors but a sufficient number of nurses. This package aims to optimize existing healthcare capacities through advanced technologies, improving service delivery and quality.

Benefits

- For Local Communities
 - Improved access to high-quality healthcare.
 - Retention of families and the younger generation by reducing the *need for migration*.
- For Tourists
 - Better healthcare services during peak tourist seasons.
 - *Enhanced local healthcare capacities to manage increased demand.*

By implementing these measures, the Healthcare Package seeks to significantly improve rural healthcare services, contributing to talent retention and rural development offering at the same time better healthcare services for tourists.

Enriching Education through Comprehensive After-School Programs and Creative Technology Hubs (Reflecting Strategic Objective 1 in the talent retention section: Develop youth capacities and retain human capital to promote growth in Albania, Specific Objective 1.2: Advance talent development and holistic development of youth, by supporting and implementing a comprehensive array of amateur sports, arts, arts and crafts programs, and extracurricular activities, M1: Implement a comprehensive talent development program by introducing a diverse range of extracurricular courses after school to cater to various talents and interests that are identified from an early age through national schemes.)

These initiatives not only enrich students' educational experiences but also empower schools to respond dynamically to the evolving educational landscape. With the autonomy to develop tailored after-school activities, schools are better positioned to cultivate environments that nurture students' talents and interests in diverse fields like STEM, arts, sports, and leadership. This approach enables educators to craft programs that do more than supplement the standard curriculum—they transform it by integrating interdisciplinary learning experiences that prepare students for the challenges of the modern world. For example, a school might combine elements of art and technology to offer courses in digital media or robotics, thereby encouraging creativity alongside technical skills. Similarly, leadership programs might incorporate real-world problem-solving scenarios that require teamwork and critical thinking, skills crucial for success in any career. Moreover, these after-school activities are designed to be inclusive, ensuring that students from various backgrounds have the opportunity to participate and excel. Whether it's through scholarships for low-income families or programs tailored to the needs of students with disabilities, the initiative aims to make extracurricular learning accessible to all. This inclusivity extends to the digital platforms that support these programs, which are developed with user-friendly interfaces to ensure that both students and educators can easily navigate and make the most of the resources available. The digital component is particularly transformative, providing schools with the tools to manage programs efficiently and measure their impact through parent feedback and data analytics. This technology enables continuous improvement of educational offerings and facilitates a closer connection between schools and the wider community, including parents and local organizations. By engaging these stakeholders, schools can create a supportive network that enhances the educational experience and provides students with additional resources and opportunities for growth.

Comprehensive After-School Programs

Custom Talent Development Programs:

- Schools will have access to tools for program customization, allowing them to tailor after-school activities to meet the specific needs of their students.
- Integration of alumni networks to provide mentorship, career guidance, and skill development workshops.
- Collaboration with donors and parents to support the implementation and sustainability of these programs.

Digital Platform Integration:

- Develop and deploy innovative digital platforms that facilitate dynamic interactions between schools and their communities.
- Features include tools for program customization, alumni network integration, and parents/community engagement.
- Platforms will also support the management and monitoring of after-school programs, ensuring they meet educational standards and goals.

Community Engagement:

- Facilitate the involvement of the local community in school activities, fostering a sense of ownership and support.
- Organize community events and workshops to showcase the achievements of after-school programs and encourage broader participation.

Expansion of Tumo Centers

Expansion and Replication:

- Establish additional Tumo mobile branches—centers for creative technologies that provide free access to students for learning advanced digital skills.
- Use existing Tumo centers as templates to develop new centers in other rural areas, expanding the reach and impact.

Core Services of Tumo Centers:

- Offer courses in technology, design, and communications to equip students with competitive skills.
- Provide access to state-of-the-art facilities and resources for hands-on learning and project development.
- Facilitate partnerships with industry professionals to offer internships and real-world experience.

Innovative Elements:

Digital Skills Development:

- Advanced courses in coding, robotics, graphic design, and digital media.
- Integration of emerging technologies such as artificial intelligence and virtual reality in the curriculum.
- Projects that encourage innovation and entrepreneurial thinking among students.

Community Collaboration:

- Engage local businesses and organizations in supporting Tumo centers through sponsorships and collaborative projects.
- Create a network of mentors from various industries to guide and inspire students.

Sustainability and Continuous Innovation:

- Develop a sustainable funding model through partnerships with local and international donors.
- Regularly update and expand course offerings to keep pace with technological advancements and industry trends

Rationale: The rationale behind the After-School Package and Tumo Centers initiative is deeply rooted in the understanding that equal access to quality education and talent promotion across all regions is crucial for sustainable national development. The disparities in educational opportunities between urban and rural areas have historically led to unequal development and brain drain from rural to urban areas or even abroad. This initiative, therefore, aims to counteract these trends by enriching the educational landscape in rural areas and providing students with the tools and skills needed to thrive locally. The introduction of advanced digital platforms and the establishment of mobile Tumo Centers are pivotal in this transformation. These platforms and centers serve as hubs of innovation and learning, offering cutting-edge educational tools and resources that are often only available in more urban environments. By bringing these opportunities to rural areas, the initiative ensures that students in these communities have access to high-quality educational experiences that are engaging, relevant, and forward-looking. Additionally, by focusing on after-school programs that cater to a broad spectrum of interests and abilities, the initiative helps to cultivate a diverse set of skills in young learners, preparing them for a variety of career paths. This is especially important in rural areas, where economic opportunities are often limited. The skills acquired through these programs empower students to contribute to their local economies in innovative ways, potentially leading to new business ventures and community projects that can stimulate local economic growth.

Benefits

For Local Communities:

- Improved access to high-quality educational and talent development programs.
- Retention of young talent, reducing rural depopulation and fostering community development.

For Students:

- Enhanced learning experiences and opportunities to develop advanced digital skills.
- Increased job prospects and entrepreneurial capabilities, empowering students to succeed in a competitive global market.

By implementing these measures, the After-School Package and Digital Platforms initiative seeks to significantly improve educational outcomes in rural areas, contributing to talent retention and community development. Through the expansion of Tumo Centers, Albania aims to equip its youth with the skills needed for future success, ensuring sustainable and continuous innovation in education.

Leveraging the Diaspora (Reflects Strategic Objective 1: “Engage diaspora and migrants in all aspects of smart and digital development in Albania leading to a more effective EU integration process”, Specific Objective 1.1: “Diaspora expertise provides effective contribution in generating human capital development especially in rural Albania”, Specific Objective 1.2: “Promote technological development based on diaspora contribution and research to stimulate economic growth”, and Specific Objective 1.3: “Enhance Technological and Entrepreneurial Capacities through Diaspora Engagement.”): To facilitate this, measures are put in place to not only lure back these individuals but also to integrate their international experiences into the local development narrative. A pivotal element of this strategy is the Diaspora 4 Development (D4D) programme, which is designed to plug the gaps in areas craving innovation and technological expertise.

The aim is to extend to enhancing communication channels that provide the diaspora with up-to-date information on the myriad of possibilities and incentives for engagement and return to Albania. We seek to align these measures with the existing Diaspora Strategy, ensuring coherence and synergy.

Moreover, recognizing the vital role the diaspora plays in cultural preservation and community building, through the active participation of the diaspora members, the goal is to strengthen the social fabric of Albania, celebrating the country’s heritage while paving the way for a community-centric approach to development. Propelling technological development and economic growth through the contributions of the diaspora is another objective. To this end, the plan is to establish a tech training facility that acts as a bridge between the skills and knowledge of our expatriates and the needs of our local communities. This facility will host workshops and mentorship initiatives, creating a vibrant exchange of global insights and local applications. The introduction of a technology transfer curriculum, particularly in strategic S3 domains, will be rolled out through vocational education and training facilities. This curriculum will embody the innovative spirit of our diaspora, who are invited to contribute solutions that drive development.

Additionally, creating a Diaspora Community Fund in cooperation with local governance and other interested stakeholders, as well as an incentive scheme for diaspora investing in S3 priority domains, aims to foster economic growth and community development in Albania, especially in rural areas, by leveraging diaspora investments. Through targeted campaigns and online platforms, these initiatives seek to attract investments in S3 priority domains and address community needs. The involvement of the diaspora will bring innovative solutions and expertise to key sectors, contributing to the overall resilience and growth of the nation. These efforts will also engage the diaspora with their native areas, creating the conditions for their potential return to Albania.

Finally, informative platforms will be established, serving as cornerstones of the S3 communication strategy for human capital development. These platforms will spotlight talent retention and diaspora involvement, ensuring that the Albanian diaspora is not just an audience but active participants in Albania's journey towards a smart, digitized future. Through these concerted efforts, the goal is to forge a future where the Albanian diaspora is intricately woven into the national narrative, driving smart development and contributing to Albania's aspirations for a prosperous and integrated European future.

The Objective of the Diaspora Engagement initiatives presented in the boxes is to utilize the extensive resources, expertise, and cultural heritage of the Albanian diaspora to propel national development and enhance community ties. These initiatives aim to foster sustainable growth and innovation by encouraging the diaspora’s participation in Albania’s socio-economic landscape. The Diaspora Engagement programs and initiatives collectively work towards a unified goal of integrating Albanian professionals, workers, and youth back into the fabric of Albanian society while harnessing their global expertise and experiences. Central to this approach is the Albrain Platform, which epitomizes the essence of brain circulation by inviting Albanian professionals worldwide to engage in short-term projects within Albania. This platform complements the Diaspora Return Program by providing structured opportunities for knowledge transfer and innovation, fostering a collaborative environment where global insights drive local development. Together with the Educational and Cultural Programs, which focus on reconnecting the younger generation with their cultural roots, these initiatives form a comprehensive strategy to strengthen Albania's bonds with its global community, ensuring sustainable national growth and a cohesive cultural identity.

The Diaspora Engagement Programs: Leveraging Innovation and Strengthening Albania's Global Community Bonds (Reflects Strategic Objective 1 in Diaspora Section of the Action Plan: Engage diaspora and migrants in all aspects of smart and digital development in Albania leading to a more effective EU integration process, Specific Objective 1.1: Diaspora expertise provides effective contribution in generating human capital development especially in rural Albania, Specific Objective 1.2: Promote technological development based on diaspora contribution and research to stimulate economic growth, and Specific Objective 1.3: Enhance Technological and Entrepreneurial Capacities through Diaspora Engagement.)

Objective: The Diaspora Engagement Programs are crafted to utilize the extensive resources, expertise, and cultural heritage of the Albanian diaspora to propel national development and enhance community ties. These initiatives aim to foster sustainable growth and innovation by encouraging the diaspora's participation in Albania's socio-economic landscape.

The diaspora programs collectively work towards a unified goal of integrating Albanian professionals, workers, and youth back into the fabric of Albanian society while harnessing their global expertise and experiences. Central to this approach is the Albrain Platform, which epitomizes the essence of brain circulation by inviting Albanian professionals worldwide to engage in short-term projects within Albania. This platform complements the Diaspora Return Program by providing structured opportunities for knowledge transfer and innovation, fostering a collaborative environment where global insights drive local development. Together with the Educational and Cultural Programs, which focus on reconnecting the younger generation with their cultural roots, these initiatives form a comprehensive strategy to strengthen Albania's bonds with its global community, ensuring sustainable national growth and a cohesive cultural identity.

The **Diaspora Return Program** is designed to facilitate the reintegration of Albanian professionals and workers from abroad into their homeland. By offering incentives such as tax breaks, housing support, and simplified bureaucratic processes, the program makes the transition smoother and more appealing. It seeks not only to bring individuals back but also to attract investments from the diaspora into local development projects, which are crucial for boosting rural economies and infrastructure. This program offers a structured platform for diaspora members to actively engage with local projects and institutions in Albania. Through established partnerships with diaspora organizations, it facilitates knowledge exchange and collaborative ventures in critical areas such as education, healthcare, and entrepreneurship. The visiting program is integral in maintaining and strengthening the cultural and professional ties between the diaspora and Albania. It supports sustainable national development through both long-term reintegration and dynamic short-term collaborations, fostering a robust, engaged, and mutually beneficial relationship between Albania and its global community.

The **Albrain Platform** is essential in promoting the concept of brain circulation. It invites Albanian professionals worldwide to connect and create partnerships with quadruple helix actors in Albania (business community, Academia, Central and Local Government institutions and Civil Society organisations, explore opportunity for partnerships and engage in short-term projects within Albania, thereby transferring knowledge and fostering innovation. This program sets up a framework for these professionals to contribute to local challenges through workshops, consulting, and other collaborative efforts, leveraging their global experiences to drive local development.

The **Educational and Cultural Programs** are intricately designed to connect the younger generation of the Albanian diaspora with their cultural roots through engaging Summer and Winter Campuses. These initiatives go beyond mere seasonal engagement; they are a cornerstone in a broader strategy to nurture a deep-seated appreciation and understanding of Albanian language and cultural heritage among youth living abroad and foster connections with their peers in Albania. Central to these programs is the inclusion of a comprehensive package that promotes the Albanian language and culture. This is implemented through a series of structured educational activities that blend traditional learning with cultural immersion, ensuring that participants not only learn about their heritage but also feel a profound connection to it. The activities are designed to resonate with the youthful spirit, incorporating elements of fun, interaction, and discovery, which are crucial for fostering a lasting bond with the culture.

These programs aim to **support the learning of the Albanian language in schools located in countries where the diaspora resides**. This involves the preparation of bilateral agreements between Albania and respective countries' governments or executive programs, facilitating the integration of the Albanian language into local educational curriculums. By doing so, the programs ensure that diaspora youth have the opportunity to learn their ancestral language, further strengthening their cultural ties to Albania.

Additionally, these programs are aligned with strategic initiatives to facilitate the reintegration of diaspora families into Albanian life. By providing avenues for easy recognition and transfer of educational credits and qualifications obtained abroad, the programs make a significant move towards smoothing the transition for families considering a return to Albania. This aspect is vital in building a supportive bridge for those who wish to contribute actively to Albania's development or choose to resettle. The focus on facilitating these transitions is not just about cultural reintegration but also includes practical support in navigating the Albanian educational landscape, such as assistance in enrolling in local schools and universities. This comprehensive support system ensures that returning diaspora members and their families can integrate into Albanian society with ease and confidence, truly making these Educational and Cultural Programs a foundational pillar of Albania's strategy to harness the potential of its global community for national development and cohesive cultural identity.

Rationale: These comprehensive programs are interwoven to create a robust network that supports the diaspora's integration and involvement in Albania's development. By addressing both professional and cultural aspects, the initiatives ensure that members of the diaspora can find multiple pathways to contribute to and benefit from their ties to Albania. From professional reintegration to cultural enrichment, each component of the program is designed to cater to diverse needs and aspirations, ensuring a holistic approach to diaspora engagement.

Key Features:

- The Diaspora Return Program
- Albrain Platform
- Educational and Cultural Programs

Main Objectives:

- **Reintegration Support:** Equip the Albanian diaspora with necessary tools and incentives to facilitate their return and reintegration into Albania's socio-economic landscape.
- **Professional Engagement:** Leverage the expertise of the diaspora through programs that promote short-term professional engagements and continuous knowledge exchange.
- **Cultural and Educational Connections:** Enhance the ties of diaspora youth with Albanian culture and language through structured educational and cultural programs.
- **Investment and Development:** Encourage diaspora investments in local development projects, particularly in rural areas, to boost economic growth and infrastructure.

Expected Outcomes:

- **Strengthened Ties:** Build a robust network that connects the Albanian diaspora more closely with their homeland, enhancing mutual benefits and sustained engagement.
- **Economic Growth:** Drive local economic development through diaspora capital and expertise, leading to job creation and infrastructure improvements.
- **Cultural Preservation:** Foster a strong sense of Albanian identity among the diaspora, particularly the younger generation, through immersive cultural and linguistic programs.
- **Innovative Contributions:** Benefit from the global experiences and innovative approaches of the diaspora in various sectors including technology, healthcare, and education.

- **Digital Infrastructure and Connectivity**

Vision: Harnessing cutting-edge technologies to empower businesses, enhance national infrastructure, and streamline processes across all sectors. This vision aims to foster a digitally inclusive economy where innovation thrives, operational efficiency is maximized, and every citizen and business can participate fully in a digitally-enabled future.

Building on this vision, the action plan outlines several strategic objectives that provide a structured path toward realizing these ambitious goals.

Digitalization of Companies (Reflecting Strategic Objective: “Optimize Digital and Connectivity to Boost Economic Efficiency”, Specific Objective 1.2: “Reducing processing times for transporters, maritime agencies, freight forwarders, and logistic companies to streamline operations and increase efficiency”, M1. “Reengineering Services offered by Public Agencies to Transporters, Maritime Agencies, Freight Forwarders, and Logistic Companies”): At the forefront is the initiative to drive the digitalization of businesses across various priority sectors. This movement towards digitalization is more than just a shift in technology; it's a fundamental change in the way companies operate and innovate. By adopting advanced digital tools and methodologies, businesses are expected to experience a significant boost in their innovation capacities and operational efficiencies. This objective is not limited to tech-based industries alone but extends to traditional sectors, where digital technologies can unlock new potentials and drive growth. This strategy is designed to bridge the gap between education and industry, revitalizing economic diplomacy, and ensuring that the youth see a future for themselves within the country's borders.

Infrastructure and Connectivity (Reflecting Strategic Objective: “Optimize Digital and Connectivity to Boost Economic Efficiency”, Specific Objective 1.1: “Advancing Infrastructure Development and Enhancing Connectivity through Strategic Investments and Technological Upgrades”, the focus is placed on three key measures: M1. “Reducing the digital divide and providing inclusive broadband services”, M2. “Improving data infrastructure and data gathering”, and M3. “Improving digital services in public transport”): Parallel to the digitalization of companies is the strategic development of infrastructure and connectivity. Recognizing that digital transformation is contingent on the underlying infrastructure, efforts are being made to enhance the national network and connectivity. This involves not only physical infrastructure like broadband and mobile networks but also the integration of smart technologies that facilitate seamless digital experiences. The goal is to create an environment where digital technologies can be integrated effortlessly, paving the way for a more interconnected and efficient economy.

Process Efficiency (Reflecting Strategic Objective: “Optimize Digital and Connectivity to Boost Economic Efficiency”, Specific Objective 1.2: “Reducing processing times for transporters, maritime agencies, freight forwarders, and logistic companies to streamline operations and increase efficiency”, M1. “Reengineering Services offered by Public Agencies to Transporters, Maritime Agencies, Freight Forwarders, and Logistic Companies”, M2. “Automation and Digitalization of Customs and Logistic Procedures for Port users.”): A critical aspect of the digitalization strategy is streamlining the operations of key service sectors, notably transporters, maritime agencies, freight forwarders, and logistic companies. By reducing processing times, these sectors can achieve greater operational efficiency, leading to faster service delivery and reduced

costs. This objective is particularly crucial for Albania, where logistical efficiency can significantly impact the broader economy. Implementing digital solutions and modern management practices in these sectors is expected to enhance the overall efficiency and competitiveness of Albania's service industry and especially the tourism sector.

Together, these strategies form the bedrock of Albania's ambition to transform into a digitally advanced nation. By focusing on the digitalization of companies, enhancing infrastructure and connectivity, and improving process efficiency, Albania is positioning itself to harness the full potential of the digital age, boosting its economy and improving the quality of life for its citizens.

To achieve these strategic objectives, the action plan details a series of specific measures and initiatives, each aligned with the overarching goals of enhancing sustainability and fostering innovation.

Infrastructure and Connectivity (Reflecting Strategic Objective: *“Optimize Digital and Connectivity to Boost Economic Efficiency”*, Specific Objective 1.1: *“Advancing Infrastructure Development and Enhancing Connectivity through Strategic Investments and Technological Upgrades”*, M1. *“Reducing the digital divide and providing inclusive broadband services”*, M2. *“Improve data infrastructure and data gathering.”*): The second strategic objective aims to bridge the digital divide by updating the feasibility studies for broadband development in various counties and preparing for tender dossiers for rural broadband development. Investments are to be directed towards optic fiber expansions in 'white areas', establishing an inclusive broadband service. Further investments are targeted at data infrastructure, including the establishment of data centers and the adoption of international standards for high-quality data collection, analysis, and utilization in priority domains.

Process Efficiency (Reflecting Strategic Objective: *“Optimize Digital and Connectivity to Boost Economic Efficiency”*, Specific Objective 1.1 and specifically M3 : *“Improving Digital Services in Public Transport”*): In public transport, the plan introduces digital services enhancement through the development of web and mobile applications for real-time itinerary planning, implementation of electronic ticketing, and the development of training curriculums for transport staff. An awareness campaign will promote these new digital services, with additional public partnerships expected to bring investments in public transport in rural areas.

Lastly, processing times for transporters, maritime agencies, freight forwarders, and logistics companies are set to be reduced (Reflecting Strategic Objective: *Optimize Digital and Connectivity to Boost Economic Efficiency, Specific Objective 1.2: Reducing processing times for transporters, maritime agencies, freight forwarders, and logistics companies to streamline operations and increase efficiency, M1. Reengineering services offered by public agencies, M2. Automation and digitalization of customs and logistics procedures.*). This will involve reengineering services offered by public agencies, with a joint business process review in port areas, establishment of new guidelines, and the automation of customs and logistics procedures to facilitate smoother operations for port users.

These efforts represent a coordinated and forward-thinking strategy aimed at transforming Albania into a digitally agile and infrastructure-rich nation, poised for competitive participation in the global market.

The Objective of the initiative presented in the boxes below aim at to revolutionize Albania's transport sector and expand digital infrastructure are geared towards creating a more connected and efficient environment for both residents and tourists. By leveraging digital technologies, these initiatives seek to modernize the country's transportation systems, making them smarter, more reliable, and more responsive to the needs of a dynamic society. The primary goal is to integrate advanced digital solutions into the transport infrastructure to reduce congestion, lower pollution levels, and increase the overall efficiency of transport networks. This includes the implementation of intelligent transportation systems (ITS) that utilize data and technology to improve traffic management and safety. For example, smart traffic lights and adaptive traffic management systems can optimize flow and reduce wait times, while real-time data analysis helps in predicting and managing traffic patterns effectively.

Alongside improvements in transportation, there is a strong emphasis on expanding digital infrastructure across both rural and urban areas. This effort is crucial in reducing the digital divide and ensuring that all regions of Albania have access to high-speed internet and modern telecommunications services. By extending fiber-optic networks and enhancing wireless broadband coverage, the initiative supports the deployment of IoT devices and facilitates the broader adoption of smart city technologies, which are essential for monitoring and managing urban environments. The integration of digital technologies in transport and the expansion of connectivity are expected to significantly improve the quality of life for Albanians. For residents, these enhancements mean less time in traffic, more reliable public transport options, and easier access to essential services through digital channels. For tourists, improved transport and connectivity make Albania a more attractive destination, with easier navigation and access to tourist information and services.

Expanding Digital Infrastructure (Reflecting Strategic Objective in the digital infrastructure and connectivity section of the Action Plan: Optimize Digital and Connectivity to Boost Economic Efficiency, Specific Objective 1.1: Advancing Infrastructure Development and Enhancing Connectivity through Strategic Investments and Technological Upgrades, M1. Expanding digital infrastructure and enhancing connectivity across rural and urban areas, M2. Revolutionizing the transport sector through the integration of digital technologies.)

Enhancing Connectivity:

Albania is committed to expanding its digital infrastructure to enhance connectivity across rural and urban areas. This expansion is crucial for boosting tourism, improving services in health and agriculture, and supporting overall economic development.

Core Services and Facilities:

- **Widespread Wi-Fi Networks:** Install widespread Wi-Fi networks to ensure broad internet access in both rural and urban areas. This will support the digital needs of residents and tourists alike.
- **Strategic Placement of Wi-Fi Points:** Place Wi-Fi points along tourist paths and in key locations to facilitate the use of mobile devices and digital services.
- **Recharging Stations:** Add recharging stations in tourist areas to ensure that users can keep their devices powered and stay connected.

Innovative Elements:

Boosting Tourism: By enhancing digital infrastructure, Albania will provide tourists with better access to information and services, enriching their travel experience and encouraging longer stays.

Improving Services: Improve service delivery in health and agriculture through better connectivity, enabling the use of digital tools and remote services.

Supporting Local Economies: Strengthen local economies by providing businesses and residents with reliable internet access, supporting e-commerce and digital innovation.

Revolutionizing the Transport Sector Integration of Digital Technologies:

Albania, through its Smart Specialization Strategy (S3), aims to revolutionize its transport sector by integrating digital technologies like e-tickets and Google Maps. This initiative is designed to streamline transportation systems, making travel more efficient and user-friendly for both locals and tourists.

Core Services and Facilities:

- **E-Ticketing Systems:** Implement e-ticketing systems across all public transport networks to ensure seamless access and reduce the need for physical tickets. This will promote a smoother, contactless travel experience.
- **Google Maps Integration:** Include all transport routes in Google Maps to enhance navigational ease. This integration will provide real-time updates and route optimization, fostering a more connected and accessible transport network.

Innovative Elements:

- **Contactless Travel:** By implementing e-ticketing, Albania will ensure a contactless travel experience, enhancing convenience and safety for users.
- **Real-Time Updates:** Real-time updates on Google Maps will provide users with accurate information on transport schedules and routes, optimizing travel times and improving user satisfaction.
- **Accessibility:** Enhance the accessibility of public transport for all users, including tourists, by providing easy-to-use digital tools and platforms.

Rationale

These initiatives are driven by the need to modernize Albania's transport sector and expand digital connectivity to support economic growth and improve the quality of life. By integrating digital technologies into transport and enhancing digital infrastructure, Albania aims to:

- **Streamline Transportation:** Create a more efficient and user-friendly transport system that meets the needs of locals and tourists.
- **Enhance Connectivity:** Ensure that all areas, especially rural ones, have access to reliable internet services, supporting various sectors and boosting economic activity.
- **Promote Digital Inclusion:** Provide all residents and tourists with access to digital tools and services, fostering a more inclusive and connected society.

Benefits - For Local Communities:

- **Improved Transport Efficiency:** Enjoy more efficient and accessible public transport systems, reducing travel time and costs.
- **Enhanced Connectivity:** Benefit from reliable internet access, supporting education, healthcare, and business activities.
- **Economic Growth:** Stimulate local economies through improved transport and digital infrastructure, creating new job opportunities and supporting local businesses.

- Advancing Research and Innovation for Smart Growth

Vision: Empowering Albania's Future through Collaborative Innovation and Technological Excellence.

This vision emphasizes the importance of collaboration, technological excellence, and sustainability in driving Albania's future growth. By committing to these strategic objectives and measures, Albania aims to transform into a hub of scientific inquiry and innovation, securing its position as a forward-thinking leader in the region. This comprehensive approach ensures that the Albanian economy is driven by innovation, collaboration, and a deep commitment to sustainable growth, setting a strong foundation for future generations.

*Building on this vision, the action plan outlines several **strategic objectives** that provide a structured path toward realizing these ambitious goals.*

Collaborative Innovation (*Reflects Strategic Objective: “Ensure the transformation of the Research and Innovation through Digital Innovation and Technological Advancement and ensure excellence in scientific research and innovation outcomes”, Specific Objective 1.1: “Leverage the collective expertise, resources, and perspectives of all government, industry, academia, and civil society stakeholders within the quadruple helix, promoting a synergistic approach creating a dynamic and effective innovation ecosystem resulting in sustained and impactful advancements”, “Define a specific support framework for technology transfer processes (vertical and horizontal) by strengthening of linkages between technology supply side, technology adopters and the intermediary support service provider.”*): Central to this strategy is the concept of Collaborative Innovation, leveraging the combined expertise, resources, and viewpoints of stakeholders across government, industry, academia, and civil society. This approach is rooted in the Quadruple Helix model, which encourages active collaboration between these diverse sectors to create a dynamic and effective innovation ecosystem. By bringing together varied perspectives and skill sets, Albania aims to promote synergistic interactions that lead to groundbreaking innovations and solutions, thereby fostering a culture of creativity and scientific inquiry.

Technology Transfer (*Reflecting Strategic Objective: “Ensure the transformation of the Research and Innovation through Digital Innovation and Technological Advancement and ensure excellence in scientific research and innovation outcomes”, Specific Objective 1.2: “Define a specific support framework for technology transfer processes (vertical and horizontal) by strengthening of linkages between technology supply side, technology adopters and the intermediary support service provider,” M1. “Enhancing the institutional role and internal skills of state agencies such as AIDA and others for increasing Albanian participation in international events to boost networking, support “Made in Albania” products and the integration into global value chains of the S3 priority sectors”, M2. “Development by universities and research bodies of the Third Mission activities, including through support to spin-offs, and creation of a national network of innovation intermediaries such as Industrial Innovation Hubs, Tech Parks and Clusters, where the quadruple helix stakeholders can cooperate in a stable way.”*): A crucial aspect of the S3 is strengthening the framework for technology transfer, both vertically and horizontally. This involves building robust connections between those who develop technology (supply side) and those who adopt it (demand side), along with intermediary support service providers. By establishing clear pathways for

technology transfer, Albania seeks to ensure that innovations developed within academia and research institutions find practical applications in industry and society. This strategy not only accelerates the adoption of new technologies but also catalyzes the transformation of innovative ideas into marketable products and services, thus enhancing the overall competitiveness of the Albanian economy.

Industrial/Innovation Policy (Reflecting Strategic Objective: “Ensure the transformation of the Research and Innovation through Digital Innovation and Technological Advancement and ensure excellence in scientific research and innovation outcomes”, Specific Objective 1.3: “Define a sound industrial/innovation policy framework with the aim of creating a favorable business climate for companies to develop research and innovation”, M1. “Review of incentive schemes aimed at promoting the priority domains of S3 with specific aid measures and by introducing provisions that support the investment of the private sector in research and innovation”, M2. “Adoption of sustainable fiscal policies”, M3.” Definition of a legislative and regulatory framework aligned with EU standards, which can encourage investments by local companies and foreign investments and the development of clusters”, M4.” Strong simplification of the procedures for starting business investments”, M5. “Introduce a policy toolkit to support businesses in accessing public funding dedicated to R&I, including through the establishment of informative platforms and a dedicated communication strategy”, M6. “Strengthening of the R&I incentive framework directed towards the cross-sectoral introduction of eco-friendly and sustainable practices and processes and towards the adoption of digital technological solutions, both in private and public sector.”): Developing a sound industrial and innovation policy framework forms another cornerstone of the strategy. This framework aims to cultivate a business climate favorable for companies to actively engage in research and innovation. It envisages policies that incentivize research and development activities, support startups and established businesses in innovation endeavors, and create a regulatory environment that fosters technological advancement. The goal is to make Albania an attractive destination for both domestic and international investors looking to invest in research and innovation.

Digitalization of Companies (Reflecting Strategic Objective: “Optimize Digital and Connectivity to Boost Economic Efficiency”, Specific Objective 1.5: “Artificial intelligence, digitalization, and cybersecurity for smart growth”, M1. “Facilitate the development and responsible adoption of AI technologies to generate added value for the economy, environment, and society”, M2. “Support knowledge transfer, partnerships, and trainings in AI and address AI ethics issues”, M3. “Strengthen Albania's cybersecurity framework comprehensively, ensuring resilience against cyber threats and promoting collaboration, capacity building, and innovation in the cybersecurity domain”, M4. “Accelerating Digital Transformation in Enterprises”, M5. “Enhancing Institutional and Regulatory Frameworks for Digital Transformation by Streamlining Policies and Promoting Innovation.”): This digital transformation of companies is envisioned to be achieved through co-financing grants that enable the adoption of advanced digital solutions leading to automation. The strategy aims to foster partnerships with start-ups for innovative digital solutions, backed by technical support from academia and an expansive open data database that promotes research and business collaborations.

In the realm of e-commerce, the action plan includes establishing a roadmap, developing case studies, and conducting awareness campaigns about e-commerce solutions and digital payments. This endeavor seeks to bring Albanian businesses to the forefront of online commerce, enhancing their market reach and operational efficiency.

Institutionally, there is a significant push to strengthen the environment for digitalization. Comprehensive assessments and legal reforms are planned to nurture technological innovation. Specific frameworks will be designed to support business clusters in ICT and other high-potential sectors, with a keen eye on integrating artificial intelligence and digital technologies to bolster growth.

*To achieve these strategic objectives, the action plan details a series of **specific measures and initiatives**, each aligned with the overarching goals of enhancing sustainability and fostering innovation.*

Collaborative Innovation (Reflecting Strategic Objective: “Ensure the transformation of the Research and Innovation through Digital innovation and technological advancement and ensure excellence in scientific research and innovation outcomes”, Specific Objective 1.1: “Leverage the collective expertise, resources, and perspectives of all government, industry, academia, and civil society stakeholders within the quadruple helix, promoting a synergistic approach creating a dynamic and effective innovation ecosystem resulting in sustained and impactful advancements”, M1. “Reinforce the research system through digital and technological innovations both at the policy and practice levels.”): By fostering Collaborative Innovation, Albania commits to leveraging the diverse expertise, resources, and perspectives of stakeholders across government, industry, academia, and civil society. This approach, rooted in the Quadruple Helix model, aims to catalyze dynamic interactions and synergistic collaborations that lead to groundbreaking innovations. We plan to establish intersectoral platforms and forums that will bring these diverse stakeholders together, enabling them to share insights and co-create solutions. Initiatives such as the Innovation Ecosystem Fund will provide crucial seed funding to support collaborative projects and startups emerging from these interactions.

Technology Transfer (Reflecting Strategic Objective: “Ensure the transformation of the Research and Innovation through Digital innovation and technological advancement and ensure excellence in scientific research and innovation outcomes”, Specific Objective 1.2: “Define a specific support framework for technology transfer processes (vertical and horizontal) by strengthening the linkages between technology supply side, technology adopters, and the intermediary support service providers”, M1. “Enhancing the institutional role and internal skills of state agencies such as AIDA and others for increasing Albanian participation in international events to boost networking, support “Made in Albania” products, and the integration into global value chains of the S3 priority sectors.”): Technology transfer is pivotal in translating research innovations into market-ready products and services. Albania is dedicated to strengthening this framework by enhancing the operational capabilities of Technology Transfer Offices at universities and research institutions. We will provide training for intermediaries who facilitate technology adoption, ensuring a smooth transition from concept to commercialization. Public-private partnerships will be encouraged, supported by policies that foster a direct link between technological development and industrial application, thereby enhancing Albania's overall economic competitiveness.

Industrial/Innovation Policy (Reflecting Strategic Objective: “Ensure the transformation of the Research and Innovation through Digital innovation and technological advancement and ensure excellence in scientific research and innovation outcomes”, Specific Objective 1.3: “Define a sound industrial/innovation policy framework with the aim of creating a favorable business climate for companies to develop research and innovation”, M1. “Review of incentive schemes aimed at promoting the priority domains of S3 with specific aid measures and by introducing provisions that support the investment of private sector in research and innovation.”): Developing a robust industrial and innovation policy framework is central to Albania’s strategic vision. This framework will create a nurturing environment for businesses to engage in innovative activities and research. We will introduce tax incentives for R&D activities and launch comprehensive support programs for startups and SMEs, particularly in high-tech sectors. A regulatory sandbox will be established to allow innovators to test new products and services within a safe and controlled environment, encouraging creativity while managing risks.

The Objective of the initiatives presented in the boxes below is to transform Albania into a hub for scientific inquiry and technological advancement, securing its position as a forward-thinking leader in the region. The commitment to these objectives and measures ensures a future where Albania's economy is driven by innovation, collaboration, and a deep commitment to sustainable growth.

Cyber Security Research and Development Center *(Reflecting Specific Objective 1.5 in the Scientific research section of the Action Plan: Artificial Intelligence, Digitalization, and Cybersecurity for Smart Growth, M3: Strengthen Albania's cybersecurity framework comprehensively, ensuring resilience against cyber threats and promoting collaboration, capacity building, and innovation in the cybersecurity domain.)*

The objective of these initiative is to establish a robust framework for research and development in the area of cybersecurity. By partnering with AKCESK (Albanian Authority on Cybersecurity) and local universities to create a new research and development center.

Partnership with AKCESK and Universities:

A new research and development center will be established in collaboration with AKCESK and local universities, focusing on cybersecurity and other critical research disciplines. This center will play a pivotal role in training, upskilling, and reskilling professionals in cyber defense and research methodologies.

Core Services:

- **Cybersecurity Training:** The center will offer specialized training programs in cybersecurity, equipping professionals with the latest skills and knowledge to protect digital infrastructure.
- **Research and Innovation:** Conduct cutting-edge research in various disciplines, fostering innovation and technological advancements.
- **Collaboration and Networking:** Facilitate collaboration between academia, industry, and government entities to drive research and development efforts.

Innovative Elements:

- **State-of-the-Art Facilities:** Provide advanced laboratories and research facilities to support high-quality research and innovation.
- **Digital Platforms:** Implement digital platforms for knowledge sharing, remote collaboration, and continuous learning.
- **Public-Private Partnerships:** Encourage partnerships between the research center and private companies to accelerate the commercialization of research findings.

Rationale

The rationale for establishing this center stems from the growing need for advanced cybersecurity measures in an increasingly digital world. Cyber threats are evolving rapidly, and there is a critical need for well-trained professionals who can safeguard digital infrastructure. By creating a dedicated research and development center, Albania aims to:

- **Address Skills Gaps:** Ensure that the workforce is equipped with the necessary skills to handle sophisticated cyber threats.
- **Promote Innovation:** Foster a culture of innovation and research that will lead to the development of new cybersecurity solutions.
- **Enhance National Security:** Strengthen the country's overall cybersecurity posture by developing and implementing advanced security measures.

Benefits

For Local Communities:

- **Improved Employment Opportunities:** Create new job opportunities in the field of cybersecurity, contributing to economic growth.
- **Enhanced Local Expertise:** Build local expertise in cybersecurity, reducing reliance on external resources.
- **Increased Cyber Resilience:** Provide businesses with access to cutting-edge cybersecurity training and resources, enhancing their resilience against cyber threats.
- **Innovation and Growth:** Foster an environment of innovation that can lead to the development of new products and services, driving business growth.

Initiative for Business Investment in Research, Innovation, and Education *(Reflecting Specific 1.3 in the Scientific research section of the Action Plan:: Define a sound industrial/innovation policy framework with the aim of creating a favorable business climate for companies to develop research and innovation, M6. Strengthening of the R&I incentive framework directed towards the cross-sectoral introduction of eco-friendly and sustainable practices and processes and towards the adoption of digital technological solutions, both in the private and public sectors.)*

Objective:

This initiative aims to stimulate enterprise investment in research, innovation, and education by implementing legislative amendments and offering incentives. It seeks to enhance collaboration between businesses and universities, recognize research expenditures for tax deductions, and foster a culture of continuous learning and innovation within the private sector. Additionally, it aims to incentivize businesses to invest in comprehensive educational and training programs that support ongoing employee development.

Incentives for Investment in Research and Development (R&D) and Education

Overview:

Designed to bolster companies investing in R&D and education, this program offers a range of incentives, including tax deductions, grants, and fiscal benefits. These incentives aim to motivate businesses to engage deeply in innovation, technological advancements, and comprehensive employee educational programs.

Key Features:

- **Tax Incentives:** Implement a revised tax policy allowing businesses to deduct R&D and educational expenditures, thus encouraging increased investment in innovative technologies, processes, and employee skills enhancement.
- **Grants and Funding:** Provide direct financial support for R&D projects and educational initiatives, particularly those in partnership with academic institutions. This includes funding for training programs aimed at upgrading the skills and knowledge of the workforce.
- **Regulatory Support:** Streamline the approval and support processes for R&D and educational initiatives, reducing bureaucratic hurdles and accelerating the pace of innovation and skills development.

Innovative Elements:

- **Collaborative Projects:** Foster joint projects between businesses and universities to address real-world industry challenges, leveraging academic expertise and research capabilities.
- **Commercialization of Research and Educational Outcomes:** Facilitate the transformation of research findings and educational achievements into marketable products, services, and refined workforce skills, enhancing the economic impact and competitiveness of businesses.
- **Sector-Specific Initiatives:** Target specific industries for R&D and education incentives, focusing on sectors identified as priorities in the S3 strategy, to align with national strategic objectives and enhance sector-specific skills.

Rationale:

By amending laws related to sponsorships and recognizing expenditures on R&D and educational training, this initiative aims to create a conducive environment for innovation and lifelong learning. It supports the transformation of academic research and skills training into practical business applications, thereby boosting competitiveness, productivity, and fostering a knowledge-based economy. This strategic approach ensures that investments in education and training are as valued

The objective of the initiatives presented in the boxes below is to establish two Centers of Excellence to harness cutting-edge scientific research and excellence that foster international collaboration, drive technological advancement, and promote sustainable development.

In addition, establish comprehensive hubs that drive technological innovation and merge creative industries with economic activities in Albania. By developing state-of-the-art facilities and fostering collaborative environments, these projects aim to position Albania as a leader in high-tech industries and cultural innovation, thereby boosting economic growth and enhancing cultural tourism.

Centre of Excellence in Nanotechnology (Reflecting Strategic Objective in the Scientific research section of the Action Plan: Ensure the transformation of the Research and Innovation through Digital innovation and technological advancement and ensure excellence in scientific research and innovation outcomes, Specific Objective 1.1: Leverage the collective expertise, resources, and perspectives of all government, industry, academia, and civil society stakeholders within the quadruple helix, promoting a synergistic approach creating a dynamic and effective innovation ecosystem resulting in sustained and impactful advancements, M1. Reinforce the research system through digital and technological innovations both at the policy and practice levels.)

Overview: The Centre of Excellence for Nanosciences and Nanotechnology in Tirana aims to integrate the virtual Albanian Nanoscience and Nanotechnology Centre (NANOALB) with leading research groups from the region and Europe, including collaborations with institutions in Italy, Spain, and Israel. Notably, it will partner with the Catalan Institute of Nanoscience and Nanotechnology (ICN2-CERCA) and the CERCA Institute (ICERCA), recognized as premier research entities. The partnerships also aim to affiliate as an international associated center within the CERCA System.

The primary research, development, and innovation (RDI) areas include:

- Life Sciences: Health and bioapplications such as diagnostic tools (including nanosensors), therapies using modified nanomaterials as drug carriers, and novel techniques for water and food quality monitoring, as well as environmental and agricultural innovation.
- Energy: Use of graphene and other 1-2D materials for batteries and other applications.
- Intelligence: Applications related to health and other fields.
- Nanomaterials: Study of natural nanomaterials and rare earth elements, including characterization tools.

These research areas will support the development of innovative technologies that foster sustainable economic growth in the Balkan region. The center aims to bring in external expertise, train new generations of local students, boost the creation of spinoffs, and attract external investment and international companies.

In the short-term: it will create strong connections with excellent international research groups, establishing for each current group an associated one from abroad, establishing a well calibrated governance, decide on strategic development operations, integrate the best practices in RDI management from ICN2/CERCA, apply for the HRS4R logo, and draw the attention of the EU scientific community to apply for competitive projects as a centre of excellence at regional /international levels benchmarking with ICN2.

In the long-term: Its mission will be to achieve scientific and technological excellence at an international level in nanotechnology. This aim includes facilitating integration and innovation in these technologies by Albanian, Western Balkans, EU and more companies in order to address societal challenges, and to provide the highest caliber training and career development for young scientists, thereby creating a pole for attracting and retaining local and international talent to the Centre.

Key Features:

- **Advanced Research Infrastructure:** Combines state-of-the-art facilities for both fundamental and applied research in nanotechnology in different fields Life Sciences (health and bioapplications novel technique for water and food quality monitoring, environment and agriculture innovation), Energy, AI, nanomaterials
- **Interdisciplinary Collaboration:** Bridges various scientific disciplines to foster innovation and knowledge transfer across borders.
- **Entrepreneurial Support:** Encourages the commercialization of innovations through public-private partnerships and incubation programs.

Innovative Elements:

- **Capacity Building:** Enhances local and regional scientific capacity through training, workshops, and international collaborations.
- **Research and Innovation:** Drives advancements in nanomaterials, AI, and energy applications.
- **Translation and Exploitation:** Facilitates the practical application of research findings to address societal needs and stimulate economic growth.

Rationale: The establishment of Center is driven by the strategic need to position Albania and the Western Balkans at the forefront of global scientific research in nanotechnology. This center aims to catalyze regional economic development, attract international investment, and foster a dynamic innovation ecosystem

International Centre of Excellence for Marine Sciences Research and Development (ICMS)

Overview: Located strategically along the Albanian coast in Otranto channel, ICMS aims to become a hub of excellence for marine sciences, addressing critical environmental issues such as sea erosion and water pollution while promoting regional collaboration in the Adriatic and Ionian Seas.

Key Features:

- **Marine Research and Monitoring:** Focuses on comprehensive studies of marine biodiversity, pollution, and coastal dynamics.
- **Educational Integration:** Offers joint PhD and Master's programs in marine sciences, enhancing academic mobility and cooperation.
- **Community and Regional Development:** Uses scientific research to inform public policies and support sustainable development in the marine and coastal sectors.

Innovative Elements:

- **Scientific Excellence:** Aspires to be a leading marine sciences center in the region, adopting best practices from established European research institutions.
- **Socio-Economic Integration:** Links scientific research with socio-economic development, particularly in fisheries, marine conservation, and tourism.
- **Environmental Stewardship:** Promotes environmentally sustainable practices and technologies in marine resource management.

Rationale: The creation of ICMS addresses the urgent need for a dedicated marine sciences center in Albania and in the Adriatic Ionian area to enhance environmental monitoring, support economic development, and align with European Union standards and policies. This center will also play a crucial role in fostering regional cooperation and building a sustainable future for marine and coastal ecosystems.

Key Features:

- **Advanced Scientific Research:** Elevate Albania's and the entire region's research capabilities to international standards, focusing on nanotechnology and marine sciences.
- **Sustainable Development:** Use scientific innovation to address regional challenges in environmental conservation and economic development.
- **International Collaboration:** Strengthen ties with European and regional research institutions to foster academic and professional exchanges.

Expected Outcomes:

- **Economic Growth and Innovation:** Drive economic development through technological innovation and commercialization of research.
- **Environmental Conservation:** Implement sustainable practices that preserve natural resources and promote ecological health.
- **Academic and Professional Excellence:** Develop a skilled workforce through advanced training and international research opportunities.

Rationale: These initiatives represent a strategic investment in Albania's scientific and technological infrastructure, laying the groundwork for future growth and integration into the European Research Area. By establishing one of these projects in Vlora, the goal is to diversify Albania's research and innovation infrastructure, creating additional research hubs beyond Tirana

Durana Tech Park (Reflecting Strategic Objective: Ensure the establishment of state-of-the-art facilities to promote technological innovation and entrepreneurship, Specific Objective 1.1: Develop a technology and innovation ecosystem by providing infrastructure, collaborative spaces, and incubation support to startups and tech companies, M1. Establish Durana Tech Park with advanced research and development facilities, collaborative workspaces, and incubation centers for startups and tech companies.)

Durana Tech Park is envisioned as a state-of-the-art facility that will serve as a central node for technology and innovation. The park aims to attract tech companies and startups, providing them with the infrastructure and resources necessary to develop cutting-edge technologies.

Core Services and Facilities

- Research and Development Facilities: The park will include advanced laboratories and research facilities to support high-quality R&D activities.
- Collaborative Workspaces: Provide collaborative workspaces where tech companies and startups can work together, share ideas, and drive innovation.
- Incubation Centers: Establish incubation centers where startups can receive mentorship, access to investors, and business development support.
- Innovation Ecosystem: Foster an ecosystem that encourages knowledge sharing, networking, and collaboration among businesses, academia, and government entities.

Innovative Elements

- State-of-the-Art Infrastructure: Equip the park with the latest technology and infrastructure to support high-tech industries.
- Public-Private Partnerships: Encourage partnerships between the tech park, private companies, and research institutions to facilitate the commercialization of innovations.
- Talent Development Programs: Implement programs to attract and retain top talent in the technology sector, providing continuous learning and development opportunities.

Rationale

The establishment of Durana Tech Park is driven by the need to create a robust environment for technological innovation in Albania. By providing a central hub for tech companies and startups, the park aims to:

- Promote Technological Advancement: Foster the development of new technologies and innovative solutions.
- Boost Economic Growth: Drive economic growth by creating jobs and attracting investments in high-tech industries.
- Enhance Global Competitiveness: Position Albania as a competitive player in the global technology market.

Benefits

For Local Communities:

- Job Creation: Generate new employment opportunities in the high-tech sector.
- Economic Development: Stimulate local economies through increased business activity and investment.

For Businesses:

- Access to Resources: Provide businesses with access to state-of-the-art facilities, mentorship, and investment opportunities.
- Collaborative Environment: Foster a collaborative environment that encourages innovation and growth.

Economic Art Zone (ZEK) (Reflecting Strategic Objective: Foster the integration of creative industries into economic growth by merging culture, art, and business activities, Specific Objective 1.2: Develop a dedicated zone to support cultural and creative industries, facilitating collaboration between artists, entrepreneurs, and businesses, M1. Establish the Economic Art Zone (ZEK) as a hub for creative industries, providing creative workspaces, business incubation services, and platforms for collaboration, aimed at promoting cultural tourism and economic innovation.)

The Economic Art Zone (ZEK) is an innovative project designed to merge creative industries with economic activities. Situated as a hub for cultural and creative industries, ZEK will facilitate the integration of arts, culture, and business, providing a platform for artists and creative professionals to collaborate with entrepreneurs and businesses.

Core Services and Facilities

- Creative Workspaces: Provide workspaces for artists, designers, and creative professionals to collaborate and create.
- Business Incubation: Establish business incubation centers to support creative startups with mentorship, funding, and business development services.
- Cultural Events and Exhibitions: Host cultural events, exhibitions, and festivals to showcase creative works and attract tourists.
- Collaboration Platforms: Facilitate platforms for collaboration between artists, entrepreneurs, and businesses to drive innovation in arts and design.

Innovative Elements

- Cultural and Creative Hub: Develop ZEK as a central hub for cultural and creative activities, leveraging Albania's rich cultural heritage.
- Integration with Economic Activities: Promote the integration of arts and culture with business activities to enhance the economic value of creative outputs.
- Cultural Tourism Promotion: Use ZEK as a platform to promote cultural tourism, attracting visitors from around the world.

Rationale

The creation of ZEK is driven by the potential to harness Albania's cultural heritage and artistic talent to drive economic growth. By merging creative industries with economic activities, ZEK aims to:

- Foster Innovation in Arts and Design: Encourage innovation and creativity in the arts and design sectors.
- Enhance Economic Value: Increase the economic value of creative outputs and cultural products.
- Promote Cultural Tourism: Attract tourists and promote Albania as a cultural destination.

Benefits

For Local Communities:

- Cultural Enrichment: Enrich local communities through increased cultural activities and events.

- Economic Opportunities: Create new economic opportunities in the creative and cultural sectors.

For Artists and Creative Professionals:

- Support and Resources: Provide artists and creative professionals with the support and resources needed to succeed.
- Collaborative Environment: Foster a collaborative environment that encourages creativity and innovation.

10. Financial Framework

The Smart Specialization Strategy (S3) is a cornerstone in Albania's pursuit of sustainable economic growth and enhanced competitiveness. This chapter details the financial implications and outlines the structured funding approach for implementing the S3 across various priority sectors from 2025 to 2030.

The S3 will be financed through a combination of the state budget, European Union funds, grants, and donations, aligning with the objectives set forth in Albania's National Mid-Term Budget Program for 2025-2027. This multi-source funding approach ensures robust support for the innovative projects and initiatives detailed in the strategy.

The strategic objectives and sector-specific goals within the S3 are supported through a blend of policy instruments tailored to both common and sector-specific outcomes. These instruments are designed to work synergistically, with funding distributed according to the specific needs of each sector and the overarching goals of the S3.

The financial requirements for the S3 have been carefully estimated based on an analysis of activities within the action plan. Each activity's cost reflects the resources necessary for successful implementation, ensuring that all measures are adequately funded to achieve the desired impact. However, it is important to note that these costs are based on preliminary estimates.

All objectives, mainly in the priority domains: “Renewable Energy and Natural Resources”, “Advancing Education - Fostering Innovation and Workforce Readiness, through Digitalization and Curriculum Modernization”, “Digital Infrastructure and Connectivity” and “Advancing Research and Innovation for Smart Growth”, identified as aligned with the Growth Plan, approved by the European Commission in October 2024, have been marked with two asterisks in the S3 Action Plan. The costs for these objectives, as initially outlined in the S3 Action Plan, have been carefully compared with the allocated funds under the corresponding objectives in the Growth Plan, confirming that their costs are covered to a great extent by the Growth Plan’s designated funds. For the moment, their costs have been allocated under the “state budget to be foreseen” or in the “Gap” and will be reviewed within one year from S3 approval.

As part of this revision of the S3 Action Plan, a thorough review will take place to assess the implementation progress of the Growth Plan. This review will examine which measures and activities within the objectives have begun implementation, along with the budgets that have been allocated to them. Any adjustments required based on implementation progress or budget allocations will be incorporated into the revised Action Plan, ensuring it reflects current developments and supports the ongoing alignment between the S3 Action Plan and the Growth Plan. Additionally, the revised Action Plan will include budgeting for certain activities that currently lack specific budgets, pending necessary preliminary studies for detailed cost estimation.

Overview of Financial Resources (2025-2030):

- Total Estimated Budget Needed: € 1,183,685,896

- Total foreseen in actual State Budget (MTBP 2025-2027): € 443,501,890 (37.5%)
- Foreseen additional State Budget 2025-2030: € 222,786,316 (18.8%)
- EU Funds: € 274,311,000 (23.2%)
- Donor Contributions: € 143,982,760 (12.2%)
- Financial Gap: € 104,834,930 (8.9%)

The table below shows the total estimated costs, financial resources available, and the financial gap over the period 2025-2030 of the Smart Specialization Strategy action plan implementation.

Priority	% of total S3 financing	Estimated budget needed (euro)	Source of funding									
			Total foreseen in actual State Budget (euro)		Foreseen additional State Budget (euro)		EU funds (euro)		Donor Contributions (euro)		Gap (euro)	
			Value	%	Value	%	Value	%	Value	%	Gap (euro)	%
Renewable Energy	6.9	81,303,039	773,039	0.95%	78,280,000	96.28%	-	-	1,450,000	1.78%	800,000	0.98%
Raw Materials	4.6	54,993,500	18,542,500	33.72%	3,900,000	7.09%	6,811,000	12%	-	0.00%	25,740,000	46.81%
Healthy and Sustainable Food Chain	33.5	396,870,000	177,470,000	44.72%	10,800,000	2.72%	158,650,000	40%	47,600,000	11.99%	2,350,000	0.59%
Sustainable and diversified tourism	15.0	177,534,461	123,965,701	69.83%	14,417,000	8.12%	9,300,000	5%	1,137,760	0.64%	28,714,000	16.17%
Education	1.0	11,860,000	40,000	0.34%	7,565,000	63.79%	30,000	0%	250,000	2.11%	3,975,000	33.52%
Talent Retention	2.7	31,794,896	350,650	1.10%	18,957,816	59.63%	2,890,000	9%	6,900,000	21.70%	2,696,430	8.48%
Research and Innovation	30.4	359,945,000	116,420,000	32.34%	38,551,500	10.71%	84,930,000	24%	86,495,000	24.03%	33,079,500	9.19%
Diaspora Engagement	5.0	58,730,000	5,630,000	9.59%	44,740,000	76.18%	11,700,000	20%	150,000	0.26%	2,710,000	4.61%
Digital/Connectivity	0.6	7,370,000	310,000	4.21%	5,575,000	75.64%	-	0%	-	0.00%	1,485,000	20.15%
S3 Communication	0.3	3,285,000									3,285,000	100%
Total S3		1,183,685,896	443,501,890	37.5%	222,786,316	18.8%	274,311,000	23.2%	143,982,760	12.2%	104,834,930	8.9%

To address the financial needs over the strategy's timeline, approximately 56.3% of the total budget will be covered by the state, with 37.5% already accounted for in the current three-year Medium Term Budget Program (MTBP) for 2025-2027. The EU and other international donors fund are planned to be covered by EU instruments and other donor programs currently in place contributing for about 35% of the total funds needed for the implementation of the action plan.

The remaining funds will be secured through future budget allocations and negotiations with donors as the Growth Plan, as an instrument of EU designed to stimulate economic development and competitiveness in WB countries by targeting key areas such as infrastructure, innovation, digital transformation, and human capital development. It aims to foster sustainable growth by leveraging investments, enhancing regulatory environments, strengthening institutional capacities and assist WB countries in their road towards EU Integration. This plan serves as a roadmap for integrating global best practices and technologies to boost productivity, create jobs, and improve overall economic resilience. A set of objectives and initiatives laid out in Albania's S3 Action Plan have been strategically aligned with the Growth Plan objectives and will be most likely financed through this instrument:

- Business Environment Enhancements, such as reforms in the tax system and modernization of state cadaster services.

- Digital Transformation and IT Infrastructure, focusing on the development of e-commerce capabilities, digital platforms, and cybersecurity enhancements.
- Energy and Green Transition, with initiatives to promote renewable energy installations, market reforms for energy efficiency, and the introduction of sustainable practices across sectors.
- Research, Development, and Innovation, aiming to strengthen the R&D environment through collaborative projects and innovation ecosystems.
- Education and Human Capital Development, updating educational curricula and expanding digital literacy to align with labor market needs.

The costing of the S3 strategy is structured around key principles of Albania's strategic policy planning framework, as outlined in IPSIS. Established by the Council of Ministers' Decision No. 290, dated 11 April 2020, IPSIS integrates financial and policy planning within a single system. It serves as the core mechanism for planning, analyzing, and drafting strategic documents across all levels, ensuring that the alignment between policy and budget planning is closely tied to the mid-term budget process (MTBP), which spans a three-year period and is updated annually.

IPSI is designed to meet multiple objectives, including:

- Integrating financial and policy planning, ensuring both are treated as part of a unified process.
- Incorporating public investment and foreign assistance into sectoral strategic documents, which are then reflected in the MTBP.
- Aligning 1-3 year action plans with the budget program structure, so that decisions on spending are directly influenced by the policy goals and expected outcomes

The system also supports rigorous monitoring and evaluation. By using IPSIS, Albania ensures that the performance of strategic policies is continuously tracked, allowing policymakers to adjust objectives and funding to meet the evolving needs of the country. This integrated approach enhances transparency and accountability in public spending, contributing to more efficient governance and alignment with Albania's goals for EU integration and sustainable development

The actual programs of the 2025-2027 MTBP "as source of fundings" are identified and used as indicative amounts for costing of the actions or measures. Based on the IPSIS principles (see above) the S3 strategy will be included in the next MTBP process, upon approval by the GoA and proposals from the line ministries of the specific actions and measures.

To fully implement the S3, there remains a funding gap of approximately 8.9%, equating to € 104,834,930 . Efforts to close the gap will include seeking partnerships with various organizations, engaging in new projects that align with the S3's objectives, and leveraging contributions from the private sector. These avenues are seen as vital for securing the additional funds needed to ensure the strategy's full and effective implementation. The involvement of the private sector, in particular, is expected to not only

provide financial resources but also foster greater collaboration between public and private entities, enhancing the overall impact and sustainability of the strategy.

We are currently in active negotiations with a range of stakeholders, including international organizations, NGOs, and private investors, to secure the remaining funds. These discussions are aimed at establishing solid financial commitments and partnerships that will support the full execution of the strategy.

Moreover, a significant portion of the GAP is planned to be covered by various European Union funding instruments. Specifically, programs such as Horizon Europe, Erasmus+, and other EU initiatives that provide financial support for research, innovation, education, SME and regional development projects will be targeted. By tapping into these EU resources, we aim to not only bridge the funding gap but also align our efforts with broader European objectives, thereby enhancing the potential for international collaboration and the adoption of best practices. These funding streams are critical in ensuring the sustainability and scalability of our initiatives, allowing us to drive impactful change in alignment with the S3's long-term goals.

Furthermore, Albania is and will continue to engage with international donors and financial institutions to explore funding opportunities that could support specific aspects of the S3. This proactive approach to funding seeks to capitalize on Albania's strategic initiatives and ongoing reforms, aligning them with available external funding mechanisms that support innovation, sustainability, and economic growth. By actively pursuing these diverse funding sources, Albania aims to secure the necessary resources to fulfill all aspects of S3, ensuring no initiative is left unsupported.

This financial framework not only highlights the robust fiscal planning behind the S3 but also underscores Albania's commitment to fostering a dynamic and innovative economic landscape.

11. Governance

In alignment with the European Commission's guidelines for the effective implementation of Smart Specialization Strategies (S3), the governance model of the S3 in Albania is structured to incorporate a well-defined system of responsibilities and coordination at both political and technical levels¹⁸. This approach is crucial for ensuring the successful implementation, monitoring, and adaptation of the strategy.

¹⁸ <https://s3platform.jrc.ec.europa.eu/w/smart-specialisation-implementation-framework-for-the-eu-enlargement-and-neighbourhood-region>

https://s3platform.jrc.ec.europa.eu/en/w/implementing-smart-specialisation-strategies-a-handbook?p_l_back_url=%2Fsearch%3Fq%3Dimplementing%2Bsmart%2Bspecialization%2Bstrategies

The governance model for the Smart Specialization Strategy (S3) in Albania, adhering to the European Commission's guidelines, is a well-orchestrated framework, ensuring effective implementation through a balance of political guidance and technical expertise. This model is pivotal in steering the strategy towards fulfilling national innovation and development goals.

The process, initially steered by the Prime Minister's Office, laid the foundational principles for the S3. However, the governance structure evolved with the establishment of the Inter-Ministerial Committee in February 2023¹⁹. Led by the Deputy Prime Minister, this Committee is instrumental in overseeing the drafting and execution of the S3. It ensures that the strategy aligns with both national and regional policies and facilitates coordination among various institutions. The committee's responsibilities are broad and significant, encompassing the review of S3 drafts, recommending legal measures, coordinating with other related initiatives, and planning for the financing of the strategy's measures through medium-term budget programming and cooperation with development partners.

Inter-Institutional Committee and National S3 Team

In line with the Prime Minister Order, the governance structure of the Smart Specialization Strategy (S3) for Albania is centered around the formation of an Inter-Institutional Committee and a National S3 Team. This framework ensures a high-level coordination and oversight throughout the development and implementation phases of the S3. A unique aspect of the S3 governance is the involvement of a wide array of partners and working groups.

The Inter-Institutional Committee is chaired by the Deputy Prime Minister and includes members such as the Ministers responsible for Finance, Economy, Education, Enterprise, Agriculture, Tourism, Environment, Infrastructure, Energy, Culture, Health, and Standard Services. Additionally, part of the Committee are also the Head of the S3 team and the heads of important stakeholders organization as the Chairman of the Conference of Rectors, the Chairman of the Academy of Sciences, the Head of the Union of Chambers of Commerce, the Head of the Union of Albanian Producers, the Chairman of the Association for Local Autonomy, as well as heads of several national agencies, including the State Agency for Strategic Planning and Coordination of Foreign Assistance, the National Statistical Office (INSTAT), the Albanian Investment Development Agency (AIDA), and the National Agency for Information Society (NAIS) and the General Director of the General Directorate of Industrial Property.

This Committee is tasked with ensuring the effective progression of the S3 drafting and implementation processes. It reviews and provides feedback on the final draft of the S3 and other prepared materials, recommends necessary legal measures, and guides the organizational work for legislative initiatives within the S3 framework.

The institutions represented in the Committee appointed S3 coordinators to collaborate with the S3T and serve as points of contact for each institution regarding the S3.

Responsibilities of the Committee

¹⁹ <https://s3albania.org/wp-content/uploads/2023/06/Urdher-KM-S3-nr-13-dt-7.2.2023.pdf>

- **Direction and Oversight:** The committee ensures that the S3 is aligned with national priorities and coordinates high-level institutional alignment with S3 objectives.
- **Regular Meetings:** It convenes at least twice a year or as required by the chairperson to discuss ongoing work and strategic directions.
- **Strategic Discussions:** Theme-specific discussions are facilitated to drive and coordinate concrete initiatives supporting the drafting and implementation of S3.

National S3 Team

Parallel to the political oversight, the National Team of S3, composed of experts from diverse fields, operates at a technical level. This team, seen as the Management Team of S3, plays a critical role in the day-to-day management of the strategy. Their responsibilities include implementing the decisions made by the Steering Group, monitoring the strategy's progress, and efficiently managing resources. This team is the linchpin for ensuring continuity in the strategy's implementation and maintaining open and effective communication with stakeholders from the quadruple helix of government, academia, business, and civil society. The S3T is led by its Head that among other managerial duties and organization of the team's work, manages communications with third parties, and reports progress to the Committee. He can engage experts, establish technical working groups, apply for funding, and collaborate with domestic and international institutions to coordinate activities within the strategy framework.

Main Tasks of S3T

- **Strategy Development and Approval:** The team ensures the strategy is drafted through a comprehensive process, evaluates and potentially revises the legal basis, procedures, and guidelines for strategy drafting. They actively contribute by collecting and analyzing data, defining the vision, strategic and specific objectives, and facilitating the acceptance and approval of the strategy by the Council of Ministers.
- **Implementation and Monitoring:** The team guarantees the implementation of all components defined in the roadmap and collaborates with the Joint Research Centre (JRC) of the European Commission to update the roadmap as necessary.
- **Communication and Coordination:** They participate and report at national and international meetings related to smart specialization, presenting Albania's contributions and progress in the context of the country's EU integration processes. They also ensure effective coordination with both international and local partners, the JRC, and representatives of the EU Delegation in Tirana.
- **Reporting and Support:** The team provides necessary support to the Head of the National S3 Team and reports on the progress of their work every trimester to the Deputy Prime Minister.

Technical Secretariat

The S3 framework is supported by a Technical Secretariat, facilitated by the State Agency for Strategic Programming and Aid Coordination (SASPAC). It assists the Committee and S3T, providing an additional layer of organizational and administrative support to the governance structure.

Main Functions

- Ensuring proper administration of the process.
- Providing technical support to the Committee and the National S3 Team and coordinating work with involved institutions.
- Organizing and coordinating meetings and preparing discussion topics in collaboration with ministries and other actors.
- Contributing to the preparation of required documents for reports and the S3 strategy.
- Reporting on work progress to the Chairman of the Committee and the Head of the National S3 Team.

Governance Model for the Implementation of the Strategy

As Albania's Smart Specialization Strategy (S3) progresses, the governance model is planned to undergo strategic enhancements to bolster its effectiveness and adaptability. Central to this advanced governance structure is the **Inter-Ministerial Committee** led by the Deputy Prime Minister, which will continue to function as the highest decision-making body, validating the feedback and outputs generated by the monitoring processes and approving necessary revisions to the Action Plan in response to new developments within the country and region. This Committee, established by Order of Prime Minister, beyond other tasks will be in charge of taking decisions for reviewing the S3, establishing thematic working groups and engaging experts for specific topics and tasks, examine the documents prepared within this process for which the opinion of the Committee is requested, discuss and recommend the necessary legal measures and initiatives and alignment of other sectorial strategies to S3, in the framework of S3 or related to it, have a coordinating role with other initiatives that are related to S3, decide on planning the budgeting and financing of measures through medium-term budget programming for S3 implementation, as well as decide on foreign/donors aid related to activities foreseen in the S3 action plan, etc.

Beneath this committee, a pivotal addition to the governance architecture will be the establishment of an **S3 Monitoring Unit** composed by a Head of Unit and 6 senior coordinators experienced in the vertical and horizontal S3 priority domain fields. This unit is foreseen to be established within the Ministry of Economy, Culture and Innovation, specifically under the General Directorate of Business Promotion and Trade Issues. Tasked with a data-driven mandate, the Monitoring Unit will track and analyze the progress of S3 initiatives, ensuring alignment with set benchmarks and responsiveness to global trends and coordinate with the Growth Plan initiative. This unit will provide crucial insights for agile decision-making and strategic adjustments, enhancing the overall impact of the S3 initiatives. This unit will serve as Technical Secretariat for this Inter-Ministerial Committee and will report every semester on the implementation of the S3 to this Committee.

Furthermore, the governance model will integrate a robust Feedback and Evaluation System that actively solicits and incorporates input from all quadruple helix stakeholders, including government, business sector, academia, and civil society. This system is designed to facilitate regular feedback loops and conduct

impact assessments, ensuring the strategy remains attuned to Albania's evolving economic and societal needs.

A network of coordinators will be established across different institutions that are part of the Committee, as well as other relevant ministries/institutions/organizations part of quadruple helix actors. This network will facilitate efficient communication, coordination of activities, and ensure that all involved parties are aligned with the strategy's goals and implementation processes. The coordinators will play a key role in bridging interdepartmental efforts and enhancing the collaborative framework necessary for the successful implementation of the S3. The network of coordinators works closely and is coordinated by the S3 Monitoring Unit.

By enhancing international collaborations and partnerships, the governance model will also bring global best practices and insights into Albania's S3 process, reinforcing its role as a model of innovation and sustainable development in the European context. These proposed enhancements aim to create a more dynamic, responsive, and forward-looking governance structure, positioning Albania's S3 as a beacon of innovation and sustainable growth.

12. Monitoring and Evaluation

Monitoring and evaluation are integral and constituent parts of any successful strategy, and, as such, a necessity for a smart specialization strategy as well. Effective and successful implementation of S3 Strategy will be achieved through a monitoring and evaluation system to verify progress in meeting or not the specific objectives and measures set out in the Action Plan. Accordingly, the S3 will be accompanied by a responsible and realistic Action Plan for its implementation. The Action Plan will cover the period from 2025 to 2030 and it will serve as the main means of monitoring the S3. The AP is a document that is subject to change and may be revised as necessary, if monitoring and evaluation find that particular measures are not delivering the expected results. A mid term revision of the Action Plan is foreseen in a 3 year period (by 2027).

Given that most of the activities and measures are new and included in the Action Plan for the first time, with some requiring feasibility studies and financial evaluations of models, an update of the financial provisions in the Action Plan is planned after one year (by 2025).

The development of a monitoring system is essential to assess if the national Strategy of Smart Specialization is being implemented as planned, thus supporting decision making on proposals for action lines, on the maintenance of priority areas or the eventual need of adjustments, being a step towards a deeper evaluation. It also serves the purpose of disseminating the achievements with the implementation of the strategy, as it is important to maintain a transparent process of information and communication with the stakeholders involved in the governance model of the strategy.

The S3 monitoring system aims to provide useful data for measuring the implementation of the strategy and the results achieved, also in order to take any corrective actions. It will be performed through two types of indicators: output indicators, for measuring the level of implementation of the policies and related actions put in place, that is the output of national policies in terms of actions carried out and outcome indicators, for measuring the changes taking place in the production systems compared to the objectives of the S3.

The Ministry of Economy, Culture and Innovation (MECI), as the executive body of the Strategy, will be the responsible institution and the main body responsible for monitoring and implementation of the S3. MECI will use a monitoring methodology based on standards that will determine how the monitoring and evaluation process will be conducted in order to establish an effective, unified and systematic data reporting system of all institutions involved. According to this strategic document, each institution reports on the level of implementation of each objective, measure and activity, on the allocated budget, the problems encountered and the assessment of the progress of the strategy in general. To monitor the implementation of the commitments undertaken, in relation to the implementation of the measures, the monitoring process will be carried out at the objective level.

MECI will produce six-monthly and annual monitoring and evaluation reports, which will produce necessary and timely information to policy makers on the progress of implementation of the measures foreseen in the S3 Action Plan for each year. In addition, a mid-term monitoring will be foreseen for implementation at the end of 2027. The action plan of the strategic document, taking into account the degree of mobilization of financial resources for its implementation, will be reviewed every 2-3 years to ensure in this way a real assessment for its implementation.

The monitoring reports will be drafted in cooperation with all the institutions involved in the Action Plan and discussed in the thematic groups established for this purpose according to the specific objectives of S3 and then approved by the Inter-ministerial Committee.

The Inter-ministerial Committee for S3, comprising relevant ministries and stakeholders will oversee on the implementation of the S3 Strategy, ensuring high-level coordination and alignment with national objectives. The mandate of this Committee will last for the duration of the strategy and will cover the task of supervision over implementation and monitoring. It will retain a similar composition of members and thus ensure the continuation of a well-managed process and involvement of all relevant stakeholders. The Committee will meet at least every six months. The S3 Monitoring Unit at MECI will oversee the daily coordination of strategy implementation and gather inputs from relevant Ministries, Agencies and other stakeholders/entities involved in specific measures and activities of the Action Plan. It will prepare an annual report to be presented to the Committee on the implementation of the Strategy within the first trimester of the following year.

Evaluation

In addition to the regular monitoring described above, the S3 2025-2030 will undergo a 3 year mid-term evaluation in 2027. The evaluation will complement the monitoring activities, and its timing will allow for policy corrections should these be necessary. While taking into account the overall objectives and scope of S3 the mid-term evaluation will focus primarily on the progress made in the implementation of the measures and the status of expected outputs and impacts. It is envisaged that while outputs and impacts might be somewhat limited in 2027, an initial assessment would nonetheless be undertaken at this stage with a view to provide a reasonable interim evaluation baseline.

Subsequently, an ex-post evaluation would be carried out towards the end of the lifecycle of the S3 Strategy, with this comprehensive ex-post evaluation to be undertaken to inform the preparation of the ensuing Smart Specialization Strategy within a post-2030 timeframe. The mid-term evaluation will be undertaken by independent experts, who will lead the development of the exact evaluation questions and the methodology. It is expected that the monitoring framework will be an important input into the

evaluation, and itself might need to be updated as a result of the mid-term evaluation. In addition, other qualitative and quantitative information sources will need to be considered by the experts.

Logframe Matrix

Vision:

Collaborative growth, innovation, and creation of a conducive environment for businesses and innovation

Policy Goals:

Collaborative Growth: Focusing on investing in education, training, and skill development to build the necessary human capital for a smarter, more adaptive economy. This goal is essential for fostering an environment where innovation thrives and businesses grow.

Innovation-Centric Approach: Encouraging a culture of innovation, particularly among the youth, to keep our brightest minds in Albania and attract global talents. This approach is key to maintaining a competitive edge in a rapidly changing world.

Business and Innovation Environment: Creating a supportive atmosphere for businesses, facilitating research and development, and promoting innovative ideas. This involves clear regulations, access to funding, and support systems that help startups and established businesses alike to flourish.

Integrated Collaboration: Enhancing synergy among technology, academia, businesses, and government sectors. By working together, these sectors can drive Albania's advancement in a cohesive and integrated manner.

Development of Human Capital: Investing in the workforce through education and professional training programs. This includes enhancing vocational training, higher education, and continuous learning opportunities to meet the evolving demands of the job market.

Digitalization and Connectivity: Accelerating the digital transformation of the public and private sectors. This encompasses expanding digital infrastructure, enhancing internet accessibility, and promoting the use of digital technologies across various industries to improve efficiency and connectivity.

Renewable Energy and Natural Resources: Aiming for leadership in renewable energy and responsible resource management, focusing on environmental sustainability and economic growth.

Sustainable and Diversified Tourism: Establishing Albania as a prime destination for sustainable tourism, leveraging our unique cultural and natural assets.

Healthy and Sustainable Food Chain: Transitioning to organic farming and sustainable practices in food production, emphasizing health and environmental stewardship.

Specific Objectives based on PRIORITY DOMAINS

Renewable Energy and Natural Resources

- Boosting investments in renewable energy, including through liberalization of the energy market.
- Streamlining procedures for issuing permits and licenses for the companies operating in the sector and improving the legal and regulatory framework, including through developing under-regulations and guidelines to facilitate the implementation of energy-related laws
- Encouraging the utilization of waste-to-energy technologies, innovative technologies and biomass resources for clean energy production, reducing landfill waste and promoting awareness
- Promoting support measures for integration of alternative energy sources, energy efficiency and diversification of electricity production mix
- Strengthening the partnership between academia, businesses, and the government to bridge the skills gap and enhance education and training programs, reviewing curricula, including upskilling and reskilling
- Investing in the development of smart grids and storage systems, to support smart grids and energy storage infrastructure that can efficiently handle the various nature of renewable energy resources and enable cross-regional energy sharing.
- Enhancing energy infrastructure, including the construction of technology centers (TECs) and charging stations to support electric transportation
- Sustainable energy use practices
- Orientation of mining sector of Albania to become EU strategic partner and a valuable contributor to the EU's critical raw material supply chain
- The enlargement of existing mineral deposits and exploring new deposits of CRM/SRM minerals
- Strengthening of mineral processing, Increasing the efficiency of non-renewable resources by adopting new waste-free technologies, trying to approach the green and circular economy model
- Empowering of infrastructure, scientific, human, and research capacities of CRM/SRM minerals

Sustainable and diversified tourism

- Preserve and promote Albania's historical and cultural sites, museums, and traditions to attract heritage enthusiasts, ensuring that Albania's cultural heritage, will be preserved, restored, and promoted
- Development of Health and Wellness sub sector of Tourism by tapping into Albania's natural and therapeutic resources
- Natural, adventure and rural tourism
- Promote rural tourism by connecting visitors with local farms and agritourism activities, emphasizing sustainable food production
- Development of niche tourism products and services with focus on culinary
- Development of skills in tourism and collaboration

Healthy and Sustainable Food Chain

- Sustainable Farming and Certification
Increasing the economic sustainability of farms to tackle current and future challenges (i.e. Climate change) thorough cost reduction, sustainable production and certification
- Food Processing and Value-Added Products
- Sustainable Fisheries and Aquaculture
- Medicinal aromatic plants, oils and extracts production
- Promoting sustainable and efficient management of natural resources
- Strengthening agritourism and business development in rural areas

**Advancing Education:
Fostering Innovation
and Workforce
Readiness, through
Digitalization and
curriculum
modernization**

- Strengthening collaboration among academia, businesses, government, and civil society (Quadruple Helix) to enhance innovation and workforce readiness;

- Enhance lifelong learning programs to foster a resilient and agile workforce through reskilling and upskilling of workers, taking into account the challenges posed by circular economy and artificial intelligence;

- Curriculum modernization at all levels to better equip Albania for the digital and green transitions, and for strengthening the specialization of the national economy in the S3 priority areas and increasing scientific and technological skills across all levels

- Reversing the trend towards emigration and abandonment of the rural areas from young people, making it attractive for young people to stay in rural areas and engage in rural development

**Empowering Youth
and Retaining Talent**

- Reverse youth trends towards emigration and abandonment of rural areas by increasing the quality of public services offered and making it attractive for youth to remain in Albania and engage in rural development;

- Advance talent development and holistic development of youth, by supporting and implementing a comprehensive array of amateur sports, arts, arts and crafts programs, and extracurricular activities;

**Engaging
Diaspora:
Boosting Human
Capital,
Technology, and
Culture**

- Diaspora expertise provides effective contribution in generating human capital development especially in rural Albania;

- Promote technological development based on diaspora contribution and research to stimulate economic growth;

- Enhance Technological and Entrepreneurial Capacities through Diaspora Engagement

**Advancing Research and
Innovation for Smart
Growth**

- Leverage the collective expertise, resources, and perspectives of all government, industry, academia, and civil society stakeholders within the quadruple helix, promoting a synergistic approach to creating a dynamic and effective innovation ecosystem resulting in sustained and impactful advancements.

- Define a specific support framework for technology transfer processes (vertical and horizontal) by strengthening linkages between the technology supply side, technology adopters, and the intermediary support service providers.

- Develop a sound industrial and innovation policy framework aimed at creating a favorable business climate for companies to engage in research and innovation.

- Leverage advanced technologies, including AI, satellite imagery, and UAV data, to drive innovation, enhance decision-making processes, and assess scientific and innovation potential, while integrating high-quality statistical data to monitor and refine Smart Specialization Strategy (S3) priorities effectively.

- Artificial intelligence, digitalization and cybersecurity for smart growth

**Digital
Infrastructure
and
Connectivity**

- Advancing infrastructure development and enhancing connectivity, through Strategic Investments and Technological Upgrades facilitating seamless integration of digital technologies.

- Reducing processing times for transporters, maritime agencies, freight forwarders, and logistic companies to streamline operations and increase efficiency.

Renewable Energy and Natural resources – Outcome Indicators

- Percentage increase in trained RES investors as a result of capacity-building initiatives./Number of awareness campaigns conducted promoting RES and energy efficiency investments.
- Percentage Increase in the accuracy and timeliness of statistical reporting on RES after the implementation of data analysis automation.
- Percentage increase in cross-border energy projects initiated after the adoption of streamlined permitting and regulatory processes.
- % increase in the volume of cross-border energy trades conducted as a result of joining the Single Day Ahead Coupling, showcasing enhanced cross-border cooperation.
-
- Percentage Reduction in Fuel Expenditure for Greenhouses (% annually).
- % increase in installed RES capacity across all sectors
- % increase in KESH's total production capacity from RES sources as a result of the new biomass, offshore wind, and battery storage projects.
- % improvement in energy efficiency or performance in pilot areas due to R&D initiatives./ % of R&D projects supported
- Percentage reduction in energy consumption and improvement in energy efficiency across all public administration buildings as a result of the implementation of new policies
- % Increase of Participation of Albanian Researchers in EU Green Deal Projects
- % increase of the effectiveness of the AEEI in bridging the gap between industry and academia, measured by joint projects and collaborative research activities.
- Percentage of graduates trained in RES and energy efficiency
- The increase in end-user engagement in the electricity market following smart meter installation.
- The total energy storage capacity secured through auctioned projects, compared to the pre-auction period.
- The increased capacity and resilience of the energy system due to the addition of the pumped hydro storage project, measured by the reduction in peak load energy deficits.
- The percentage reduction in emissions within the local public transport sector following the introduction of e-vehicles and renewable energy-powered charging stations.
- Percentage increase in the area of forests managed under sustainable practices and certified by forest certification standards
- Degree of the mining sector's alignment with EU sustainability objectives as laid out in the Green Deal, Net Zero Industry Act, and CRM Act
- % Increase of efficiency as a result of improvements made to the digital archive system of mineral deposits.
- Percentage increase in compliance rates among mining companies with the updated legal and regulatory framework.
- The stability of raw material markets, reflected in reduced price fluctuations and increased market predictability, as a result of consistent evaluation of market dynamics and trends.
- Increase of geological reserves for CRM/SRM
- % exploration sites identified as new deposits
- % Increase in the value-added contribution of the mineral processing sector to the Gross Domestic Product (GDP).
- The reduction in the volume of mining waste through reprocessing, green technology and recycling initiatives.
- Increase in the number of collaborative research projects and publications produced by the sector, including contributions from government, academia, and research institutions
- % Increase in the number of students pursuing careers in mining due to grants and scholarships offered for those committing to work in the sector for a predefined period

Sustainable and diversified tourism – Outcome Indicators

- Increase in visitor engagement rates at cultural sites and museums, as measured by interactions with digital and augmented reality tools, completed heritage trails, and utilization of smart signage and interactive maps annually.
- Tourism revenue increase attributable to the heritage sites.
- The increase in tourism-related economic activity in areas that were classified and diversified (measured by tourist spending, hotel occupancy rates, etc.).
- Increase in Revenue generated from foreign patients undergoing Health Tourism and Wellness Tourism in Albania
- Improvement in Health Tourism Experience by increase in satisfaction rate among health tourists for digital health services
- Improvement in local employment rates due to extended tourism seasons and the development of natural and adventure tourism
- Increase in tourism revenue and visitor numbers due to data-driven strategic policies
- Percentage increase in the income earned by local farmers and producers through direct sales to tourists and participation in farmers' markets and agro-festivals.
- Increase in the number of tourists visiting rural areas and participating in agritourism activities
- Improvement in tourist satisfaction ratings for certified agri-tourism establishments
- Percentage decrease in the overall carbon footprint of tourism activities within the region or destination, compared to a baseline year.

- Percentage increase in the number of tourists participating in rural culinary experiences, such as farm stays, culinary tours, and cooking classes, compared to the previous year.
- Percentage increase in the adoption and utilization of newly developed culinary tourism products and experiences by tourists, compared to existing offerings.
- Increase in customer satisfaction ratings and feedback regarding the quality of services provided by professionals in S3 subsectors, reflecting enhanced skills and capabilities.
- Percentage of individuals completing ongoing training programs in cultural tourism, compared to the total number of participants enrolled.
- Percentage increase in the contribution of the blue economy sectors (such as fisheries, aquaculture, marine tourism, etc.) to the overall GDP.
- Improvement in accessibility and amenities in coastal areas, enhancing the overall visitor experience and supporting tourism growth.
- Reduction in the number of air pollution-related health problems and illnesses, such as respiratory diseases, cardiovascular issues, and premature deaths.
- Percentage increase in the accuracy and reliability of air quality data collected through the upgraded monitoring network, as assessed through comparison with reference measurements or quality assurance checks.
- Percentage increase in the number of water bodies meeting or exceeding water quality standards and objectives, as determined by monitoring data.
- Percentage increase in the number of water bodies monitored for key parameters, compared to the baseline coverage
- Improvement in regulatory clarity and consistency, as evidenced by assessments of the legal framework's effectiveness in fostering innovation.
- % of inspectors with improved capabilities on inspection methods

Healthy and Sustainable Food Chain – Outcome Indicators

- Increase in Agricultural Yield and Reduction in Losses Due to Natural Disasters
- Percentage of Agricultural Land with Updated Titles and Integrated into the Land Information System
- Increase in Organic Certification and Market Access for Organic Products
- Number of agricultural farms that have implemented the new technological monitoring and resource-efficient practices
- Improve the natural resources efficiency through innovative irrigation techniques and enhanced Financial Resilience of Farmers (Increase in access to credit for farmers)
- Percentage increase in employment and business startup rates among program participants within one year of completing training.
- Increase in the Number of Registered Agricultural Cooperatives and Clusters
- Expansion of market share, added value and reach for processed agro-food and fishery products in domestic and international markets.
- Percentage increase in agriculture productivity applying sustainability metrics
- Percentage increase in the adoption of innovative agricultural practices, technologies, and methodologies among farmers and agricultural stakeholders
- Increase in the number of sustainable marine operations certified with environmental standards
- Rate of adoption of sustainable technologies and practices within the MAP sector,
- Increase in the number of tourists visiting rural agritourism facilities that have integrated innovative infrastructures or introduced new experiential offerings

Education – Outcome Indicators

- Graduate Employment Rate as a result of cooperation between academia and businesses: percentage of graduates from participating educational institutions who secure employment within their field of study in the business sector within six months of graduation.
- Engagement Level of quadruple helix actors in EDP Process
- Korca University functions as an Innovation Hub and used as a model for other universities
- Increase in Enrollment and Completion Rates of Lifelong Learning Programs and Micro-Credential Courses:
- The percentage of businesses in identified priority sectors that have adopted the new upskilling and reskilling programs into their training frameworks
- The percentage of graduated students who possess the skills and knowledge that align with current and emerging market demands or % of students who are workforce-ready upon graduation.
- Percentage of graduates with proficiency in multiple languages meeting labor market demands
- Increase in the degree to which the skills and knowledge of the university graduates match the specific requirements of labor market within S3 priority domains
- The proportion of graduates employed in their field of study within the region
- Percentage of VET graduates employed in fields related to their training within 1 year of graduation.
- Participation rates in community and environmentally friendly projects,
- Percentage increase in youth participation in rural development initiatives and youth-oriented services
- The rate of students' involvement in incentivized
- % increase in the number of student-led initiatives and projects that demonstrate innovative thinking and contribute to smart, sustainable growth

Talent retention – Outcome Indicators

- Improve youth support for employability, mobility, entrepreneurship and cooperation within the country and beyond
- Percentage increase in timely access to primary health care services in rural and touristic areas following the implementation of advanced technologies and integrated services.
- % increase in specialized health workforce employed in rural areas
- Improved rural community satisfaction and perceived quality of life, overall well-being, sense of cultural identity, and satisfaction with available social and cultural activities by revitalizing social and cultural life through the integration of smart technologies.
- National-level advancement in talent support systems, student exchange programs, and school functionality, measured by increased community and alumni engagement, fostering a lasting sense of belonging and support through generations.

Advancing Research and Innovation for Smart Growth – Outcome Indicators

- Percentage increase in research projects and efficiency due to the implementation of digital and technological innovations in the research system.
- Increase of Albanian participation in international events to boost networking, support “Made in Albania” products and the integration into global value chains.
- Percentage increase in SMEs utilizing Knowledge Intensive Business Services (KIBS)
- Increase in private sector investment in research and innovation within the priority domains of S3, measured as a percentage of total investment in these areas compared to the baseline year.
- Measure the growth in foreign investment in research and development (R&D) activities - as a percentage change from the baseline year.
- Increase in the number of new local and foreign investments in targeted sectors,
- Reduction in the average time and number of steps required to start a business, measured before and after the implementation of the simplified procedures.
- Increase in the number of businesses successfully accessing public funding for research and innovation
- Increase in the number of private and public sector entities adopting eco-friendly and sustainable practices and digital technological solutions
- percentage of industries reporting successful integration and innovative use of UAS annually
- Increase in the implementation of AI and advanced technology solutions for environmental monitoring and disaster preparedness,
- Increase in gathering innovation-specific metrics, such as the number of patents filed, technology licenses granted to measure innovation potential related to S3 priorities
- Increase in the number of sectors and organizations adopting AI technologies responsibly,
- The participation rate in AI training programs, including online courses, certifications, and specialized workshops.
- The nr of AI professionals who have completed ethics training specifically related to AI technologies."
- Percentage reduction in the number of successful cyber-attacks against critical infrastructure and public institutions annually
- Percentage increase in nr of enterprises that adopt automation, digitization of processes, and digital payment adoption resulting from the implemented activities such as collaboration with startups and academia, the promotion of e-commerce, and the use of digital eWallet systems.
- Increase in growth rates in sectors where AI and digital technologies have been integrated

Digital infrastructure and Connectivity – Outcome Indicators

- Percentage of the targeted 'white areas' that have access to broadband services.
- The degree of improvement in data use, data services, data products, data sources.
- The degree to which real-time transit information is made available to the public through web and app services
- The percentage of digital service projects (real-time itinerary information, electronic ticketing systems, ERTMS) that have been completed and are fully operational.
- The change in public awareness levels and satisfaction rates concerning digital public transport services
- The improvement in the speed and accuracy of service delivery to stakeholders as a direct result of the reengineered processes and new guidelines.
- The average reduction in time required for customs clearance processes post-implementation of digital services.

13. Communicating S3

The communication plan for Albania's Smart Specialization Strategy (S3), is a vital tool to ensure that the strategy's core messages and achievements are effectively communicated to all relevant stakeholders, both domestically and internationally. By fostering broad understanding and support, this plan is crucial for the successful implementation of S3 initiatives, driving innovation, sustainability, and economic growth in Albania.

Effective communication is essential to the success of the S3 strategy. It ensures that all quadruple helix stakeholders—ranging from government bodies, businesses, civil society and academia to the general public—are aware of the strategy's objectives and benefits. A well-communicated plan helps in garnering support, fostering collaboration, and ensuring that stakeholders are motivated to participate in the strategy's initiatives. This broad-based understanding and support are fundamental to achieving the desired outcomes of the S3 strategy.

The communication plan is guided by clear objectives and goals designed to maximize its impact:

- The plan aims to raise awareness among all stakeholders about the S3 strategy, ensuring they understand its goals, benefits, and importance. This includes making the public, businesses, and international partners aware of the innovative opportunities and economic growth the strategy promotes.
- Foster Engagement through collaboration among stakeholders are encouraged through transparent and inclusive communication. This involves regular updates, interactive sessions, and opportunities for stakeholders to provide feedback and contribute to the strategy's development and implementation.
- Promote Successes by showcasing the positive impacts and achievements of the S3 strategy, the communication plan seeks to build and maintain specific support. Highlighting success stories and tangible benefits helps to reinforce the value of the strategy and encourages continued participation and investment.
- Promote S3 Action Plan activities by actively communicating the various activities and initiatives undertaken as part of the S3. This ensures that stakeholders are well-informed about ongoing efforts, upcoming events, and opportunities to get involved, thereby enhancing engagement and support for the strategy.

The communication plan directly impacts the implementation of the S3 strategy by ensuring that all stakeholders are informed, engaged, and supportive. A well-executed communication plan helps to align the efforts of various stakeholders, facilitating collaboration and ensuring that the strategy's measures and activities are effectively carried out. The plan's multi-channel approach ensures comprehensive

coverage and involvement, thereby enhancing the overall effectiveness of the S3 strategy. Additionally, the communication plan plays a crucial role in keeping stakeholders informed about the progress and developments of the S3 action plan activities. By maintaining transparency and providing regular updates, it fosters greater involvement and participation from all parties in Action Plan implementation. This ongoing promotion not only showcases the achievements but also encourages stakeholders to actively support and engage with the strategy's goals.

The plan employs a diverse range of communication tools and channels to reach its objectives:

- **Traditional Media:** Utilizing press releases, media briefings, TV and radio interviews, and print advertisements in major newspapers to disseminate information widely.
- **Digital Media:** Leveraging social media platforms (Facebook, Instagram, LinkedIn, YouTube, TikTok), an enhanced S3 website, and monthly email newsletters to provide regular updates and engage with a broad audience. The S3 website offers comprehensive information in both Albanian and English, ensuring accessibility for all stakeholders.
- **Events and Engagement:** Organizing annual S3 conferences, regional workshops, and online webinars to facilitate discussions, share progress, and engage local stakeholders. A dissemination event at national level concluding S3 approval was held to showcase the strategy's future visions and next steps for successful implementation.

Key Communication Activities:

- **Communication Platforms** - Enhancing the S3 Albania website, expanding social media presence, and utilizing traditional media networks to share information and updates periodically.
- **Products of Communication** - Creating digital banners, infographics, podcasts, video testimonials, online newsletters, PR articles, and op-eds to highlight achievements and benefits of the S3 strategy.
- **External Collaborations** - Contributing articles to the European Commission's S3 newsletter and collaborating with EurActiv platforms to share success stories.
- **Local Engagement** - Hosting public events, encouraging stakeholders to contribute articles and case studies, and conducting online info sessions.

The effectiveness of the communication plan will be regularly evaluated through stakeholder surveys and feedback mechanisms. This continuous evaluation allows for adjustments to be made as needed, ensuring that the communication efforts remain relevant and impactful. Key performance indicators (KPIs) such as social media engagement rates, website traffic, media coverage, and stakeholder feedback will be monitored to assess the plan's success.

In summary, the communication plan for Albania's S3 provides a structured approach to promoting the strategy's objectives and achievements. By engaging stakeholders and the public through targeted messages and multiple communication channels, the plan aims to build widespread support and ensure the successful implementation of S3 initiatives. This comprehensive communication approach is designed to foster a deeper understanding of the S3 strategy, encouraging active participation and feedback from various sectors, and ultimately contributing to Albania's sustainable growth and development.

The comprehensive Communication Plan is presented in Annex 6 of this Strategy, whereas the detailed activities and their respective budgets are outlined in the S3 Action Plan in Annex 5.

Annex 1. Composition of the Interministerial Committee, the National S3 Team, and the S3 Analytical Team

Interministerial Committee of S3

– Deputy Prime Minister and minister of Infrastructure and Energy	Chairman
– Minister of Finance	Member
– Minister of Education and Sports	Member
– Minister of State for Entrepreneurship and Business Climate	Member
– Minister of Agriculture and Rural Development	Member
– Minister of Tourism and Environment	Member
– Minister of Economy , Culture and Innovation	Member
– Minister of Health and Social Protection	Member
– Director General of the State Agency for Strategic Programming and Aid Coordination (SASPAC)	Member
– Director General of INSTAT	Member
– Director General of the Albanian Investment Development Agency (AIDA)	Member
– Director General of the National Agency for Information Society (NAIS)	Member
– Director General of the General Directorate of Industrial Property	Member
– National Team Leader S3	Member
– President of the Academy of Sciences	Member
– President of the Union of Chambers of Commerce	Member
– President of the Albanian Producers Union	Member
– Chairman of the Association for Local Autonomy	Member

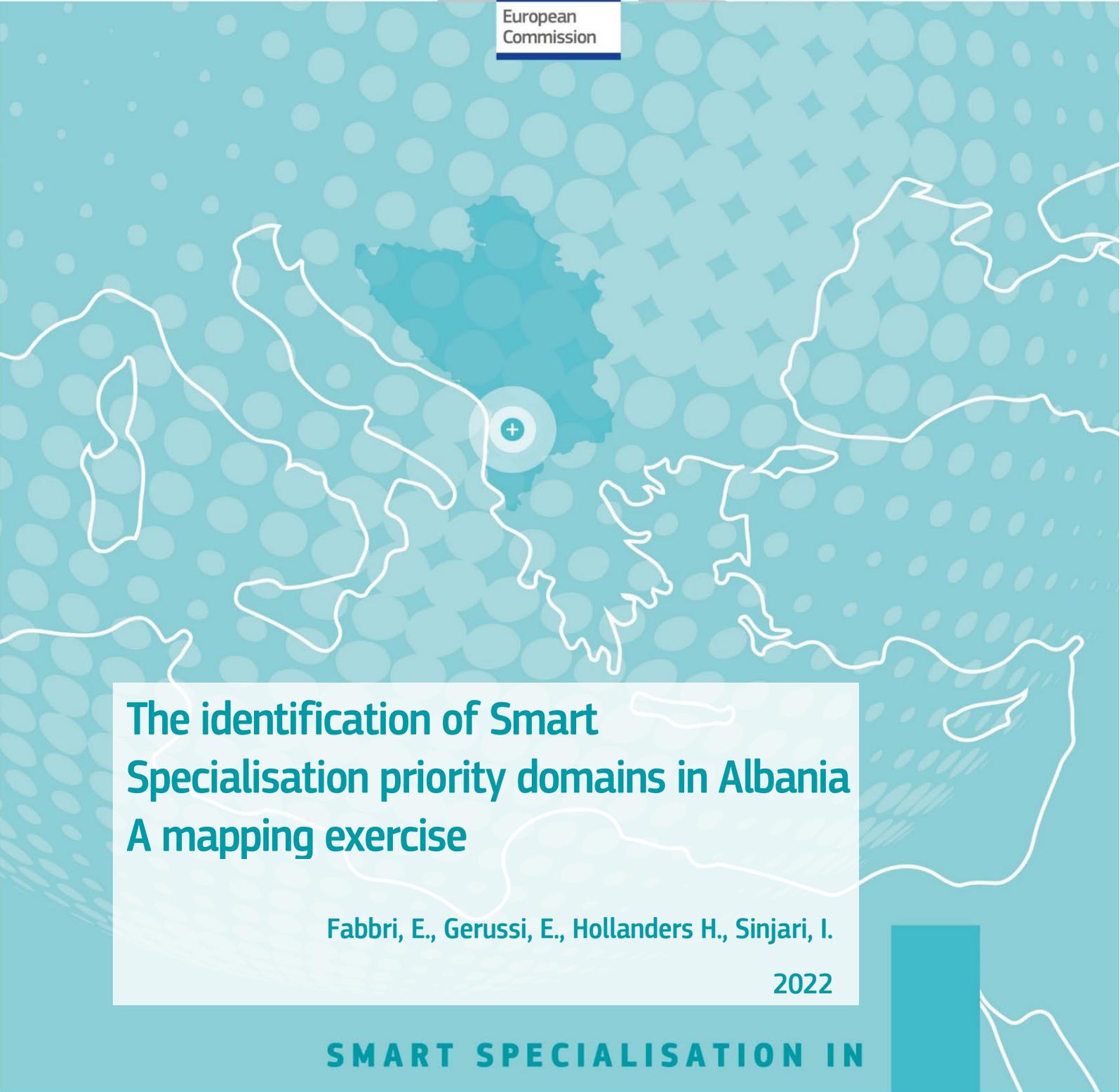
NATIONAL S3 TEAM FOR STRATEGY PREPARATION

– Linda Pustina, expert, advisor to the Deputy Prime Minister	Head of S3 Team
– Florensa Haxhi, expert, Albanian Corporation of Investment	Member
– Arben Shkodra, expert, Albanian Producers Union	Member
– Geron Kamberi, expert	Member
– Elsa Dhuli , expert , INSTAT	Member
– Kozeta Sevrani, expert, University of Tirana	Member
– Genc Kojdheli, expert, Municipality of Tirana	Member
– Dhimitër Bako, expert	Member
– Elona Ajazi, Department for Policy and Good Governance, at the Prime Minister’s Office	Member
– Elira Demiraj , Ministry of Finance and Economy	Member
Zamira Gjini , Ministry of Education and Sports	Member
– Ana Petani , Ministry of State for the Protection of Entrepreneurship	Member
– Fiona Beqiri, AIDA	Member
– Mirela Muça, NASRI	Member
– Aleksandër Xhuvani, Polytechnic University of Tirana	Member

S3 ANALYTICAL TEAM

– Kozeta Sevrani, Chairwoman of the National Statistical Council, Department of Statistics, UT	Head of the analytical team
– Ogerta Elezaj, Lecturer, Department of Statistics, UT	Member
– Etugert Llazi , INSTAT	Member
– Migena Muslli , AIDA	Member
– Erjola Reçi, General Director of Industrial Property	Member
– Taulant Muka, Expert in bibliometric data collection	Member

*Ms. Valeria Valeri, expert of the “Albania Regional Development Program” Project, assisted the S3 Analytical Team.



The identification of Smart Specialisation priority domains in Albania A mapping exercise

Fabbri, E., Gerussi, E., Hollanders H., Sinjari, I.

2022

SMART SPECIALISATION IN

Albania



This publication is a Technical report by the Joint Research Centre (JRC), the European Commission's science and knowledge service. It aims to provide evidence-based scientific support to the European policymaking process. The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of this publication. For information on the methodology and quality underlying the data used in this publication for which the source is neither Eurostat nor other Commission services, users should contact the referenced source. The designations employed and the presentation of material on the maps do not imply the expression of any opinion whatsoever on the part of the European Union concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Contact information

Name: Elisa Gerussi
Address: Edificio Expo, C. Inca Garcilaso, 3, 41092 Sevilla, Spain
Email: elisa.gerussi@ec.europa.eu

EU Science Hub

<https://joint-research-centre.ec.europa.eu>

JRC 130660

EUR 31221 EN

PDF ISBN 978-92-76-56980-0 ISSN 1831-9424 [doi:10.2760/322286](https://doi.org/10.2760/322286) KJ-NA-31-221-EN-N

Luxembourg: Publications Office of the European Union, 2022

© European Union, 2022



The reuse policy of the European Commission documents is implemented by the Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Unless otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated.

For any use or reproduction of photos or other material that is not owned by the European Union, permission must be sought directly from the copyright holders.

How to cite this report: Fabbri, E., Gerussi, E., Hollanders, H. and Sinjari, I., *The identification of Smart Specialisation priority domains in Albania. A mapping exercise*. Gerussi, E., Hollanders, H. (editors), Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/322286, JRC130660.

Contents

Abstract	1
Acknowledgements	2
Executive Summary	3
1. Introduction	5
2. Economic Outlook	6
2.1 Regional Disparities	6
2.2 Agriculture in Albania	9
2.3 The impact of Covid-19 in the Albanian economy	11
3. The quantitative analysis: the economic potential	13
3.1 Data and Descriptive statistics	13
3.2 Methodology	13
3.3 Results	14
3.4 Exports of goods analysis	16
4. The quantitative analysis: the innovation potential	18
4.1 Data and Descriptive statistics	18
5. The quantitative analysis: the scientific potential	22
5.1 Scientific production	22
5.2 Technological production	27
5.3 Education Indicators	29
6 Outcomes and next steps	31
7 The qualitative analysis: methodological framework and data collection	33
8. Data analysis on each selected domain	34
8.1 Agriculture, forestry and fishing	34
8.2 Manufacturing	39
8.3 Energy	44
8.4 Accommodation and support service activities	46
8.5 Information and Communication	48
8.6 Administrative and support service activities	50
9. Conclusion and recommendations	54
References	59
Abbreviations	61
List of figures	62
List of tables	63
Annexes	64

Abstract

The mapping exercise described in this technical report contributes to gather evidence based information as a basis to select and define the priority areas of the Smart Specialisation Strategy of Albania.

The commitment of Albania in the Smart Specialisation process started in 2016, under the Ministry of Education, Sports and Youth, and currently strongly supported by the Prime Minister Office. In November 2017, Albania registered in the JRC Smart Specialisation Platform and since then the country has been implementing a roadmap for the definition of a National Strategy for Smart Specialisation, with the assistance of the EC and according to the JRC methodological framework for Smart Specialisation in the EU Enlargement and Neighbourhood countries.

The quantitative analysis was started end-2020 and finalized in 2021, and was followed by the qualitative analysis that was closed end-2022. It stressed the relevance especially of the ICT sector: in fact, by combining both the economic and innovation potential under the current and emerging perspective, the following subsectors appear: - J60.1 Radio broadcasting; - J60.1 Television programming and broadcasting activities; - J61.1 Wired telecommunications activities (current and emerging economic potential and innovation potential); - J61.3 Satellite telecommunications activities (Current and emerging economic potential and innovation potential).

The qualitative analysis refined the results of the quantitative mapping leading to the identification of five preliminary priority domains for the Smart Specialisation Strategy: Agriculture Fisheries and Aquaculture; Manufacturing; Energy; Accommodation and support service activities; Information and Communication; Administrative and support service activities.

Both quantitative and qualitative diagnostic stages dealt with relevant challenges related to data availability in the first case, and difficulties in reaching out with the stakeholders of the priority areas selected, for a number of reasons including mistrust, post-COVID effects and related constraints, as well as lack of information on Smart Specialisation.

To stress the opportunities emerged in digital transition and ecological transition the analysis has also identified as potentially interesting: Blue economy; Healthy food; Renewable resources energy; Extended BPOs.

Further exploration will be the goal of the next Entrepreneurial Discovery Process that is expected to be launched by the end of 2022.

Acknowledgements

We would like to acknowledge the commitment of the members of Albania's national Smart Specialisation team and to the Statistical Office of Albania, which provided necessary disaggregated datasets, which made the analysis possible.

Editors

Elisa Gerussi
European Commission, Joint Research Centre (JRC), Seville, Spain

Hugo Hollanders
Maastricht University, The Netherlands

Authors

Emanuele Fabbri
Regione Toscana, Italy

Elisa Gerussi
European Commission, Joint Research Centre (JRC), Seville, Spain

Hugo Hollanders
Maastricht University, The Netherlands

Isida Sinjari
Institute for sustainable policies, Albania

Executive Summary

Smart Specialisation is one of the flagship initiatives of the Western Balkan Agenda on Research, Innovation, Education, Culture, Youth and Sport. It is also included in other EU policy documents regarding the region, such as the 2021 Communication on EU Enlargement Policy and the Economic and Investment Plan for the Western Balkans.

The commitment of Albania to the Smart Specialisation process started in 2016, under the Ministry of Education, Sports and Youth, and is currently strongly supported by the Prime Minister's Office. In November 2017, Albania registered on the JRC Smart Specialisation Platform and since then the country has been implementing a roadmap for the definition of a National Strategy for Smart Specialisation, with the assistance of the EC and according to the JRC methodological framework for Smart Specialisation in the EU Enlargement and Neighbourhood countries.

This study supports a first identification of the economic and productive domains that might be considered in the selection of the priority areas for a Smart Specialisation Strategy in Albania, and it includes both quantitative and a qualitative analyses.

The Smart Specialisation approach encourages the combination of evidence-informed policy making with consultation of the key actors of a regional or national eco-system. The mapping phase is crucial to detect which sub-sectoral specialisations have appropriate critical mass, innovative activity as well as scientific and technological output to drive economic transformation in the medium-long term, and can therefore be the subject of important public investment. This technical report includes on the one side a statistical quantitative analysis mapping of the economic, innovation, scientific and technological potential of the Albanian economy by using a variety of statistical data and methodologies, and on the other side a qualitative analysis that enables consideration of market actors' perspectives and positioning. The outcomes of the study then provide inputs for the following phase of the Entrepreneurial Discovery Process (EDP). Both diagnostic exercises have been based on the recommendations of JRC and S3 Framework for EU Enlargement and Neighbourhood region, and have been carried out by a team of international and local experts with consolidated experience in innovation and smart specialisation related topics.

In the quantitative analysis, the economic potential has been explored by current (or static) and emerging (or dynamic) indicators that use data (employees, turnover, wages) for the period 2011-2018 at 2 and 3-digit NACE industrial classification level. The analysis identifies 13 industries with a current economic potential, and 16 industries showing an emerging economic potential, two of these having both current and emerging potential: J61.3-Satellite telecommunications activities; N82.2-Activities of call centres.

The mapping of the innovation potential uses the "Innovation activity survey" conducted by the Institute of Statistics in Albania (INSTAT) for the period 2017-2019. Data are available at NACE 1-digit level. The analysis identifies two NACE 1-digit industries with a current and emerging innovation potential: J-Information and communication technologies, and M-Professional, scientific and technical activities.

Finally, the scientific potential has been mapped by analysing Albanian scientific and technological production, as well as statistics related to education.

The quantitative analysis emphasised the particular relevance of the ICT sector. In fact, by combining both the economic and innovation potential under the current and emerging perspective, identifies the following subsectors: - J60.1 Radio broadcasting; - J60.1 Television programming and broadcasting activities; - J61.1 Wired telecommunications activities (current and emerging economic potential and innovation potential); - J61.3 Satellite telecommunications activities (Current and emerging economic potential and innovation potential).

The qualitative analysis combines an on-line survey with 60 in-depth interviews among relevant stakeholders of the territory in order to delve deeper into the sector dynamics, as well as to validate previous statistical results, and identify the sub-sectors and niches with high potential for innovation.

The qualitative analysis has indeed confirmed the outcomes of the quantitative mapping and integrated it with further details on the potentials. It has explored the following sectors: Agriculture Fisheries and Aquaculture; Manufacturing; Energy; Accommodation and support service activities; Information and Communication; Administrative and support service activities.

In particular, interesting development opportunities emerged in digital transition (with the automation of processes, the reorganization of supply chains and the digital transformation that can lead to new business models) and more in general in digital technologies (from applications of artificial intelligence, IoT (industrial Internet of Things) sensors, data analytics, to robotics). The ecological transition also shows high potential (which concerns, on the one hand, an intelligent use of renewable sources, energy efficiency solutions but also attention to business models that are aligned with international standards and requirements. Likewise, experiences related to sustainable tourism are considered positive, especially when integrated with quality agriculture and responsible food processing. In the case of horizontal integrations, positive experiences include the integration of BPO services with IT solutions.

The analysis has also identified the following subsectors as potentially interesting for further exploration during the EDP: Blue economy; Healthy food; Renewable resources energy; Extended BPOs (Business Process Outsourcing).

The availability of data, especially for the quantitative mapping was a relevant challenge, with detailed economic data not being directly available requiring the study team to construct aggregate NACE 2- and 3-digit industry data from firm level data made available by INSTAT. Also, detailed data on innovation activities were not available limiting the analysis and the interpretation to extending the results from NACE 1-digit to lower industry levels.

Likewise, in the case of the qualitative analysis, encouraging the participation of actors to take part in this type of exercise required considerable effort from the side of the expert team. Between data collection and data interpretation, the analysis took around five months.

The report comprises eight chapters. The first chapter gives an economic outlook of Albania, focusing on regional disparities, the agriculture sector and a short reference to the post-Covid situation. Chapters 2,3, 4, and 5 present the methodology used and results from the quantitative mapping for the economic, innovation and scientific potential, respectively. Chapter 6 and 7 describe the qualitative analysis that followed the quantitative one, and the last chapters draws some important conclusions from the whole exercise.

1. Introduction

This technical report has been drafted within the framework of the project “Support to Smart Specialisation in the Enlargement and Neighbourhood region” led by JRC and aimed at accompanying the Western Balkan economies in the design process of their Smart Specialisation Strategies. Smart Specialisation is one of the flagship initiatives of the Western Balkan Agenda on Research, Innovation, Education, Culture, Youth and Sport. It is also included in other EU policy documents regarding the region, such as the 2021 Communication on EU Enlargement Policy and the Economic and Investment Plan for the Western Balkans.

In 2018, JRC presented a Smart Specialisation Framework for the Enlargement and Neighbourhood region that is meant to be a guideline for the government towards the definition of their Smart Specialisation priority areas as well as related policy instruments. The Framework includes five main phases – institutional capacity building, diagnosis, stakeholders’dialogue, definition of the policy mix, draft of the Strategy – and provides indications on how to define the main elements for an effective Smart Specialisation Strategy.

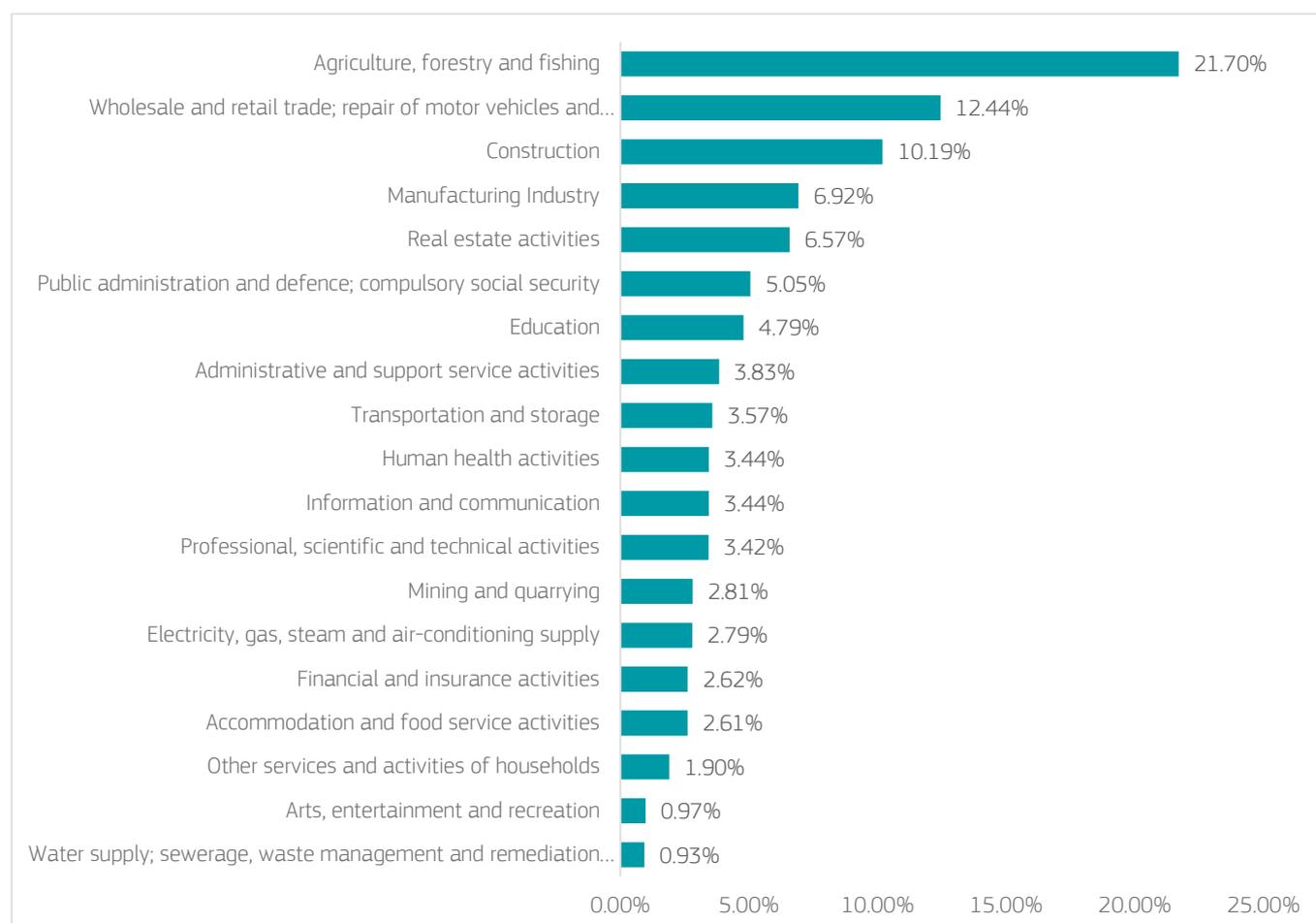
The focus of this report is the diagnosis phase of Albania, including the quantitative and qualitative mapping of the national economic, innovation, technological and scientific potential for Smart Specialisation. The study took most of one year and was supported by local and international experts with the close collaboration with the national government and the institutions involved in the design and implementation of the Smart Specialisation Strategy. The outcomes are meaningful not only with reference to the draft of a Smart Specialisation Strategy for Albania, but also for the opportunities and the weaknesses that the report stresses: the high potential of Albania’s economy on the one side, and the necessity of improving the availability of data on innovation on the other side. Therefore, besides the specific objectives that it provides, this report can be deemed as a useful tool to be updated in future by national authorities in charge of Smart Specialisation and to be integrated within the set of analytical instruments of the territorial potential.

The report describes the analysis first quantitative and then qualitative of the economic, innovation, technological and scientific potential of Albania for Smart Specialisation and identifies the preliminary priority areas to be included into the final strategic document. It will serve as a starting point for the following stakeholders’dialogue phase of the EDP.

2. Economic Outlook

According to annual data, Gross Domestic Product (GDP) in 2020 was estimated at 1,644,077 million Albanian Lek (ALL) with a negative change from 2019 due to the pandemic situation. GDP per capita in 2020 reached 579 thousand ALL (or € 4,681) from 593 thousand ALL (or € 4,819) in 2019. Looking at the Gross Value Added (GVA), the largest percentage is occupied by *Agriculture, forestry and fishing*, followed by *Wholesale and retail trade, repair of motor vehicles and motorcycles* and *Construction* (Figure 1). Other large industries are *Manufacturing and Real estate activities*.

Figure 1: Gross Value Added at current prices by economic activity NACE Rev.2 – digit 1 (average values), 2016-2020



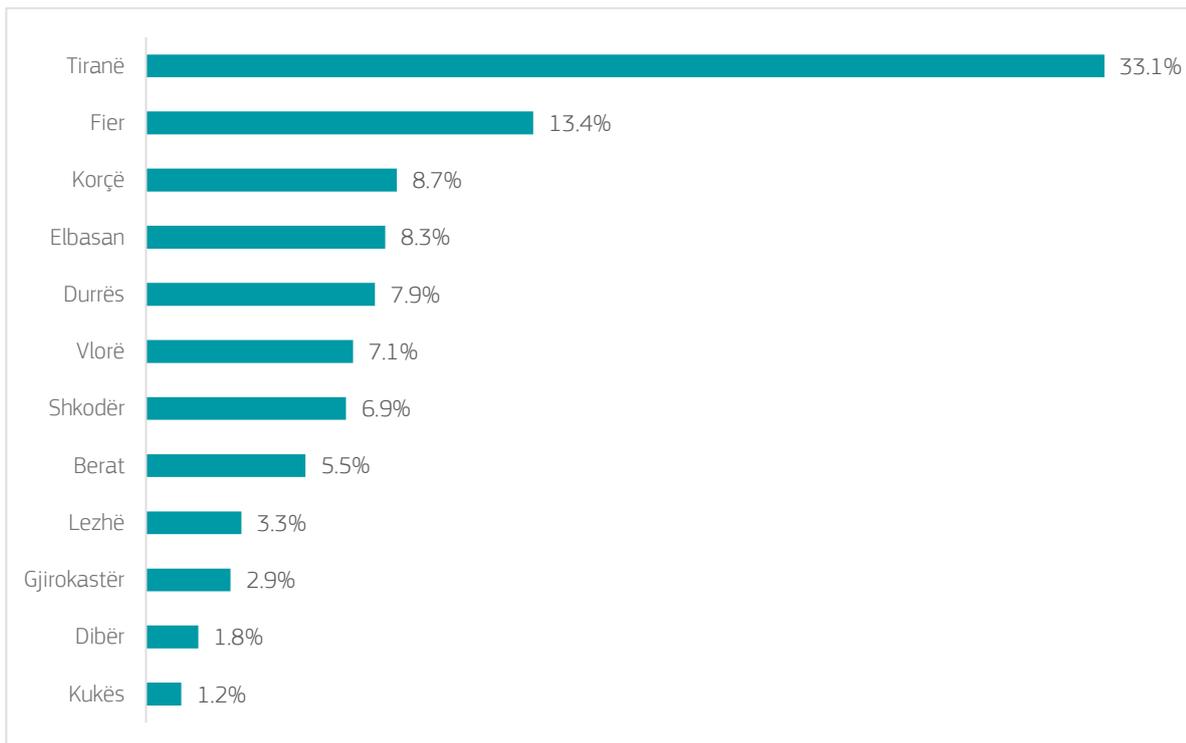
Source: INSTAT, author's elaboration

2.1 Regional Disparities

Albania is divided into 3 NUTS one-digit regions and 12 NUTS two-digit regions¹. Firms are normally concentrated in the East and the North, leaving the rest of the country with a significantly low productive activity. Figure 2 gives a picture of the regional distribution of enterprises: the highest number is located in Tirana, followed by Fier, and Korca.

¹ AL01 Northern Albania includes AL011 Dibër, AL012 Durrës, AL013 Kukës, AL014 Lezhë and AL015 Shkodër. AL02 Central Albania includes AL021 Elbasan and AL022 Tirana. AL03 Southern Albania includes AL031 Berat, AL032 Fier, AL033 Gjirokastër, AL034 Korçë and AL035 Vlorë.

Figure 2: Number of active enterprises by NUTS 2-digit region, 2016-2020

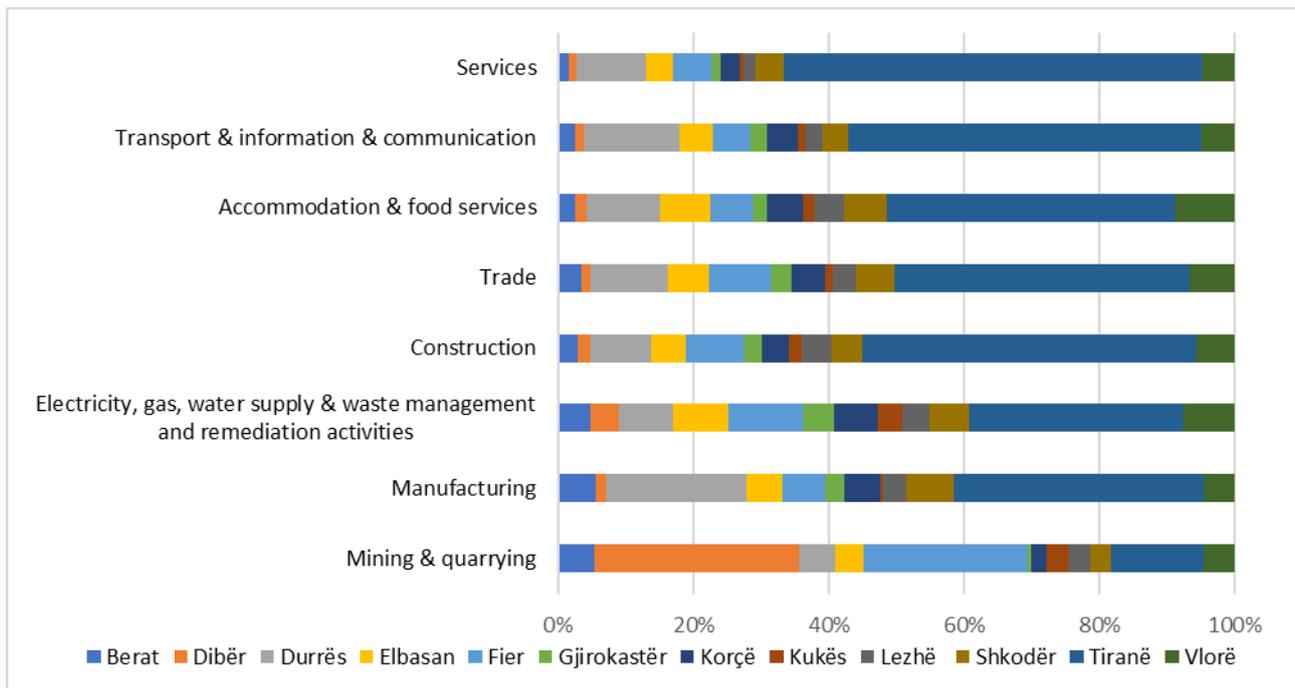


Source: INSTAT, author's elaboration

Figure 3 shows the employment structure by economic activity in each region. Mining & Quarrying employs most of its workers in Diber with 30% of employees followed by Fier and Tirana. For the services sector there is a significant difference between Tirana and other regions, where the former employs 62% of total employees in services. The Manufacturing sector is concentrated in Tirana with 37% of employees followed by Durres with 21% of employees. Tirana also accounts for high shares of employees in Construction, Trade and Transport & ICT (respectively 49%, 44%, 52%).

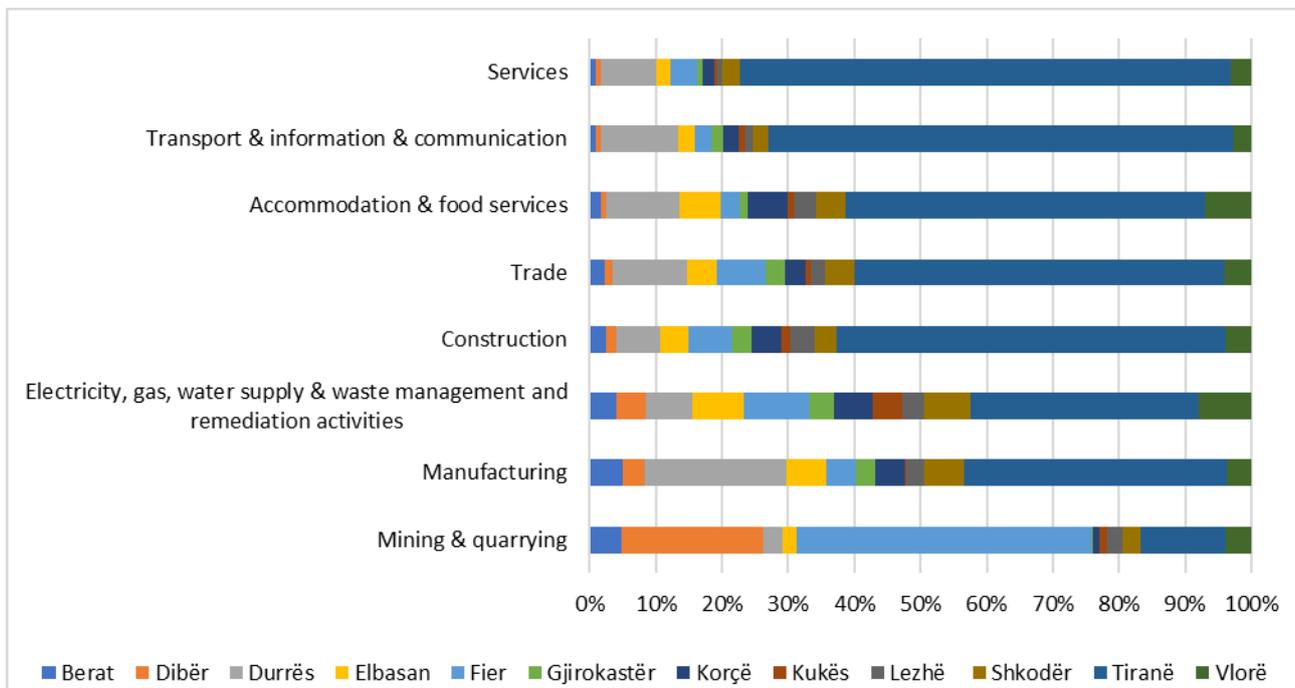
Figure 4 shows wages and salaries by economic activity in each region. Mining & quarrying in Fier region accounts for 37% of wages and Diber accounts for 18% of the total wages in this sector. Manufacturing is more concentrated in Tirana and Durres, which respectively account for 60% and 33% of total wages and salaries. Tirana has the highest shares in almost all the remaining sectors for wages and salaries.

Figure 3: Employment structure by economic activity and by region, 2015-2018



Source: INSTAT, author's elaboration

Figure 4: Wages and salaries structure by economic activity and by region, 2015-2018



Source: INSTAT, author's elaboration

2.2 Agriculture in Albania

Agriculture remains one of the most important sectors in Albania, contributing with 20% to GDP in 2021. Albania depends heavily on this sector for its economic growth; about 24% of its territory is classified as agricultural land (FAO, 2019). Wheat, corn, oats, potatoes, vegetables, olives, tobacco, fruits, sugar beets, vines, livestock and dairy products constitute most of the production that however lags behind in terms of technologies and equipment leading to low productivity rates.

Table 1 shows the trend of the contribution of agriculture to Albanian GDP over the years. Data reflect the shift from the communist period (80s) when Albania operated as a closed economy, followed by the first transition period between 1993 and 1998 when the political change to democracy led to an open economy system. The Agricultural sector has decreased in economic importance since 1980, but is accounting for a relatively stable share of GDP in the last 10 years.

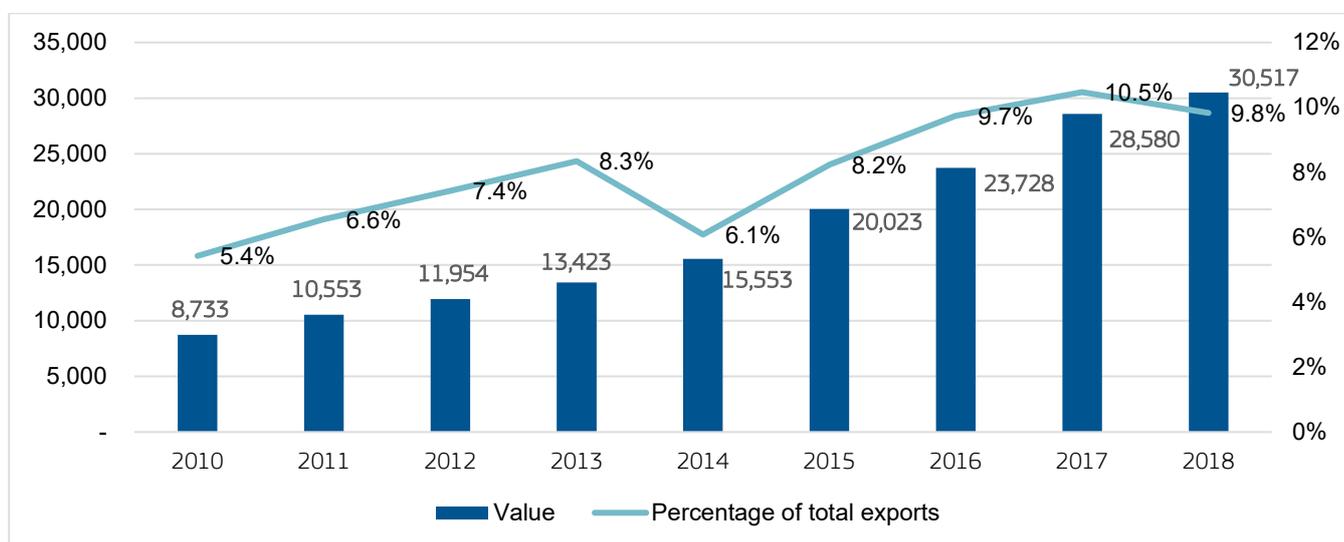
Table 1: Contribution of Agriculture to GDP, 1980 – 2021

	1980	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
% of GDP	34%	21%	21%	22%	22%	23%	23%	23%	22%	21%	21%	22%	20%

Source: INSTAT, author's elaboration

Agricultural exports, which include livestock, agriculture and agro-processing products, amounted to 30,517 million of ALL for 2018 or 9.8% of total exports, with a slight decrease in this share from 2017. The share of agricultural exports has been increasing during 2010-2018 (Figure 5).

Figure 5: Export performance for agriculture products in total exports, in million ALL



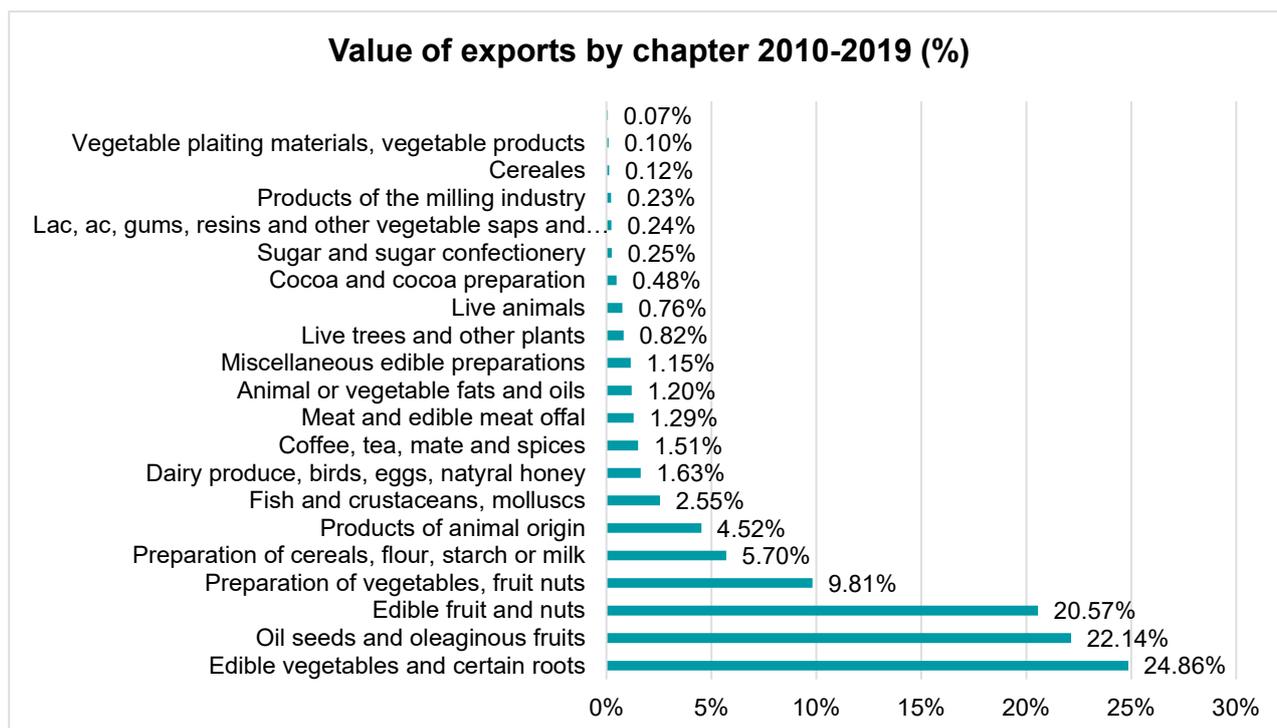
Source: INSTAT, author's elaboration

Edible vegetables and certain roots have the highest export share with 24.86% (of the total agricultural exports) for a value of 37,943 million ALL followed by Oil seeds and oleaginous fruits, 22.14% with a value of 35,248 million ALL (Figure 6).

Exports of agricultural products, especially fruits and vegetables, increased in double digits. In April 2020 compared to April 2019, there was an increase in exports by 14%. This comes as a result of private and public investments in the agricultural sector, especially in cultivation through greenhouses that create an advantage for Albania.²

Albania exports 75% of fishery products and 99% of medicinal and aromatic plants. Medicinal and aromatic plants cultivated and processed in Albania include lavender, hawthorn, dog rose, juniper berry, blueberry, thistle seed, artichoke, chamomile, herbal teas, basil, bay leaves, cornflower, dandelion, fennel, and coriander, followed by about 300 species, mostly wild collected.³

Figure 6: Value of exports by chapter of agricultural products for period 2010-2019 (Million ALL)



Source: INSTAT, author's elaboration

Albania exports a total of 80 aromatic medicinal plants mainly to EU, Australia, US, Canada, India and China. Exports have increased significantly over the last years doubling since 2010, reaching around 30 million USD in 2016 and 41 million USD in 2019⁴ (Figure 7). The revenues of the sector are mainly divided among the 10 main exporters.⁵

About 90% of the farmers who cultivate aromatic and medicinal plants are located in the region of Shkodra (mainly Malësi e Madhe). The largest amount of aromatic and medicinal plants has been cultivated since 2010, mainly driven by support from government subsidy schemes.

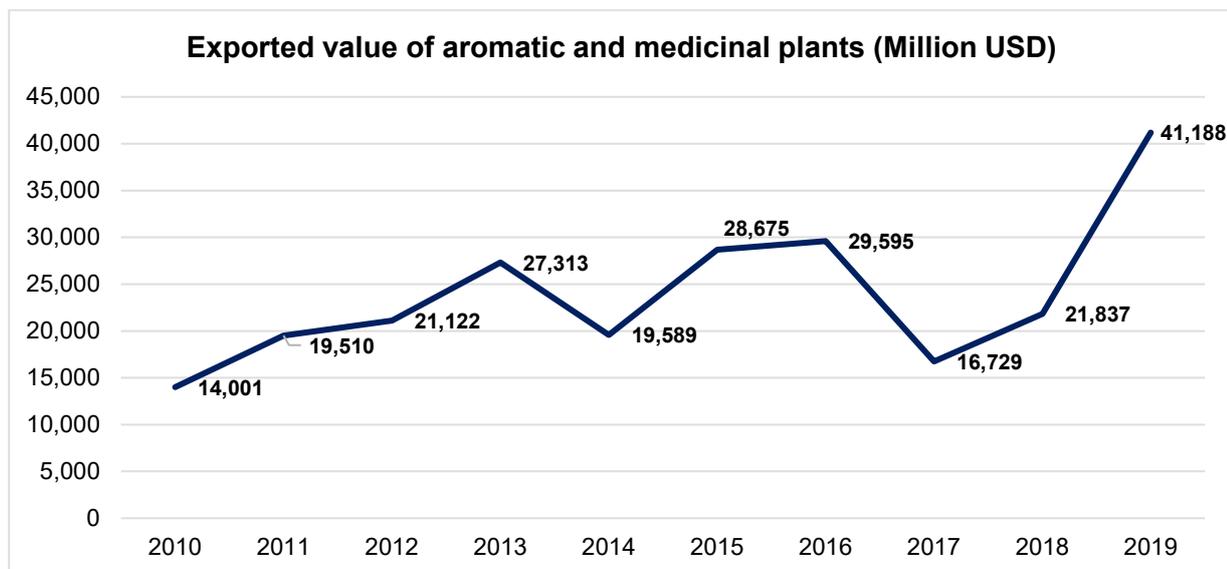
² <https://www.italian-network.net/en/in-crescita-le-esportazioni-dei-prodotti-agricoli-albanesi/>

³ <https://invest-in-albania.org/industries/agriculture/>

⁴ Source: International Trade Center data

⁵ <https://aasf.com.al/wp-content/uploads/2019/08/Map-EN.pdf>

Figure 7: Exports of aromatic and medicinal plants⁶



Source: International Trade Center, author's elaboration

2.3 The impact of Covid-19 in the Albanian economy⁷

The Covid-19 pandemic started after the strong earthquake in 2019 and had severe effects on Albania's economy. With an economic contraction of about 4% in 2020⁸ almost all sectors have suffered. According to the Ministry of Finance and Economy, at the end of the 3rd quarter of 2020, the total public debt reached 79.9% of GDP, 13.6 percentage points more compared to December 2019.⁹

The private sector has gone through shortage of clients as in the case of services, tourism and trade, as well as lack of liquidity, more often in agriculture, industry and construction, with consequently difficulties to pay the salaries and compliance with tax payments. Remittances also decreased by almost one-fifth in 2020 pulling down private consumption and increasing social inequality regarding mainly with the most disadvantaged groups.¹⁰

Trade has also been affected, especially in industrial sectors, and its downturn started already when Italy, the main trading partner of Albania, was first hit by the pandemic. Very low demand, and disruptions in supply chains, have severely affected exports that contracted 35% in 2020¹¹. Textile and footwear; Construction materials and metals; Minerals, fuels, electricity are the sectors that suffered the most.

Strongly import-oriented companies have seen their import flows shrinking, which in some cases benefited local products. The annual decrease of imports by 5.6 % was mainly affecting: "Minerals, fuels, electricity", "Food, beverages, tobacco", and "Textile and footwear".

To face the difficult situation, the government of Albania adopted two support packages for vulnerable people and businesses affected by the COVID-19 pandemic, which allocate in total 45 billion ALL (2.8% of GDP). The support package addressed mainly health sector, and small businesses/self-employees and establish a sovereign guarantee fund to support businesses to access overdrafts. Part of the support packages was also ALL 2 billion allocated toward humanitarian relief for the most vulnerable. (Ministry of Finance and Economy, 2020).¹²

A deeper look at the sectors shows that in the three first quarters of 2020 Agriculture and Real Estate Activities are the only ones growing with +1.8% and +5.94%, respectively. The strongest decline was recorded by Trade, transport

⁶ Data from: <https://www.trademap.org>

⁷ This chapter is a desk review of national and international reports on the impact of Covid-19 crisis in Albanian economy

⁸ ERBD Transition Report 2021-22: System upgrade: Delivering the Digital Dividend

⁹ <https://financa.gov.al/statistika-fiskale-mujore/>

¹⁰ Musabelliu M (2020) Albania economy briefing: The costs of the pandemic for Albania, Vol. 35, No. 2 (AI) December 2020

¹¹ <https://www.oecd.org/south-east-europe/COVID-19-Crisis-in-Albania.pdf>

¹² Ministry of Finance and Economy (2020) Covid-19 pandemic development, Albania Overview.

and hospitality services (-27%) and Wholesale and Retail Trade and Accommodation and food service activities (-15%).¹³

Tourism, which accounts for more than 20% of Albania's GDP, was one of the most affected sectors by the pandemic due to travel restrictions. In July 2020, incoming and outgoing flows of tourists decreased by around 62% compared to 2019.¹⁴

¹³ Academy of political studies (2021). Challenges and opportunities for the recovery of the sick Albanian Economy. Analysis document.

¹⁴ https://ec.europa.eu/info/sites/info/files/economy-finance/tp044_en.pdf

3. The quantitative analysis: the economic potential

3.1 Data and Descriptive statistics

Data are first discussed at NACE Rev.2 1-digit level, and then analysed at NACE Rev.2 3-digit level for the period 2010-2018. Table 4 shows data used for the analysis of the economic potential.

3.2 Methodology

The mapping exercise includes both an identification of industries with a static or current economic potential which are already highly specialised with relatively high average wages, and industries with a dynamic or emerging economic potential where employment, turnover and average wages have been growing at above average rates.

Industries with a static or current economic potential are established industries in which Albania is specialised compared to the EU. These industries should not be too small and have relatively high levels of average wages. Increasing the share of industries with high average wages will raise average wages in the country and contribute to the country's overall economic well-being. However, the mapping analysis is based on an analysis of past, although relatively recent, data. The analysis could overlook industries in which Albania is not yet specialised, which are still small or where average wages are relatively low, but where there are clear signs of improvement over time which could turn these industries into industries with a current economic potential in few years' time. These industries are identified as industries with a dynamic or emerging economic potential when there are positive and above average trend improvements in employment, turnover and average wages.

Static (or current) economic potential has been analysed at NACE 3-digit level for the period 2011-2018 by taking into consideration indicators based on number of employees as a measure of size (i.e. critical mass and location quotient) and relative wages. More specifically, the following indicators have been computed:

- **Critical mass (CM):** percentage share of employees in a specific industry in total number of employees in the economy:

$$CM_i = e_i / e,$$

Where

e_i = number of employees in sector i in Albania
 e = total number of employees in Albania

Industries with a CM equal or higher than 0.10% can be considered as potential candidates for having an economic potential. The threshold is set at 0.10% because micro and small industries may be not significantly relevant for economic policies¹⁵.

- **Location Quotient (LQ):** it measures the degree of specialisation(or concentration) of an industry in a country as compared to the same industry in a larger context. This is obtained by dividing the size of a specific industry (measured by employees) in Albania by the size of the same industry in the EU27. The EU was chosen as the reference as the foreseen Smart Specialisation strategy will focus at the country and not the regional level. This approach has also been used for other countries in the Balkan area including Montenegro in 2018 and North Macedonia in 2019¹⁶.

$$LQ_i = (e_i/e)/(E_i/E)$$

where

¹⁵ There are no set rules for determining these threshold values. The most common practice is to start with threshold values which are also used in other studies and then to either use these if the number of selected industries matches expectations, or to decrease them if the number of selected industries is too small or to increase them if the number of selected industries is too high.

¹⁶ In a more recent mapping study for Kosovo in 2021, instead a selection of neighboring countries – Bosnia and Herzegovina, Bulgaria, Croatia, Greece, and North Macedonia – has been used for which detailed economic data are available. For this study the same benchmark, EU27, has also been selected as the EU was used in previous mapping studies for Albania for which this and the 2021 report both provide an update.

e_i = number of employees in industry i in Albania
 e = total number of employees in Albania
 E_i = number of employees in industry i in the benchmark economy (here: EU27)
 E = total number of employees in the benchmark economy (here: EU27)

An industry passes the Specialisation threshold if the LQ is at least 1.25; the choice for this value comes from the fact that using a higher threshold of 1.5 would identify a too low number of specialized industries, using a lower threshold would identify too many specialized industries.

- **Relative wage index** as the average wage (per industry) relative to average wages for all industries:

$$aw_i > Z * aw$$

Where

aw_i = average wages in industry i in Albania

aw = average wages in Albania

The mapping exercise combines the previous indicators and identifies those industries both with a critical mass of activities and a specialisation for employment, for which:

- size and specialisation (LQs) are sufficiently high, i.e. above pre-defined threshold values, and
- where average wages are sufficiently high compared to average wages for all industries in the country and the same industry in the EU27:

Dynamic (or emerging) economic potential has also been analysed at NACE 3-digit level for the period 2011-2018 by taking into consideration growth or trend performance indicators based on number of employees, as a measure of size, and wages. More specifically:

- average annual growth rate of Number of employees (for 2011-2018)
- average annual growth rate for Average wages per employee (for 2011-2018)

An industry is identified as having a dynamic or emerging economic potential if it fulfils the following criteria:

- **Critical mass:** Only industries where Size is at least 0.10% will be potential candidates for having an economic potential; 0.10% is used because small industries are less relevant for economic policies.
- An industry passes the **trend for Number of employees** threshold if its average annual growth rate is at least 50% above the average annual growth rate for all industries combined; the threshold of 50% has been selected to allow the identification of a sufficiently high number of industries.
- An industry passes the **trend for Average wages per employee** threshold if its average annual growth rate is at least 25% above the average annual growth rate for all industries combined; the threshold of 25% has been selected to allow the identification of a sufficiently high number of industries.

3.3 Results

The *static analysis* identifies those industries in which Albania is *currently* specialized compared to the EU27, both for size and average wages.

The static analysis gives the following results:

- 104 industries pass the Critical mass criterion;
- 50 industries pass the Specialisation criterion;
- 42 industries pass both criteria jointly;
- 60 industries pass the Relative wages criterion;
- 33 industries pass both criteria for Critical Mass and Relative wages;
- 13 industries pass all criteria: Critical Mass, Specialisation and Relative wages.

Based on passing all criteria, the following 13 industries have a static economic potential:

- **B06.1** Extraction of crude petroleum
- **B07.2** Mining of non-ferrous metal ores
- **B09.1** Support activities for petroleum and natural gas extraction
- **C11** Manufacture of beverages
- **C19.2** Manufacture of refined petroleum products
- **C23.5** Manufacture of cement, lime and plaster
- **D35.1** Electric power generation, transmission and distribution
- **F42.1** Construction of roads and railways
- **J60.1** Radio broadcasting
- **J60.2** Television programming and broadcasting activities
- **J61.1** Wired telecommunications activities
- **J61.3** Satellite telecommunications activities
- **N82.2** Activities of call centers

The dynamic analysis identified those industries in which Albania is not currently showing a strong specialisation compared to the EU27 nor have sufficiently high average wages. Nonetheless, these industries show upward growth trends that may lead to a point in time where they meet the criteria fulfilled to be an industry with a current economic potential.

The dynamic analysis gives the following results:

- 62 industries pass the trend for Number of employees criterion;
- Combining Critical Mass and trend for Number of employees, 30 industries pass both criteria;
- 94 industries pass the trend for Average wages per employee criterion;
- Combining Critical Mass and trend for Average wages per employee, 55 industries pass both criteria;
- Combining Critical Mass, trend for Number of employees and trend for Average wages per employee, 16 industries pass all criteria.

Based on passing all criteria, the following 16 industries have a dynamic economic potential:

- **C10.8** Manufacture of other food products
- **C13.9** Manufacture of other textiles
- **C24.5** Casting of metals
- **C25.9** Manufacture of other fabricated metal products
- **C32.4** Manufacture of games and toys
- **E38.1** Waste collection
- **F42.2** Construction of utility projects
- **F43.1** Demolition and site preparation
- **G46.1** Wholesale on a fee or contract basis
- **G47.4** Retail sale of information and communication equipment in specialised stores
- **I55.9** Other accommodation
- **J56.1** Restaurants and mobile food service activities
- **J61.3** Satellite telecommunications activities
- **N80.2** Security systems service activities
- **N82.2** Activities of call centers
- **N82.9** Business support service activities n.e.c.

Only two industries have both a static and a dynamic economic potential:

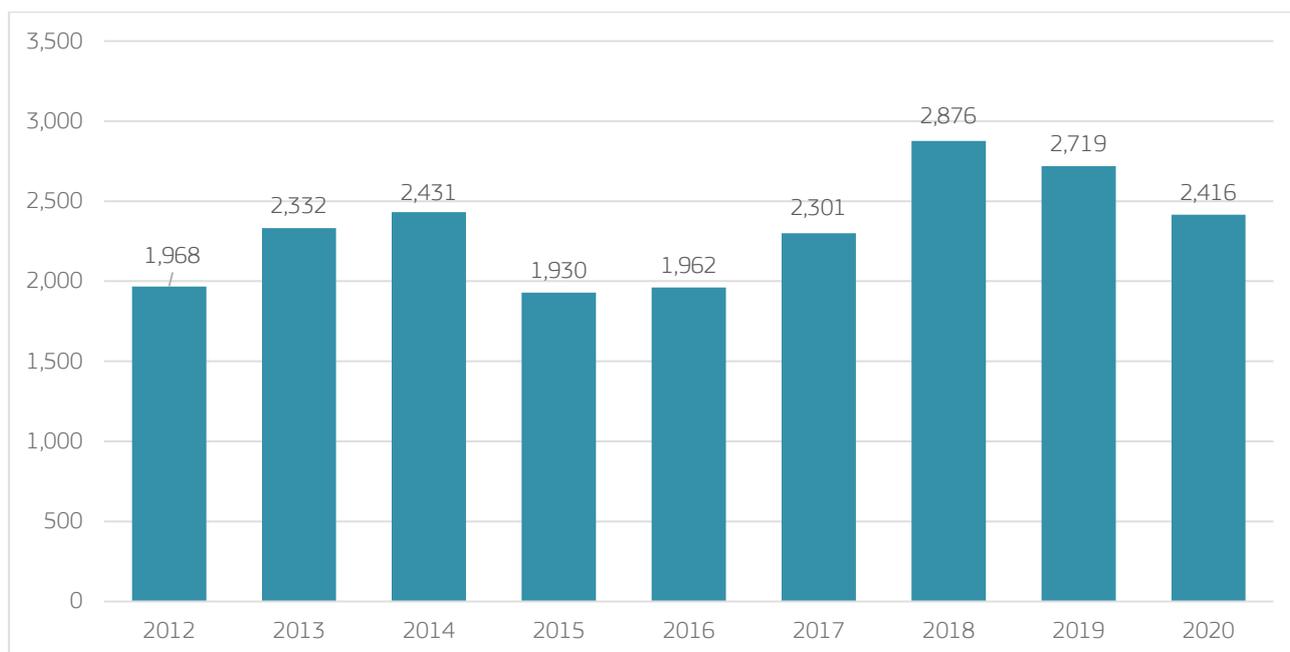
- **J61.3** Satellite telecommunications activities and
- **N82.2** Activities of call centers

Annex 1 shows detailed results for both the static and dynamic analysis.

3.4 Exports of goods analysis

A further step of the economic analysis has focused on Exports of goods in order to assess the competitiveness of industries. Data on goods exports are used to identify in which products Albania has a trade specialisation compared to the EU. Export data are available at the HS¹⁷ 4-digit level from UN Comtrade¹⁸. Figure 8 below reports the value of goods exports for the period 2012-2020, which shows a downward trend in 2015 and 2016. This was most probably due to the sharp decrease of exports in the industry of *Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes (HS27)* that is the largest exports activity in the country.

Figure 8: Total Exports (2012-2020) (in million US\$)



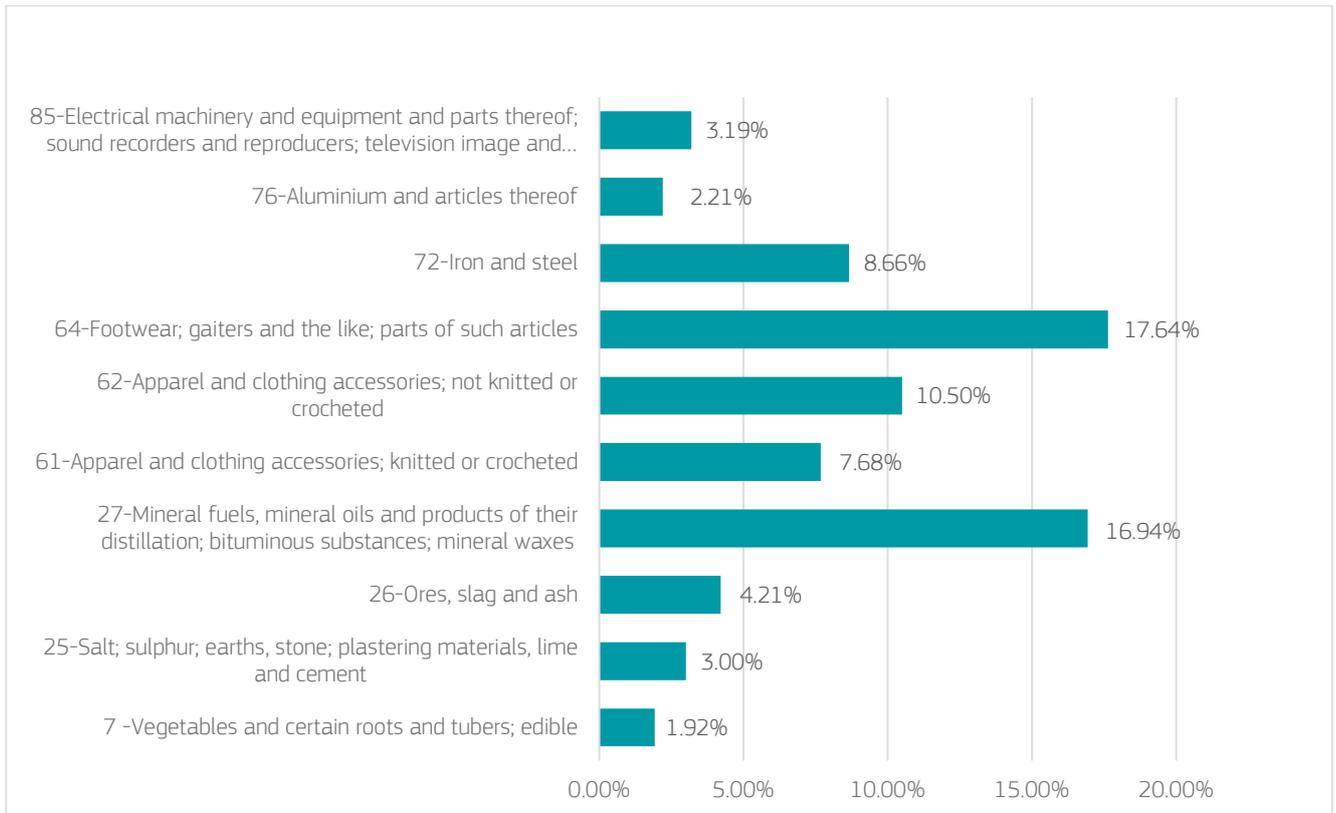
Source: UN Comtrade, author's elaboration

Figure 9 shows the 10 largest export sections based on average 2012-2020 export value. The leading export industry is *HS64 - Footwear, gaiters and like, parts of such articles* with 17.64% of total goods exports followed by *HS27 - Mineral fuels, mineral oils and products of their distillation* with 16.94%, and *HS62 - Apparel and clothing accessories not knitted or crocheted* with 10%.

¹⁷ Harmonized System classification. <https://www.foreign-trade.com/reference/hscode.htm>

¹⁸ <https://comtrade.un.org/Data>

Figure 9: Top 10 exports per product category HS Classification 2-digit), cumulative for 2012-2020 (in million US\$)



Source: UN Comtrade, author's elaboration

The exports analysis is in line with the potential economic industries. Most of the 10 largest export industries and their sub categories match with the results of the mapping of economic potential. Categories such as *HS27- Mineral fuels, mineral oils and products of their distillation*, *HS72 - Iron and steel*, *HS76 - Aluminium and articles thereof*, match with industries *B06.1 Extraction of crude petroleum*, *B09.1 Support activities for petroleum and natural gas extraction*. *HS64 - Footwear*, *HS62 - Apparel and clothing accessories not knitted*, and *HS61 - Articles of apparel and clothing accessories*, match dynamic potential industries such as *C13.9 Manufacture of other textiles*.

4. The quantitative analysis: the innovation potential

4.1 Data and Descriptive statistics

Innovation potential has been mapped by using firm data from years 2017 -2019 of the Innovation Activity Survey (INSTAT, 2020)¹⁹. The definition of innovative firms used in this Survey includes both firms that have existing product and/or business process innovations, and firms that developed in the past innovations that were however abandoned or unfinished during the reference period 2017-2019. Data are available only at NACE Rev.2, 1-digit industry level for the following variables, which makes the analysis less detailed in comparison to the one applied to the economic potential.

- Number of enterprises in the population;
- Number of innovative enterprises;
- Number of Product and/or business process innovative enterprises only;
- Share of innovative enterprises that invest in R&D;
- Share of enterprises that purchased new technologies not used in the enterprise before.

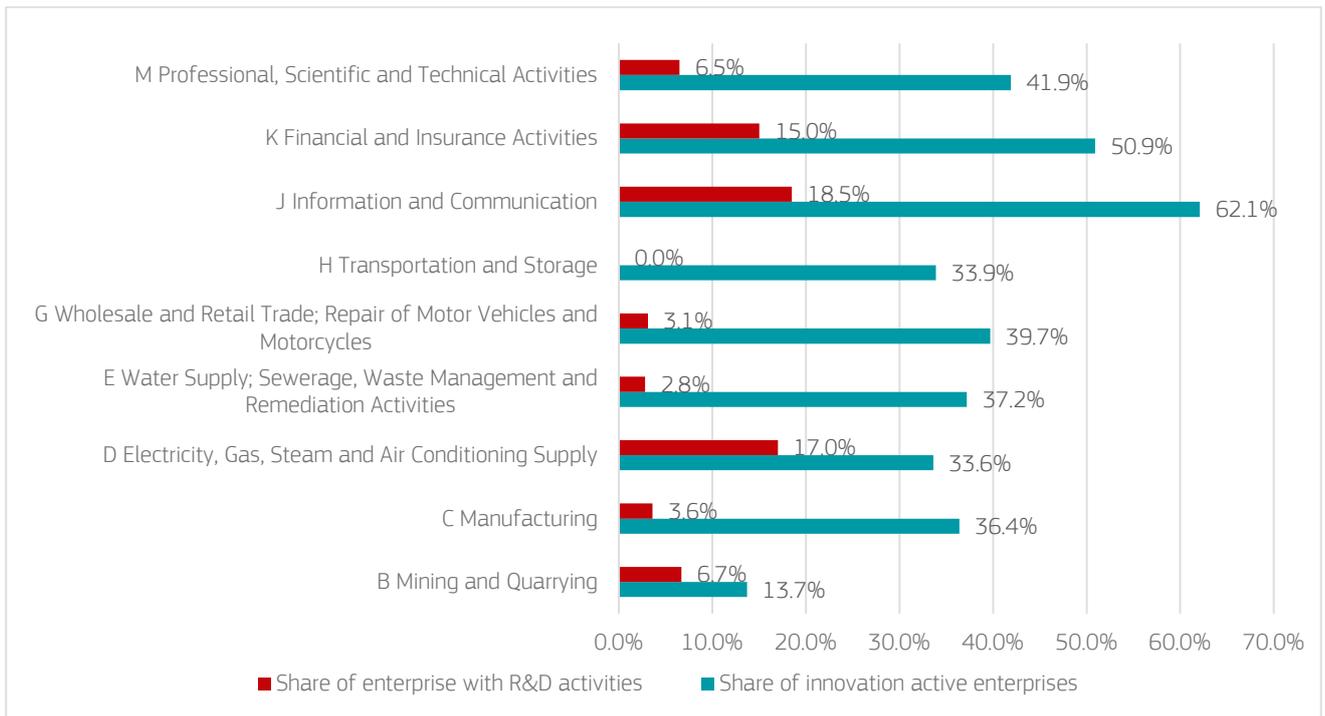
Figure 10 shows the share of innovation-active enterprises and the share of enterprises with R&D activities during the period 2017-2019. The data show that the largest share of innovation-active enterprises is in NACE J - Information and Communication (62.1%), followed by NACE K - Financial and Insurance Activities (50.9%) and NACE M - Professional, Scientific and Technical Activities²⁰ (41.9%). The smallest share of innovation active enterprises is in NACE B - Mining and Quarrying (13.7%).

The largest share of enterprises with R&D activities is also in NACE J - Information and Communication (18.5%), followed by NACE D - Electricity, Gas, Steam and Air Conditioning Supply (17%). In NACE H -Transportation and Storage no enterprises have R&D activities.

¹⁹ The Innovation Activity Survey was carried out on a representative sample by INSTAT in 2020. The population consists of all enterprises that, according to the Statistical Business Register, were active in December of the reference year. The sample frame covers 3,629 enterprises. The sample size comprises of 1,566 enterprises performing non-financial and financial activities in Albania according to the following size classes: small (10-49 employees), medium (50-249 employees) and large enterprises (250+ employees). The data were weighted and calculated on the level of the population of enterprises. The survey was done based on a stratified sample according to the size class of enterprises and according to activities (according to NACE Rev. 2): B Mining And Quarrying; C Manufacturing; D Electricity, Gas Steam and Air Conditioning Supply; E Water Supply, Sewerage, Waste Management and remediation Activities; G46 Wholesale Trade, Except of Vehicles and Motorcycles; H Transportation and Storage; J Information and Communication; K Financial and Insurance Activities; M71-73 Architectural and Engineering Activities; Technical Testing and Analysis; M72 Scientific Research and Development; M73 Advertising and Market Research.

²⁰ Legal activities; Accounting, bookkeeping and auditing activities-tax consultancy; Activities of head offices; Management consultancy activities; Architectural and engineering activities and related technical consultancy; Technical testing and analysis; Research and experimental development on natural sciences and engineering; Research and experimental development on social sciences and humanities; Advertising; Market research and public opinion polling; Specialised design activities; Photographic activities; Translation and interpretation activities; Other professional, scientific and technical activities n.e.c.

Figure 10: Share of innovation active enterprises & Share of enterprise with R&D activities

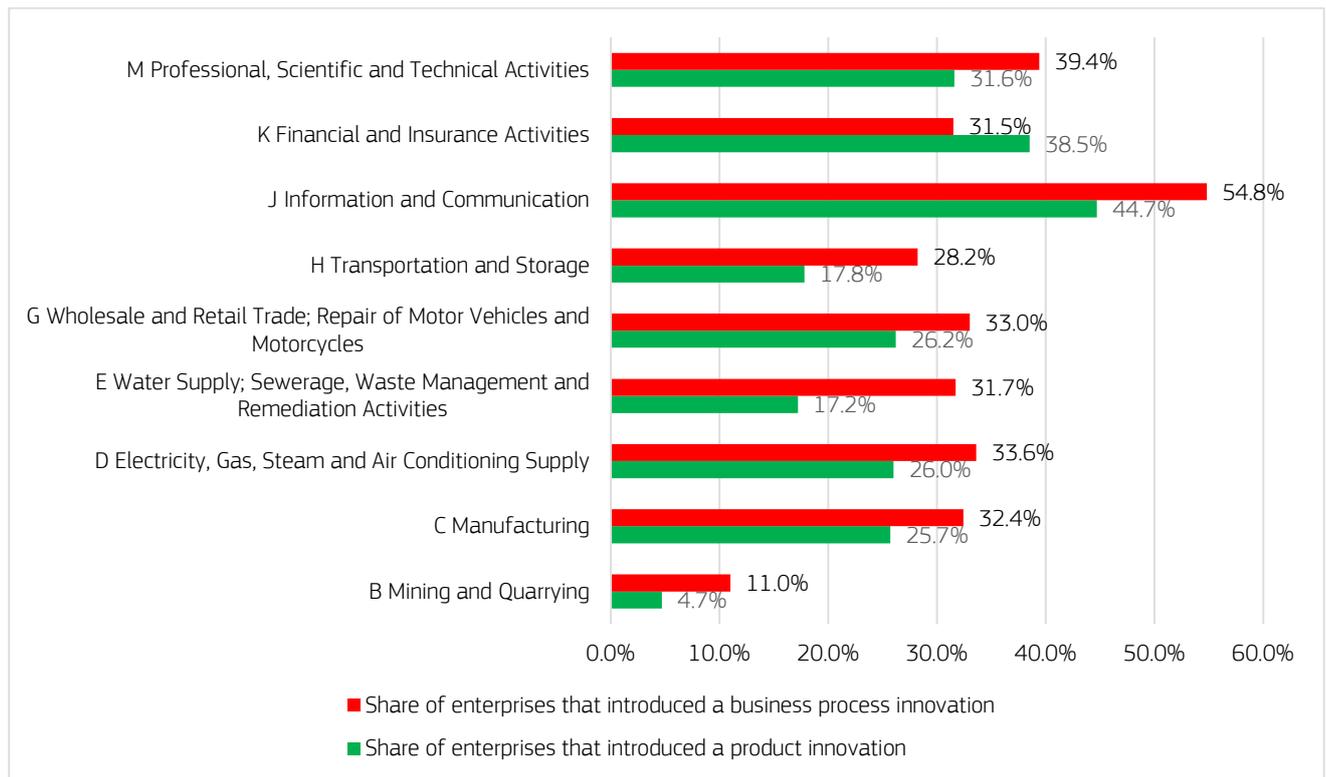


Source: INSTAT, author's elaboration

Figure 11 shows the share of enterprises that introduced a business process innovation and the share of enterprises that introduced a product innovation. The largest share of enterprises that introduced a business process innovation is in NACE J Information and Communication (54.8%), followed by NACE M Professional, Scientific and Technical Activities (39.4%).

The sector with the smallest percentage is NACE B Mining and Quarrying (11%), showing a big difference from the other sectors. NACE J Information and Communication is also the sector that has the largest share of enterprises that introduced a product innovation (44.7%), followed by NACE K Financial and Insurance Activities (38.5%). NACE D Electricity, Gas, Steam and Air Conditioning Supply has the smallest percentage of enterprises that introduced a product innovation (2.6%).

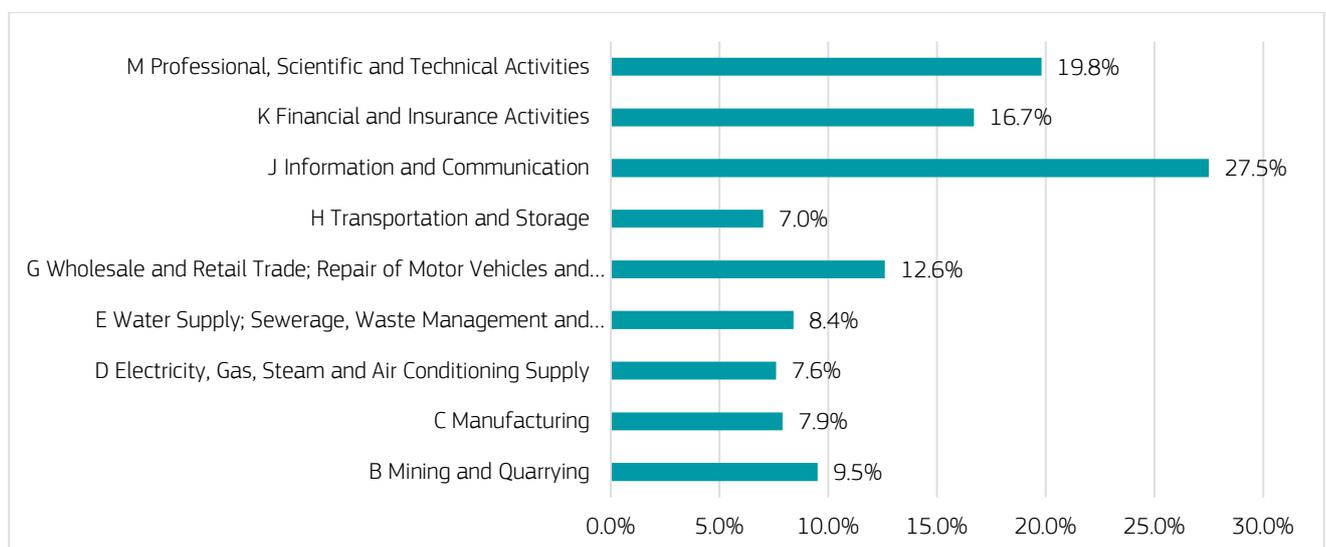
Figure 11: Enterprises that introduced a business process innovation or a product innovation



Source: INSTAT, author's elaboration

Figure 12 shows that NACE J Information and Communication has the largest share of enterprises that have purchased a new technology that was not used before (27.5%), followed by NACE M Professional, Scientific and Technical Activities (19.8%) and NACE K Financial and Insurance Activities (16.7%). NACE H Transportation and Storage has the smallest share of enterprises that has purchased a new technology (7%), followed by NACE D Electricity, Gas, Steam and Air Conditioning Supply (7.6%).

Figure 12: Share of enterprises that have purchased a new technology that was not used in the enterprise before



Source: INSTAT, author's elaboration

Information and communication (NACE J) shows the highest rates of innovative activities, followed by Financial and insurance activities (NACE K) and Professional, scientific and technical activities (NACE M). These results would suggest that the following industries identified as having an economic potential, could also have an innovation potential (assuming that 2-digit industries show the same rate of innovation activities as the 1-digit section to which they belong)²¹:

- Current economic potential and innovation potential:
 - J60.1 Radio broadcasting
 - J60.1 Television programming and broadcasting activities
 - J61.1 Wired telecommunications activities

- Current and emerging economic potential and innovation potential:
 - J61.3 Satellite telecommunications activities

²¹ Financial and insurance activities (NACE K) was not included in the economic mapping analysis as data are not available.

5. The quantitative analysis: the scientific potential

To explore Albania's scientific potential the following indicators have been used:

- *scientific production* during 2010-2019 based on:
 - total number of scientific publications for each science field in Albania
 - total number of publications and citations in five Western Balkan countries (Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia)
 - degree of specialisation of Albania in the Western Balkan region for number of scientific publications.

- *technological production* during 2010 – 2018 based on:
 - number of patent applications

- *educational system* based on:
 - number of students enrolled in higher education (public and non-public universities) for the period 2010-2018;
 - number of students graduated in higher education (bachelor, master, doctoral) for the period 2015-2018;
 - number of students enrolled and graduated in upper education by structure of the education (gymnasium, VET, socio-cultural schools) for the period 2010-2018.

5.1 Scientific production

Table 2 presents the total number of scientific publications in Albania in 27 fields from 2010 to 2019. Medicine has the highest percentage with 15.1%, followed by Social Science with 12%, and Art and Humanities with 8.6%.

Table 2: Scientific Publications by fields

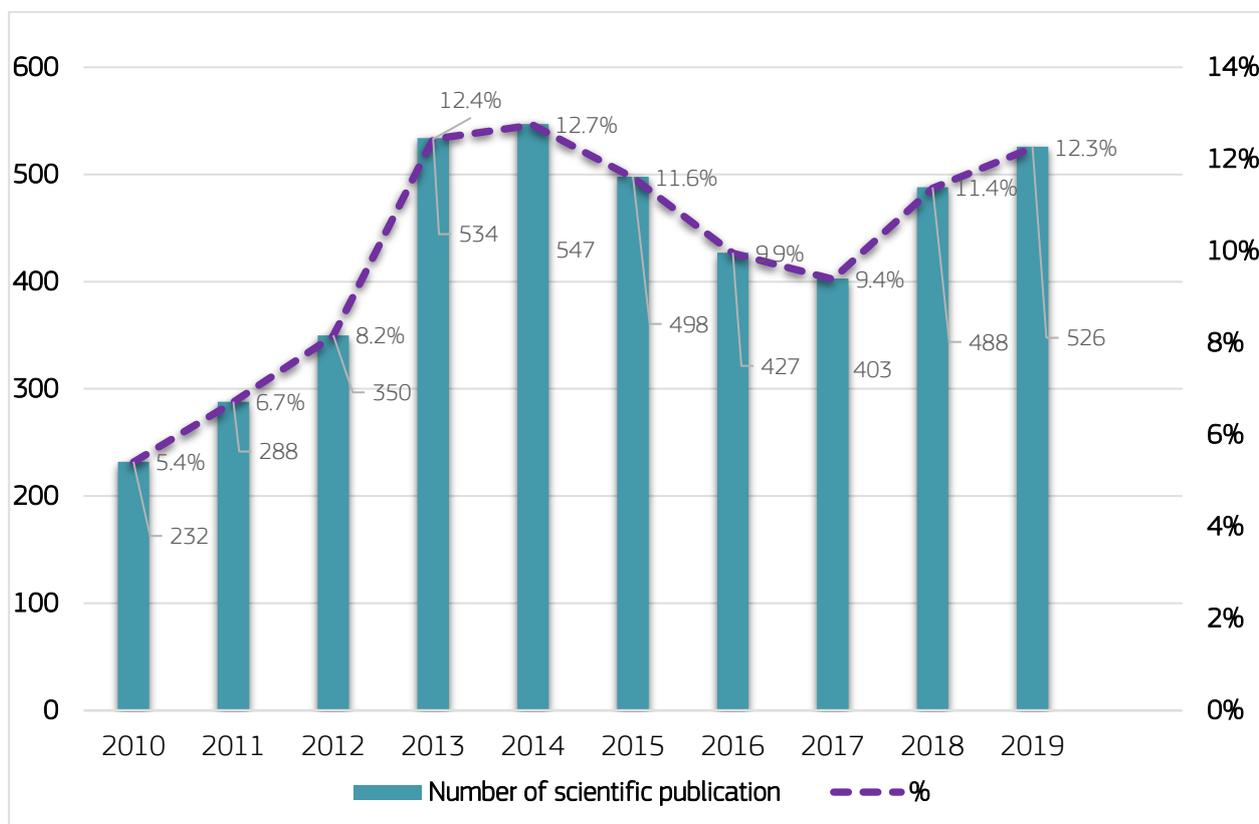
Scientific Publications by Fields	Number of scientific publications 2010-2019	%
1. Medicine	1,110	15.1%
2. Social Science	886	12.0%
3. Arts and Humanities	633	8.6%
4. Economics, Econometrics and Finance	621	8.4%
5. Computer Science	506	6.9%
6. Agricultural and Biological Science	476	6.5%
7. Environmental Science	466	6.3%
8. Engineering	427	5.8%
9. Earth and Planetary Science	270	3.7%
10. Mathematics	258	3.5%
11. Biochemistry, Genetics and Molecular Biology	246	3.3%
12. Physic and Astronomy	245	3.3%
13. Business, Management and Accounting	155	2.1%
14. Immunology and Microbiology	145	2.0%
15. Chemistry	138	1.9%
16. Material Science	132	1.8%
17. Veterinary	99	1.3%

18. Pharmacology, Toxicology and Pharmaceutics	87	1.2%
19. Dentistry	84	1.1%
20. Energy	81	1.1%
21. Health Professions	58	0.8%
22. Chemical Engineering	51	0.7%
23. Multidisciplinary	51	0.7%
24. Decision Science	43	0.6%
25. Psychology	37	0.5%
26. Nursing	33	0.4%
27. Nursing Neuroscience	27	0.4%
TOTAL	7,365	100%

Source: SJR (SC imago Journal and Country Ranking), author`s elaborations

Figure 13 shows the number of scientific publications for each year during the period 2010-2019. There is a continuous and steady growth of scientific publications, from 2010 to 2014. 2015-2017 shows a decrease in the number of publications related especially to Art & Humanities, Economics, Econometrics & Finance and Social Science, followed by a new increase during 2018-2019.

Figure 13: Trend in Number of scientific publications during 2010-2019



Source of data: SJR (SC imago Journal and Country Ranking), author's elaboration

The comparison of some important scientific specializations for the Western Balkan countries (Engineering, Economics, Econometrics, Medicine, Agriculture and Biological Sciences, Arts and Humanities, Computer Science, Environmental Science and Social Science) presented in the number of scientific publications and citations in the

period 2010-2019, is given in Table 3. It is calculated on a logarithmic scale. i.e. the numbers show the logarithm of the total number of publications and total number of citations for each scientific field, to clearly understand the weight of citations compared to the actual number of publications.

Table 3: Relevant scientific specialisation in the Western Balkans (total of publications and citations in logarithmic scale)

	Albania	Bosnia and Herzegovina	Montenegro	North Macedonia	Serbia
Agricultural and Biological Science	2.68	2.94	2.81	2.88	3.90
Citation	3.48	3.69	3.50	3.75	4.75
Economics, Econometrics and Finance	2.79	2.28	2.21	2.40	3.02
Citation	2.55	2.73	2.77	2.96	3.50
Engineering	2.63	3.37	2.99	3.24	4.18
Citation	3.01	3.99	3.85	3.89	4.98
Medicine	3.05	3.59	2.89	3.39	4.31
Citation	4.12	4.55	3.79	4.63	5.37
Arts and Humanities	2.80	2.64	2.34	2.33	3.28
Citation	3.05	3.23	2.37	3.12	3.96
Computer Science	2.70	3.29	2.88	3.27	3.95
Citation	3.14	3.84	3.57	3.85	4.63
Environmental Science	2.67	2.75	2.53	2.67	3.65
Citation	3.42	3.56	3.18	3.65	4.59
Social Science	2.95	3.00	2.64	2.93	3.71
Citation	3.04	3.42	2.92	3.30	4.26

Source: SJR (SC imago Journal and Country Ranking), author's elaboration

Table below shows that Albania has high shares of publications in Medicine (15.1%); Social Sciences (12%); and Arts and Humanities (8.6%). Montenegro in Engineering (14.7%); Medicine (11.9%) and Computer Science (11.5%), Bosnia and Herzegovina in Medicine (23.3%), Engineering (14.2%), and Computer science (11.8%); North Macedonia in Medicine (17.4%); Computer Science (13.1%) and Engineering (12.1%) and Serbia in Medicine (16.1%); Engineering (12.1%) and Science and in Physics and Astronomy (8%).

Table 4: Scientific publications by science field (2010-2019)

Science field	Albania	Montenegro	Bosnia and Herzegovina	North Macedonia	Serbia
Agricultural and Biological Science	6.5%	9.9%	5.3%	5.3%	6.3%
Arts and Humanities	8.6%	3.3%	2.6%	1.5%	1.5%
Biochemistry, Genetics and Molecular Biology	3.3%	3.2%	3.6%	4.1%	6.2%
Business, Management and Accounting	2.1%	2.8%	1.8%	2.3%	1.0%
Chemical Engineering	0.7%	1.1%	2.1%	1.9%	2.9%
Chemistry	1.9%	2.4%	2.1%	3.8%	6.0%
Computer Science	6.9%	11.5%	11.8%	13.1%	7.2%
Decision Science	0.6%	0.9%	1.1%	1.1%	0.7%
Dentistry	1.1%	0.1%	0.4%	0.3%	0.4%
Earth and Planetary Science	3.7%	3.1%	1.7%	2.6%	2.2%
Economics, Econometrics and Finance	8.4%	2.4%	1.1%	1.8%	0.8%
Energy	1.1%	2.4%	2.6%	2.4%	2.5%
Engineering	5.8%	14.7%	14.2%	12.1%	12.1%
Environmental Science	6.3%	5.1%	3.4%	3.3%	3.6%
Health Professions	0.8%	1.7%	1.3%	0.8%	0.7%

Immunology and Microbiology	2.0%	0.5%	1.0%	1.0%	1.3%
Material Science	1.8%	2.5%	2.6%	2.7%	5.1%
Mathematics	3.5%	6.3%	4.3%	5.3%	5.6%
Medicine	15.1%	11.9%	23.3%	17.4%	16.1%
Multidisciplinary	0.7%	0.4%	0.5%	0.8%	0.6%
Neuroscience	0.4%	0.3%	0.4%	0.9%	1.0%
Nursing	0.4%	0.3%	0.4%	0.2%	0.4%
Pharmacology, Toxicology and Pharmaceutics	1.2%	0.8%	1.2%	1.5%	2.2%
Physic and Astronomy	3.3%	5.4%	3.5%	5.1%	8.0%
Psychology	0.5%	0.2%	0.9%	1.6%	0.7%
Social Science	12.0%	6.6%	6.0%	6.0%	4.1%
Veterinary	1.3%	0.2%	0.8%	1.2%	0.7%

Source: SJR (SC imago Journal and Country Ranking), author's elaboration

In order to analyse deeper the scientific specialisation in Albania compared to the Western Balkan region, a Location Quotient has been used.

$$LQ_i = (e_i/e)/(E_i/E)$$

where

e_i = number of publications in scientific field i in Albania

e = total number of publications in Albania

E_i = number of publications in scientific field i in the benchmark economy (here: WBs)

E = total number of publications in the benchmark economy (here: WBs)

Table 5 shows three scientific fields in which Albania has publication shares which are highly above those in the other WB countries for the reference period: Economics, Econometrics and Finance (LQ= 6.324), Arts and Humanities (LQ= 4.277), Dentistry (LQ= 2.901). Other areas in which Albania shows a scientific specialisation include Social Science (LQ= 2.468), Veterinary (LQ= 1.786), Environmental Science (LQ= 1.695), Earth and Planetary Science (LQ=1.622), Immunology and Microbiology (LQ=1.613), and Business, Management and Accounting (LQ= 1.591).

Table 5: Scientific specialisation areas in Albania for period 2010-2019

Areas	Number of publications in the region						LQ - WB5 weighted Albania
	Albania	Montenegro	Bosnia and Herzegovina	North Macedonia	Serbia	TOTAL	
Agricultural and Biological Science	476	650	877	759	7894	10656	1.032
Arts and Humanities	633	218	433	215	1921	3420	4.277
Biochemistry, Genetics and Molecular Biology	246	214	607	581	7776	9424	0.603
Business, Management and Accounting	155	186	304	325	1281	2251	1.591
Chemical Engineering	51	71	344	272	3601	4339	0.272
Chemistry	138	157	351	547	7570	8763	0.364
Computer Science	506	758	1967	1872	8968	14071	0.831
Decision Science	43	62	179	164	937	1385	0.717
Dentistry	84	7	74	42	462	669	2.901
Earth and Planetary Science	270	203	283	373	2717	3846	1.622
Economics, Econometrics and Finance	621	161	191	253	1043	2269	6.324
Energy	81	158	427	343	3149	4158	0.450
Engineering	427	969	2369	1722	15126	20613	0.479
Environmental Science	466	338	564	473	4512	6353	1.695
Health Professions	58	110	223	114	884	1389	0.965
Immunology and Microbiology	145	36	159	139	1598	2077	1.613
Material Science	132	165	427	380	6393	7497	0.407
Mathematics	258	412	721	761	6959	9111	0.654
Medicine	1110	784	3899	2479	20220	28492	0.900
Multidisciplinary	51	24	83	111	789	1058	1.114
Neuroscience	27	19	75	129	1232	1482	0.421
Nursing	33	18	62	29	552	694	1.099
Pharmacology, Toxicology and Pharmaceutics	87	52	194	215	2713	3261	0.616
Physic and Astronomy	245	357	591	721	10079	11993	0.472
Psychology	37	15	154	233	904	1343	0.637
Social science	886	433	1010	857	5108	8294	2468
Veterinary	99	14	132	168	868	1281	1.786

Source: SJR (SC imago Journal and Country Ranking), author's elaboration

Dividing the 2010-2019 period into 3 periods of 4 years each with one overlapping year, reveals changes in specialisation patterns. Albania is specialized in the field Immunology and Microbiology in all 3 periods. Earth and Planetary Science, Environmental Science, Veterinary, Multidisciplinary fields are specialized in 2010-2013 period. Arts and Humanities, Economics, Econometrics and Finance and Social Science are specialized scientific areas in two time periods covering 2010 to 2016. For Dentistry specialisation is increasing from 2013 to 2019.

Table 6: Scientific specialisation areas in Albania divided into 3 periods ²²

	Period 2010-2013	Period 2013-2016	Period 2016-2019
Areas	LQ - WB5 unweighted Albania	LQ - WB5 unweighted Albania	LQ - WB5 unweighted Albania
1. Agricultural and Biological Science	0.947	0.772	1.148
2. Arts and Humanities	2.994	2.804	1.151
3. Biochemistry, Genetics and Molecular Biology	0.583	0.619	1.099
4. Business, Management and Accounting	1.385	0.776	1.097
5. Chemical Engineering	0.415	0.219	0.565
6. Chemistry	0.610	0.422	0.755
7. Computer Science	0.634	0.615	0.820
8. Decision Science ²³	0.255	0.781	0.673
9. Dentistry	0.684	1.541	3.238
10. Earth and Planetary Science	1.705	1.215	1.271
11. Economics, Econometrics and Finance	3.628	3.285	1.388
12. Energy	0.328	0.391	0.636
13. Engineering	0.422	0.391	0.649
14. Environmental Science	1.638	1.392	1.390
15. Health Professions	1.092	0.798	0.600
16. Immunology and Microbiology	1.562	1.512	1.977
17. Material Science	0.605	0.467	0.719
18. Mathematics	0.689	0.555	0.804
19. Medicine	0.681	0.808	1.112
20. Multidisciplinary ²⁴	1.581	0.916	1.142
21. Neuroscience	0.354	0.347	0.925
22. Nursing	1.452	0.847	1.512
23. Pharmacology, Toxicology and Pharmaceutics	0.737	0.758	0.957
24. Physic and Astronomy	0.579	0.481	0.857
25. Psychology	0.531	0.374	0.945
26. Social Science	1.925	2.111	1.221
27. Veterinary	2.004	1.054	1.456

Source: SJR (SC imago Journal and Country Ranking), author's elaboration

5.2 Technological production

In the field of intellectual property rights, Albania has recently made progress thanks to the legislative alignment with the EU acquis, especially in relation to trademarks and legal protection of designs, patents for inventions and utility models. In 2018, the number of applications to registered trademarks rose by 24.4% compared to 2017²⁵.

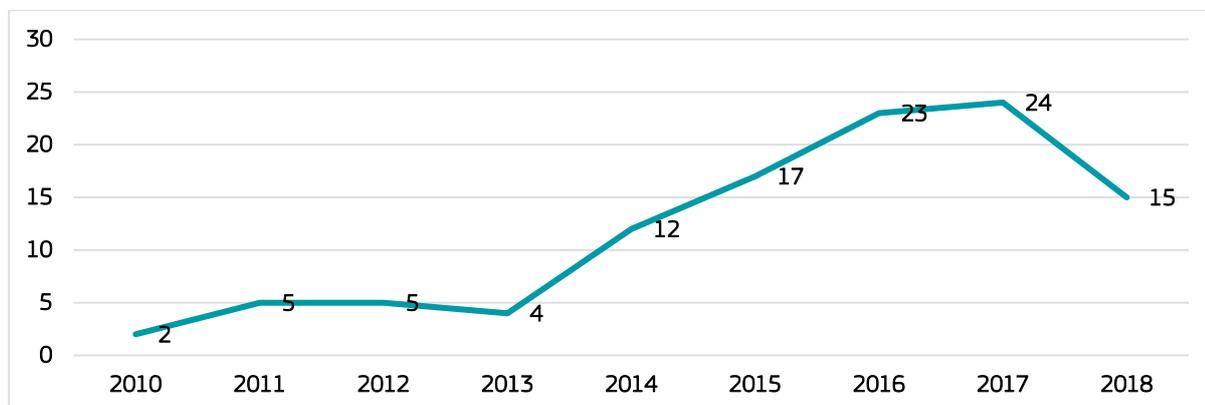
²² Table 6 uses unweighted results as otherwise aggregate WB results would be dominated by the results for Serbia where scientific production is much larger than in the other countries.

²³ Includes categories such as: Information System and Management; Management Science and Operation Research; Statistics, Probability and Uncertainty.

²⁴ Scientific area "Multidisciplinary" of the SJR classification cannot be directly matched with an appropriate scientific area of the WoS and National University Library classifications, but it refers to all of the areas equally.

The number of patent applications is small, with less than 10 patent applications per year until 2013, and then increasing to 24 patent applications in 2017 (Figure 14). These are mostly concentrated in the fields of Mechanics, Electromechanical, Hydropower/Energetic industry, and Pharmaceutical (Table 7).

Figure 14: Number of national patent applications for all fields, 2010-2018



Source: MFE, author's elaboration

Table 7: Number of patent applications during period 2010-2018, cumulative

Field of application	Number of applications for 2010-2018
Electromechanical	23
Hydropower/energetic industry	15
Mechanics	11
Information technology	9
Pharmaceutical	8
Heavy industry (hydrocarbons)	7
Energetic industry	6
Food industry	6
Chemical industry	4
Light industry	4
Concrete industry	3
Art, composition	2
Textile industry	2
Art, Ceramic	1
Electrical	1
Electrophysical	1
Electrotechnical	1
Energetic	1
Hydropower industry	1
Phytotherapy	1

Source: MFE, author's elaboration

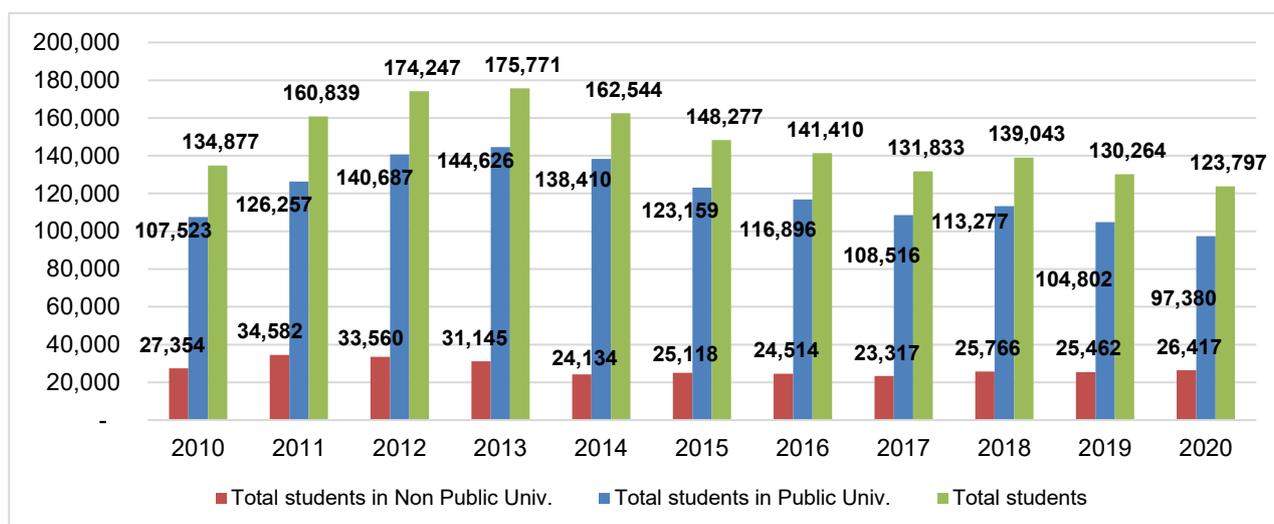
²⁵ <https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/20190529-albania-report.pdf>

5.3 Education Indicators

In spite of continuous progress and high access to primary and basic education with a Net Enrolment Rate of 96%, Albania struggles with improving equity and quality criteria in order to bring them in line with the Sustainable Development Goals (SDG-4) and national education goals.²⁶

Figure 15 shows the number of students enrolled in higher education for the period 2010-2020, by typology of institution. The number of students enrolled in higher education has been fluctuating over time along a decreasing trend. After reaching a peak in 2013 (approximately 176,000 students enrolled) it decreased with a slight upward trend in 2018. Around 80% of total students are enrolled in public universities, the remaining 20% in non-public universities. University of Tirana leads for the number of enrolments followed by University of Durrës and the Polytechnic University.

Figure 15: Students enrolled in Higher Education per typology of institution, 2010-2020

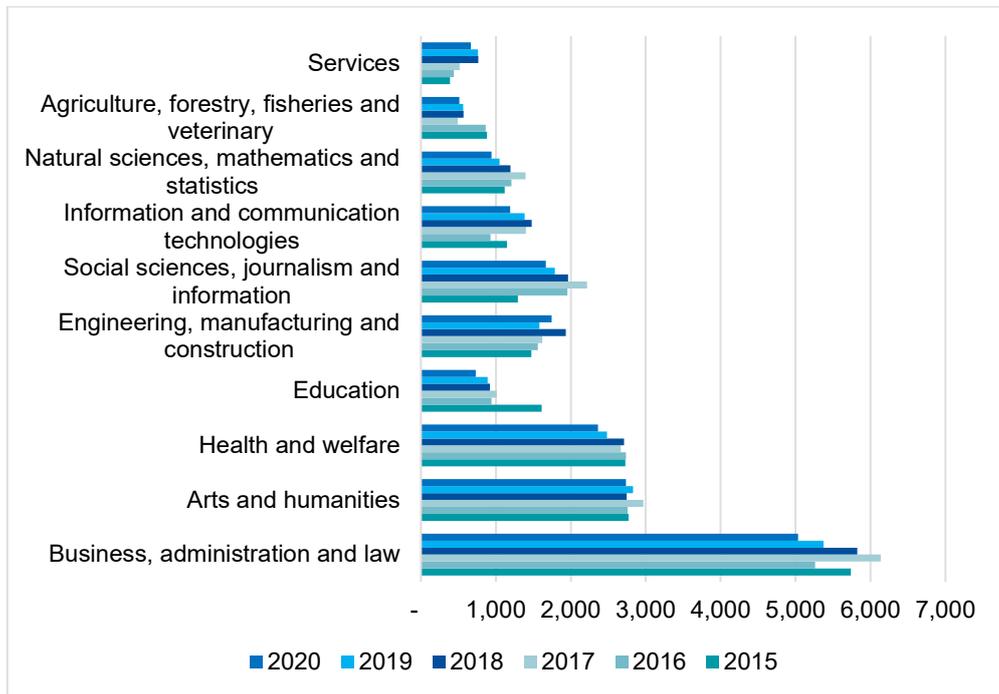


Source: INSTAT, author's elaboration

The highest number of graduated students has been in Business, administration and law, with a peak in 2017, followed by Arts and humanities and Health and welfare (Figure 16).

²⁶ <https://www.unicef.org/albania/education>

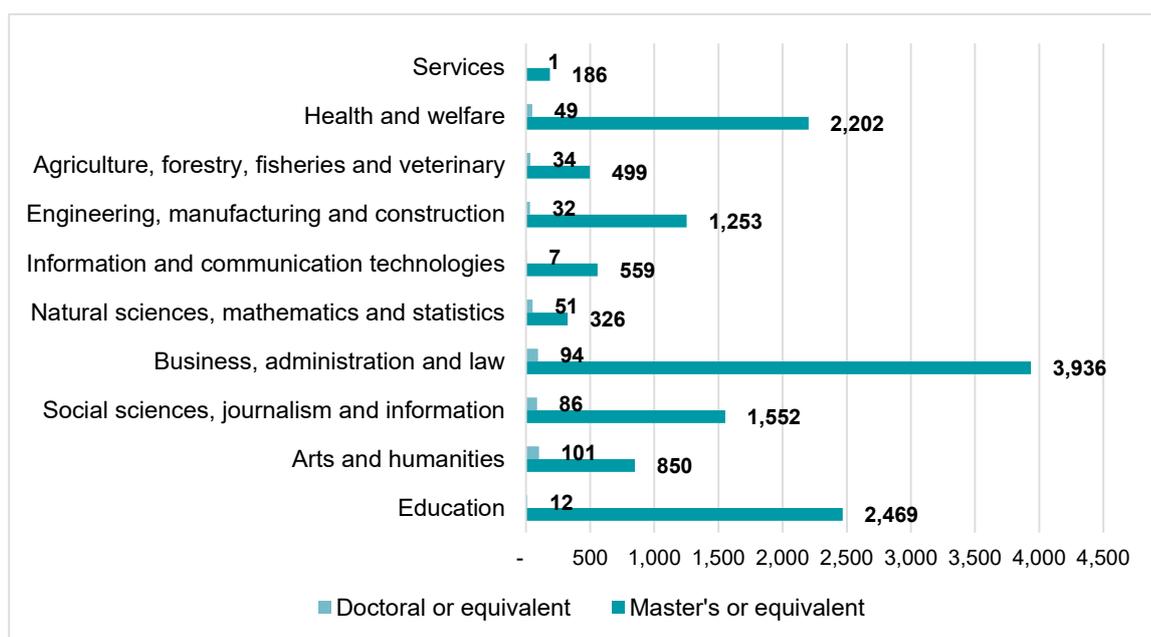
Figure 16: Number of students graduated in higher education per area (bachelor or equivalent), 2015-2020



Source: INSTAT, author's elaboration

Figure 17 shows the number of students graduated in master's and doctoral level, respectively during the period 2015-2020. Doctoral level shows very small numbers in comparison to the master's category. The Business, administration and law area is the one having the highest number of master's graduates, followed by Education, and Health and welfare. As for the doctoral level Art and Humanities is leading, followed by Business, administration and law. In both cases, Services and Natural sciences, mathematics and statistics areas are lagging behind.

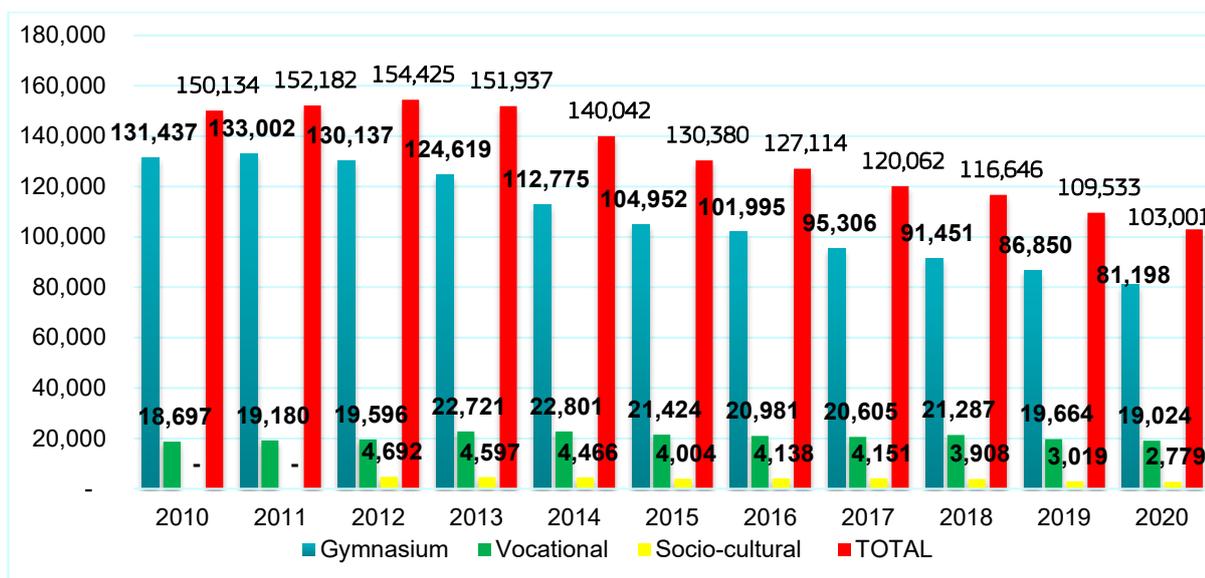
Figure 17: Average number of students graduated in higher education (master`s, doctoral or equivalent) 2015-2020



Source: INSTAT, author's elaboration

Looking at secondary education in Figure 18, the average number of students enrolled over 2010-2020 is approximately 138,111 students, with the highest number in 2012 (154,425 students). Gymnasium shows the highest trend of all three categories considered (with vocational and socio-cultural²⁷ schools as well). After 2012 registration numbers decrease steadily.

Figure 18: Number of students enrolled in upper secondary education by structure of the education, 2010-2020



Source: INSTAT, author's elaboration

6 Outcomes and next steps

The previous sections showed the results of the analysis of the economic, scientific and innovation potential for Smart Specialisation in Albania. In general, the availability of data varied for each of the three potentials. For the economic potential, data on employment and wages were available at NACE 3-digit while for exports classification HS2-4digit was chosen. Data on innovation were available at 1 NACE 1-digit for R&D activity, use of new technologies, product innovation and process innovation. For the scientific potential data have been available at the level of the fields of science from one international source (Scimago).

Regarding the economic potential, the static analysis identified 13 industries, and the dynamic analysis 16 industries. Static economic potential emerges in domains such as Mining and quarrying, Manufacture, Electric Power, Construction, TV and Telecommunication businesses and Call centers, whereas dynamic potential is found in sectors such as Services, including service contracts, mobile food service activities, satellite telecommunications, security systems, call centers, and business support activities.

Two industries are found to have both static and dynamic potentials: J61.3 Satellite telecommunications activities and N82.2 Activities of call centers.

When we look at Exports of goods, the analysis identifies 10 largest subsections, including the most important ones: **64** Footwear; with outer soles and uppers of rubber or plastics (excluding waterproof footwear), and **27** Petroleum oils and oil obtained from bituminous minerals; crude.

Matching the results from the economic potential and innovative potential analyses, assuming that 2-digit industries show the same performance as the 1-digit industry to which they belong, a first selection of industries lead to the following:

- Current economic potential and innovation potential:

²⁷ According to INSTAT, socio-cultural refers to secondary education in the field of art, sports and foreign languages.

- J60.1 Radio broadcasting
- J60.1 Television programming and broadcasting activities
- J61.1 Wired telecommunications activities
- Current and emerging economic potential and innovation potential:
 - J61.3 Satellite telecommunications activities

Finally, as for the scientific mapping, the analysis has shown that the number of scientific publications is generally increasing and the fields having a scientific potential are: Social Sciences, Arts and Humanities, Economics, Econometrics and Finance, Dentistry, Immunology and Microbiology and Veterinary.

A full match between the three pillars would be almost impossible, due to the different availability and level of coverage of data. It appears more efficient to make a connection between economic and innovation potential although the latter is at the 1-digit level. According to data, the industry that fits this connection is J61.3 Satellite telecommunications activities. As for the scientific mapping the unit of analysis is not the industry but the field of science.

Likewise, considering that agriculture occupies a relatively high weight in the country's GDP and dominates the employment market, the qualitative analysis and the EDP could provide more detailed information and help to identify challenges related to innovative processes in the sector (modernization of production methods through new technologies) and R&D activities.

Industries that are good candidates for the upcoming phases of Smart Specialisation design are those that would potentially provide the largest increase in wages and employment from targeted research and innovation investment, as well as those with existing development and support programs.

- **(NACE A) – Agriculture, forestry and fishing**
 - A01.6 - Support activities to agriculture and post-harvest crop activities
 - A03.21 - Marine aquaculture
 - A03.1 – Fishing
- **(NACE C) – Manufacturing**
 - C10.8 - Manufacture of other food products
 - C24.5 Casting of metals
- **(NACE I) – Accommodation and support service activities**
 - I55.9 – Other accommodation
- **(NACE J) – Information and Communication**
 - J61.3 – Satellite telecommunications activities
 - J62.09 – Other Information technology
- **(NACE N) – Administrative and support service activities**
 - N82.2 – Activities of call centers
 - N82.9 – Business support services activities

Energy is also an area where there is potential for smart and innovative growth in the future.

7 The qualitative analysis: methodological framework and data collection

In order to support the national authorities in the follow up activities and complement the quantitative analysis, a qualitative analysis was conducted. This enabled to delve deeper into the pre-selected domains and explore current and future perspectives for the EDP, by collecting non-numerical data on intangible factors.

Main results from qualitative data collection have been systemized according to the identified domains. Cross-sectorial areas with relative opportunities and bottlenecks have been detected.

Information/data collection was done mainly through:

- a) a survey,
- b) in-depth interviews (IDIs)

Both were run by a local expert, responsible for preparing the list of stakeholders and the questionnaires, in collaboration with the Albanian Government. Albanian language was used to facilitate participation and inclusion.

A detailed description of the comprehensive methodological approach used for the qualitative study, including the survey and the IDIs is reported in Annex A.

Survey

The survey, composed almost only of closed-ended questions, was sent to a longlist of relevant stakeholders from each of the pre-selected domains. It aimed at identifying the main characteristics of the actors and main features of their related sector or sub-sector.

Questionnaires were differentiated according to recipients (Businesses, Academia-Research Sector, Civil Society Organizations and Government), and structured around the following main challenge areas:

- *value chain;*
- *current competitive advantage;*
- *existing technologies;*
- *innovation potential;*
- *COVID-19 impacts and challenges.*

The survey was designed in Google Format with relevant links, and first launched on July 13, 2021, followed by a second launch mid-September, and closed end-October 2021. A relevant number of emails were returned back due to incorrect email addresses or other technical issues.

Below are reported the number of emails sent to the respective sectors and stakeholders:

In-Depth Interviews

IDIs were to verify or validate the main results from the quantitative analysis, focusing on the same topics addressed with the survey, but with a deeper level of detail. IDIs started in July 2021 and were completed in November 2021. Interviewees were selected by the local expert after consultation with the Government, the Chambers of Commerce and Unions. The annex D reports the list of key actors and institutions/organizations interviewed.

Again, four differentiated questionnaires for each stakeholder category were prepared.

Interviews were mainly conducted by telephone due to Covid restrictions, and introduced by description of the context and the purpose of the activity. They took around 50 minutes. In some cases, they were conducted by email.

<i>Stakeholder category</i>	<i>Emails sent for the Survey</i>	<i>Answers received for the Survey</i>	<i>IDIs</i>
Businesses	3564 ²⁸	62	28
Academia Research Sector:	75 (Research Institutions, HEIs)	10	12
Government:	21 (Ministries, Directorates and Agencies)	4	14
Civil Society Organizations:	376	27	6
Total	4036	103	60

8. Data analysis on each selected domain

In general, both in the case of the survey and IDIs, participants tended to answer with reference to the specific situation of their own organization, rather than focus on the sector. This has been particularly evident for non-business categories, i.e. Academia, Government, civil society/civil organizations. In these cases, in order to maximise accuracy interviews were integrated with findings from recent studies and analyses by international institutions (e.g. OECD, World Bank, UNIDO, EC).

Here below a brief description of each pre-selected priority domain.

8.1 Agriculture, forestry and fishing

“Support activities to agriculture and post-harvest crop activities”

Agriculture in Albania is a relevant sector. Geographical and natural features of the country are considered at the core of its strengths and a possible asset for further development opportunities: the Mediterranean climate, the hydrography and the position with two seas, the Adriatic and the Ionian Sea significantly favour several cultivations. Rainwater and groundwater sources are a valuable asset for irrigation, but also for energy production by small hydropower plants (Martinovska Stojcheska et al., 2021). Forests, pastures and meadows are suitable for animal husbandry, poultry, cultivation of medicinal plants and production of forest fruits. Protected areas in Albania are valued for the development of agritourism, beekeeping, production of medicinal plants, forest fruits, sports and recreational hunting (Martinovska Stojcheska et al., 2021).

Albania has a quite large variety of crop production with some specialisation fields:

- crops production is mainly composed of forage and cereals (36% and 25 % of crop area, respectively). The vegetable sector, although covering a smaller crop area, is a large contributor to income. The sector continues to experience a highly positive trend in terms of production, especially greenhouse agriculture, with the quantity produced in 2005 approximately doubling, reaching 1.166.000 tonnes (t) in 2018. (Martinovska Stojcheska et al., 2021);
- production of perennial crops, overall composed mainly of stone and pome fruits, citrus, grapes and olives, continues to increase²⁹.

²⁸ Of which: A01.6 Support activities to agriculture and post-harvest crop activities: 162; A03.21 Marine aquaculture, A03.1 Fishing: 413;C10.8 Manufacture of other food products: 333;C24.5 Casting of metals: 45;I55.9 Other accommodation: 279;J61.3 Satellite telecommunication activities & J62.09 Other Information technology: 1070;N82.2 Activities of call centres: 607;N82.9 Business support services activities: 595;D Electricity: 60;

According to OECD (2021), prior to pandemics, Albania experienced a decade of economic growth on yearly basis of around 3% and agriculture GVA gradually increased (up to EUR 2.5 billion in 2019) contributing in 2019 with 21% to the total economy. Rural areas are still quite populated³⁰.

In the last decade agrifood exports have continued to grow, the trade deficit has been increasing also in proportion of agrifood imports³¹. The EU remains Albania's most important market (both for exports and imports) of agrifood commodities³². Albanian agricultural exports are below potential but in certain productions - such as vegetable, tomatoes and salad cucumber - the country has a macro-regional competitive advantage.

Main academic actors in the sector are the Agricultural University of Tirana (AUT) and the University of Fan Noli Korçë. Both have more than 180 Ha of land available, various premises in several areas of the country, and several laboratories, including agrifood, soil and plant analysis, microbiology laboratories.

According to stakeholders, very relevant for the innovation potential of the sector is the system of Agricultural Technology Transfer Centres (ATTCs). Currently in Albania there are five ATTCs based on the merge of the previous research institutes operating under the Ministry of Agriculture, Food and Consumer Protection³³. ATTCs are located in FushëKruja, Vlora, Shkodra, Korça and Lushnja with different fields of intervention. Main tasks are related to the identification, testing, adaptation and introduction of new technologies, the production of certified seeds and seedlings, the provision of technical expertise to extension service staff and farmers, the support with data and information as well as the publishing of materials. The largest ATTCs (for annual income and percentage of own income) are: the one in Korça, mainly operating in fruit trees (apples), livestock (cows and small ruminants) and field crops, and the one in Lushnja, mainly operating in open-field and greenhouses vegetables and wheat. The main challenges regarding the ATTCs refer to low financial resources, lack of international connections (few international projects), low number of researchers, especially young researchers, low level of research outputs, need of advanced equipment and laboratories.

Other research institutions/organisations are the Food Safety and Veterinary Institute, the National Tobacco Agency and the National Entity of Seed and Sapling.

So far, the sector has suffered from the lack of investments especially in soil protection and risks of hydrogeological instability (e.g. the maintenance of dams and canals). However, it seems that significant public investments in the irrigation and drainage system are now planned which not only include the rehabilitation of the canals, but also the modernization of the whole system. Agriculture public expenditure is considered on the right track also to increase the competitiveness of the sector, with its focus on farm capital investments and rural development. Furthermore, Albania's increased focus on food safety and quality control is in line with the growing demand of processed food and agrifood exports; the support allocated under rural development programs (particularly farm modernization and food processing) is expected to increase employment.

Despite of the relevance of Albanian agricultural sector important challenges and threats are to be considered.

The sector consists of over 350 thousand farms, most of them with small and fragmented plots of 1 hectare on average, with the lowest value added per agricultural worker in the Western Balkan region.

²⁹ Production is boosted by a gradual increase in the planted area and improved production yields. The production of pome fruits (especially apple) and citrus has been growing from year to year, unlike grape and olive production, which has experienced a period of years with stable levels of production but has recently seen slight decreases (Martinovska Stojcheska et al., 2021).

³⁰ Currently in these areas live about 40% of the population but in the last decades there has been significant demographic change and since 2011 the urban population has been larger than the rural population.

³¹ The agriculture sector has gained in importance in terms of trade. Since 2013, there has been a considerable increase in agrifood exports as a proportion of total exports (12% in 2019), while the proportion of agrifood imports within total imports has been stagnating (17% in 2019). Despite the positive trends, the trade deficit has continued to gradually increase. Nevertheless, agrifood exports as a proportion of agrifood imports in Albania have continued to increase (from 12% in 2005 to 32% in 2019 – the highest registered) (INSTAT, 2020).

³² EU is the main trade partner in agrifood with 67% of total agrifood exports and 62% of imports (2019). The Western Balkans countries are the destination of 25% of Albanian agrifood exports and are the origin of 11% of agrifood imports.

³³ 1) Institute of field crops, Fushë-Kruja 2) Vegetable and Potato Institute, Tirana, 3) Institute of Fruit crops, Vlora; 4) Institute of Animal Research, Tirana, 5) Maize Institute, Shkodra, and 6) Soil Research Institute (Zhllima, 2020).

Most of the production is for subsistence. Value chains are fragmented, and earnings are low. Farming often represents a source of both food and income security, and capital availability is low (Martinovska Stojcheska et al., 2021).

A third of agricultural workers are above 65 years of age and most have low educational levels; in the last decade the sector's contribution to total employment has decreased by 10%, mainly due to the diaspora, but also to an increase in productivity (Martinovska Stojcheska et al., 2021).

Education system in rural areas struggles with attracting qualified teachers, and attendance is lower than in urban areas. This is caused also by a mass exodus of youth, as well as shortcomings in vocational education. Young people are not enough trained or skilled to face the demand of labour market.

Concerning innovation, there are no formal sectoral clusters (although there are clustered producers in fruits, vegetable and medicinal and aromatic plants in Fier, Berat, Shkoder and Sarande). There are two business incubators in Tirana and Korçë which are officially serving to companies (not agricultural businesses, though) and two agriculture incubators. AIDA (Albanian Investment Development Agency) is also recognised as an important actor that may support firms with exports.

The success rate of Albanian institutions in Horizon is low. Interviewees refer that in 2020 a total of 319 eligible proposals were submitted to H2020 programme of which 40 grants were signed with a 10% success rate). Albania is ranked 14 out of 16 EU associated countries. According to the official data at the Funding & Tenders portal, only one SME from the food and agriculture sector was involved in projects as partners (Zhllima, 2020).

In general, universities are considered to have very limited funding, a weak orientation to research activities and limited research outputs³⁴. Nonetheless, they have quite good international relations, mainly with European research and academic institutions.

Technological innovation is considered very important by stakeholders to lower costs, increase productivity, production, asset/unit revenue, fill the gaps in the labour market, and to this extent producers associations can play an important role³⁵.

To export successfully, Albanian farmers need to increase production volumes and quality, by modernizing production and facilitate technology transfer. Building and/or strengthening farmer's associations and cooperatives could also help against the fragmentation of small land plots. Albania has few aggregation mechanisms, unlike many countries in the EU, where small producer associations and cooperatives play a critical role in linking smallholders with services.

Due to the average dimension of companies and lack of funding, cooperation between HEIs is quite rare. According to Zhllima (2020). Albania had the lowest university-industry research collaboration and the lowest rate of patents granted per million inhabitants in the region. Cooperation with the research could help increase the opportunities for the sector; recently, universities are taking a new role to facilitate the contact of students with the market, but Albanian universities deal with several challenges among which lack of knowledge of the national labour market and employability opportunities, high-level market informality.

Stakeholders consider specific agricultural sub-sectors as promising for start-ups. Some universities have recently started entrepreneurship programmes and enhanced the collaboration among institutions and between education and industry³⁶.

³⁴ Only one fourth of the publications are cited in impact factor journals and less than 10% of authors have a level of citations above 100. In particular according to the ranking in Scopus by H index (of 25 countries) often the Albanian ranking is lower than other Western Balkans countries (Zhllima, 2020).

³⁵ The MTEF has assisted and supported two member associations to build two electronic communication platforms, Albanian Dairy And Meat Association "ADAMA" and the Savings and Credit Association "Fed Invest" for the design and implementation of the electronic platform "ABA" Online. Sources for innovation have been the International Labor Organization (ILO) and the Japan International Cooperation Agency (JICA).

International cooperation within the industry is seen as an important driver to combine the modernization of sector, the quality of crops and the positioning in foreign markets. The position within the supply chains should be improved and relations with the food service and tourism sectors are considered as a good opportunity of growth.

Investments in mechanization are required in order to enhance quality and reach the production scales required to address foreign markets. In addition, investments in innovation and certification could help unveiling the potential related to premium price productions such as beekeeping, medicinal and aromatic plants and ecological fertilizer.

According to some of the interviewed stakeholders, Covid 19 had negative impacts, especially on employment, production and exports as well as firm survival besides a significant increase of labour cost and market prices. However, in a larger perspective the Covid outbreak does not seem to have changed the structure and the relevance of the sector for the Albanian economy.

From the survey, all companies plan to invest in technology in the next three years, mostly in order to follow market requirements. Inter-industry collaboration is considered very important especially for the implementation of new technologies. Keeping existing customers is seen as the main challenge with regards to Covid, as well as maintain networks and connections.

In table 8 main findings are reported with regards to main focuses of investigation.

Table 8: Agriculture at a glance, main findings from interviews and survey

Main focus	Main findings
Value chain	<ul style="list-style-type: none"> - Industry is mostly oriented to the internal market and composed of small size companies, with high level of informality and low productivity; - Size of companies is very small and so are land plots; - Despite of the high potential in terms of value added (i.e. medicinal herbs) most crops show low added value; - The largest part of the industry operates in cultivation and provision of raw materials in the first part of the value chain.
Current competitive advantage	<ul style="list-style-type: none"> - Competitive advantage is mainly based on low costs; - Crops are cultivated with limited additives and this opens to opportunities within the organic food sub-sector.
Existing technologies	<ul style="list-style-type: none"> - Basic level of modernisation.
Innovation potential	<ul style="list-style-type: none"> - There are indeed experiences reporting the use of robotization and automation solutions, as well as investments in innovation. Nonetheless, both the connectivity in rural areas, digital skills availability, and the high average age of workforce are relevant bottlenecks in the diffusion of innovation; - Main research and development activities carried out by companies are on safety and food security
COVID-19 impacts	<ul style="list-style-type: none"> - Limited impacts of the pandemic on the relevance and the structure of the industry. - Main post-covid challenges regard keeping existing customers as well as maintaining networks and connections

³⁶ For instance it has been signed a Memorandum of Cooperation with four Universities (Agricultural University of Tirana "AUT", Luarasi University, Polis University and with Eqerem Çabej University in Gjirokastra) and there are partnership between Universities and the National Chamber of Crafts of Albania for joint programs to provide support for the labour market.

“Fishing and aquaculture”

Albania has a high diversity of fish species. Total fishery production increased from 1,500 tons in 1950 to 12,483 tons in 2017 (with relevant differences among years). Although the catch has stabilized over the last few years, the FAO estimates that up to 80% of the fish stock within the Exclusive Economic Zone (EEZ) of Albania is overexploited. At moment, fish and seafood industry represents a small part of the national economy, but full with untapped opportunities³⁷, especially in terms of employment.

Average seafood consumption is low, but domestic demand is expected to grow with the improvement of standards of living and the estimated increase of GDP per capita³⁸. The market growth potential is much greater in the domestic market than in the export market, and the sector is expected to grow up to the 50% in 2030 (World Bank, 2020).

Albania has been active in the fish trade, facilitated by its proximity to the largest seafood markets in Europe. Besides its natural resources, main strengths in fish processing/trading industry are considered the low labour costs, the commercial/cultural links to neighbouring markets and the access to imported raw materials. These strengths are considered as points of competitive advantage, at the basis of the Albania's seafood export performances and able to overcome the constraint of inadequate fisheries resources (World Bank, 2020).

Concerning higher education institutions operating in this sector, based on stakeholders interviews, the University of Durres is considered an important actor especially with the Department of Engineering Sciences and Maritime. There are laboratories operating in the field of maritime, automotive technology, electrical engineering and ship manoeuvring. To strengthen the market orientation support provided by universities cooperation between companies and universities is considered as relevant: so far among the +50 agreements signed with different companies the collaboration with the Durres Port Authority is an important achievement; similarly study programs are on the way to be adapted in accordance with the labour market needs.

Main international collaborations are with EU universities in Erasmus and H2020 programmes.

From the academic perspective, the most promising innovation opportunities are considered coming from (a) the optimization, robotization of naval operations and (b) big data processing which could increase efficiency and the volume of goods for processing industry, as well as give a boost to the competitiveness of Albanian ports in terms of services provision.

Blue economy is seen by stakeholders as a good opportunity for new businesses. University of Durres has a program that supports the integration of students in SMEs of the Blue Economy.

The need for a more efficient and sustainable industry is relevant. Both domestic and export demand can be expected to increase in the future, but according to the international observers (World Bank, 2019) the sector currently faces over-exploitation of fish stock and low productivity. To a wider extent the blue economy (as a sustainable and integrated economic development in healthy oceans) is considered by stakeholder as a way to a higher productivity of the sector while ensuring environmental sustainability and cultural acceptability³⁹.

Within this perspective, investments in pollution reduction are seen as necessary for preserving the environment, on the one side, and indirectly going towards more added value development opportunities, on the other side.

³⁷ The value of fish and seafood production in Albania in 2017 was US\$53 million (55% from marine fisheries production, 38% from aquaculture production, and 7% from inland fisheries production)

³⁸ Average seafood consumption is 5.3 kg per capita, which is far lower than its Mediterranean neighbours: 12.2 kg in Montenegro, 19.1 kg in Croatia, 20 kg in Greece, 25.9 kg in Italy, and 32.8 kg in Malta. However, real fish consumption is considered to be likely higher due to informal and unreported seafood sales.

³⁹ For an extensive description see also World Bank, 2020.

From the survey, provision/production is the main part of the value chain and positioning is mainly determined by experience on the market, knowledge and capacities. Main research and development activities regard safety and food security and to this regard the lack of technology is seen as one of the main weaknesses of the sector. Main challenges regarding digitalization are related to investments on equipment and systems. All the companies participating in the survey have taken environmental protection initiatives in the last year, and for those who are committed in innovation main drivers are better products/processes and market requirements.

In the table 9 main findings are reported with regards to main focus of investigation.

Table 9: Fisheries and aquaculture at a glance, main findings from interviews and survey

Main focus	Main findings
Value chain	<ul style="list-style-type: none"> - Industry is mostly oriented to the internal market and composed of small size companies; - The dimension of companies is very small and with regards to fisheries, operating with small and obsolete vessels; - The biggest part of the industry operates in the provision of fish;
Current competitive advantage	<ul style="list-style-type: none"> - Main competitive advantage is based on the low costs and up to now in the large provision of fish; - In a wider perspective fisheries and aquaculture could be very much integrated with other industry, in particular with tourism and catering;
Existing technologies	<ul style="list-style-type: none"> - The existing technologies correspond to a basic level of modernisation;
Innovation potential	<ul style="list-style-type: none"> - Main innovation potential is represented by the integration of supply chain, both horizontally and vertically. To this attempts main technologies are related to IT ;
COVID-19 impacts	<ul style="list-style-type: none"> - The industry has not been affected very much by the impact of the pandemics.

Source: own elaboration

8.2 Manufacturing

Industry represents an important part of the whole Albanian economy both in terms of GDP share and employment. In 2018, before the pandemic, industry's contribution to GDP was approximately equal to 21.3% (including construction). Major industries in which Albania are represented by mining, footwear, textiles and agribusiness. In 2018, manufacturing represented 5.9% of Albania's GDP. According to OECD (2019) more than 80% of manufactured goods are low value and low complexity, mainly based on low cost productions. Manufacturing integration in main global value chains is constrained by some infrastructural gaps, customs and logistics, challenges in the business environment, skills gaps and firms' limited capacities for technology adoption, limitations in access to finance, etc. Upgrading and diversification of the manufacturing sector could play a key role in boosting exports and GVC integration. Short- to medium term growth is expected through the expansion of agrifood processing, while in the long-term, potential for growth is identified in the automotive industry (vehicle and engine parts), machinery and metal processing".

"Agrifood processing"

Albania provides important opportunities of development, thanks to its favourable climate and low cost of labour. Furthermore, important investments have been made in recent years and the added value of the sector has continuously increased. According to international observers (Confindustria Albania, 2020) thanks to the use of traditional methods, Albanian fruit, vegetables, meat and dairy products are grown and produced with a limited use of artificial additives, chemicals or pesticides, which increase the competitive advantage of the country in regional and European markets.

The agricultural sector is called upon to play a crucial role for the sustainable and inclusive development of the country. Currently, the sector is largely based on informal employment; the perspective of a sustainable and equitable development path requires moving away from labour models based on extensive agricultural and informal employment towards a knowledge-based economic approach.

To this extent low productivity and incomes are reflections of structural barriers, such as a highly fragmented ownership, low levels of mechanization and phytosanitary and veterinary controls, which limit agricultural exports (OECD, 2021).

According to stakeholders interviewed, one of the consequences is that Albanian agricultural output is barely able to satisfy the domestic demand as the latter has grown faster in most sub-sectors, so imports have increased drastically in recent years resulting in high trade deficit. This affects also the processing subsector.

Still based on stakeholders interviews, the private sector is called upon to invest in different business models, integrate supply chains, afford different scale of production, and implement international standards of production in terms of quality. On the side of private sector, integration with other industries represents an important opportunity, such as tourism (for instance with touristic offer based on healthy food) and ICT (for the application in terms of agriculture 4.0). To this extent, for the small dimension of companies operating in agrifood and the average age of employees that is quite high, investment in organisation assets (aggregation, integration, merge, foreign investments) and competence (soft skills, ICT, managerial competence) are considered as necessary.

Among stakeholders interviewed, interesting experiences come from food processing in compliance with EU requirements, which adopt green technologies, approach market opportunities at global level, using non-food production as a raw material for other industries of pharmaceuticals, cosmetics as well as fuel production (for instance with CO₂ extraction) in a circular economy approach. Indeed this kind of business model requires investments and a long-term perspective. To this extent public intervention can result very important to support the access of SMEs to finance, because even though the banking sector has been stable, liquid and well-capitalised, credit to the private sector is lower than in peers and advanced economies. Albania has one of the lowest loan-to-deposit ratios among emerging economies, in particular for SMEs (OECD, 2021).

According to stakeholders, an important challenge is reputation. Despite the quality of most of agricultural production, at international level, Albania is rarely perceived as able to encounter international standards thus leading to prejudices. Strong commitment in the definition and implementation of international regulatory frameworks, public-private partnership at international level and integrated policies (both vertical and horizontal) can support Albanian operators in facing these difficulties. For these reasons, certifications are perceived by majority of stakeholders as even more relevant than patenting.

In general, innovation in this sector is imported. Main stakeholders consider higher education important for knowledge intensive productions, but Albanian university system needs to be significantly improved in order to meet main companies' requirements. Especially concerning research, test and analysis activities are conducted independently or in collaboration with foreigner operators. In general, Albanian knowledge-intensive services are considered as neither competitive nor easily available; in order to compete worldwide and be part of GVCs, methods and equipment used by universities have to be compliant with the standards required by certification bodies.

Same challenges are reported by stakeholders operating in the packaging industries, indeed very connected to food processing and relevant both for the quality of products and the international standards. Also in this case main collaborations are with international organizations (such as GIZ) that support operators in knowledge intensive

services and tech-transfer opportunities. Difficulties are also detected in finding workforce with adequate profile to carry on knowledge intensive activities.

Keeping the quality of products high, reducing production costs, increasing efficiency of transport and logistics, and ensuring compliance to requirements of international markets are further relevant points.

These may be connected to:

- the lack of adaptation - even in large companies - to modernisation (industry 4.0) and consequently to artificial intelligence, robotics, digitalization of sales, marketing, process automation, among others, as most of Albanian entrepreneurs continue to produce with traditional methods;
- the lack or the loss of qualified personnel and the necessity to introduce changes in the vocational education system to meet the market demand;
- difficulties in accessing the financial market and capitals.

Based on stakeholders' perception, main opportunities are expected from opportunities in the fields of artificial intelligence, robotics, and process digitalization.

From the survey, the positioning in the market is mainly determined by a wide range of products and services, whereas inferior product quality and inadequate organisational structures are seen as one of the main weaknesses. Environment is considered as a relevant issue and in the last 12 months most of companies have taken environmental protection initiatives, such as reducing energy consumption, fuels, reducing pollution from waste, replacing recycled products. Main innovation activities in the last 5 years have been related to the improvements of products, as well as to follow market requirements. Inter-industry collaborations are considered important especially for the development of new products, strengthen the brand positioning and increase investment opportunities. Keeping existing customers is seen as the main operational challenges especially after pandemics, as well as the lack of funds for businesses.

In the table 10 main findings are reported with regards to main focus of investigation.

Table 10: Agrifood processing at a glance, main findings from interviews and survey

Main focus	Main findings
Value chain	<ul style="list-style-type: none"> - Industry is mostly oriented to the internal market and composed of small size companies; - The complete adoption of international phytosanitary standards could extend the opportunities of internationalisation;
Current competitive advantage	<ul style="list-style-type: none"> - Main competitive advantage is based on low costs of production; - In a wider perspective agriculture, food processing and tourism could represent an interesting integrated value chain for the domestic markets; - For agriculture complying with international phytosanitary requirements, the proximity to organic crops could represent an interesting source of competitive advantage in international markets,
Existing technologies	<ul style="list-style-type: none"> - The existing technologies have a basic level of modernisation;

Innovation potential	<ul style="list-style-type: none"> - Main innovation potential is represented by the integration of supply chain. - Main technologies are related to robotics and automation, but in a wider perspective investments in connectivity and digital skills are required - Investments in the educational system to overcome the skills mismatch between what offered from VET institutions/HEIs and what required by the market is required
COVID-19 impacts	<ul style="list-style-type: none"> - Industry has been partly affected by the impact of the pandemics. - Keeping existing customers and increase funds for the private sector are the main challenges post pandemics.

Source: own elaboration

“Casting of metals”

This sector in Albania is mostly oriented to international markets (mainly the EU), also due to the absence of a large national heavy industry, such as automotive or mechanics.

Aluminium casting is seen as the main promising segment in the whole industry. The European aluminium casting market is expected to grow significantly, and its main application is in end-user sectors, especially automotive, building and construction, industrial, household appliances, aerospace, electronics and electrical, engineering tools, among others.

The market is divided into primary (fresh) aluminium and secondary (recycled) aluminium. Albania has companies operating in both segments and in case of lack of raw materials there are companies operating with recycling and refining technologies. Then, with regards to this, there are two more points:

- 1) Markets prefer primary aluminum
- 2) Based on stakeholders feedback, the current regulation on waste should be revised because constraining the sector

In order to compete with global players, Albanian companies have to adhere to the directives and standards of the countries where they export, especially in the field of recycling and waste treatment. Automotive represent an important market destination, but companies operate also in the market of construction and metallurgical industry.

Stakeholders interviewed report, on the one side, the necessity to reduce bureaucracy in export-related practice, on the other side the opportunity to change the legislation regarding the import of waste materials, and enhance the possibility to import recyclable waste at a low price⁴⁰.

In order to compete on the cost of material collection, stakeholders consider the industry in Albania as led by too small size operators. Operators should be encouraged to collaborate especially in raw and waste materials collection. To this extent, stakeholders believe that a legal framework regulating and supporting this process would facilitate the development of the industry.

When it comes to innovation, stakeholders point out the importance to guarantee quality and sustainability. Patenting is considered complicated and not always relevant to businesses. International cooperation instead can be a driver for introducing new processes, also in compliance with the standards and requirements of the main international markets.

Skilled labour is a challenge. VET and higher education curricula not always respond to the market needs. Stakeholders consider university curricula as not fully adapted to the labour market. More advanced competences

⁴⁰ According to stakeholders, under this condition the whole business of recycling metals would be very much constrained with a low level of profitability (importing materials classified as secondary raw material) and often the impossibility to use plants and technologies at full capacity, suffering the competition of other WB countries (classifying aluminium as commodity).

are required in chemical engineering, for instance. Neither joint programs to facilitate internships or Science-Industry collaboration are offered by the educational system. Stakeholders recognise internal training as an easier and alternative way to build qualification and invest in knowledge over time. Foreign partners can also take part in these initiatives and support the process.

The Polytechnic University of Tirana ,especially with the Faculty of Metallurgy and Faculty of Chemistry are seen by stakeholders as valuable partners. However, main of innovations introduced in the market often come from foreign consulting organisations, rather than by research centres. In general, Higher education is considered a relevant stakeholder for knowledge intensive services rather than for research and innovation activities.

Stakeholders do not report any particular cross-sectorial cooperation. Aida agency is recognised as a possible gatekeeper promoting and facilitating the match among stakeholders.

From the survey, the main challenge is identified in the capability to be aligned to market requirements and the inadequate supply chain is seen as the main weakness of the sector, especially with regards to material provisions. Most of inter-industry collaborations regard energy saving and raw material production, whereas main investments in the last 5 years have regarded the quality of products. One of the most relevant challenges identified in the Covid phase is related to the necessity to have laws policies regulating the sectors as well as keeping exiting customers.

In the table 11 main findings are reported with regards to main focus of investigation.

Table 11: Casting metals at a glance, main findings from interviews and survey

Main focus	Main findings
Value chain	<ul style="list-style-type: none"> - Most part of the industry is opened to international markets and operating in the process of casting; the phases of research, design and marketing are mainly implemented by other countries.
Current competitive advantage	<ul style="list-style-type: none"> - Main competitive advantage is based on the low costs; - Aluminium casting is seen by stakeholders as the main promising segment; - In order to compete on the cost of material collection, stakeholders consider the industry in Albania as composed by too small operators; - The regulatory framework regarding waste material could represent a relevant bottleneck in the sustainability of business models of main operators;
Existing technologies	<ul style="list-style-type: none"> - The existing technologies correspond to a basic level of industrial modernisation; - Main technologies implemented are finalised to assure quality and the respect of international standards.
Innovation potential	<ul style="list-style-type: none"> - Main technologies are related to robotics and automation, patenting is not considered complicated and not relevant for the industry - Main innovation are related to the efficiency of the process, the sustainability and the respect of market standards and requirements
COVID-19 impacts	<ul style="list-style-type: none"> - The industry in part has been affected by the impact of the pandemic. - Main impacts regarded not much the organisation of the process, rather the market destinations.

8.3 Energy

“Electric power generation, transmission and distribution”

The energy sector is significantly affected by the current National energy legislation and its governance. The process of alignment to EU legislation - following the EU integration agenda - is on-going. According to international observers (OECD, 2021) up to 50% of the required policies have been implemented so far, and Albania is working on the first elements of the EU's Clean Energy Package. Albania has extensive legislation on greenhouse gases, emission reduction and air quality, and the Law on Climate Change contain articles that should allow ETS (emission trading schemes) to be implemented in the future.

One of the main issues regarding the energy sector is the supply and security of the energy.

- With regards to gas market, Albania is working on establishing a natural gas supply framework. Since the end of 2020, the country is receiving natural gas extracted from Azerbaijan via the Trans Adriatic Pipeline. Key infrastructure investment projects are on track and to be implemented over the short, medium and long term. However, gas market is not developed yet (OECD, 2021).
- The electricity supply is governed by a comprehensive legislative and policy framework. The supply is guided by state-owned entities with defined roles and it is monitored by recurring statistical reports. Main source of power derive from hydroelectric. From stakeholders' perspective, the main difference between Albania and other Western Balkans countries in terms of electricity generation regards the source. In Albania the production of electricity is based almost 100% on hydro resources, while in the rest of the region fuels prevails.

In terms of transmission and distribution, stakeholders consider the Albanian infrastructure as “beyond the limits”, compared to other countries:

- The transmission capacity is indicated as 1.4 times above the energy needs. In spite of this, other stakeholders underline investments are required and that the energy supply must be guaranteed, considered that as modernization increases also energy needs may increase, while resources are limited.
- On distribution, investments are on-going. Stakeholders report that the distribution network is able to cover the entire territory of Albania and it is continuously renewed and improved, taking into account the location of the customers. Some of them instead report that further investments in distribution are required to guarantee safety and higher quality, renovate the entire system standards and reach better rural areas.

As mentioned, renewable energy accounts for a significant share of Albania's energy mix—approximately 35% of its domestic energy supply (OECD, 2021). Stakeholders consider the harmonization of different renewable sources as a strategic but difficult process, as not all resources have the same level of efficiency and usability. In Albania most of renewable energy - but not all - derives from hydro generation. Stakeholders consider that this could be affected to annual fluctuations due to hydrological changes. International observers consider important to promote a wider diversification of the renewable energy mix, enhancing optimisation and risk reduction. To this extent, Albania is operating for non-hydro renewable energy growth, but implementation of intervention is not accomplished yet.

Energy efficiency in Albania is still in its early stages. According to OECD (2021) there is no dedicated government-funded energy efficiency fund—although energy efficiency investments are realised as part of other projects/investments funded by the international financial institutions or commercial banks. Albania does not have a system in place for data collection and monitoring of energy efficiency, energy auditors nor a bottom-up methodology for data collection.

Innovation is considered by stakeholders as relevant for the development of the system and the industry. The Ministry of Infrastructure and Energy has drafted a National plan including climate change, setting the targets by 2030 for energy efficiency, renewable energy and greenhouse gases and detecting issues related to Research and Innovation. Among others, specific focus is on agriculture, forestry, waste management, policies and measures supporting research and innovation. Concerning this the collaboration with the National Agency for Scientific Research and Innovation (NASRI) is considered as relevant, and some of the measures included have been elaborated in accordance with NASRI findings and recommendations.

Collaboration between universities and public/private organisations is considered important by stakeholders interviewed. One of the fields of intervention of the National Plan is to improve cooperation at both regional and international level in the field of scientific research in the energy sector with a budget of about € 2 million, promoting also the follow up of the programs Horizon 2020, COSME, COST, Erasmus.

According to some stakeholders, in Albania main challenges regard the completion of the liberalization of the electricity market and the increase of production, including through the diversification of electricity generation sources. In view of the security of the country's electricity supply, this can be classified as a weak point since the production of electricity is largely dependent on atmospheric precipitation.

Despite most of the energy production requires low level of CO2 emissions, only the 38% of the consumption of energy is based on renewable sources, as energy bought on the stock exchange is not clean including also coal or other substances that classified as not very clean. This calls upon a relevant commitment from the side of the National authorities in relation to renewables and decarbonisation.

On this, according to stakeholders, innovation and technologies can contribute both to the implementation of more efficient hydropower solutions and the development of other sources such as solar, wind and geothermal.

Collaboration among actors is an opportunity to be explored and strengthened. Based on stakeholders interviews, government and academia have a positive dialogue whereas between companies and academia is still a challenge. For instance, the Ministry for Infrastructure and energy has signed a scientific cooperation agreement with the Polytechnic University of Tirana on the development in heavy industries, infrastructure and energy. Effective collaboration occurred with regards to energy saving projects and after the recent earthquake (2019).

In the opinion of some stakeholders, Academia is mainly focussed on teaching, rather than on research or tech transfer services. To increase competitiveness in the sector, knowledge-intensive services have to be supported but they are not easily available within the country. Most companies prefer receiving support from foreign consulting organisations. University is considered as less involved on such activities, and there are not significant research units.

In particular in the hydrocarbon sector there is a large gap in terms of qualified staff, as universities do not produce geologists or petroleum engineers, dealing with scientific research. The Petroleum Institute – currently closed – is expected to be reopened as represented the main nucleus of innovation in the hydrocarbon sector.

Talking about specific competences, stakeholders consider that qualified employees are available for horizontal areas such as finance, legal expertise, human resources, but not for technical fields such as construction, research & development and brain draining is high.

Concerning the crisis from pandemics, main effects in terms of energy production were seen in the first quarter of the 2020. The country is currently "suffering" from the ban on domestic energy production projects during 2020 which raised the price of energy imports.

In the table 12 main findings are reported with regards to main focus of investigation.

Table 12: Energy at a glance, main findings from interviews and survey

Main focus	Main findings
------------	---------------

Value chain	<ul style="list-style-type: none"> - The energy system is very much affected by the regulatory framework as well as the process of alignment with the requirements for the EU accession - The energy balance is highly dependent on foreign provisions - With regards to production, this is mainly based on hydroelectric plants
Current competitive advantage	<ul style="list-style-type: none"> - Up to now the whole energy system has been largely based on the absence of a market economy - Main strengths are related to territorial endowments enhancing the production of energy from renewable sources or with a very limited CO2 emissions; - The supply infrastructure is seen as an asset, which requires investment. Investments on the supply infrastructure could lead to growth opportunity also for other industries;
Existing technologies	<ul style="list-style-type: none"> - The existing technologies correspond to a basic level of modernisation; - Energy saving investments are not much implemented. - No relevant R&D stakeholders in the national innovation system, compared to international standards.
Innovation potential	<ul style="list-style-type: none"> - Main innovation potential is represented by the development of renewable source solutions, mainly from hydro, wind and solar sources. - It is important to overcome the skills mismatch between the educational offer and labour demand
COVID-19 impacts	<ul style="list-style-type: none"> - The industry hasn't been affected very much by the impact of the pandemic. - Upcoming laws, policies and regulation in the sectors are seen as the main challenges to face in the post covid-phase.

Source: own elaboration

8.4 Accommodation and support service activities

“Other accommodation”

As already mentioned, in the decade before the Covid-19 outbreak tourism in Albania grew rapidly both in terms of share of GDP (direct contribution equal to 8,8% in 2019) and employment (direct contribution equal to 8% in 2019). The number of tourists visiting Albania has been growing at yearly basis, with an average annual growth of almost 15%.

Before the pandemics, the number of tourists entering Albania had been steadily increasing - from 3,513,666 in 2012 to 5,117,000 in 2017; 6,406,038 in 2019 (and then decreasing to 2,657,818 in 2020) (Burlea-Schiopoiu, A; Ozuni, F, 2021). Generally foreign tourists come from South Eastern Europe (Greece and Italy), Western Europe (Germany, Belgium, Netherlands, France and Scandinavia) and from other Balkan countries (Kosovo, Macedonia, Montenegro).

The 80% of the hotels is located in coastal areas (Velipoja, Shengjin, Durres, Kavaja, Vlora, Saranda, or Pogradec) while the 10% is in Tirana and the remaining 10% is located in other areas of the country (Burlea-Schiopoiu, A; Ozuni, F, 2021);

The country has several touristic attractions including national parks and protected reserves, well-preserved coast, a variety of lakes, and a large number of archaeological and UNESCO sites such as Butrint, Berat and Gjirokastra.

Accommodation sector is very much affected by the dimension of facilities: tourism continues to be mostly represented by small, locally-owned operators with rare involvement of foreign investors.

Concerning infrastructures, Albania has only one airport in the capital town. Although the country is by the Mediterranean Sea, the lack of ports for yacht owners and for cruise ships make the maritime potential not fully exploited yet.

There are a few educational players operating in the field of tourism. The University of Tirana has a Department of Marketing and Tourism, mainly focused on business orientation and entrepreneurship, and the National Agency of Vocational Education Training and Qualifications is directly involved to implement the Albanian Qualifications Framework for vocational education and training. The University of Saranda also operates also in field of tourism education. According to stakeholders the cooperation between higher education and vocational education should be strengthened, also in response to the lack a qualified and motivated personnel.

In terms of innovation, it is mostly led by a cost saving purpose and in the last 12 months all the companies participating to the survey have taken steps for environmental protection such as reducing energy consumption, fuels, reducing pollution from waste, replacing recycled products. Opportunities can come from linkages with the ICT sector. IT solutions may represent a relevant tool for: integrating the supply chain with higher efficiency and quality standards, as in the case of delivering products from farmers or fisheries to restaurants, or improving the connection between ports and touristic sites; matching the touristic demand and channelling the offer in terms of promotion web-tools, clients management, integrated offers, touristic packages; implementing new solutions and touristic products, such as big data, machine learning, business analytics, and IT web based solutions for booking, registration, payments, additional services. Electronic booking, payments, web referrals for instance are international standards that require investment not only in technology but also in business models and in knowledge intensive services. This is considered as one of the first challenge to be faced, in order to unlock the economic potential of the international tourism.

As main findings from international observers (World Bank, 2020) and stakeholders interviews, there are a few opportunities that could be further investigated on the basis of integrated value chains:

- the blue economy and marine tourism, integrated with logistic industry (ports, seaports, marine) to enhance touristic (natural, historical and cultural) sites in the inner areas of the country
- the outdoor and agritourism linked to the agricultural sector
- the well-being tourism, starting from a well radicated dental tourism and enlarging the well-being offer to wellness industry, healthy cousine;
- the business tourism. One of the weaknesses is the lack of big brand names that could facilitate the diffusion of international standards (in terms of products and services). International standards combined to local values and traditions could lead to a unique experience to be promoted at a competitive price. For the development of business tourism, cooperation with international companies and agencies is considered important for the revenues, the product affordability and prices in the category of 5-star hotels.

A sustainable development approach requires infrastructural investments both tangible and intangible. On the one side, there is a need of logistic (roads) and connectivity (IT) infrastructures, on the other, stakeholders consider strategic to invest on international networking and internal market integration. Above all a long term perspective is necessary, enhancing the dialogue among main stakeholders, with the commitment of the national and local governments, the engagement of private and financial operators, as well as foreigner investors.

In the table 13 main findings are reported with regards to main focus of investigation.

Table 13: Accommodation and support services at a glance, main findings from interviews and survey

Main focus	Main findings
Value chain	<ul style="list-style-type: none"> - Most relevant part of the value chain is related to accommodation services in the seaside and the capital city - With the exception of the tourism in Tirana that has a certain regularity during the year, coastal tourism has high level of seasonality and concentration - Tourism in rural areas is very much affected by a limited offer of accommodation, infrastructures and touristic services.
Current competitive advantage	<ul style="list-style-type: none"> - Low cost, naturalistic and cultural heritage represent main assets and source of competitive advantage; - Some lack of infrastructures limits the tourism in the inner part, as well as possible inflow coming from yachting and cruise travels.
Existing technologies	<ul style="list-style-type: none"> - Main technologies are represented by IT, with regards to the customer management (booking, payments etc..) and supply chain integration; - Other technologies adopted are related to energy saving investments.
Innovation potential	<ul style="list-style-type: none"> - Main innovation potential is related to the integration of supply chain with other sectors. On the one side the IT progress allow to provide a differentiated service to customers; on the other, integration opportunities with food, culture, health could be exploited through a wider application of intelligent IT solutions.
COVID-19 impacts	<ul style="list-style-type: none"> - The industry has been affected by the impact of the pandemic - Keeping existing customers is seen as the main operational challenges with regards to Covid phase

Source: own elaboration

8.5 Information and Communication

“Satellite telecommunications activities and Other Information technology”

According to international observers⁴¹ in 2018 the ICT industry's contribution to GDP was 2.9%, which increased further during 2019; the total turnover of the Transport, Information and Communications sector for the year 2018 amounted EUR 1,255million and the value added for 2018 was EUR 512 million⁴².

Main issues of the Albanian ICT market in Albania are digitalisation of the public administration and e-services. ICT interoperability represents one of the ingredients in the attempt to enlarge the diffusion of e-services (OECD, 2021). Nonetheless, the implementation of the Digital Agenda 2015–2020 has reported positive results, especially in terms of public administration digitalisation and with the launch of the *e-Albania* portal.

Regarding the connectivity broadband, infrastructures have been significantly improved thanks to the National Broadband Plan 2013–2020 and the ongoing 2020–2025. Broadband speeds can now reach 1 Gigabit per second

⁴¹ See OECD (2021) and PwC North Macedonia (2020).

⁴² The data includes the Transport, Information and Communication Sectors; There is no available data only for the ICT sector.

(Gbps), but the majority of subscribers (55%) have speeds of 4-10 Megabits per second (Mbps)⁴³. The new National Frequency Plan introduces important changes to the spectrum available for new services and technologies, mobile broadband including bands for 5G. This is expected to enlarge the IT market and the opportunities for cross-cutting applications among industries (OECD, 2021).

With regards to ICT adoption in 2019 the 28% of enterprises employed an ICT specialist, and 45% of enterprises had a website. Main applications (89%) were to publish catalogues or price lists (INSTAT, 2021) and the 12.8% of enterprises were involved in e-commerce activities in 2020. With regards to this figures, despite a large number of ICT specialists, a low penetration of e-commerce activities is recorded and the usage of ICT opportunities appears to still have an untapped potential (OECD, 2021).

According to OECD (2021) online shopping is not popular, due to the low use of credit cards in certain areas, the low purchasing power as well as the high cost of shipping. Moreover, the framework for digital privacy protections is not completely aligned with the current EU framework especially with regards to the legislation on consumer protection in e-commerce.

The Digital Agenda and the National Strategy for Development support the adoption of ITC equipment for SMEs through the Innovation Fund but according to international observers the impact of this type of support (and other innovation funding programmes) is limited to a small number of beneficiaries⁴⁴.

Nonetheless, according to stakeholders interviewed, most people have basic and intermediate digital skills and only people who completed university studies or working in digital sectors show more advanced skills. The availability of resources represent the main critical issue for the ICT operators. The industry faces a deficit of highly skilled ICT professionals, which is linked to the gap between the skills developed by the education system in Albania and those needed by the labour market.

The lack of digital skills in the economy negatively affects both the demand and supply of digital products, undermining the potential of digitalisation in terms of employment and entrepreneurship. Stakeholders report that finding or training highly skilled ICT professionals is difficult and retaining them is even harder, since brain drain heavily affects this industry. One of the issues to take into consideration is that the preparation of recently graduated employees is considered barely adequate for the industry. To this extent, stakeholders believe that Universities are able to provide just a preliminary knowledge. The construction of competences derives often by internal training. The mismatch between the demand and supply of qualified competences is even more critical on businesses oriented to IT products, where the global competition require integrated solutions and competences on cloud, machine learning, artificial intelligence and internet of things applications.

A stronger dialogue between companies and national government is considered important to design training programmes addressing the needs of the labour market. Interesting applications are internet of things in agrifood, tourism IT application, as well as the digital transition in other industries, even if the lack of big operators could undermines the effective development of these opportunities.

Patenting and research is indeed deeply important but stakeholders report there are not research infrastructures and patenting is mainly carried out abroad.

From the survey main sources of competitive advantage are represented by strong distribution networks, good economies of scales and low production costs. Software pre-production activities are considered a good opportunity for the IT value chain. Main companies consider as main assets both database management and data processing capabilities. To this extent investments in equipment and systems are considered as the main challenges, in order to follow market requirements and differentiate products/services.

⁴³ According to the Report on Albania 2021, the rate of penetration is corresponding to the 15.6% of the population and 52 % of the households. The gap in fixed internet-broadband penetration between urban and rural areas is still relevant. Rural areas account for 40% of the population, but only 3.7% are connected to the internet. The mobile penetration rate at the end of 2020 was 70% compared with 61.8% at the end of 2019. In 2020, there were 2 million active users of mobile broadband. The volume of data usage during 2020 increased by 29.4% compared with 2019

⁴⁴ A relevant incentive for running business in ICT sector is related to the tax regime, as ICT sector companies benefit from a reduced profit tax rate (5% instead of a 20% nominal tax for all other sectors). According to stakeholders interviewed, running a start ups in IT sector is very convenient but in the long period are required partnerships with bigger players.

In the table 14 main findings are reported with regards to main focus of investigation.

Table 14: Information and Communication at a glance, main findings from interviews and survey

Main focus	Main findings
Value chain	<ul style="list-style-type: none"> - Large part of the industry is related to public e-services - Main IT adoption among companies is related to web sites and e-commerce application - Internet provision is depending on the development of IT connectivity infrastructures that in the rural areas is not widely available. National programs are speeding up the diffusion of IT infrastructures and IT services adoption - The lack of big operators could limit the pace of digital transformation among companies
Current competitive advantage	<ul style="list-style-type: none"> - Pre-production and additional functions are the main activities for weight in the value chain. Main companies consider as main assets a strong marketing activity, a superior database management and data processing capabilities - The lack of dedicated IT skills and the necessity to invest in equipment and systems are seen as the main weaknesses, especially for those companies oriented to oriented to IT products, suffering very much the global competition
Existing technologies	<ul style="list-style-type: none"> - Existing technologies are aligned with the basic standards and depending on the IT infrastructures; - University are considered useful for the for preliminary skills construction, not for the availability of equipment and IT labs in order to level up the competitive advantage of the system
Innovation potential	<ul style="list-style-type: none"> - Integration and inter-industries collaborations represent interesting opportunities. IoT applications in tourism and agriculture are possible examples - lack of R&D, lack of capital, lack of technology are seen as some of the main difficulties and main innovation activities conducted are to follow market requirements and differentiate products/services
COVID-19 impacts	<ul style="list-style-type: none"> - The industry hasn't been affected very much by the impact of the pandemic. - Keeping existing customers and international changes in the business model are seen as the main challenges in covid phase.

Source: own elaboration

8.6 Administrative and support service activities

“Activities of call centres and Business support services activities”

According to RISI (2019) Business Process Outsourcing (BPO) can be described as the allocation of specific business processes, usually with particular regards to routine or non-core business tasks such as customer support, to external service providers. Main services usually provided in the form of BPO, among others, regard IT, Finance & accounting, Back-office processes, E-commerce and support, Procurement, Human resource & recruitment processes.

Globally, the BPO sector has grown enormously over the last decades, driven by the transfer or offshoring of business processes from firms based in developed countries to ones based in emerging economies and due to the reduction of communication and information technologies costs (RISI, 2019).

According to Confindustria Albania (2021) in 2000 the country emerged as a leader in the Western Balkan region for BPO services, due to the proximity to European markets and the availability of cost saving resources, in particular the linguistic competences. The BPO sector has been growing since its beginning and currently employs approximately 35,000 professionals across more than 400 outsourcing companies.

According to INSTAT (2019) in the period 2010-2018, 12,029 enterprises were operating in Administrative and support service activities with 26,840 employees (average enterprise size 4,9 employees). The turnover generated was approximately equal to ALL 38,080 Million, wages equal to ALL 11,479 Million and an average wage per employee equal to ALL 427,7 thousands.

Data entry and call centres are among the top outsourced services in Albania and the market destination is represented by the European countries, especially Italy. Since the beginning, main activities have been related to post-sales, customer-care and telemarketing services and only recently to marketing and research services, IT and Software operations, as well as finance and accounting services.

Since the large diffusion worldwide of IT solutions, the way business processes are organised and outsourced have changed. Nowadays at international level the ICT-BPO sector is attempting further diversification including activities in digital processes, software design and development, blockchain technologies, cyber-security, etc. The cloud-based BPO is changing the business outsourcing process and leads several sectors to reduce costs, develop global delivery models and provide secure data access. Due to its advantages, cloud-based BPO services will be increasingly adopted in the future.

In Albania BPO sector is embracing this challenge, dealing with activities related to customer relationship management (mainly call centres providing customer support, sales and marketing services), human resource management (mainly training, payroll and recruitment services), enterprise resource management (mainly finance, accounting, procurement, logistics and data services)⁴⁵.

Being competitive at international level on such fields means investing in knowledge management processes, dealing with the transfer of more complex tasks and requiring skills, competences and specialist expertise. According to stakeholders it is necessary to have a long term perspective of investments both on technologies and competences.

Types of services carried out by knowledge process outsourcing (as an evolution of BPO based on knowledge management processes) could include legal and medical services, training, market research and business consultancy and with regards to IT, BPO involves the provision of software maintenance and higher value-added software design, programming and IT strategy development services⁴⁶.

In view of these opportunities, based on stakeholders' interviews, some Albanian operators have started to develop IT solutions for intelligent analytics and in the field of security. To this extent main trends may be represented by artificial Intelligence applied to software applications; artificial intelligence applied to robotics; digital marketing oriented towards SEO, PPC, E-commerce, etc; green technology and solutions. Similarly, robotic process automations and social media management represent other trends leading to further evolution and requirements for the provision of BPO services. With regards to these trends, innovation activities are mainly oriented to follow market

⁴⁵ According to AIDA (2020), some of the most successful BPO companies operating in Albania are Lufthansa industry solutions, Deloitte, Teleperformance, IDS, Rework, Innovaway, Alba contact, Albcall, Ernest&Young, Euroservices and Localeyes.

⁴⁶ According to RISI (2019), many emerging economies, including some of eastern Europe neighbours have progressed from the provision of basic BPO or traditional call centre focused services to the provision of higher value technology and knowledge intensive services.

According to some operators main current opportunities in international market may come from:

- Healthcare: although, healthcare represents a small part of BPO deals (low compared to other industries, such as financial services, banking, and manufacturing) the potential for growth is high due to the increasing demand for quality care.
- IT: information Technology Outsourcing is one of the most frequented outsourcing practices in the world. It includes: the use of service providers for delivering IT-reliant business processes, application services, and infrastructure solutions.
- Insurance: cost efficiency and service quality have made insurance companies explore the opportunity of not managing directly some kind of services.
- E-commerce: the emergence of e-commerce has determined the access to new markets for many companies.
- Data entry: today the market is overwhelmed by data, mainly raw data, that risk being useless if are not translated into meaningful information. Data Entry is a very time consuming service; to this extent outsourcing could save relevant operational costs.

requirements, differentiate products/services and save costs. To these aims, investments in equipment and IT systems are seen as priority.

Also in this case, quality of employment is a challenge as well as the current mismatch in the labour market where university curricula do not always comply with the requirements. In recent years, there has been a significant increase in the level of skills of young people working in BPO services, but market demands and needs are not aligned with the existing qualification. In particular stakeholders detect a lack of engineers in comparison with other Western Balkan countries. In this regard, business associations can play an important role: the ABSL association (Association of Business Service Leaders) signed a Memorandum of Cooperation with the Alexander Moisiu University in Durres to set up professional training courses of young talents.

According to some stakeholders, at the moment most of largest operators in BPO mainly operate on low added value segments, anyway the presence of some advisory multinational companies could strengthen the diffusion of IT-BPO services, and promote international cooperation. To this extent, the current European Union integration agenda has reduced uncertainties and strengthened the industry reputation. Both of them are considered important ingredients for new business opportunities.

Stakeholders believe there should be a special legal framework supporting the development of this industry, together with fiscal incentives to foreign investors and start up. One of the weakness is the lack of qualified data and information on BPO, IT Outsource and Research & Development, with specific regard to main assets, operations and potential, which may compromise the effectiveness of supporting measures.

Finally the sector also requires efficient strategic infrastructures, especially on energy and internet service provision. Up to now main challenges for the Covid phase are keeping existing customers, and detecting funds to grow the business.

In the table 15 main findings are reported with regards to main focus of investigation.

Table 15: Call centres and Business support services at a glance, main findings from interviews and survey

Main focus	Main findings
Value chain	<ul style="list-style-type: none"> - BPO industry is mainly operating in the provision of medium low knowledge services. Data entry and call centres are among the top outsourced services in Albania and the market destination is oriented towards European countries, main market is Italy. - In Albania operate also multinational actors, providing business advisory in the country. They can represent also a possible hub for international collaboration and opportunities.
Current competitive advantage	<ul style="list-style-type: none"> - Main current competitive advantage is represented by the low cost of workforce, combined with the presence of linguistic skills, the presence of an economic system operating in a consolidated way in the sector; - The cultural and geographical proximity to European markets is recognised as a positive asset; - Some companies have introduced IT application enabling intelligent analytics and the opportunity to provide added value services

Existing technologies	<ul style="list-style-type: none"> - The existing technologies correspond to the current IT requirements of the market, for a low medium level outsourced services; - Some advanced IT solution has been implemented; - Largest operators are based mainly on medium low segments, implementing technologies assuring efficiency and stability in the service provision.
Innovation potential	<ul style="list-style-type: none"> - Main innovation potential comes from the application of IT solutions; - The overcome of the mismatch between the demand a and supply of skilled workforce, a wider connectivity represent main enablers in order to introduce innovation; - IT solutions may concur in positioning in markets services with higher intensity of knowledge and added value.
COVID-19 impacts	<ul style="list-style-type: none"> - The industry has been in part affected by the impact of the pandemic, with regards to the internal organizational aspect.

Source: own elaboration

9. Conclusion and recommendations

Qualitative data corroborate the results from the Quantitative Analysis, identifying relevant domains to be further explored for the final selection of the Smart Specialisation priorities. All the sectors investigated have a great territorial relevance, as well as development opportunities. Nonetheless, they also show structural weaknesses that require investments and a strong commitment by the National Authorities.

Agriculture Fisheries and Aquaculture; Manufacturing; Energy; Accommodation and support service activities; Information and Communication; Administrative and support service activities are the selected domain that will need to be further explored in future analysis and consultations with stakeholders.

Moreover, interviewees identify **strategic infrastructures**, especially related to energy provision, digital and transport connectivity, as both an important driver of development, and as a source of uncertainty. Although much has been done in recent years and much is currently in the pipeline, infrastructure remains an important challenge for the future of Albania.

There it often a mismatch between VET and higher education curricula, on the one side, and labour market requirements, on the other side. In particular, some curricula are very slow to adapt to international standards and requirements. In the end, this implies that companies are responsible for providing training courses, which may be very difficult especially for segments with a higher knowledge intensity competition.

In general, public research is considered to be below European standards and considerably underfunded in comparison with other economies of the macro-region. This often leads to collaborative protocols between companies and universities, but mainly oriented to talent scouting and internships rather than on R&D, which often relies on foreign provision.

From both the survey and the IDIs, interesting development opportunities emerge in international megatrends such as **digital transition** (including automation of processes, reorganization of supply chains and digital transformation that can lead to new business models); and, to a wider extent **digital technologies**, (including applications of artificial intelligence, IoT sensors, data analytics, robotics); and, **ecological transition** (including intelligent use of renewable sources, energy efficiency solutions, as well as new business models aligned with international standards of sustainability).

Another challenge is related to **cross-fertilization** and integration of supply chains. Many of the stakeholders, reporting positive business experiences, operate in contexts that enhance the integration of both horizontal and vertical value chains. In the former case, there are good experiences with **sustainable tourism**, especially when integrated with quality agriculture and responsible food processing, in the latter case, successful practices can be seen in the **integration of BPO services with IT** solutions.

In general, the absence of large national industries together with low demand for consumption and investments, lead to the necessity to look outside of the country, at international partnerships and cooperation opportunities, foreign direct investments, as well as at the positive externalities coming from diaspora. With regards to these opportunities, AIDA's activities, specific sectorial regulations (as for the energy sector) as well as some specific programs (as for the diaspora) represent good starting points to unlock the growth potential, to be accompanied anyway by the implementation other policies, as currently being implemented and foreseen by the agenda for the EU accession.

As main outcomes of the qualitative analysis, a number of cross-sectorial areas could also be considered for possible investigation during the EDP. This is also because the economic situation due to pandemics on the one side, and difficulties in qualitative data collection - mainly during the summer - resulted in a low participation in the survey and a limited number of interviews, especially in consideration of the width and articulation of the domains that emerged from the quantitative analysis.

Thus, in the continuation of the activities for the definition of the S3, it is suggested to increase the number of stakeholders involved and to organise further interviews, focusing more on the way value chains are organised, on their potential and bottlenecks and in the way value chains may contribute to the sustainable development of the country.

Based on the results of the quantitative and qualitative analysis, the subsequent EDP phase can contribute very much in this sense, providing further insights on the identified areas and integrating the strengths, weaknesses, opportunities and threats outlined in the report, for an economic transformation agenda of the Country.

Blue economy

Tourism on the coast is a driving force even considering the high level of territorial concentration and high seasonality, though. Interesting connections can be strengthened with the fishing industries and yachting or cruise travel tourism. To this aim, facilities and infrastructures should be improved. Especially the infrastructural endowments related to tourist ports and services for boats should go hand by hand with the conservation and promotion of the country's cultural and natural heritage. ICT can be also a relevant driving force, linked to tourism services and the organization/operation of supply chains.

In the case of fishing and aquaculture, integration with the accommodation sector provides a promising opportunity for growth.

Table 16: Blue-economy: main SWOT points

Strengths	Weaknesses
<ul style="list-style-type: none"> • Wide coast, long periods of sunshine, and a naturalistic tourist heritage of great beauty • lively seaside tourism with good economic performances • active fishing industry • availability of skilled workforce • academic studies on the sector as well as on-going partnerships between companies and academia • Low costs compared to other neighbouring operators • The fishing industry has not been particularly impacted by the Covid-19 	<ul style="list-style-type: none"> • Need for port investments with regards to nautical services • Need for port investments with regards to cruise tourism • High seasonality of the sector • Need for investments in road and digital connectivity for inland areas connections • Lack of a fitting industry and / or nautical retrofitting industries • Need for the development of adequate digital tourist and nautical services
Opportunities	Threats
<ul style="list-style-type: none"> • Development of tourism products related to yachting and cruises • Development of tourism products linked to the inland areas and the naturalistic cultural heritage of the country • Opportunities for the integration of the fishing, catering, hotel industries 	<ul style="list-style-type: none"> • Foreign competition from other ports systems/operators in the Mediterranean • Need to preserve the coast and the attractiveness of the naturalistic cultural heritage • Tourism industry is conditioned by the current emergency linked to Covid-19

Source: own elaboration

Healthy food

The food processing industry represents another interesting opportunity. Agriculture constitutes a relevant sector for the country with a large share of GDP and employment, but with low productivity, high occupational informality and structural weaknesses related to infrastructures, employment, and phytosanitary standards, which may prevent the optimal positioning of the country in international markets.

Investments are needed to reach higher production scales and enhance an upgrade in the positioning within the supply chain. Similarly, investments in digital skills are needed, especially for adults.

In general, there is a great potential for organic production that can be oriented towards international markets and deriving from crops traditionally cultivated with a very limited use of chemical additives. In this sense, the business of healthy food and wellbeing could be optimally integrated with sustainable tourism, outdoor and agro-tourisms in inland areas.

Albania has territories of cultural and naturalistic beauty that combine perfectly with the logic of sustainable tourism, suited to wellbeing and health. On the other side, indeed, infrastructure and skills-related challenges require a longer-term perspective.

Table 17: Healthy food: main SWOT points

Strengths	Weaknesses
<ul style="list-style-type: none"> • Agriculture as an important sector partly based on sustainable crops • Naturalistic heritage of great beauty • Lively tourism sector • Educational paths in the sector and partnerships between companies and academia • Low costs of factors of production compared to other neighbouring operators • Excellent climatic conditions • Network of extension services/technological transfer organisations operating in agriculture • The sector has not been particularly impacted by the Covid-19 	<ul style="list-style-type: none"> • Weak road and digital connectivity • Small average size of agricultural enterprises and land plots • High average age of the workforce, low level of skills and high level of informality • Rural development often based on subsistence economies • Lack of a touristic offer network in rural areas.
Opportunities	Threats
<ul style="list-style-type: none"> • Tourism integrated offer related to organic food, health and sustainability • Tourism offer related to wellbeing, the naturalistic and cultural heritage of the country • Development of the agro-tourism sector • Opportunities for integration with the catering and hotel industries • Opportunities for productivity development through ICT applications 	<ul style="list-style-type: none"> • Competition from other countries of the macro region • Foreign competition/dependence related to the development of technological solutions that could reduce profit margins and the sustainability of business models

Source: own elaboration

Renewable resources energy

The national energy system is called upon to face important challenges related, on the one hand, to the process of alignment with European requirements and, on the other, to the effectiveness and efficiency of the energy distribution and transmission system. This is a kind of mandatory path that will also determine a redefinition of the energy industry and of the players operating in the sector, primarily the state-owned ones.

Within this context and independently from the process of EU alignment, Albania has territorial assets for the development of renewable resources energy that could represent a driving force for the development of the country's economy and energy system, through both foreign and national capitals. Investments on this sector are considered as enabling for most of the value chains of the country.

Most important renewable sources are indeed represented by hydroelectric energy, wind and solar energy. The development of these sectors has to deal with the curricular mismatch and the lack of some engineering profiles that seem not to be present.

Table 18: Renewable resources energy: main SWOT point

Strengths	Weaknesses
<ul style="list-style-type: none"> • Important hydroelectric energy production network • Natural and geographical features favouring solar and wind energy production • Excellent climatic conditions • Limited impact of the Covid-19 on the sector 	<ul style="list-style-type: none"> • Weak energy distribution and transmission • Need for adjustments to the energy system, liberalization of the market and state-owned operators • Mismatch in the labour market • Lack of research and academic stakeholders for effective collaboration in the field of R&D • Expected infrastructural interventions requiring a medium-long term timing;
Opportunities	Threats
<ul style="list-style-type: none"> • Highly sustainable energy production solutions, in a systemic perspective; • Strengthen the country's energy balance with inexhaustible resources 	<ul style="list-style-type: none"> • International competition based on knowledge and innovation • Energy supply affected also by the international geopolitical dynamics

Source: own elaboration

Extended BPO.

Stakeholders consider the sector as having the potential for a new value proposition.

BPO operations usually require large scales and to supply large industries. Due to the lack of large national industries, Albanian BPO services are almost totally oriented to international markets and the sector results being very depending on them, as well as on their value chain compositions and requirements. Currently the sector is very concentrated on specific geographical markets and getting more and more exposed to other countries competition, also in the macro-region.

According to stakeholders, the sector has a high growth potential although in the next future competition is expected to be higher and digital technologies could greatly compress the margins, especially in low-knowledge segments. Nonetheless, the cultural and linguistic proximity to European markets, the presence of well-established economic fabric already operating in the BPO and the presence of some international business advisory players represent positive assets.

Main sources of opportunity may derive from an extension of the BPO perimeter, exploring new markets segments more oriented to knowledge-intensive business services (such as post-sales services on robotics, automation, fintech

solutions etc.), and integrating IT solutions as a possible response to global competition due to digitalisation, platforms economies and artificial intelligence.

Table 19: Extended BPO: main SWOT points

Strengths	Weaknesses
<ul style="list-style-type: none"> • Well-developed sector relevant to GDP and youth employment • Cultural and linguistic proximity to main European markets • Low costs compared to other neighbouring operators • High numbers of IT operators • Presence of international players in the advisory business, bridging international opportunities of networking and collaboration • Positive international reputation of the industry also due to the gradual alignment to European standards also in terms of security • Marginally affected by the measures in response to covid-19 	<ul style="list-style-type: none"> • Need for investments in digital connectivity and when required on the energy network • Great mobility of the workforce • Labour market mismatch and not adequacy of the academic and VET offer • Not alignment to European standards in R&D activities • Lack of a national industry sustaining domestic value chains and territorial development dynamics • Great market concentration on specific countries and consequently relevant exposure to their economies
Opportunities	Threats
<ul style="list-style-type: none"> • Expected growth of the sector at international level • Opportunities of integrations, through ICT applications, for higher added value services • Opportunity to penetrate added value segments with a lower cost offer 	<ul style="list-style-type: none"> • Competitiveness from most advanced economies and based on technological solutions, reshoring the outsourced processes or/and reducing profit margins • Competitiveness from other economies of the macro region and based on low costs

Source: own elaboration

References

AIDA (2020) Albania Calls. A country of opportunities

Albania Investment Council (2020), Domestic production, import substitution and investment promotion in agro-processing

Bevilacqua, C. et al. (2020), Smart Innovation, System and Technologies: New Metropolitan Perspectives Knowledge Dynamics, Innovation-driven Policies Towards the Territories' Attractiveness Volume 1

Burlea-Schiopoiu, A., Ozuni, F., (2021), The Potential of Albanian Tourism Sector. Sustainability, The Geography of Sustainable Tourism, 13, 3928

Confindustria Albania (2021), Scheda Paese Albania - Settore ICT-BPO

Co-Plan / Ecorys (2017), Regional Development Programme, Albania Phase III.

Dhrami, K., Bejko, A. (2018), Albania: Towards a More Effective Financing Mechanism for Regional Development, Annual Review of Territorial Governance in Albania, I

EBRD (2020), Regional Economic Prospects: COVID-19: From Shock to Recovery.

ERBD (2021), Transition Report 2021-22: System upgrade: Delivering the Digital Dividend, Country Assessments: Albania.

ERE (2020), Annual Report, The Situation of the Power Sector and ERE Activity during 2020. Tirana

European Commission. (2019), Albania 2019 Report.

European Commission. (2021), Albania 2021 Report.

European Commission (2020), EU Candidate Countries' & Potential Candidates' Economic Quarterly (CCEQ), Technical paper 044 | October 2020.

FORAY, D. (2015) Smart Specialisation: Opportunities and Challenges for Regional Innovation Policy, Routledge

Kroll, H., et al. (2017), Mapping of economic, innovative and scientific potential in Serbia. JRC, Sevilla.

Martinovska Stojcheska, A., et al., (2021) Recent agricultural policy developments in the context of the EU approximation process in the pre-accession countries, Martinovska Stojcheska, A., KOTEVSKA, A., CIAIAN, P., Ilic, B., Pavloska-Gjorgjieska, D., Salputra G., Eds., EUR 30687 EN, Publications Office of the European Union, Luxembourg

Ministry of Finance and Economy. (2020), Covid-19 pandemic development, Albania Overview.

Ministry of Finance and Economy. (2021), Monthly fiscal statistics.

Musabelliu, M. (2020), Albania economy briefing: The costs of the pandemic for Albania, Vol. 35, No. 2 (Al) December 2020.

Nientied, P., Shutina, D. (2020), Tourism in transition, the post Covis-19 aftermath in the Western Balkans. Co-PLAN Resilience Series, 2020, 2

OECD (2019), Education at a Glance 2019: OECD Indicators, OECD Publishing, Paris,

OECD (2021) Competitiveness in South East Europe 2021: A Policy Outlook, Competitiveness and Private Sector Development, OECD Publishing, Paris

OECD. (2021), The Covid-19 crisis in Albania, OECD Publishing, Paris

European Bank for Reconstruction and Development. (2020), Strategy for Albania 2020-2025.

PwC North Macedonia (2020). ICT Sector study North Macedonia, Albania, Kosovo

Rama, L., Cabiri, Y., Polo, E., Miluka, J. (2017), Skills and Needs Analysis 2017. Report for the Albanian Government, Tirana.

RCC Int. (2020), Bregu: Tourism in the Western Balkans already feels the pinch of COVID-19 pandemic.

Shutina, D., Toto, R., Boka, M. (2015), Toward Regional Operational Programing - Assistance to Regional Development Policy Reform in Albania, SDC; GIZ.

Skreli, E., Imami, D. (2019), Medicinal and aromatic plants sector study, Albania Agribusiness Support Facility (AASF), Institute of Economics Studies and Knowledge Transfer

Zeqo, K., Zalm, G., Scholten, N. (2020), Assessing opportunities for cluster development in Albania.

ZHLLIMA (2020) Agricultural research and knowledge transfer in Western Balkan countries

Zhllima, E., Imami, D., Rama, K. (2018). Albania 's challenges of implementation of Agri-Environmental Policies in the framework of EU Accession.

Abbreviations

ALL	Albanian currency (Lek)
ATTCs	Agriculture Technology Transfer Centre
BPO	Business Process Outsourcing
CM	Critical Mass
EDP	Entrepreneurial Discovery Process
GDP	Gross Domestic Product
GVA	Gross Value Added
HEI	Higher Education Institution
ICT	Information Communication Technology
INSTAT	Albania Institute for Statistics
IoT	Internet of Things
LQ	Location Quotient
NACE	Nomenclature of Economic Activities
NUTS	Nomenclature of Territorial Units for Statistics
SDGs	Sustainable Development Goals
SME	Small Medium Enterprise

List of figures

Figure 1: Gross Value Added at current prices by economic activity NACE Rev.2 – digit 1 (average values), 2016-2020	6
Figure 2: Number of active enterprises by NUTS 2-digit region, 2016-2020	7
Figure 3: Employment structure by economic activity and by region, 2015-2018	8
Figure 4: Wages and salaries structure by economic activity and by region, 2015-2018	8
Figure 5: Export performance for agriculture products in total exports, in million ALL	9
Figure 6: Value of exports by chapter of agricultural products for period 2010-2019 (Million ALL)	10
Figure 7: Exports of aromatic and medicinal plants	11
Figure 8: Total Exports (2012-2020) (in million US\$)	16
Figure 9: Top 10 exports per product category HS Classification 2-digit), cumulative for 2012-2020 (in million US\$)	17
Figure 10: Share of innovation active enterprises & Share of enterprise with R&D activities	19
Figure 11: Enterprises that introduced a business process innovation or a product innovation	20
Figure 12: Share of enterprises that have purchased a new technology that was not used in the enterprise before	20
Figure 13: Trend in Number of scientific publications during 2010-2019	23
Figure 14: Number of national patent applications for all fields, 2010-2018	28
Figure 15: Students enrolled in Higher Education per typology of institution, 2010-2020	29
Figure 16: Number of students graduated in higher education per area (bachelor or equivalent), 2015-2020	30
Figure 17: Average number of students graduated in higher education (master`s, doctoral or equivalent) 2015-2020	30
Figure 18: Number of students enrolled in upper secondary education by structure of the education, 2010-2020	31

List of tables

Table 1 Contribution of Agriculture to GDP, 1980 – 2021	9
Table 2: Scientific Publications by fields	22
Table 3: Relevant scientific specialisation in the Western Balkans (total of publications and citations in logarithmic scale)	24
Table 4: Scientific publications by science field (2010-2019)	24
Table 5: Scientific specialisation areas in Albania for period 2010-2019	26
Table 6: Scientific specialisation areas in Albania divided into 3 periods	27
Table 7: Number of patent applications during period 2010-2018, cumulative	28
Table 8: Agriculture at a glance, main findings from interviews and survey	37
Table 9: Fisheries and aquaculture at a glance, main findings from interviews and survey	39
Table 10: Agrifood processing at a glance, main findings from interviews and survey	41
Table 11: Casting metals at a glance, main findings from interviews and survey	43
Table 12: Energy at a glance, main findings from interviews and survey	45
Table 13: Accommodation and support services at a glance, main findings from interviews and survey	48
Table 14: Information and Communication at a glance, main findings from interviews and survey	50
Table 15: Call centres and Business support services at a glance, main findings from interviews and survey	52
Table 16: Blue-economy: main SWOT points	55
Table 17: Healthy food: main SWOT points	56
Table 18: Renewable resources energy: main SWOT point	57
Table 19: Extended BPO: main SWOT points	58

Annexes

Annex 1. Summary of economic, innovation and scientific potential mapping

Economic Potential		Exports	Innovation Potential	Scientific Potential
Static (Industries NACE 3-digit)	Dynamic (Industries NACE 3-digit)	Classification (HS-4_digit)	(Industries NACE 1-digit)	Classification by fields
B06.1 Extraction of crude petroleum	C10.8 Manufacture of other food products	64 Footwear, gaiters and like, parts of such articles <i>Subsection: 6403</i> Footwear; with outer soles and uppers of rubber or plastics (excluding waterproof footwear)	J Information and Communication	Immunology and Microbiology
B07.2 Mining of non-ferrous metal ores	C13.9 Manufacture of other textiles	27 Mineral fuels, mineral oils and products of their distillation <i>Subsection: 2709</i> Petroleum oils and oils obtained from bituminous minerals; crude	K Financial and Insurance Activities	Social Science
B09.1 Support activities for petroleum and natural gas extraction	C24.5 Casting of metals	62 Articles of apparel and clothing accessories not knitted <i>Subsection: 6203</i> Suits, ensembles, jackets, blazers, trousers, bib and brace overalls, breeches and shorts (other than swimwear); men's or boys' (not knitted or crocheted)	M Professional, Scientific and Technical Activities	Economics, Econometrics and Financial
C11 Manufacture of beverages	C25.9 Manufacture of other fabricated metal products	72 Iron and steel <i>Subsection: 7214</i> Iron or non-alloy steel; bars and rods, not further worked than forged, hot-rolled, hot drawn or hot-extruded, but including those twisted after rolling		Arts and Humanities
C19.2 Manufacture of refined petroleum products	C32.4 Manufacture of games and toys	61 Articles of apparel and clothing accessories <i>Subsection: 6107</i> Underpants, briefs, nightshirts, pyjamas, bathrobes, dressing gowns and similar articles; men's or boys', knitted or crocheted		Dentistry
C23.5 Manufacture of cement, lime and plaster	E38.1 Waste collection	85 Electrical machinery and equipment and parts thereof <i>Subsection: 8503</i> Electric motors and generators; parts suitable for use solely or principally with the machines of heading no. 8501 or 8502		Medicine Agricultural and Biological Science
D35.1 Electric power generation, transmission and distribution	F42.2 Construction of utility projects	76 Aluminum and articles thereof <i>Subsection: 7604</i> Aluminum; unwrought		Environmental Science
F42.1 Construction	F43.1 Demolition	26 Ores, slag and ash		

Economic Potential		Exports	Innovation Potential	Scientific Potential
<i>Static</i> (Industries NACE 3-digit)	<i>Dynamic</i> (Industries NACE 3-digit)	<i>Classification (HS-4_digit)</i>	<i>(Industries NACE 1-digit)</i>	<i>Classification by fields</i>
of roads and railways	and site preparation	<u>Subsection: 2610</u> Chromium ores and concentrates		
J60.1 Radio broadcasting	G46.1 Wholesale on a fee or contract basis	07 Edible vegetables and certain roots <u>Subsection: 0702</u> Tomatoes; fresh or chilled		
J60.2 Television programming and broadcasting activities	G47.4 Retail sale of information and communication equipment in specialised stores	25 Salt, sulphur, earths and stone, lime and cement <u>Subsection: 2523</u> Portland cement, aluminous cement (cement fondu), slag cement, supersulphate cement and similar hydraulic cements, whether or not colored or in the form of clinkers		
J61.1 Wired telecommunications activities	I55.9 Other accommodation			
J61.3 Satellite telecommunications activities	J56.1 Restaurants and mobile food service activities			
N82.2 Activities of call centers	J61.3 Satellite telecommunications activities			
	N80.2 Security systems service activities			
	N82.2 Activities of call centers			
	N82.9 Business support service activities n.e.c.			

Annex 2: Results economic mapping

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
B6.1	Extraction of crude petroleum	1	1	1	0	1	1	1	0	1	1	0
B6.2	Extraction of natural gas	0	0	0	0	0	0	0	0	0	0	0
B7.1	Mining of iron ores	0	1	1	1	0	0	0	0	0	0	0
B7.2	Mining of non-ferrous metal ores	1	1	1	0	0	1	1	0	0	1	0
B8.1	Quarrying of stone, sand and clay	1	1	0	0	0	1	0	0	0	0	0
B8.9	Mining and quarrying n.e.c.	0	1	1	0	1	0	0	0	0	0	0
B9.1	Support activities for petroleum and natural gas extraction	1	1	1	0	0	1	1	0	0	1	0
B9.9	Support activities for other mining and quarrying	0	0	0	1	1	0	0	0	0	0	0
C10.1	Processing and preserving of meat and production of meat products	1	0	0	0	1	0	0	0	1	0	0
C10.2	Processing and preserving of fish, crustaceans and molluscs	1	1	0	0	1	1	0	0	1	0	0
C10.3	Processing and preserving of fruit and vegetables	1	0	0	0	1	0	0	0	1	0	0
C10.4	Manufacture of vegetable and animal oils and fats	0	1	0	1	0	0	0	0	0	0	0
C10.5	Manufacture of dairy products	1	0	0	0	1	0	0	0	1	0	0
C10.6	Manufacture of grain mill products, starches and starch products	1	1	0	0	0	1	0	0	0	0	0
C10.7	Manufacture of bakery and farinaceous products	1	0	0	0	1	0	0	0	1	0	0
C10.8	Manufacture of other food products	1	0	0	1	1	0	0	1	1	0	1
C10.9	Manufacture of prepared animal feeds	0	0	0	0	0	0	0	0	0	0	0
C11	Manufacture of beverages	1	1	1	0	1	1	1	0	1	1	0
C12	Manufacture of tobacco products	0	0	0	0	0	0	0	0	0	0	0
C13.1	Preparation and spinning of textile	0	0	0	1	1	0	0	0	0	0	0

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
	fibres											
C13.2	Weaving of textiles	0	0	0	1	1	0	0	0	0	0	0
C13.3	Finishing of textiles	0	0	0	1	0	0	0	0	0	0	0
C13.9	Manufacture of other textiles	1	0	0	1	1	0	0	1	1	0	1
C14.1	Manufacture of wearing apparel, except fur apparel	1	1	0	0	0	1	0	0	0	0	0
C14.2	Manufacture of articles of fur	0	0	0	0	0	0	0	0	0	0	0
C14.3	Manufacture of knitted and crocheted apparel	0	0	0	0	0	0	0	0	0	0	0
C15.1	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur	0	0	0	0	1	0	0	0	0	0	0
C15.2	Manufacture of footwear	1	1	0	0	1	1	0	0	1	0	0
C16.1	Sawmilling and planing of wood	1	0	0	0	1	0	0	0	1	0	0
C16.2	Manufacture of products of wood, cork, straw and plaiting materials	1	0	0	0	1	0	0	0	1	0	0
C17.1	Manufacture of pulp, paper and paperboard	0	0	0	0	0	0	0	0	0	0	0
C17.2	Manufacture of articles of paper and paperboard	1	1	0	0	1	1	0	0	1	0	0
C18.1	Printing and service activities related to printing	1	0	1	0	0	0	1	0	0	0	0
C18.2	Reproduction of recorded media	0	0	0	0	0	0	0	0	0	0	0
C19.1	Manufacture of coke oven products	0	0	0	0	0	0	0	0	0	0	0
C19.2	Manufacture of refined petroleum products	1	1	1	0	0	1	1	0	0	1	0
C20.1	Manufacture of basic chemicals, fertilisers and nitrogen compounds, plastics and synthetic rubber in primary forms	0	0	0	0	1	0	0	0	0	0	0
C20.2	Manufacture of pesticides and other agrochemical	0	0	0	0	0	0	0	0	0	0	0

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
	products											
C20.3	Manufacture of paints, varnishes and similar coatings, printing ink and mastics	0	0	0	0	0	0	0	0	0	0	0
C20.4	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations	0	0	0	0	0	0	0	0	0	0	0
C20.5	Manufacture of other chemical products	0	0	1	0	0	0	0	0	0	0	0
C20.6	Manufacture of man-made fibres	0	0	0	0	0	0	0	0	0	0	0
C21.1	Manufacture of basic pharmaceutical products	0	0	1	0	1	0	0	0	0	0	0
C21.2	Manufacture of pharmaceutical preparations	0	0	1	0	1	0	0	0	0	0	0
C22.1	Manufacture of rubber products	0	0	0	0	1	0	0	0	0	0	0
C22.2	Manufacture of plastic products	1	0	0	0	0	0	0	0	0	0	0
C23.1	Manufacture of glass and glass products	0	0	0	0	0	0	0	0	0	0	0
C23.2	Manufacture of refractory products	0	0	1	0	1	0	0	0	0	0	0
C23.3	Manufacture of clay building materials	1	1	0	0	1	1	0	0	1	0	0
C23.4	Manufacture of other porcelain and ceramic products	0	0	0	0	0	0	0	0	0	0	0
C23.5	Manufacture of cement, lime and plaster	1	1	1	0	0	1	1	0	0	1	0
C23.6	Manufacture of articles of concrete, cement and plaster	1	1	0	0	0	1	0	0	0	0	0
C23.7	Cutting, shaping and finishing of stone	1	1	0	0	1	1	0	0	1	0	0
C23.9	Manufacture of abrasive products and non-metallic mineral products n.e.c.	0	0	0	0	0	0	0	0	0	0	0
C24.1	Manufacture of basic iron and steel	0	0	1	0	1	0	0	0	0	0	0

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
	of ferro-alloys											
C24.2	Manufacture of tubes, pipes, hollow profiles and related fittings, of steel	0	0	1	0	1	0	0	0	0	0	0
C24.3	Manufacture of other products of first processing of steel	0	0	0	0	1	0	0	0	0	0	0
C24.4	Manufacture of basic precious and other non-ferrous metals	0	0	0	0	0	0	0	0	0	0	0
C24.5	Casting of metals	1	0	1	1	1	0	1	1	1	0	1
C25.1	Manufacture of structural metal products	1	0	0	0	1	0	0	0	1	0	0
C25.2	Manufacture of tanks, reservoirs and containers of metal	0	0	0	1	0	0	0	0	0	0	0
C25.3	Manufacture of steam generators, except central heating hot water boilers	0	0	0	1	0	0	0	0	0	0	0
C25.4	Manufacture of weapons and ammunition	0	0	0	0	0	0	0	0	0	0	0
C25.5	Forging, pressing, stamping and roll-forming of metal; powder metallurgy	0	0	0	0	0	0	0	0	0	0	0
C25.6	Treatment and coating of metals; machining	1	0	0	0	1	0	0	0	1	0	0
C25.7	Manufacture of cutlery, tools and general hardware	0	0	0	0	0	0	0	0	0	0	0
C25.9	Manufacture of other fabricated metal products	1	0	0	1	1	0	0	1	1	0	1
C26.1	Manufacture of electronic components and boards	0	0	1	0	0	0	0	0	0	0	0
C26.2	Manufacture of computer and peripheral equipment	0	0	0	0	0	0	0	0	0	0	0
C26.3	Manufacture of communication equipment	0	1	0	0	0	0	0	0	0	0	0
C26.4	Manufacture of consumer	0	0	0	0	0	0	0	0	0	0	0

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
	electronics											
C26.5	Manufacture of instruments and appliances for measuring, testing and navigation; watches and clocks	0	0	0	0	0	0	0	0	0	0	0
C26.6	Manufacture of irradiation, electromedical and electrotherapeutic equipment	0	0	1	0	0	0	0	0	0	0	0
C26.7	Manufacture of optical instruments and photographic equipment	0	0	0	0	1	0	0	0	0	0	0
C27.1	Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus	0	0	1	0	0	0	0	0	0	0	0
C27.2	Manufacture of batteries and accumulators	0	0	0	0	0	0	0	0	0	0	0
C27.3	Manufacture of wiring and wiring devices	0	0	0	1	0	0	0	0	0	0	0
C27.4	Manufacture of electric lighting equipment	0	0	0	1	1	0	0	0	0	0	0
C27.5	Manufacture of domestic appliances	0	0	0	0	0	0	0	0	0	0	0
C27.9	Manufacture of other electrical equipment	0	0	1	1	1	0	0	0	0	0	0
C28.1	Manufacture of general-purpose machinery	0	0	0	0	1	0	0	0	0	0	0
C28.2	Manufacture of other general-purpose machinery	0	0	0	1	0	0	0	0	0	0	0
C28.4	Manufacture of metal forming machinery and machine tools	0	1	0	0	0	0	0	0	0	0	0
C28.9	Manufacture of other special-purpose machinery	0	0	0	0	0	0	0	0	0	0	0
C29.3	Manufacture of parts and accessories for motor vehicles	0	0	1	1	1	0	0	0	0	0	0

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
C30.1	Building of ships and boats	0	0	0	0	1	0	0	0	0	0	0
C30.9	Manufacture of transport equipment n.e.c	0	0	0	0	0	0	0	0	0	0	0
C31	Manufacture of furniture	1	0	0	0	1	0	0	0	1	0	0
C32.1	Manufacture of jewellery, bijouterie and related articles	0	0	0	0	1	0	0	0	0	0	0
C32.3	Manufacture of sports goods	0	0	0	0	0	0	0	0	0	0	0
C32.4	Manufacture of games and toys	1	1	0	1	1	1	0	1	1	0	1
C32.5	Manufacture of medical and dental instruments and supplies	0	0	0	0	1	0	0	0	0	0	0
C32.9	Manufacturing n.e.c.	0	0	0	0	0	0	0	0	0	0	0
C33.1	Repair of fabricated metal products, machinery and equipment	1	0	0	0	0	0	0	0	0	0	0
C33.2	Installation of industrial machinery and equipment	0	0	1	1	1	0	0	0	0	0	0
D35.1	Electric power generation, transmission and distribution	1	1	1	0	1	1	1	0	1	1	0
D35.2	Manufacture of gas; distribution of gaseous fuels through mains	0	0	1	1	1	0	0	0	0	0	0
D35.3	Steam and air conditioning supply	0	1	0	0	0	0	0	0	0	0	0
E36	Water collection, treatment and supply	1	1	0	0	0	1	0	0	0	0	0
E37	Sewerage	1	0	0	0	0	0	0	0	0	0	0
E38.1	Waste collection	1	1	0	1	1	1	0	1	1	0	1
E38.2	Waste treatment and disposal	0	0	0	1	0	0	0	0	0	0	0
E38.3	Materials recovery	1	0	0	1	0	0	0	1	0	0	0
E39	Remediation activities and other waste management services	0	0	0	1	1	0	0	0	0	0	0
F41.1	Development of building projects	1	0	1	0	0	0	1	0	0	0	0
F41.2	Construction of residential and non-residential buildings	1	1	0	0	0	1	0	0	0	0	0

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
F42.1	Construction of roads and railways	1	1	1	0	0	1	1	0	0	1	0
F42.2	Construction of utility projects	1	0	1	1	1	0	1	1	1	0	1
F42.9	Construction of other civil engineering projects	1	0	1	1	0	0	1	1	0	0	0
F43.1	Demolition and site preparation	1	0	1	1	1	0	1	1	1	0	1
F43.2	Electrical, plumbing and other construction installation activities	1	0	0	0	0	0	0	0	0	0	0
F43.3	Building completion and finishing	1	0	0	1	0	0	0	1	0	0	0
F43.9	Other specialised construction activities	1	0	0	0	0	0	0	0	0	0	0
G45.1	Sale of motor vehicles	1	0	1	0	0	0	1	0	0	0	0
G45.2	Maintenance and repair of motor vehicles	1	0	0	1	0	0	0	1	0	0	0
G45.3	Sale of motor vehicle parts and accessories	1	0	0	0	1	0	0	0	1	0	0
G45.4	Sale, maintenance and repair of motorcycles and related parts and accessories	0	0	0	1	1	0	0	0	0	0	0
G46.1	Wholesale on a fee or contract basis	1	0	0	1	1	0	0	1	1	0	1
G46.2	Wholesale of agricultural raw materials and live animals	1	0	0	0	0	0	0	0	0	0	0
G46.3	Wholesale of food, beverages and tobacco	1	1	0	0	0	1	0	0	0	0	0
G46.4	Wholesale of household goods	1	0	1	0	1	0	1	0	1	0	0
G46.5	Wholesale of information and communication equipment	1	0	1	0	1	0	1	0	1	0	0
G46.6	Wholesale of other machinery, equipment and supplies	1	0	0	1	0	0	0	1	0	0	0
G46.7	Other specialised wholesale	1	1	0	0	0	1	0	0	0	0	0
G46.9	Non-specialised	1	1	0	1	0	1	0	1	0	0	0

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
	wholesale trade											
G47.1	Retail sale in non-specialised stores	1	0	0	0	1	0	0	0	1	0	0
G47.2	Retail sale of food, beverages and tobacco in specialised stores	1	1	0	0	1	1	0	0	1	0	0
G47.3	Retail sale of automotive fuel in specialised stores	1	1	0	0	0	1	0	0	0	0	0
G47.4	Retail sale of information and communication equipment in specialised stores	1	0	0	1	1	0	0	1	1	0	1
G47.5	Retail sale of other household equipment in specialised stores	1	1	0	0	1	1	0	0	1	0	0
G47.6	Retail sale of cultural and recreation goods in specialised stores	1	0	0	0	1	0	0	0	1	0	0
G47.7	Retail sale of other goods in specialised stores	1	0	0	0	1	0	0	0	1	0	0
G47.8	Retail sale via stalls and markets	1	1	0	0	1	1	0	0	1	0	0
G47.9	Retail trade not in stores, stalls or markets	1	0	0	0	1	0	0	0	1	0	0
H49.1	Passenger rail transport, interurban	1	0	0	0	0	0	0	0	0	0	0
H49.2	Freight rail transport	0	0	0	0	0	0	0	0	0	0	0
H49.3	Other passenger land transport	1	1	0	0	1	1	0	0	1	0	0
H49.4	Freight transport by road and removal services	1	0	0	0	1	0	0	0	1	0	0
H49.5	Transport via pipeline	0	0	0	0	0	0	0	0	0	0	0
H50.1	Sea and coastal passenger water transport	0	0	1	0	0	0	0	0	0	0	0
H50.2	Sea and coastal freight water transport	0	0	1	0	1	0	0	0	0	0	0
H50.3	Inland passenger water transport	0	0	0	1	0	0	0	0	0	0	0
H50.4	Inland freight water transport	0	0	0	1	1	0	0	0	0	0	0
H51.1	Passenger air transport	0	0	1	0	0	0	0	0	0	0	0

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
H51.2	Freight air transport and space transport	0	0	0	0	0	0	0	0	0	0	0
H52.1	Warehousing and storage	0	0	1	0	0	0	0	0	0	0	0
H52.2	Support activities for transportation	1	0	1	0	0	0	1	0	0	0	0
H53.1	Postal activities under universal service obligation	1	0	0	0	1	0	0	0	1	0	0
H53.2	Other postal and courier activities	0	0	1	0	0	0	0	0	0	0	0
I55.1	Hotels and similar accommodation	1	0	0	1	0	0	0	1	0	0	0
I55.2	Holiday and other short-stay accommodation	0	0	0	1	1	0	0	0	0	0	0
I55.3	Camping grounds, recreational vehicle parks and trailer parks	0	0	0	1	0	0	0	0	0	0	0
I55.9	Other accommodation	1	1	0	1	1	1	0	1	1	0	1
I56.1	Restaurants and mobile food service activities	1	0	0	1	1	0	0	1	1	0	1
I56.2	Event catering and other food service activities	1	0	0	0	0	0	0	0	0	0	0
I56.3	Beverage serving activities	1	1	0	0	1	1	0	0	1	0	0
J58.1	Publishing of books, periodicals and other publishing activities	1	0	0	0	0	0	0	0	0	0	0
J58.2	Software publishing	0	0	1	0	0	0	0	0	0	0	0
J59.1	Motion picture, video and television programme activities	1	0	0	0	0	0	0	0	0	0	0
J59.2	Sound recording and music publishing activities	0	0	0	1	0	0	0	0	0	0	0
J60.1	Radio broadcasting	1	1	1	0	0	1	1	0	0	1	0
J60.2	Television programming and broadcasting activities	1	1	1	0	1	1	1	0	1	1	0
J61.1	Wired telecommunications activities	1	1	1	0	0	1	1	0	0	1	0
J61.2	Wireless telecommunications activities	1	0	1	0	0	0	1	0	0	0	0
J61.3	Satellite telecommunications	1	1	1	1	1	1	1	1	1		1

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
	activities											
J61.9	Other telecommunications activities	1	1	0	0	1	1	0	0	1	0	0
J62	Computer programming, consultancy and related activities	1	0	1	1	0	0	1	1	0	0	0
J63.1	Data processing, hosting and related activities; web portals	0	0	0	1	1	0	0	0	0	0	0
J63.9	Other information service activities	0	0	0	1	1	0	0	0	0	0	0
L68.1	Buying and selling of own real estate	0	0	0	0	0	0	0	0	0	0	0
L68.2	Rental and operating of own or leased real estate	1	0	1	0	1	0	1	0	1	0	0
L68.3	Real estate activities on a fee or contract basis	1	0	0	0	0	0	0	0	0	0	0
M69.1	Legal activities	1	0	0	1	0	0	0	1	0	0	0
M69.2	Accounting, bookkeeping and auditing activities; tax consultancy	1	0	1	0	0	0	1	0	0	0	0
M70.1	Activities of head offices	0	0	1	1	1	0	0	0	0	0	0
M70.2	Management consultancy activities	1	0	1	1	0	0	1	1	0	0	0
M71.1	Architectural and engineering activities and related technical consultancy	1	0	1	0	0	0	1	0	0	0	0
M71.2	Technical testing and analysis	1	0	1	1	0	0	1	1	0	0	0
M72.1	Research and experimental development on natural sciences and engineering	1	0	1	0	1	0	1	0	1	0	0
M72.2	Research and experimental development on social sciences and humanities	0	0	1	0	1	0	0	0	0	0	0
M73.1	Advertising	1	0	1	1	0	0	1	1	0	0	0
M73.2	Market research and public opinion polling	1	0	0	0	1	0	0	0	1	0	0
M74.1	Specialised design activities	0	0	0	0	0	0	0	0	0	0	0

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
M74.2	Photographic activities	1	1	0	0	1	1	0	0	1	0	0
M74.3	Translation and interpretation activities	0	1	0	1	1	0	0	0	0	0	0
M74.9	Other professional, scientific and technical activities n.e.c.	0	0	1	1	1	0	0	0	0	0	0
M75	Veterinary activities	0	0	0	1	1	0	0	0	0	0	0
N77.1	Rental and leasing of motor vehicles	0	0	0	1	0	0	0	0	0	0	0
N77.2	Rental and leasing of personal and household goods	0	0	0	0	1	0	0	0	0	0	0
N77.3	Rental and leasing of other machinery, equipment and tangible goods	0	0	0	0	0	0	0	0	0	0	0
N77.4	Leasing of intellectual property and similar products, except copyrighted works	0	0	1	0	0	0	0	0	0	0	0
N78.1	Activities of employment placement agencies	0	0	0	1	0	0	0	0	0	0	0
N78.3	Other human resources provision	0	0	1	0	0	0	0	0	0	0	0
N79.1	Travel agency and tour operator activities	1	1	0	0	0	1	0	0	0	0	0
N79.9	Other reservation service and related activities	0	0	0	0	1	0	0	0	0	0	0
N80.1	Private security activities	1	1	0	0	1	1	0	0	1	0	0
N80.2	Security systems service activities	1	0	0	1	1	0	0	1	1	0	1
N80.3	Investigation activities	0	1	0	0	0	0	0	0	0	0	0
N81.1	Combined facilities support activities	0	0	0	0	0	0	0	0	0	0	0
N81.2	Cleaning activities	1	0	0	1	0	0	0	1	0	0	0
N81.3	Landscape service activities	0	0	0	0	1	0	0	0	0	0	0
N82.1	Office administrative and support activities	0	0	1	1	1	0	0	0	0	0	0
N82.2	Activities of call centres	1	1	1	1	1	1	1	1	1	1	1
N82.3	Organisation of conventions and trade shows	0	0	0	0	0	0	0	0	0	0	0
N82.9	Business support	1	0	1	1	1	0	1	1	1	0	1

		Size	Employment	Wages	Employment Trend	Wages trend	Employment & Size	Wages & Size	Employment Trend & Size	Wages trend & Size	STATIC Employment & Wages & Size	TREND Employment & Wages & Size
Codes	Group-Description of economic activities	104	50	60	62	94	42	33	30	55	13	16
	service activities n.e.c.											
N95.1	Repair of computers and communication equipment	1	1	0	1	0	1	0	1	0	0	0
N95.2	Repair of personal and household goods	1	1	0	0	1	1	0	0	1	0	0

Annex 3 - Methodological guidance for the qualitative analysis

Introduction

Smart Specialisation Strategy (S3) represents the agenda of economic transformation of a territory and the capacity of an economic system to foster new paths of development on the basis of the existing local endowments of resources (Foray, 2015)⁴⁷.

In 2017, the JRC launched a project on "Smart specialisation and organisational development in enlargement and H2020 associated countries" now continued in JRC Work Programme with the aim of analysing and supporting the strategic management capabilities in the EU Enlargement and Neighbourhood Region. In 2019 DG NEAR and JRC have signed an Administrative Arrangement (AA), concerning the development of S3 in the Western Balkan region and supporting national governments in the region for that aim.

The Republic of Albania is involved in the above mentioned activities and currently conducting initiatives agreed with the European Commission for the definition of the National S3. These activities are part of the EU accession negotiations within the EU Enlargement Policy, with regards to Albania. More precisely, within this framework, Albania has recently carried out a quantitative analysis on the national innovation strengths and potential, with the identification of areas to be further investigated through a qualitative analysis, as a contribution to the S3 design process.

The quantitative mapping explored the economic, innovative and scientific potential of the Country and led to the identification of domains likely to provide large increase in wages/employment from research and innovation investments, as well as where investments could synergize with existing/planned development programmes. In order to support the national authorities in the follow-up activities, a further insight on the innovation potential is required, complementing the results of the quantitative mapping and providing the necessary data/information to approach the subsequent steps of entrepreneurial discovery process (EDP).

In particular, starting from the results of the quantitative analysis, the qualitative analysis is expected to characterize the detected domains, providing details on "dynamics behind the figures", collecting non-numerical data on intangible factors, exploring current and future perspectives.

The domains emerged from the quantitative analysis in Albania are:

- (NACE A) Agriculture, forestry and fishing: (A01.6) Support activities to agriculture and post-harvest crop activities; (A03.21) Marine aquaculture; (A03.1) Fishing;
- (NACE C) Manufacturing: (C10.8) Manufacture of other food products; (C24.5) Casting of metals;
- (NACE I) Accommodation and support service activities: (I55.9) Other accommodation;
- (NACE J) Information and Communication: (J61.3) Satellite telecommunications activities; (J62.09) Other Information technology;
- (NACE N) Administrative and support service activities: (N82.2) Activities of call centers; (N82.9) Business support services activities.

The aim of this document is to provide a methodological guidance on the way qualitative analysis will be carried out, with the specification of the information required and the operational indication to collect data/information.

To this aim the present document describes (1) the outline and the structure of the analysis; (2) the methods used, the list of other sources and the expected results; (3) the timeframe and (4) the documentation used during the implementation of the analysis. The document is then completed with a (5) proposal of index for the analysis report.

Outline and Structure of the analysis

⁴⁷ Since 2014, S3 has been detected as one of the main theoretical framework for innovation policies in EU, addressing the allocation of the financial resources at national and regional level, related to EU Cohesion Policy for 2014-2020. For the Programming period 2021-2027 Members States are proceeding in updating their strategies and enforcing the detected governance structures.

The outline of the qualitative analysis is based on a sequence of steps leading from the results of the quantitative analysis, providing in-depth insights for each selected area and concluding with remarks useful for the next phase of the EDP.

The analysis foresees four steps:

- 1) Context and general overview of the national economic system. After a preliminary description of the legal framework in which the qualitative analysis is carried out, a general overview of the national economic and innovation system is represented, starting from main evidences coming from studies and analyses conducted by international institutes/organisation and reporting main findings coming from the quantitative analysis.
- 2) Main findings deriving from the quantitative analysis on the selected domains. Main information and data collected in the quantitative phase on the selected domains will be described. Motivation on the domains selection will be reported.
- 3) Qualitative analysis design, implementation and results. After the description of the methodological issues regarding the qualitative analysis design and implementation, an in-depth representation of the selected domains will be provided. On the basis of the collected data, issues likely to be addressed regard:
 - o value chain;
 - o current competitive advantage;
 - o existing technologies;
 - o existing competences;
 - o Innovation potential;
 - o COVID-19 impacts and challenges.
- 4) Qualitative analysis findings in a wider perspective. Main evidences emerged from the qualitative phase on each domain will be presented on a wider perspective. Linkages among sectors, asymmetries and cross-cutting opportunities will be highlighted. Conclusive remarks will be drawn on:
 - a. main strengths and challenges in terms of competitive advantage sources and endowments, as well as in terms of participation to international value chain and of macro-region positioning;
 - b. innovation potential in terms of future trends, regional distribution of relevant stakeholders and cross-sectorial innovation opportunities;
 - c. main hints useful for the subsequent phase of EDP and territorial participation.

The logic framework of the qualitative analysis can be outlined according to the scheme reported below.



During the qualitative phase, main contribution in terms of data collection will come from a survey and in-depth interviews (IDIs) addressed to Albanian representatives of companies, researchers, academics, Government officials, business organizations.

According to the logic framework outlined, the analysis will follow the structure described below.

Qualitative analysis outline	Qualitative analysis structure
<i>General overview on the basis of existing studies and quantitative analysis</i>	<p>- <u>Introduction and main goals of the analysis</u>. This section aims at providing a general framework of the context in which the analysis is carried out; main features on the S3 paradigm will be mentioned and the general aspects of the document will be presented.</p> <p>- <u>Qualitative analysis as a step of the S3 design process in Albania</u>. This section aims at providing a synthetic picture of the strategy design process, describing the analysis as an intermediate step, following the quantitative analysis and preliminary to the EDP phase.</p>

	- <u>Summary of quantitative analysis</u> . This section aims at providing a short description on the quantitative analysis conducted, providing most relevant findings related to the general context and including results from other sources
<i>Sectorial specificities on the basis of the quantitative analysis</i>	- <u>Detected areas subject to qualitative analysis</u> . This section will focus on each selected domain. Specific boxes will be prepared with the results of the quantitative analysis on the identified domains.
<i>Sectorial specificities on the basis of the qualitative analysis</i>	- <u>Methodological framework for qualitative insights</u> . This section aims at describing the methodological aspects related to qualitative data collection (survey and IDIs), explaining main goals, methods used, logic framework and expected results. - <u>Implementation: data collection</u> . This section aims at describing the way data collection activities will have been carried out: organizational and operational aspects, the contents treated timeframe and participation results. - <u>Data analysis per area</u> . For each selected area, a representation of the information collected with the survey and IDIs will be provided, highlighting specific aspects related to "value chain", "current competitive advantage", "existing technologies", "existing competences", "Innovation potential" and "Covid-19 impacts and challenges"
<i>Cross-cutting overview on the basis of the evidences collected in the qualitative phases</i>	- <u>Conclusion and recommendations</u> . This section will provide overall considerations on the emerged results on a cross-cutting perspective. Possible operational indications, related to the subsequent EDP phase, may be provided.

Methods used, list of other sources to be consulted and expected results

This section provides information on qualitative data collection, in particular specifies methods to be used and suggests operational hints for a large and qualified participation.

Information/data collection is mainly implemented through two tools:

- c) a survey,
- d) in-depth interviews (IDIs) for each selected domain.

The above mentioned activities are carried out directly by a local expert, responsible for preparing the list of stakeholders, the list of questions and the implementation of both survey and IDIs. The local expert will then return the results of the survey and the interviews carried out, according to the terms of reference defined by the JRC. The results emerging from the survey and interviews are used by an international expert in charge of defining the methodological aspects of the analysis and finalising the qualitative report, in line with the terms of reference defined by the JRC. The effectiveness of the activities is ensured by the collaboration between the local expert and the international expert and by the operational link with the JRC and the Albanian government.

Additionally, in order to collect complementary information, other sources of information will be taken into consideration.

The survey and the IDIs are considered particularly useful not only in order to provide information that generally are not detected by official statistics and quantitative tools, but also to provide information on the expected impacts from the COVID-19 outbreak, that technically may not be yet available in official data, since currently on-going.

a) Survey

The survey has the objective to provide better description and justification of the selected domains, in terms of value chains positioning, existing critical mass, future potential, cross-innovation opportunities and competitiveness at macro-regional level.

The survey will be sent to relevant stakeholders belonging to the selected domains and oriented to bring out both:

- main characteristics regarding their organizations;
- main features regarding the sector they belong to.

In order to avoid fragmentation and facilitate a large participation the questionnaire should be composed almost only with closed-ended questions. The selection of recipients will be based on a purposive approach, according to the domains selected, the territorial distribution and the recipients profile. The active participation should be promoted also by the government offices, as well as by business organisations and main relevant stakeholders.

Main issues to be faced with the survey are related to:

- A. *Value chain*: current strengths, weaknesses, opportunities and threats; Albanian positioning within the value chain; level of internationalisation; role of multinational enterprises and the relevance of foreign direct investments;
- B. *Current competitive advantage*: sources of competitive advantage, the relevance and availability of knowledge-intensive services for value creation; main challenges deriving from digitalisation and environmental sustainability; the relevance of intellectual property right in the domain, main intellectual property activities conducted (trademarks, patents...)
- C. *Existing technologies*: main technologies applied and the extent to which main players use them (to follow market requirements, to save costs, to differentiate products/services, to innovate..); main skills and competences required and their actual availability; capacity of the education system to provide required skills and competences; the relevance of human capital migration for the selected domains;
- D. *Innovation potential*: innovation challenges and bottlenecks in the development/application of innovative processes; dynamism in terms of start-up creation and companies grow;
- E. *COVID-19 impacts and challenges*: expected impacts (employment, wages, innovation, research, exports, value chains, foreign direct investments and other relevant economic indicators...); main challenges (finance, competences, international changes in the business model, new competitors...).

The survey will be launched electronically and recipients are expected to participate through a web-portal. Intelligent analytics tools should be available in order to have survey results in a short time. A brief description on S3 framework should be provided, describing S3 as a paradigm for innovation policies, but also as a part of the current EU accession negotiations for the Country.

Moreover the survey should be introduced as an attempt to encounter territorial perspectives and activate a dialogue with the territory. The completion of the questionnaire should be described as a step of a wider process, leading to better designed policies. To this aim the subsequent phase of EDP should be mentioned.

b) In-Depth Interviews (IDIs)

IDIs aim at providing detailed information on main challenges for the selected domains, unveiling specific features of value chains, current competitive advantages, relevant technologies and competences, opportunities for innovation potential.

IDIs will be addressed to relevant stakeholders from companies, academia, research organisations, governmental organisations and belonging to the selected domains.

Interviews will be oriented to bring out main features of the sector they belong to.

Issues to be faced with the IDIs regard the same topics addressed with the survey, but with a deeper level of detail. They are related to:

- A. Value chain:
 - a. main product/services realised in Albania and market destination (local/national/international..);
 - b. main Albanian stakeholders, their relevance and role at territorial level;
 - c. current strengths, weaknesses, opportunities and threats;
 - d. the evolution of economic sectors in recent years (main drivers);
 - e. Albanian positioning of the value chain (is the value chain international? where is the largest part of the value created? and which role has Albania?);
 - f. territorial concentration of sector-related companies/organisations;
 - g. role of multinational enterprises and the relevance of foreign direct investments;
- B. Current competitive advantage:

- a. sources of competitive advantage and their evolution in recent years;
 - b. the relevance and availability of knowledge intensive services for the value creation;
 - c. Current competitive advantage and main challenges deriving from digitalisation and environmental sustainability;
 - d. the relevance of intellectual property right in the domain, main intellectual property activities conducted (trademarks, patents...)
 - e. main differences between Albania and other countries in the macro-region with regards to the domain selected;
- C. Existing technologies:
- a. main technologies applied and to what extent main players use them (to follow market requirements, to save costs, to differentiate products/services, to innovate..);
 - b. main research and innovation activities/projects;
 - c. main technological infrastructures and why are relevant for the domain;
- D. Existing competences:
- a. main skills and competences required and their actual availability;
 - b. main skills and competences required by competitors in the macro-region;
 - c. capacity of the education system to provide required skills and competences;
 - d. the relevance of the human capital migration for the selected domain;
- E. Innovation potential:
- a. innovation challenges and bottlenecks in the development/application of innovative processes;
 - b. dynamism in terms of start-up creation and companies grow;
 - c. main opportunities of innovation scale-up;
 - d. main cross-sectorial collaboration;
 - e. main research centers/university collaboration opportunities;
 - f. main opportunities of cross-sectorial innovation, main similarities with other sectors in terms of competences, technologies and market;
- F. COVID-19 impacts and challenges:
- a. the expected impacts of the economic crisis caused by the COVID-19 pandemic on the preliminary priority areas in Albania, in terms of employment, wages, innovation, research, exports, value chains, foreign direct investments and other relevant economic indicators;
 - b. main upcoming challenges and needs affecting the potential of development of the selected domains in Albania, in terms of finance to investments, required competences, changes in global value chains, comparative advantage dynamics in the macro-region and other relevant dynamics.

As mentioned interviews will be conducted to relevant stakeholder (between 10 and 15 per selected domain) and will follow a semi-structured approach: the local expert will define a predetermined list of questions or topics for discussion, but allows the conversation to evolve, based on how the participant responds.

The interview will be conducted face to face (with remote IT solutions) and will provide information on individual opinions, experiences and at least should last 90 minutes each.

IDIs should be oriented to the verification/confirmation of the main results coming for each selected domain from the quantitative analysis.

When contacting interviewees, the general aim of the analysis should be anticipated, as well as main quantitative results regarding the domain and the macro-topics to be discussed during the interview.

The main operational objective of interview is to have relevant stakeholders outlook on future trends. For an effective exploitation of data collection activities, IDIs should be subsequent to the survey, so that fragmentation, lack of data and incoherencies on survey findings could be faced with relevant stakeholders. In the opposite, in case of strong evidences from the survey, the interview could allow a confirmation/verification also from the perspective of relevant stakeholder.

The local expert is expected to define the questionnaires, take notes and annotations during the interview and return the outputs to JRC and to the international expert.

On the basis of collected data, main results from survey and interviews will be categorised for each selected domain and reported in the qualitative analysis. Possible regularities, linkages or causal relationships among sectors will be highlighted and described in the final Report.

Other sources and expected results

In addition to the evidence coming from quantitative analysis and the results of the survey and the IDIs, other sources of information will be taken into consideration:

- A. Recent Communications on EU Enlargement Policy with regards to Albania in order to contextualize the process of S3 formation as a step of the accession negotiation with regards to the chapter science and research;
- B. Statistics from Eurostat and the Statistical Authorities in Albania, eventually able to provide complementary information to main findings from quantitative analysis;
- C. OECD Reviews on Education in Albania, eventually able to provide complementary information to main findings on education from quantitative analysis;
- D. UN Country Analysis and Progress Report, both eventually able to provide complementary information on the socio-economic context and possible conclusive remarks on UN SDGs;
- E. World Bank country reports to provide complementary information regarding the socio economic context.

Other sources that may be necessary will be detected during the implementation phase of the qualitative analysis. On ordinary basis other sources of information that may occur are detected by the international expert. The local expert, Albanian Governmental, Offices and the JRC may indicate additional sources and specific publications, complementary to those mentioned above.

Annex 4 - Questionnaires

A – Questionnaires for the survey

Businesses

1. Email Address
2. Name of the company
3. Location
4. Main field of activity (based on NACE-rev 2 classification)
5. Number of employees
6. Time of activity
7. Does your company operate locally or nationally?
8. Your company falls into one or more of the following categories
9. Does your company also carry out research and development activities?
10. If "yes", how many employees are involved in research and development activities?
11. Do you have a dedicated budget for research and development activities?
12. Please specify the field in which the company carries out research and development activities
13. Which are, in your opinion, the main strengths of the sector?
14. What about the main weaknesses of the sector? Which are?
15. Where is your value chain based?
16. Positioning of your company in the Albanian market is mainly determined by:
17. Which are 2 main activities with the greatest weight within the Value Chain?
18. Which are two main sources of competitive advantage of your company?
19. The main challenge regarding digitalization of processes, in your opinion is related to
20. Has your company taken environmental protection initiatives in the last 12 months? (for example, reducing energy consumption, fuels, reducing pollution from waste, replacing recycled products, etc)
21. In the last 5 years or since you founded the company, has your company introduced new or significantly improved
22. In the last 5 years or since you founded the company, has your company acquired patents?
23. If yes, specify the number
 - a) Improving organizational strategies and increasing labor productivity
 - b) Use of external expertise for skills development
 - c) Improving the competitiveness of enterprises by entering new markets and diversifying the range of products / services
 - d) Facilitating the exchange of experiences, good practices and cooperation between companies
 - e) Focus on niche products
 - f) Alignment with environmental standards
 - g) Introduction of new technologies for the production of high value-added goods and services

h) Acquisition of patents and certification of products

i) Improving the capacity to prevent and manage risks and adapt to market dynamics

24. Does your company use on-site computer systems to manage customer-related business activities such as sales, billing, etc.? (Computer systems can be Laptop, Palmtop, Handheld PC, etc.)

25. Do you plan to invest more in technology in the next three years?

26. If (YES), what % of profit is planned to be invested in technology?

27. For which of the following issues does your company uses technology?

28. Do you have diaspora employees in your company?

29. If YES, how much?

30. In your opinion, where is the importance of engaging human capital diaspora for the business environment?"

a) To be competitive on the markets is closely related to the level of education of the workforce in the company

b) Offers for practical work experience - a key element in education and training at all levels

c) Employers need to provide opportunities for prospective employees

d) Cooperation with companies must be enforceable

e) Academia and training centers should be mediators

31. How do you appreciate the collaboration so far between academia and the private sector in the field of research and development?

32. Do you have access to funding programs which allows you to introduce product innovation (goods or services), process, marketing or organizational innovation?

33. If yes, what kind of support did you received?

34. Do you collaborate with companies from other industries or within the same industry?

35. If YES, with which industry?

36. In your opinion, what makes the concept of inter-industry collaboration successful?

37. If you have an inter-industrial collaboration, in what form are you involved?

38. Which are the main reasons for creating an inter-industry collaboration?

39. In the last 5 years or since you founded the company, has your company purchased protected industrial models and designs? Specify the number.

40. Could you identify the state measures that could help your company grow?

a) Lack of own funds

b) Lack of funding from other sources

c) Too high innovation costs

d) Lack of qualified personnel

e) Lack of information on technology

f) Lack of information on market demand for products or services

g) Difficulties in finding cooperation partners for innovation (e.g., for product and process development or for marketing partnerships)

h) The market is dominated by other established companies

- i) Uncertainty of demand for innovative products and services
- j) Innovation is not needed as the sector is already innovative
- k) Lack of demand for innovations (reasons not to innovate)
- l) Legislation, regulations, standards
- m) Other, please list and classify (e.g., copyright issue, etc.)

- Employment
- Wages
- Turnover
- R&D
- Exports
- Value chains
- FDI
- Technologies

41. Main challenges post COVID19 in your company"

CSOs

1. Name of the organization represented
2. Location
3. Which of the following areas do you consider your CSO belongs to?
4. How many staff/volunteers does your organization have?
5. On a scale of 1 to 5, where "1" is the least and "5" the most, how much do you think your organization addresses social challenges?
6. What is the geographical coverage of the CSO you are working at?
7. Main area of focus of your organization?
8. What are main factors contributing to the organization's financial and operational sustainability?
9. Did your organization receive funding from any of the following sources in the last year? (If YES, choose)
10. If YES, was this funding from
11. On a scale of 1 to 5, where "1" is the least and "5" the most, how good is your organization's collaboration with the private sector? (Please tick your opinion on the scale.)
12. Which are the advantages of collaborations with private sector?
13. On a scale of "1 to 5" where "1" represents the least and "5" the most, how good do you think your organization's collaboration with public institutions - universities, research centers, institutes of research, local authorities? (Please tick your opinion on the scale.)
14. How often you involve in policy dialogue with the government?
15. On a scale of "1 to 5" where "1" is the least and "5" the most, how much opportunities do you think there is for the development of partnerships to exploit the innovative potential of the region? (Please tick your opinion on the scale.)
16. Which is the main program category of technology that your organization intends to use more in the future?
17. What is the main barrier to using technology in your organization?

Government

1. Name of the institution represented
2. City / county
3. How would you assess the regional innovation system in your area?
4. Does your institution support and encourage innovation for economic operators?
5. Does your organization engage in innovation in processes or communication?
6. Does your organization engage in capacity building or continuing education?
7. Does your organization regularly consult business and education leaders to receive feedback on how to better provide services to your community?
8. In the past five years, how many innovations related events has your organization attended? (Conferences, expos, etc.)
9. Did your organization carry out the procurement of innovative solutions (based not only on the price, but on demanding performance specifications and with selection of the bids based on the cost-benefit ratio, possibly in a life-cycle perspective)?
10. Has your institution implemented projects with positive impact on the business environment?
11. To what extent have these projects contributed to the development of the region? 1-in a very large extent and 5-not at all
12. On a scale from "1 to 5" where "1" represents the least and "5" the most, how much is your institution interested in organizing actions to promote research and innovation (conferences, seminars, exhibitions, etc.)
13. On a scale of "1 to 5" where "1" is the least and "5" the most, how good is the collaboration between public institutions in the region?
14. On a scale of "1 to 5" where "1" is the least and "5" the most, how good is your institution's collaboration with the private sector?
15. Are there funds at regional, national and local levels to encourage and support research and development projects?
16. How is the funding for business support services allocated?
17. Please rate the degree to which you agree with the following sentence: "Albania makes full use of its innovation potential." 1-very little and 5- very much
18. Which of the following is the primary barrier to additional Albanian innovation?
19. In which ways do you believe government can be most helpful in spurring innovation and market growth
20. In your region or technical sector, which types of organizations have contributed most to innovative activity

Academia and Research Centres

1. Name of the institution
2. Location
3. Category
4. Please indicate the types of activities that your institution engages in
5. Please select the fields in which your institution carried out R&D activities
6. Please rate how strongly you agree with the following sentence: "My organization is leading research in my field."

7. Please rate how strongly you agree with the following sentence: "My field is a strength of research and innovation in Albania."
8. Does your organization have a technology transfer unit?
9. If No, do you believe your organization needs such a unit?
10. In the last 5 years, have you obtained a patent or patents as a result of your R&D activities?
11. In the future, the number of patents in my region will increase
12. In the past five years, has your institution used their own facilities to carry out R&D activities?
13. In the last 5 years, has your institution implemented research projects aimed at creating products and services for the market? If yes, how many projects were completed? What was the number of staff involved in these projects? What was the average budget of these projects?
14. Has your institution received funds for R&D and innovation projects from any of the following sources in the last 5 years?
15. In how many projects funded by the government, has your institution been engaged? Referring to the last five years
16. In how many internationally funded projects, has your institution been engaged? Referring to the last five years
17. How satisfied are you with the availability and use of national and international funding?
18. Which of the following partners are most helpful in developing collaborative research projects
19. How many joint projects have you or your institution engaged in over the last five years with other institutes, governments, or firms?
20. In the last year, how many conferences, expos, or other collaborative events has your institution attended?
21. Which are, in your opinion, the main strengths of the sector?
22. Which are the main weaknesses of the sector?
23. Which are two main sources of competitive advantage of your institution?
24. On a scale of 1-5, with 1 being not at all and 5 being to a very large extent, to what extent do you believe the R&D potential in Albania is being fully utilized?
25. What are the needs for the development of technology transfer in the Region?
26. What are the barriers to the development of technology transfer in the region? Select all that apply

B - Questionnaires for the In-depth interviews

Businesses

(July 15th, - August 31st, 2021)

1. Which is the organizational structure of your company (governing structure, departments, staff, etc.)?
2. Do you usually work with suppliers, cooperation partners or customers outside Albania? Do you have knowledge about role of Albania in Value Chain and the part where the most value is created?
3. Which type of assets, skills, expertise and knowledge makes your company different from competitors (competitive advantage)?
4. What upcoming threats and challenges do you see for your firm in the next decade?
5. Do you usually work with suppliers, cooperation partners or customers outside your region/ country? To which destinations do most of your exports go?
6. Has your company developed an innovation in the last 3 years? (incl. based on research, technological development, process, organizational or marketing innovation, new business models, new combination of existing knowledge)
7. Does the research and innovation support offered in your region/country correspond to your needs? What would be suitable incentives / conditions for you to decide to invest (more) into research and innovation?
8. Which technologies, products, and global market opportunities do you conceive as very promising for the upcoming decade (in general, not only for your company)?
9. Which sub-sector of your industry, if any, do you consider as most promising and worth to be developed for increasing the whole industry's performance?
10. How is the collaboration with the Higher Education Institutions and Vocational schools? Do you know the research and education fields of the nearest universities? Do you cooperate with them? Do you have joint programmes aimed at supporting students' entry to labour market?
11. Do you think young people are well enough trained or skilled to face the demand of your industry labour market?
12. Do you easily find employees and collaborators, in particular highly qualified personnel, in your region/country (e.g., the local university) or do you need to look further afield?
13. Which have been impacts of Covid 19 in your company in terms of employment, wages, innovation, research, exports, value chains, foreign direct investments and other relevant economic indicators?
14. In your opinion which are main upcoming challenges and needs affecting the potential of development of your company and sector in Albania?

Businesses

(September - October - November)

1. Which are the main features of your company (your main products/services and market destination local/national/international...)?
2. How relevant is the domain selected among those of your company operation?
3. Do you usually work with suppliers, cooperation partners or customers outside Albania? How relevant are international stakeholders in the domain selected? Which are the main market destinations of with regards to the selected domain? Do you have knowledge about role of Albania in Value Chain and the part where the most value is created with regards to the domain selected?

4. In your opinion which are the main strengths and weaknesses of the selected domain? Can this be a threat for the upcoming decade?
5. Which type of assets, skills, expertise and knowledge do you consider as most relevant in value chain selected (the basis of the competitive advantage)?
6. How relevant is technological innovation in the selected domain? Has your company developed an innovation in the last 3 years? (incl. based on research, technological development, process, organizational or marketing innovation, new business models, new combination of existing knowledge) With regards to the selected domain, which are the main sources of innovation? (Internal to the company, research centers, coming from leading companies, multinational enterprises, international research centers...)
7. Which is the main technological/innovation challenge for your sector in the next decade?
8. Does the research and innovation support offered in your region/country correspond to your needs? Are knowledge-intensive services relevant for competing in the selected domain and are they available at local/national level? What would be suitable incentives / conditions for you to decide to invest (more) into research and innovation?
9. Do you have knowledge on main research centers/universities that could help your company in the selected domain? Which are the main one and why?
10. Is patenting relevant for your company and do you consider it relevant for the selected domain?
11. With regards to the domain selected, do you have knowledge of the main differences between Albania and other countries in the macro-region?
12. Which sub-sector of your industry, if any, do you consider as most promising and worth to be developed for increasing the whole industry's performance?
13. Is there any cross-sectorial collaboration among the domains selected by the Albanian government? (Examples?)
14. How is the collaboration with the Higher Education Institutions and Vocational schools? Do you know the research and education fields of the nearest universities? Is industry-science cooperation relevant for the selected domain? Do you have joint programmes aimed at supporting students' entry to labour market?
15. Do you think young people are well enough trained or skilled to face the demand of your industry labour market? Do you consider the selected domain as profitable for new start-ups?
16. Do you easily find employees and collaborators, in particular highly qualified personnel, in your region/country (e.g., the local university)?
17. Which have been impacts of Covid 19 in the selected domain in terms of employment, wages, innovation, research, exports, value chains, foreign direct investments and other relevant economic indicators?"

Government

(July 15th, - August 31st, 2021)

1. Do you know which are the main research and innovation actors in your region/country? Which are their fields of competence?
2. Do you know who in your region/country participated in the EU Research Framework Programme or the Competitiveness and Innovation Programme? Or are you aware of any participation and success rate statistics concerning to that?
3. Do you know which or how many Albanian companies registered in the past 2-3 years European Patents?
4. In which sectors do you have most start-ups in your region/country? ... and which seem to survive and grow after 5 years?
5. Which are the fastest growing firms or biggest exporters in your region/country? Do you know on what they base their success and with whom they cooperate?

6. What are the main needs of innovative firms in your region/country to grow?
7. Besides science or technology driven innovation, which other forms of innovation/economic transformation do you support in your region?
8. Do you have specific funding instruments for innovation or R&D activities?
9. Who are the private innovation support providers (B2B) and what support do they offer?
10. Are you aware about existing measures to support innovation in neighboring and Western Balkan economies? do you cooperate within the region or at EU level within innovation and R&D support framework?
11. What are the main challenges to innovation in Albania?
12. How is the funding for business support services allocated: to existing bodies or via a competition among potential service providers?
13. What are the results of evaluations of innovation and business support in your /country, if any? (Research and development, testing, prototyping, technology transfer, counselling, incubators, cluster / networking initiatives, science and technology parks, support for creative thinking /design, technology audits, Living Labs, proof of concept, etc.) What main lessons have been learnt?
14. Which department(s) is/are in charge of innovation policies and budgets? How do you cooperate with the different governance levels and departments in charge of research, innovation, business development and skills?
15. What is the budget allocated to research and innovation by your region / country? Are the schemes revolving or grant-based? Are they allocated on the basis of a competition based on quality? Are the financial support schemes designed to generate synergies and cooperation with private financing bodies and investors?
16. Where does the funding in R&D and innovation go to: rather to individual projects (research, or to development, demonstration, technological validation, testing in system environments, development of prototypes, support to set up production lines), to universities vs. enterprises to improving the innovation eco-system (innovation support services, networking / platforms, incubation, training, mobility and access to human resources, etc.)?

Government

(September - October – November)

1. Which is the role of your organization with regards to the selected domain?
2. What are the main needs and challenges to innovation in Albania? And with regards to the selected domain which are the main strengths and weaknesses? what upcoming threats and challenges do you see for the selected domain in the next decade?
3. In your perspective which are the main players (Companies, Universities, CSOs, Research centers) operating in the selected domain?
4. In your perspective and in general terms, is there effective collaboration between companies and university-research centers, with regards to the selected domain?
5. With regards to the selected domain do you know who in your region/country participated in the EU Research Framework Programme or the Competitiveness and Innovation Programme? Or are you aware of any participation and success rate statistics concerning to that?
6. With regards to the selected domain do you know which or how many Albanian companies registered in the past 2-3 years European Patents? And the rate of success of start-ups?
7. What are the main needs of innovative firms in your region/country to grow with regards to the selected domain?
8. Besides science or technology driven innovation, which other forms of innovation/economic transformation do you support in your region? Are those relevant in the selected domains?
9. Do you have knowledge of any cross-sectorial collaboration?

10. With regards to the domain selected, do you have knowledge of the main differences between Albania and other countries in the macro-region? Are you aware about existing measures to support innovation in neighboring and Western Balkan economies? do you cooperate within the region or at EU level within innovation and R&D support framework?
11. In your perspective, which are the main needs to tackle to unlock the potential in the selected domain? Do you have specific funding instruments for innovation or R&D activities?
12. Who are the private innovation support providers and what support do they offer?
13. How is the funding for business support services allocated: to existing bodies or via a competition among potential service providers?
14. Are beneficiaries happy with the existing instruments? What are the results of evaluations of innovation and business support in your /country, if any? (Research and development, testing, prototyping, technology transfer, counselling, incubators, cluster / networking initiatives, science and technology parks, support for creative thinking /design, technology audits, Living Labs, proof of concept, etc.) What main lessons have been learnt with regards to the selected domain?
15. Which department(s) is/are in charge of innovation policies and budgets? How do you cooperate with the different governance levels and departments in charge of research, innovation, business development and skills? Is there any specific policy instrument with regards to the support to innovation in the selected domain?
16. What is the budget allocated for the support to research and innovation by your region / country? Are the financial support schemes designed to generate synergies and cooperation with private financing bodies and investors?
17. Where does the funding in R&D and innovation mainly go to: rather to individual projects research, or to development, demonstration, technological validation, testing in system environments, 4 developments of prototypes, support to set up production lines, to universities vs. enterprises to improving the innovation eco-system, innovation support services, networking / platforms, incubation, training, mobility and access to human resources, etc.?
18. With regards to the selected domain, are there any strategic assets (skills, competences, knowledge, infrastructures, companies) from which start working in order to strengthen development opportunities?
19. In your perspective which have been the main impacts of Covid 19 in the selected domain (employment, wages, innovation, research, exports, value chains, foreign direct investments...)? Which are main upcoming challenges and needs affecting the potential of development of the selected domain in Albania?"

Academia –Research Centres

(July 15th, - August 31st, 2021)

1. How is your institution organized (governing body, departments, staff, etc.)?
2. Which research issues and future technologies do you conceive as most promising (not only technological / natural sciences, but also social sciences, arts, etc.)?
3. With which enterprises or research institutes in your region/country do you cooperate and in which field? (Both in terms of skills development /training and research related activities) Do you get a part of your budget from private investors?
4. How much mobility is there between the public science and education and the private sector (i.e., are graduates/engineers/professors moving between universities and firms and back; are entrepreneurs/managers invited to lecture in universities)?
5. Do you train students and graduates to become entrepreneurs? Is there any cooperation between the science/technology, business and arts faculties?
6. How much do you cooperate with international/European partners (e.g., via the Research Framework Programme/Horizon 2020, Competitiveness and Innovation Programme/COSME, EUREKA, EIT, COST, etc.)?

7. What important research infrastructure and creativity hotspots are established in your region/ country? Can you access infrastructure/hotspots in other regions/countries?
8. What do you think is the strengths of your institutions in Albania?
9. What are threatens and main challenges that prevent the HEIs and research actors of the country to be more active?
10. Which sectors or subsectors of national industries do you consider as the most promising ones in the medium/long run term?
11. Do you have a good or constant dialogue with the government?
12. Would you like or do you think would be useful that your institution be more involved in policy makers decisions for development and innovation related polices?

Academia –Research Centres

(September - October – November)

1. Which are the main features of your organisation (your main research fields)? How relevant is your role within the domain selected and why is your institution and similar HEIs so important in Albania?
2. In your perspective, which are the main strengths and weaknesses of the selected domain? And what upcoming threats and challenges do you see for the selected domain in the next decade?
3. With regards to the selected domain which innovation opportunities do you consider as the most promising ones in the medium/long run term?
4. In your perspective with are the main players (Companies, Universities, CSOs, Research centers) operating in the selected domain?
5. With regards to the selected domain with research institutes in your region/country do you cooperate and in which field? (Both in terms of skills development /training and research related activities)
6. What about the cooperation with businesses?
7. How much mobility is there between the public science and education and the private sector (i.e., are graduates/engineers/professors moving between universities and firms and back; are entrepreneurs/managers invited to lecture in universities) with regards to the selected domain? Do you train students and graduates to become entrepreneurs (in the selected domain)?
8. What about funding? Do you get a part of your budget from private investors for activities related to the selected domain?
9. Is patenting relevant for your organisation and do you consider it relevant for the selected domain? In your perspective which are the main innovation driver with regards to the selected domain?
10. What skills and competences do you consider necessary to drive innovation in Albania with regards to the selected domain? And are the available?
11. What technologies do you consider strategic for the development of the selected domain? Are those technologies available in Albania? Which are the main constraints and needs to tackle in order to unlock the untapped potential, with regards to the selected domain?
12. In your perspective, which are main cross-sectorial innovation opportunities or experiences that could be fostered among the domains selected by the Albanian government ?
13. With regards to the selected domain how much do you cooperate with international/European partners (e.g., via the Research Framework Programme/Horizon 2020, Competitiveness and Innovation Programme/COSME, EUREKA, EIT, COST, etc.)?
14. Which are the main research infrastructures in Albania with regards to the selected domain?

15. What are threats and main challenges that prevent the HEIs and research actors of the country to be more active?
16. Do you have a good or constant dialogue with the government?
17. Would you like or do you think would be useful that your institution be more involved in policy makers decisions for development and innovation related policies?
18. In your perspective which have been the main impacts of Covid 19 in the selected domain (employment, wages, innovation, research, exports, value chains, foreign direct investments...)?

CSOs

(July 15th, - August 31st, 2021)

1. Which is organizational structure of your organization (governance body, staff, expertise, network of experts, etc.)?
2. How fit is your regional science/enterprise/creativity/skills potential to address societal challenges (e.g., health and ageing, climate change, pollution, traffic, energy, social inclusion, etc.)?
3. How could you personally contribute to an innovation-driven economic transformation of the region for higher added value and better living conditions? (In terms of ideas, bringing different stakeholders together, drive cooperation processes, etc.)
4. Do you collaborate with research centers, universities or companies to bring about change in a particular issue? In what areas?
5. Which are the types of innovations that you would like to get in the future? (Private and public sphere, radical and incremental or based on a new combination of existing solutions)
6. What would be your vision/dream for innovation-driven transformations in your region / country?
7. As for the tackling of major societal challenges (in particular as regards environment and social challenges) not only technical and other innovations are necessary, but also behavioral changes, what would be necessary to make you change your behavior?

CSOs

(September - October - November)

1. Which are the main features of your organisation (your main research fields)? How relevant is your role within the domain selected and why is your institution and similar HEIs so important in Albania?
2. In your perspective (as CSO) which are the main strengths and weaknesses of the selected domain? And what upcoming threats and challenges do you see for the selected domain in the next decade?
3. In your perspective which are the main players (Companies, Universities, CSOs, Research centers) operating in the selected domain?
4. How fit is your regional science/enterprise/creativity/skills potential to address societal challenges (e.g., health and ageing, climate change, pollution, traffic, energy, social inclusion, etc.) with regards to the selected domain?
5. How could your organization contribute to an innovation-driven economic transformation of the region for higher added value and better living conditions with regards to the selected domain? (In terms of ideas, bringing different stakeholders together, drive cooperation processes, etc.)
6. With regards to the selected domain, does your organization collaborate with research centers, universities or companies to bring about change in a particular issue? In what areas?
7. Which are the types of innovations that you would like to get in the future with regards to the selected domain? (Private and public sphere, radical and incremental or based on a new combination of existing solutions)

8. What would be your vision/dream for innovation-driven transformations in your region / country with regards to the selected domain?
9. Which are the main socioeconomic needs to tackle in order to unlock the potential with regards to the selected domain? In your opinion are there any strategic assets (skills, competences, knowledge, infrastructures, companies) from which start working in order to strengthen development opportunities?
10. In your perspective which have been the main impacts of Covid 19 in the selected domain (employment, wages, innovation, research, exports, value chains, foreign direct investments...)?

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct centres. You can find the address of the centre nearest you online (european-union.europa.eu/contact-eu/meet-us_en).

On the phone or in writing

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696,
- via the following form: european-union.europa.eu/contact-eu/write-us_en.

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website (european-union.europa.eu).

EU publications

You can view or order EU publications at op.europa.eu/en/publications. Multiple copies of free publications can be obtained by contacting Europe Direct or your local documentation centre (european-union.europa.eu/contact-eu/meet-us_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex (eur-lex.europa.eu).

Open data from the EU

The portal data.europa.eu provides access to open datasets from the EU institutions, bodies and agencies. These can be downloaded and reused for free, for both commercial and non-commercial purposes. The portal also provides access to a wealth of datasets from European countries.

The European Commission's science and knowledge service

Joint Research Centre

JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.



EU Science Hub
joint-research-centre.ec.europa.eu



@EU_ScienceHub



EU Science Hub - Joint Research Centre



EU Science, Research and Innovation



EU Science Hub



EU Science



Publications Office
of the European Union

Report
on the review of EDP and six summary reports
provided by the Albanian national S3 team

September 2023

1.	Introduction	4
2.	The EDP policy framework in Albania	6
3.	The EDP in the S3 design process	7
4.	EDP structure.....	8
4.1	Identification of stakeholders.....	8
4.2	EDP plan and working rules.....	9
5.	EDP output	11
5.1	EDP working groups.....	11
5.2	Overall feedback on stakeholders’ engagement	13
6.	EDP findings by priority domain	15
6.1	Agriculture sector	15
6.1.1	Round tables and Workshops participants.....	15
6.1.2	Key findings.....	15
6.1.2.1	SWOT	19
6.1.2.2	Vision	20
6.1.2.3	Policy mix	21
6.2	BPO sector	24
6.2.1	Round tables and Workshops participants.....	24
6.2.2	Key findings.....	24
6.2.2.1	SWOT	27
6.2.2.2	Vision	28
6.2.2.3	Policy mix	29
6.3	Energy sector	30
6.3.1	Round tables and Workshops participants.....	30
6.3.2	Key findings.....	31
6.3.2.1	SWOT	32
6.3.2.2	Vision	34
6.3.2.3	Policy mix	35
6.4	ICT sector.....	36
6.4.1	Round tables and Workshops participants.....	36
6.4.2	Findings	37
6.4.2.1	SWOT	39
6.4.2.2	Vision	41

6.4.2.3 Policy mix	41
6.5 Manufacturing sector	42
6.5.1 Round tables and Workshops participants.....	42
6.5.2 Findings	43
6.5.2.1 SWOT	45
6.5.2.2 Vision	47
6.5.2.3 Policy mix.....	47
6.6 Tourism sector	50
6.6.1 Round tables and Workshops participants.....	50
6.6.2 Findings	50
6.6.2.1 SWOT	54
6.6.2.2 Vision	56
6.6.2.3 Policy mix.....	56
7. Conclusive remarks.....	60
References	63
Annex 1 - List of the horizontal issues considered for the drafting of the conclusive remarks	64
Annex 2 - Summary table of the main findings of the bilateral meetings	66

1. Introduction

The definition of a Smart Specialisation Strategy is one of the flagship initiatives of the Western Balkan Agenda on Research, Innovation, Education, Culture, Youth and Sport promoted since 2021 by European Commission in the framework of its strategy for the Enlargement and Neighbourhood¹. It is also envisaged in other EU policy documents regarding the region, such as the 2020 Communication on EU Enlargement Policy and the Economic and Investment Plan for the Western Balkans².

This report has been drafted within the project “Support to Smart Specialisation in the Enlargement and Neighbourhood region” led by JRC and aimed at accompanying the Western Balkan Countries in the design process of their Smart Specialisation Strategies.

Through this project JRC provides a guideline for the governments on how to define the main elements for an effective Smart Specialisation Strategy.

More specifically, the JRC support action includes five areas of intervention – institutional capacity building, diagnosis, stakeholders’ dialogue, definition of the policy mix, draft of the Strategy.

The focus of this report is the JRC expert review of the summary reports and additional documents provided by the Albanian national team involved in managing the stakeholders’ dialogue within the Entrepreneurial Discovery Process of the S3 Albania.

The report mainly describes the work done by the S3 team for fostering stakeholders’ dialogue and summarizes the main findings emerged from this process.

More in details,

- Chapter 1 provides a description of the institutional context in which the process of defining the S3 of Albania falls and the main stages of the EDP Albania;
- Chapter 2 refers the key methodological issues of the EDP highlighting its importance in the S3 definition process;
- Chapter 3 describes the stakeholder identification process, the work plan and rules applied for managing workshops and round tables;

¹ European Commission, Directorate-General for Research and Innovation, A Western Balkans agenda on innovation, research, education, culture, youth & sport, 2021.

² Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, An Economic and Investment Plan for the Western Balkans {SWD(2020) 223 final}.

- Chapter 4 shows data about stakeholders' participation in the consultation process, the degree of involvement of the different actors of the quadruple helix and the lessons learned from the management of the EDP as a whole;
- Chapter 5 points out for each priority domain identified the main findings derived from the stakeholders' dialogue carried out in the context of workshops and round tables;
- Chapter 6 on the basis of a horizontal reading of the main findings of the stakeholders' dialogue process relating to the various domains, it provides a summary representation of what emerged and further ideas for defining the priorities of interventions of the S3.

2. The EDP policy framework in Albania

S3 is a strategy that the European Commission has mandated for all its member countries, including Albania as part of the EU's Innovation Agenda for the Western Balkans Countries (WB6)³ 2021-2027 with a view to joining the European Union.

S3 is also part of two chapters of the Community Acquis⁴. Particularly, it is intended to be part of the negotiating Chapter 20, "Enterprises and Industrial Policies," and Chapter 25, "Science and Research."

In addition, the definition and implementation of a Smart Specialisation Strategy is an expected result of the Common Regional Market (CRM) 2021-2024 Action Plan for WB6⁵ defined within the Berlin Process. Particularly, based on the agreements reached the WB6 have committed to develop the smart specialisation strategies as part of the smart growth actions in the Multi-Annual Plan on Regional Economic Area (MAP REA)⁶.

To support the design and implementation of a Smart Specialisation Strategy in WB6 the European Commission's Joint Research Centre (JRC), in cooperation with the Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR), elaborated the document "Supporting an Innovation Agenda for the Western Balkans: Tools and Methodologies"⁷ which gives an overview of the Western Balkan region, looking at challenges and emerging potentials for innovation.

The document also presents the tools and methodologies available at the JRC to support an innovation agenda for economic transformation inspired by smart specialization. The document identifies a "Smart specialisation framework for Enlargement and Neighbourhood countries" (*S3 framework*), whose implementation is based on *4 lines of activity*:

- (i) *the application of the S3 methodology to design and implement innovation strategies*⁸;
- (ii) *capacity-building activities for technology transfer, in particular through workshops, tools and instruments specifically designed to assist the academic institutions in the regional economies;*

³ <https://data.europa.eu/doi/10.2777/831554>

⁴ https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy/conditions-membership/chapters-acquis_en

⁵ https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy/policy-highlights/common-regional-market_en

⁶ <https://www.rcc.int/docs/383/consolidated-multi-annual-action-plan-for-a-regional-economic-area-in-the-western-balkans-six>

⁷ Matusiak M., Kleibrink A. (ed.), Supporting an Innovation Agenda for the Western Balkans: Tools and Methodologies.

⁸ Foray, D., Smart Specialisation: Opportunities and Challenges for Regional Innovation Policy, Routledge, Abingdon/New York, 2015.

- (iii) *support to transnational collaboration and linkages in the context of EU macro-regional strategies;*
- (iv) *data quality enhancement.*

Within this policy framework through the development of the Smart Specialization Strategy (S3), the Albanian government aims to give itself a strategic agenda that identifies priority areas for a specialization path based on innovation.

In view of this goal, the S3 Albania is intended to promote the conditions for the creation of a competitive advantage in the medium term in specific thematic areas of economic activity.

3. The EDP in the S3 design process

The *S3 Framework* lines of activity mentioned above are intended to be developed into 5 phases:

1. *Institutional capacity building*
2. *Diagnosis (mapping exercise)*
3. *Stakeholder dialogue*
4. *Institutional capacity for implementation*
5. *Final strategy*

According to the *S3 framework*, the operational translation of these lines of activity is carried out on the basis of a methodology in which each stage – as a part of a *stage-gate* process – should only start after the previous one has been completed. The entire process is divided into 7 stages⁹ leading to the design and formal approval of S3.

The Entrepreneurial Discover Process is the fifth stage in the process of S3 design.

It aims at bringing together representatives from quadruple helix to discuss the already evident or latent innovation prospects in the various fields of economic activity and identify priority domains for intervention, starting from a SWOT analysis as a basis for formulating a medium-term vision and a mix of related policy actions.

In fact, a key aspect of the Smart Specialization Strategy is a participatory bottom-up approach based on the involvement of 4 stakeholders (Business, Academia, Civil Society, and Central and Local Governance) to discuss and identify priority areas for intervention, as input for S3 definition.

The EDP consists of 6 sub-stages:

⁹ The other 6 stages are: 1) Decision to start smart specialisation process; 2) Analysis of strategic mandates; 3) Analysis of existing economic, scientific and innovative potential (quantitative); 4) In-depth analysis of priority domains (qualitative); 6) Design of monitoring, implementation and financing system; 7) Preparation of S3 strategy document.



Source: S3 Framework, 2018.

This report describes the evidence emerged from EDP with specific reference sub-stages from 5.2 (Identification of stakeholders for each priority domain) to 5.6 (EDP input for S3).

According to the above described methodology, the stakeholder's dialogue (EDP) preparation was based on the evidence resulting from the previous activity stage ("Mapping exercise"), conducted with the support of the JRC in 2022.

The main results of the mapping exercise came together in a document¹⁰ that identified six priority areas on which it was considered relevant to carry out specific insights in the EDP phase.

The six priority areas are the following:

- Agriculture, forestry and fishing
- Business Process Outsourcing (Administrative and support service activities)
- Energy
- ICT
- Manufacturing
- Tourism (Accommodation and support service activities)

Therefore, in the following paragraphs, after describing how the EDP was structured and what the outputs of the process were, the report will describe the main findings deriving from the stakeholder's dialogue for each of the six domains mentioned above.

4. EDP structure

4.1 Identification of stakeholders

The first step to set up an effective EDP consists in the identification of relevant stakeholders to be involved in the dialogue taking into account the thematic domains selected as a result of the mapping phase.

According to the methodology of the *S3 framework* the stakeholders must be identified among the most representative subjects active on the territory in the respective thematic domains.

Subjects such as key players in the value chain of the thematic domain respond to this profile, as well as innovative companies, University departments and research centres from related fields, chambers of commerce and other business associations. Relevant governmental bodies including

¹⁰ Fabbri, E., Gerussi, E., Hollanders, H. and Sinjari, I., The identification of Smart Specialisation priority domains in Albania. A mapping exercise.

ministries, regulatory bodies, public agencies, as well as civil society organizations should be involved in the process.

In the context of the preparation of EDP Albania, as highlighted in the document “EDP in the EU Enlargement and Neighbourhood Region in 2022 Smart Specialisation process in the Republic of Albania”, according to methodological guidance¹¹ a S3 national team was created by the Government to ensure effective coordination of the EDP related activities.

The selection of relevant stakeholders was carried out by the S3 national team starting from a desk analysis focused on identifying subjects from academia, research and civil society. As far as companies are concerned, the main source has been the databases available at government level.

The list of subjects involved in the qualitative analysis phase of the mapping exercise was also used to identify further relevant stakeholders.

After assembling the contact information of relevant stakeholders from the business, academia, and civil society helix, they were shared with the inter-institutional working group who was asked to indicate further relevant subjects to involve for each domain.

As for the government helix, stakeholders were identified based on the relevance of each key line ministry, government department and agency to the 6 priority areas identified.

As a result of this activity 6 working groups have been identified, taking into account the thematic domains and the need to represent all the subjects of the quadruple helix within each of them.

4.2 EDP plan and working rules

According to the *S3 framework* methodology before the EDP is launched, clear working rules should be defined for participation and decision-making process. The rules must be shared in advance with the members of working groups together with the invitation or when introducing the works of the first meeting.

Besides, as the EDP includes a series of workshops, often organized in different regions, a plan has to be developed and communicated to the participants.

As outlined in the document “EDP in the EU Enlargement and Neighbourhood Region in 2022, S3 in the Republic of Albania Priority domains Agriculture, Tourism, Energy”, a first round of EDP events were held from October to November 2022, covering the domains Agriculture, Energy and

¹¹ Perianez-Forte I. and Wilson J., *Assessing Smart Specialisation: The Entrepreneurial Discovery Process* EUR 30709 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-37823-5, doi:10.2760/559139, JRC124405.

Tourism, and the rest of the events took place between April-June 2023 (see paragraph 4.1 for details).

To develop an effective stakeholders' dialogue, two different tools have been identified: round tables and workshops.

In order to prepare effectively each event, the meetings were planned so as not to organize round tables and workshops related to the same domain on days too close together.

Therefore, the workshops were also scheduled sequentially in different weeks in order to allow the necessary time to process the findings from the roundtables and be able to present and validate them through the national workshops.

The round tables were intended as an interactive method for engaging stakeholders, in line with methodological guidance on EDP¹².

Besides, they were configured as a preliminary working stage to promote discussions focused on sub-themes of the different domains freely, in accordance with the brainstorming method.

This choice was also motivated by the need to more easily reach subjects with little knowledge of participatory working methods such as those EDP related. With this view the round tables turned out to be important, in terms of collecting initial insight useful for directing the subsequent dialogue within the workshops. In addition, they contributed also to spread knowledge of what S3 is and to increase awareness of its importance in the perspective of a development based on innovation for Albania.

Before each round table, a set of materials was sent to the invitees, including the invitation with a description of the event and its purpose, the agenda as well as a document with thorough information regarding the importance of the S3 process, the EDP stage, and a summary of the relevant priority area findings from the quantitative and qualitative analysis. This set of materials was intended to provide the participants in these roundtables with the necessary knowledge and information needed to be able to participate in a constructive way during the meetings.

Each meeting was facilitated and moderated by at least two experts from the National S3 Team and experts of the relevant sectors.

The organisation of the national workshops aimed at involving subjects able to contribute to the dialogue by providing value added information and points of view useful for carrying out the SWOT analysis, the definition of the vision and the consequent identification of possible actions of the policy mix, through a dissemination of the information provided from the roundtable discussions.

¹² Marinelli, E. and Perianez Forte, I., Smart Specialisation at work: The entrepreneurial discovery as a continuous process S3, Working Paper Series No. 12/2017, EUR 28838 EN, Publications Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-74377-1, doi:10.2760/514714, JRC108571.

At the beginning of each workshop the work agenda was introduced by the Government representatives responsible for the S3 design process. The process of EDP, the various stages of the work path and the specific purpose of the workshop were each time explained.

In accordance to the RIS design model, within each workshop the activity was organized in three work sessions, dedicated respectively to the definition of the SWOT, the identification of the Vision and the identification of the actions that will have proposed to compose the policy mix.

The participants were distributed in different working groups/tables, each made up of about 10 people. The composition of the groups took into account the need to bring together representatives from quadruple helix.

Within each working group, a member of the S3 national team acted as a facilitator, both by asking the participants specific questions and by taking notes on a specific board of the opinions/considerations expressed.

For each work session, a list of the most relevant points that emerged from the discussion was thus produced and a member of each group presented to other groups the main findings coming from the dialogue with regard to SWOT, vision and policy mix.

5. EDP output

5.1 EDP working groups

After the first roundtables held in 2022, in order to give greater visibility to the EDP process and to promote more aware participation in its purposes, the Albanian government organized an EDP kick-off meeting in April 2023, which was attended by a total of 175 subjects of the quadruple helix.

The event was held in Tirana and the participants were divided as follows: 55 government representatives, 49 from business, 34 from the academic world, 37 representatives from civil society.

To promote the stakeholders' dialogue within the 6 thematic domains emerged as relevant from the mapping exercise a total of 28 events have been organised by the S3 national team from October 2022 to June 2023.

In total there were 964 participants in the EDP events. There were 629 participants in the round tables, while 335 participants in the workshops.

The table below shows more in details the participation to the 28 EDP events held.

<i>No.</i>	<i>Event</i>	<i>Date</i>	<i>Location</i>	<i>No. Participants</i>
Agriculture				
<i>Round table</i>				
1	Agro-processing	26.10.2022	Tirana - Agricultural University of Tirana	34
2	Fishing and Aquaculture	26.10.2022	Tirana - Agricultural University of Tirana	25
3	Forestry	26.10.2022	Tirana - Agricultural University of Tirana	30
4	Livestock	18.11.2022	Tirana - Uka Farm	26
5	Agriculture, Livestock Farming, and Agro-processing	9.5.2023	Tirane - Ministry of Agriculture	50
6	Blue Economy, Food Security	9.5.2023	Tirane - Ministry of Agriculture	24
<i>Workshop</i>				
1	Agriculture and Livestock Farming	2.6.2023	Petrelle - Fustanella Farm	60
Business Process Outsourcing				
<i>Round table</i>				
1	Business Process Outsourcing	3.4.2023	Tirane - TUMO Center	31
<i>Workshop</i>				
1	Business Process Outsourcing	15.5.2023	Tirane - Rogner Hotel	45
Energy				
<i>Round table</i>				
1	Renewable Energy	16.11.2022	Tirane - Tirana International Hotel	26
2	Alternative Energy	16.11.2022	Tirane - Tirana International Hotel	13
<i>Workshop</i>				
1	Energy	13.6.2023	Tirane - Tirana International Hotel	51
ICT				
<i>Round table</i>				
1	Startup Ecosystem	18.4.2023	Tirane - TUMO Center	32
2	Innovation	18.4.2023	Tirane - TUMO Center	32
<i>Workshop</i>				
1	Information and Communication Technology (ICT)	19.5.2023	Tirane - Tirana International Hotel	62
Manufacturing				
<i>Round table</i>				
1	Textile and Leather Product Manufacturing	24.4.2023	Tirane - M.I.E.	18
2	Wood Processing	24.4.2023	Tirane - M.I.E.	19
3	Raw Materials Production	2.5.2023	Tirane - M.I.E.	26
4	Construction Materials Production	5.5.2023	Tirane - M.I.E.	25
5	Automotive, Electrical, and Metal Processing	10.5.2023	Tirane - M.I.E.	16
<i>Workshop</i>				
1	Manufacturing Industry	29.5.2023	Tirane - Tirana International Hotel	54
Tourism				
<i>Round table</i>				
1	Agro-Tourism	3.11.2022	Tirane - Xheko Imperial	32
2	Mountain Tourism	3.11.2022	Tirane - Xheko Imperial	29
3	Coastal Tourism	9.11.2022	Tirane - Mondial Hotel	31
4	Health Tourism	9.11.2022	Tirane - Mondial Hotel	18

5	Development of the Tourism and Hospitality Market	8.6.2023	Tirane - Ministry of Tourism	60
6	Diversification of Offerings and Year-Round Tourism	8.6.2023	Tirane - Ministry of Tourism	32
<i>Workshop</i>				
1	Tourism	20.6.2023	Tirane - Xheko Imperial	63

Source: Albanian national S3 team

Downstream of the 28 national EDP events, with a view to promoting smart specialization also based on the identification of priorities of common interest with neighboring countries on which to develop cooperation paths, 3 bilateral meetings with institutional, academic and business representatives from Kosovo, North Macedonia and Montenegro were organized in June and July.

A specific report elaborated by the National S3 team describes in detail the main findings resulting from these meetings, while in annex of this report a summary table highlights some specific inputs related to the priority domains covered by the EDP.

<i>Bilateral Workshops</i>				
<i>No.</i>	<i>Event</i>	<i>Date</i>	<i>Location</i>	<i>No. Participants</i>
1	Kosovo	26.06.2023	Tirane – Diamma Hotel.	43
2	North Macedonia	07.07.2023	Pogradec – Hymeti Palce.	43
3	Montenegro	17.07.2023	Shkoder – Hotel Colosseo	50

Source: Albanian national S3 team

5.2 Overall feedback on stakeholders' engagement

Overall the participation of the quadruple helix actors in each event organized was very satisfactory, in qualitative terms. A considerable part of the actors invited responded positively to the invitations and confirmed their participation. Some of them even proposed other qualified subjects to be invited in the events, thus contributing to promoting awareness of the S3 approach among stakeholders.

The participants were mainly CEO-s of companies or high level executives, directors of organisations or institutions, high level professors and representatives of Universities or high level experts of the specific areas.

Their engagement during the meetings was generally very high and most of the participants were very active during the discussions taking initiative to propose new perspectives and new ideas.

Overall, there was a good participation from Business sector, Academia, High Education (HE) and a very good participation and involvement in discussion from VET and Government and there were wide discussions on proposals and issues that were raised by all the participants. Considering the novelty of the S3 approach for Albania, the participation of NGOs and more generally of subjects representing civil society can be considered satisfactory.

Participants from some priority domains, especially tourism and agriculture, participated also in the activities of other related priority domains considering the relations of the subsectors.

The roundtables and workshops which had the highest number of participation were those organized for the priority domains of agriculture and tourism. These two priority domains, together with the energy, are those that highlighted the highest number of qualified participants (in general but also from each helix) and the most active discussions too. In these priority domains, more than in the others, the stakeholders involved, in addition to showing a high interest in the prospect of smart specialization, have demonstrated that they possess a clearer vision, also through the formulation of concrete proposals and ideas regarding the innovative development of the reference sector.

Besides, the discussions conducted within the organized events indicated that the development of advanced services and digitalisation, considered as possible specific priority domains for smart specialisation, are perceived by stakeholders as a transversal priority investment area for innovative development of all sectors.

The discussions conducted within the events organized in the priority domain manufacturing highlighted less capacity in bringing out a clear vision regarding the future development of the sector and its possible smart specialization in more specific sub-sectors (such as, for instance, raw materials exploration, exploitation and processing).

<i>Helix</i>	<i>Agriculture</i>	<i>BPO</i>	<i>Energy</i>	<i>ICT</i>	<i>Manufacturing</i>	<i>Tourism</i>
Academia	57	10	14	17	22	59
Business	95	29	32	42	44	81
Civil society	42	8	8	14	17	23
Government	55	29	36	53	75	102
Total	249	76	90	126	158	265

Source: Albanian national S3 team

6. EDP findings by priority domain

6.1 Agriculture sector

6.1.1 Round tables and Workshops participants

Domain	Event	Participants from				Total
		Academia	Business	Civil society	Government	
Agriculture	Round table	44	74	35	34	187
	Workshop	13	21	7	21	62
	<i>Total</i>	<i>57</i>	<i>95</i>	<i>42</i>	<i>55</i>	249

Source: Albanian national S3 team

After Tourism, Agriculture is the domain that registered the highest level of participation. In total the participants were 249, mainly from business (38%). Over 50 were the participants from the academia and the government, while the participation of civil society was slightly lower. Overall, in qualitative terms the participation and the involvement from business, academia (mostly HE), Government and NGOs was very good.

The discussions on agriculture were very vivid. The participants were very much engaged to bring out all the strengths and weaknesses of the sector and propose innovative methods to move forward.

6.1.2 Key findings

For the field of Agriculture, six roundtable discussions were held involving representatives from the quadruple helix. The discussions focused on agriculture, livestock farming, agro-processing (including medicinal plants and tobacco) & food processing, as well as the blue economy (fishery) and food security, in line with the national government's 2021-2027 agricultural strategy. The following issues emerged from the discussions as key points to consider as a basis for the definition of an innovation sectoral agenda:

- 1. Fragmentation of land and land ownership:** Agricultural land in Albania is fragmented into numerous small plots, posing challenges to efficient land organization and utilization. Fragmented land hinders the modernization of agriculture and the adoption of advanced agricultural technologies. Issues related to land ownership were also raised, citing bureaucratic hurdles that hinder investment.
- 2. Lack of organization and collaboration:** Albanian farmers often work individually, resulting in a lack of organization and collaboration among them. This hampers the strengthening of agricultural and livestock capacities and makes it more difficult to implement effective marketing and distribution strategies for agricultural products. To address this, proposals were made to promote livestock farming organization, including financial mechanisms, legal and regulatory infrastructure. The government and business

helices emphasized the lack of cluster development and fragmented value chains across sectors in Albania. For example, in the livestock sector, value-added opportunities are missed because hides from livestock are not utilized due to a lack of collaboration. This results in the importation of primary raw materials (leather) by businesses involved in the Textile and Leather Processing Industry, against capacities that remain underutilized in Albania.

3. **Promotion of sustainable production and food quality:** The preservation of abundant and of high value natural resources that Albania has was emphasized as an integral part of the national agricultural strategy. The adoption of more sustainable agricultural practices represents an essential condition for an innovative development of the sector and should go through a more efficient and environmentally friendly use of land, water and energy. Albania faces significant challenges related to the use of agricultural land, water management, and biodiversity conservation. Promoting sustainable agricultural methods, adopting new technologies, and raising awareness among farmers about the importance of preserving natural resources are crucial for addressing these challenges. It is also necessary to improve agricultural infrastructure, invest in packaging and marketing of agricultural products, and promote local and farmer-produced goods for a more sustainable approach and access to export markets.
4. **Climate change:** Albania is impacted by climate change, including floods, droughts, and temperature variations. These climate-related factors affect agricultural production, increase costs, and pose risks to food security. Addressing this issue requires the integration of new agricultural methods and innovative technologies – such as precision agriculture – that can assist in weather forecasting and mitigation.
5. **Rising input costs due to global instability:** The increase in oil prices, agricultural chemical costs, the prices of food crops used as animal feed (such as wheat and corn), and imported agricultural machinery/equipment have significantly affected farmers' financial health. To mitigate this issue, greater government and institutional support was proposed, including subsidies for agricultural inputs, increased local production of inputs, improved agricultural infrastructure, and the promotion of advanced technologies to reduce import dependency. Furthermore, investments in diversifying the agricultural sector and enhancing local processing capabilities can help mitigate the impact of input prices in Albania's agricultural sector.
6. **Strengthening health and welfare policies in livestock farming:** Participants highlighted a growing spread of diseases affecting livestock breeding that require specific attention. They emphasized the need for vaccination, training, monitoring, infrastructure development, and scientific research in collaboration with the government and academia. Participants also suggested integrating new technological monitoring methods to address these issues, mentioning the advantages that can arise from an intelligent use of microchips and sensors.

7. **Lack of a purebred livestock market:** Albania currently lacks a market for purebred livestock, which leads to high costs associated with importing animals. Short-term proposals included the development of appropriate legislation to establish purebred improvement stations. In the medium-long term, efforts should be made to produce certified breed animals and create a domestic market for purebred livestock. Another proposal in this context was the establishment of a beekeeping station in Albania. Preserving the integrity of native bee species was considered essential by the academia helix.
8. **Lack of laboratories for quality certification and product safety:** Albania currently lacks accredited laboratories that can perform the necessary tests to certify agricultural products, especially medicinal plants, for export to international markets. This hinders the development of niche sectors with good potential such as essential oil production. Efforts should be made to establish accredited laboratories capable of conducting comprehensive tests and certification.
9. **Lack of agricultural research:** Collaboration and coordination between various research institutions and agricultural practices remain insufficient in Albania. Participants mentioned the negative impact of transforming Agricultural Research Institutes into Agricultural Technology Transfer Centers, leading to a reduction in research capacity, specialized expertise in agriculture, and demotivation/attrition of qualified personnel.
10. **Inadequate funding and unfavorable conditions of access to credit:** Participants complained the absence of adequate funding and accessible credit as factors slowing down growth and modernization of the agricultural sector. Thus, the agricultural sector requires a stable framework of substantial financing and favorable credit conditions to support investment in technology, infrastructure, and skills management.
11. **Policies for enhancing domestic production vs. imports:** Participants from the business helix discussed the need for support in promoting domestic production in agriculture. They proposed supportive schemes, including the imposition of customs tariffs on specific seasonal imported products to prioritize local supply when feasible. They also expressed a desire to strengthen and expand common agricultural markets that help secure a market for domestic products and increase farmers' ability to adapt to market demands.
12. **Information transfer** was identified as a challenge in two ways:

Firstly, not rarely Albanian farmers continue to rely on traditional farming methods based on personal experience and generational knowledge. The lack of up-to-date information based on scientific research restricts their access to advanced agricultural methods and innovations, limiting the growth and competitiveness of the sector. The government introduced an initiative to establish model farms to inform and train farmers about new agricultural practices. However, further collaboration between academia, business, and local government is necessary for the success of this project.

Secondly, the business sector is not fully aware of many support measures, projects and programs that exist.

13. **Lack of human capacity:** This issue was discussed from several perspectives, including population migration, the ageing agricultural population, a decline in student enrolment/interest in the University of Agriculture due to the preference for other fields of study, and the absence of contemporary programs, curricula, or vocational courses/schools as alternatives to university education.

Findings emerged from the roundtables served as a starting point for discussions within the national workshop to identify strengths and weaknesses, opportunities and threats related to the challenges to be faced and better focus the main components of an innovation-based strategy for the development of the agricultural sector in Albania.

Firstly, from the workshop emerged a widespread awareness among all subjects of the quadruple helix that the agriculture sector in Albania holds preeminent economic importance, benefiting from favorable environmental conditions for high quality agriculture (including through organic practices), extensive and diverse productive land, a rich tradition of food production, and proximity to the European Union market. Thanks to the workshop several findings already emerged from the round tables found confirmation and those that should be more considered as priorities in the path of smart specialization have been more clearly identified.

One of the main challenges is the lack of infrastructure, especially logistics, able to support the modernization paths of the agriculture and agro food sector and the low level adoption of advanced technologies in agricultural practices, which affects the efficiency and quality of agriculture production and competitiveness of food processing products. A negative role on this is played by the lack of close collaboration among academic institutions, industry, and the government which hinders the creation of a supportive environment and innovative policies.

Additionally, the lack of training and educational capacities in the field of technology and management represents a strong complementary obstacle for the achievement of smart specialization in the sector.

Difficulties in financing and accessing financial resources was confirmed as a further barrier to investment in technology and innovation, together with the allocation of resources specifically aimed at supporting research in the sector.

All this brings with it as a consequence a difficulty of the agriculture and food sector in adapting its offer to the market demand and creating suitable products in terms of high quality and safety standards to enter international markets and able to give value on the market to a brand “Made in Albania” in agrifood sector.

6.1.2.1 SWOT

From the summary report provided by the S3 team for all elements of the SWOT analysis several key insights were identified which can support the definition of the vision and the policy mix.

Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Abundant natural resources (including water) and biodiversity and land quality ➤ Inherited agricultural and livestock traditions, especially in the cultivation of medicinal plants, tobacco, olive and viticulture, with wide diffusion of organic practices (not certified), resulting in high quality of the products ➤ Presence of specialized producers/farmers in trade and export (but not reaching their full potential) ➤ Favorable climate conditions for early access of products to markets (compared to regional countries, product maturation times are shorter) 	<ul style="list-style-type: none"> ➤ Land fragmentation (law 7501) and small farms, resulting in lack of agricultural cooperatives and more generally lack of collaboration and weakness of organizations that represent the sector ➤ Low adoption of advanced technology, including utilization of ICT ➤ Inadequate logistics infrastructure, especially in rural areas ➤ Low collaboration between the academic sector, industry, and government ➤ Lack of skills aligned with market demands (due also to low number of professional schools) ➤ Uncertain legal framework due to lack of long term policies (i.e. lack of policies on uncultivated land) and need for review of sectoral legislation (i.e. tobacco) and for improvements in the implementation of legislation (i.e. bureaucracy for land lease from local government), resulting also in Informality of the sector ➤ Unclear institutional framework, resulting in need of better role division and collaboration between local and central government institutions ➤ Inadequate funding and fiscal policies (including tax refund schemes) for firms to face high costs of production and for boosting research and development applied to agriculture and food sector ➤ Low compliance of products to quality and safety standards for export, resulting in limited space for Made in Albania brand,

	also because of disconnected value chain (e.g., packaging not produced in Albania)
Opportunities	Threats
<ul style="list-style-type: none"> ➤ Constant growth trend in demand for organic products and exploration of new markets ➤ High transformative potential deriving from the diffusion of advanced technological applications in the agricultural and food processing sectors ➤ Strong growth trend of rural and agrotourism ➤ Favorable government policies, including increased attention to incentivizing and attractive national policies and strategies for Foreign Direct Investments and policies on uncultivated land and efficiency on land use ➤ Opportunity for broad access to financing in the Green and Circular economy at an international level ➤ Potential for development of aquaculture on fresh water (lakes, rivers) ➤ Potential for development of composting as an energy producer and fertilizer 	<ul style="list-style-type: none"> ➤ International competition with higher quality ➤ Climate change, resulting also in higher erosion and forest degradation ➤ Global instability such as the COVID-19 pandemic and the Russia-Ukraine conflict, and trade restrictions, resulting also in increasing price of inputs ➤ Emigration and depopulation of rural areas ➤ Old age of the farmers ➤ Inefficient waste management from agricultural production and food processing ➤ Legal framework allowing to change easily the land status and its use for constructions

6.1.2.2 Vision

The vision for the development of an innovation agenda in the agriculture-based sector in Albania is to transform it into a modern, sustainable, and competitive industry to deliver healthy food by focusing on the development of sustainable food chain based on tradition that maximizes productivity, enhances value addition, and fosters inclusive growth ensuring the well-being of its citizens. The strategy is to leverage technological advancements and promote diversification by enhancing innovative solutions connected to the development of the blue and green economy, and strengthen market linkages to establish “Made in Albania” as a new player in the regional and international agricultural markets.

The strategy is also based on the creation of enabling context conditions that pass through the implementation of a broader policy agenda that includes measures capable of improving the

living conditions of residents in rural areas, to reverse the trend towards depopulation and abandonment of primary sector activities.

In addition, this vision also encompasses fostering a supportive specific policy environment, through the definition of measures aimed at strengthening the transfer of knowledge to farmers and entrepreneurs in the food sector, increasing financial support to businesses and adapting functional infrastructures to support modernization of the sector.

Pursuing this vision will mean focusing policy action on the development of specific trajectories of innovation, such as:

- Sustainable Organic Farming;
- Food Processing;
- Sustainable Fisheries and Aquaculture;
- Medicinal Aromatic Plants, oils and extracts production.

6.1.2.3 Policy mix

In order to translate this vision into a concrete mix of support measures consistent with the objective of promoting smart specialization in the agrifood sector in the medium term some possible lines of action have been identified.

More specifically, enabling and more horizontal in nature lines of action are:

1. Creation of an institutional environment conducive to innovation:

- Enhance infrastructure, including irrigation and drainage systems, social infrastructure.
- Review and improve legislation (including for tobacco) related to grants, certifications, and subsidies and respective support schemes.
- Create enabling context environment through improvement of working conditions on the basis of European standards, also for the achievement of the Acquis communautaire;
- Simplify administrative procedures and local government reforms, also with the view to facilitate land renting and the use of uncultivated land.
- Improve planning and regulations for land protection and management and property registration.

2. Boosting financial support and improving funding opportunities:

- Improve access to finance and information in both directions.

- Review subsidy packages and establish tax incentives.
- Develop policies and guidelines for businesses to better access and use of funds, including through financial assistance.

Priority specific lines of action are to be considered

3. Support to the implementation of innovative solutions (not only technology-based) in production, processing and marketing:

- Stimulate, also through investments in technology transfer actions, the adoption of new technological solutions (including automation) and digital capabilities and spur the transition to green practices and solutions, not only technological (digital and green transition transformation of at least 60% of the agricultural sector within 2030)
- Strengthen support for training for all stakeholders to favor green and digital transitions.
- Support zero KM-products and promote safer and higher-quality products in the market through certifications, control, reduced pesticide use, and invest in farmer education with the view to promote agro-tourism.

4. Promoting collaboration and sectoral clustering:

- Strengthen collaboration among all stakeholders in the sector.
- Support and consolidate at national and regional level EDP as a mean for supporting Smart Specialization paths
- Promote clusters and inter sectoral cooperation.

5. Promoting Market Development and Value Chain Optimization:

- Enhance the market's recognition and demand for local products, also by supporting the identity of Albanian products through the creation of a made in Albania brand
- Support bio/organic agricultural practices and products
- Promote the diversification of the agricultural sector through the promotion of agro tourism.
- Strengthen the local market and enhance the capacity of local producers.

6. Strengthening Capacity Building and Research:

- Enhance vocational training and professional development programs.

- Strengthen scientific institutions and research capabilities, including through the creation of a national network of labs for certification of products for export or internal use
- Support NGOs and environmental-related capacity building initiatives.

7. Natural resources risk management and Resilience:

- Develop measures to mitigate the impact of natural disasters, including financial support.
- Enhance information campaigns on product insurance and risk management.
- Improve absorptive capacities for projects and strengthen disaster response mechanisms.

8. Support measures related to specific trajectories of innovation with higher potential

- Support to sustainable and organic farming including through certification, to meet the growing demand for organic products;
- Strengthen the weight of food processing in the Albanian agro-industry value chain, by investing in food processing facilities, supporting the development of value-added food products and enhancing their marketability, including through the establishment of AKIS (Agriculture Knowledge Information System);
- Boost sustainable Fisheries and Aquaculture, by developing sustainable fisheries and aquaculture practices and processing to ensure a steady supply of high-quality seafood;
- Support the subsector of Medicinal Aromatic Plants (MAP), oils and extracts production, by providing training and support to farmers on best cultivation practices, including organic methods, establishing quality control standards and procedures to ensure the consistency and purity of MAPs from field to market, including through the creation of cooperatives or associations among MAP growers and producers.

6.2 BPO sector

6.2.1 Round tables and Workshops participants

Domain	Event	Participants from				
		Academia	Business	Civil society	Government	Total
BPO	Round table	6	9	5	11	31
	Workshop	4	20	3	18	45
	<i>Total</i>	<i>10</i>	<i>29</i>	<i>8</i>	<i>29</i>	<i>76</i>

Source: Albanian national S3 team

BPO sector is the domain that registered the lowest level of participation, pointing out that in this area a lack of subjects capable of expressing a demand for specific innovation paths. In total the participants were 76, of which just 29 as business representatives. Even considering the round table and the workshop together, participants from the academia and the civil society were very few.

6.2.2 Key findings

As a premise participants emphasized that in Albania, the BPO sector has primarily focused on non-core aspects such as customer support or care, although in more recent years it has sought to expand into other markets, including value-added services such as marketing and market analysis, IT and software programming, as well as financial and accounting services.

The BPO sector in Albania in the past years experienced a growth trend, bringing significant revenues to the country and employing a considerable number of young people. The participants in the organized meetings agreed that BPO remains one of the important sectors with potential for smart specialization in Albania, serving as a significant source of employment and income for many young individuals.

During the roundtable discussions, several key issues were raised:

- 1. Skills related challenges:** Participants expressed concerns about emigration, which is an ongoing and urgent problem with immediate consequences for every sector. Another issue raised was the declining proficiency in foreign languages, which is diminishing one of the sector's advantages. Therefore, more importance should be given to language training, especially in Italian. Training professionals and aligning university curricula with European Union standards and best practices were cited as key factors too.
- 2. Financial aspects:** The inability to secure financing from banking institutions and the lack of knowledge regarding expenses for advertising on digital platforms, such as Meta, were identified as challenges for businesses operating in the sector. Business representatives proposed changes to the current legislation on value-added tax to align it with the

operational reality of BPO. They also suggested streamlining bureaucratic procedures for contract agreements between BPOs and foreign clients, as well as treating the sector differently due to the absence of physical products. Furthermore, they emphasized the importance of creating favorable economic conditions and supportive schemes for the sector by increasing fiscal incentives and access to both public and private finances for the sector.

3. **Educational practices:** The discussions highlighted the need for monitoring the practical training of students within businesses to prevent abuse and ensure the effective implementation of such programs for proper professional development.
4. **Collaboration between academia and businesses:** Participants emphasized the importance of finding common ground in curriculum development at universities. As businesses are the future employers of graduates, it is crucial to align the curricula with the skills necessary for managing business processes that require, knowledge, know-how and expertise. The provision of specialized training, particularly in the fields of innovation and technology, was also discussed. Business representatives expressed their willingness to collaborate with universities in establishing professional schools, developing curricula, piloting programs, and providing specialization opportunities for students, such as in operational management, which has high demand in the market.
5. **Need for uniqueness and specialization:** Participants stated that, given its limited labor force, Albania can only compete in the BPO sector by offering unique digital services. To achieve smart specialization in this sector, participants called for a long-term plan with investments in both individual knowledge and technological infrastructure, also by adopting best practices to improve productivity.
6. **Regional balance and decentralization:** The challenge of decentralizing the economy and business was discussed. Cities are experiencing population migration, while the capital city, Tirana, has exceeded its capacity, resulting in regional imbalance. The case of Italy was cited, and participants suggested providing legal incentives for cities facing deficiencies to promote BPO sector development, while avoiding an over-reliance on the capital city.
7. **Free economic and technological development zones:** The ongoing project by the Municipality of Tirana, "Development of Free Economic and Technological Zones," was highlighted. Within five years, the first operational data centre in Albania is expected to be established through this project.
8. **Diversification of services offer:** Participants discussed the types of services that Albania could offer and further develop within the BPO sector. These include legal and medical services, training, market research and consulting, software development and maintenance, and high-value design and programming for the market. Several Albanian businesses in the sector have already started implementing pilot initiatives and solutions

through ICT to ensure intelligent analysis and security for a stronger market position and value-added services.

9. **Challenges of artificial intelligence (AI):** The current challenges arising from the implementation of AI through software applications, applied AI in robotics, targeted digital marketing (SEO, PPC), e-commerce, green technologies, etc., were also addressed. Robotic process automation and social media management were identified as other trends that would further evolve BPO service demands. Investments in equipment and systems were seen as one of the main challenges to meet market demands, differentiated products/services, and cost reduction.
10. **Data protection officer:** The participants discussed the potential for Albania to develop a data protection officer position due to language skills and technological capabilities. Currently, there is a demand for this position, as it is required for the functioning of companies according to European Union regulations. This offers an opportunity for diversifying the BPO portfolio and specializing in this field as an outsource profession and offshore service.
11. **Further development of the business developer sector:** The importance of this position for businesses was emphasized, highlighting Albania's advantage in terms of communication skills.
12. **Communication and information:** The participants stressed the need for improved communication and information dissemination among all stakeholders. A communication strategy and necessary interactions should be developed to integrate the BPO sector into intelligent specialization.
13. **Diaspora engagement:** All participants acknowledged the importance of the diaspora in this economic sector and the absorption of human capital from abroad. Creating a platform for brain circulation involving academics, professionals, and researchers in the diaspora was discussed. This platform would facilitate connections between the diaspora and businesses inside and outside the country, fostering collaboration in projects, start-ups, incubators, and other initiatives, which bring investments and expertise to Albania. The parallel measures necessary to strengthen this collaboration were also emphasized.

As for other domains, findings emerged from the roundtable served as a starting point for discussions within the national workshop to set up strengths and weaknesses, opportunities and threats linked to the possible evolution of the sector and better focus the main components of an innovation-based strategy for its further development in Albania.

Workshop discussions confirmed that, despite growing competition from other countries, Albania can still be considered as an attractive destination for the Business Process Outsourcing (BPO) sector, driven by its favorable business environment, competitive costs, and a skilled bilingual workforce.

Albania still offers a cost advantage compared to other European countries, making it an appealing choice for outsourcing. The proficiency of Albanians in languages such as English and Italian positions them well for customer service, technical support, and back-office functions. Its strategic geographic location provides proximity to European markets, particularly Western Europe.

The Albanian government actively supports the BPO sector, offering tax incentives, subsidies, and establishing specialized economic zones. The country's education system has also played a role by providing relevant training programs.

Services offered encompass customer support, call center operations, technical support, data entry, back-office functions, and content moderation.

To fulfill the potential of the BPO sector in Albania and overcome the identified obstacles, participants emphasized the need to invest in the education and development of the workforce, enhance network infrastructures, and build up a dedicated legal and fiscal framework for the sector.

6.2.2.1 SWOT

From the summary report provided by the S3 team for all elements of the SWOT analysis several key insights were identified which can support the definition of the vision and the policy mix.

Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Increased interest of young people toward jobs related to the BPO sector, especially after the COVID-19 pandemic, due to the opportunity to work remotely ➤ Favorable geographical location for attracting investments and proximity to EU markets ➤ Comparative advantage in terms of cost of labor and presence of young workforce engaged in the sector ➤ Supportive and incentive policies from the government to enter the sector, with less bureaucracy and a differentiated tax rate of 5% compared to other sectors 	<ul style="list-style-type: none"> ➤ Lack of an accurate definition of the sector and insufficient prioritization of sub-sectors, also because of lack of statistics and administrative data ➤ Specialized outsourcing services have a main client in the public sector, while the private sector lacks a vision to align with specialized companies for some processes and prefers in-house operations ➤ Limited collaboration between academia and industry ➤ Lack of a skilled workforce for niche BPO services ➤ Unbalanced geographical coverage of network infrastructures resulting in difficulties in developing remote work practices (a weakness for digital nomads)

	<ul style="list-style-type: none"> ➤ Inadequate legal framework (e.g., inability to register costs or recognize certain expenses) ➤ Limited access to funding resources and grant schemes
Opportunities	Threats
<ul style="list-style-type: none"> ➤ Increasing global demand for BPO services ➤ Access to financial/incentive schemes from the European Union for sector development in the country. ➤ Use of AI-Based solutions as a means to improve competition, attract more clients, and contribute to the economic growth and technological advancement of the country. ➤ Strengthening cooperation with the diaspora to exchange expertise, knowledge, and mitigate the threat of emigration. ➤ Revitalizing economic diplomacy and increased participation in international events for promotion and contract connections, organized and supported by state agencies such as AIDA 	<ul style="list-style-type: none"> ➤ Lack of long-term and stable service assignments. ➤ Increased risk of losing professionals offering specialized services and foreign language proficiency due to the emigration of young workforce ➤ Increased competition from other countries offering free outsourcing services, such as Eastern European countries. ➤ Growing risks related to cybersecurity/data protection, as outsourcing services involve handling sensitive customer data and intellectual property

6.2.2.2 Vision

The future of the BPO sector in Albania is envisaged as being based on the strengthening of specialized and high quality skills, diversified professional services and unique specializations able to position itself in the world-class services market and supporting priority sectors in Albania by offering Advanced Digital services – including those based on AI and machine learning – for a digital transformation of economy and export capacities.

This vision also passes through a greater diffusion of business development opportunities linked to the BPO sector even outside the main cities and requires the creation of enabling context conditions through the activation of broader policy measures aimed at retaining talents and preventing brain drain.

6.2.2.3 Policy mix

As a result of the discussions carried out during the workshop, the following possible lines of intervention were identified capable of giving substance to the identified vision.

More specifically, enabling and more horizontal in nature lines of action are:

1. Enhancing network infrastructure and support to digitalisation

- Improvement and development of digital infrastructure.
- Creation of technology parks (TEDAs) and innovation hubs for BPO businesses.

2. Set up of a better policy and regulatory framework

- Enhancement of the regulatory framework and legal environment, including through alignment with international standards and compliance.
- Support for dedicated policy measures and initiatives, including financial support and fiscal incentives.

Priority specific lines of action are to be considered

3. Sector Promotion and Recognition

- Promotion of "Albania Best Practice" in the BPO sector.
- Development of a measurement methodology for the BPO market.
- Improvement of legislation and alignment with EU standards and support to certification of operational standards.

4. Promoting Collaboration

- Collaboration and exchange of experiences between universities and businesses within and outside the country, including through the creation of information platforms for legislation and information exchange
- Attracting diaspora expertise through brain circulation or brain gain initiatives.
- Establishment of a dedicated communication strategy.

5. Supporting skill development and dedicated education programs

- Improvement of language skills and curriculum development, including through integration of practical modules in pre-university education.
- Continuous training programs and lifelong learning opportunities, including horizontal programs on GDPR compliance and data protection.

6. Strengthening of investment in marketing and promotion

- Promotion of Albania as a BPO destination, including through implementation of a specific marketing strategy and participation in international trade fairs
- Boost stakeholder awareness and engagement, including through revitalization of economic diplomacy

6.3 Energy sector

6.3.1 Round tables and Workshops participants

Domain	Event	Participants from				
		Academia	Business	Civil society	Government	Total
Energy	Round table	9	17	5	8	39
	Workshop	5	15	3	28	51
	<i>Total</i>	<i>14</i>	<i>32</i>	<i>8</i>	<i>36</i>	<i>90</i>

Source: Albanian national S3 team

After BPO sector, Energy is the domain that registered the lowest level of participation. The level of participation recorded in the events organized in the energy priority domain must be read in the light of the structure of the sector, characterized by a more limited number of relevant players, above all from the business sector, compared to sectors such as agriculture and tourism. For this reason, the numbers relating to participation are to be considered significant for the sector. In total the participants were 90, with a slight prevalence of government representatives.

Over 30 were the participants from the business, while the participation of civil society was low. In qualitative terms, the participation and involvement from the participants from government helix, business sector and organisations of the energy sector was very good. Academia also participated (mostly HE).

Despite a lower participation in strictly numerical terms the discussions on renewable energy priority domain generated a lot of interest among the actors.

The main topics discussed were renewable energy production and exploiting natural resources by respecting environment to foster green transition and increase competitiveness of the economy. The sub sectors touched during the meetings and which were more promising to offer innovative solutions were the renewable energy and environmental preservation.

6.3.2 Key findings

The key points that emerged as a starting point, though not exhaustive, for discussions in the workshop are:

- 1. Legal support and policies:** Participants highlighted the need for clear and sustainable policies and legislation to encourage investments in renewable energy sector. A well-defined legal and regulatory framework is crucial to create a favorable environment for small and medium-sized enterprises and to promote renewable energy production. Currently, although licenses have been granted for investments in all three forms of renewable energy, lack of concrete investments is observed due to bureaucratic hurdles (e.g., construction permits) and inadequate monitoring systems. It is necessary to adapt laws in accordance with the acquis. Another aspect related to legal frameworks is the implementation and management of contracts. Contracts should be fair, adhere to international standards, and ensure the rights and obligations of all involved parties. Ultimately, participants highlighted there is currently a legal void in this area.
- 2. Network infrastructure:** The development of network infrastructure creates another challenge for the renewable energy sector in Albania. It is important to establish necessary networks for the efficient and sustainable transportation and distribution of renewable energy. According to participants, approximately 10-15% of production does not enter the grid due to interruptions in the distribution network and limitations in the transmission network during periods of high production when it rains. Discussions with donors, such as the World Bank, have suggested that if investments in the distribution network are directed towards smart and green solutions, grid losses could be minimized. Participants proposed the establishment of a Renewable Energy Operator to manage and address imbalances in the grids.
- 3. Lack of coordination among participating actors:** There are various actors involved in this sector, operating without coordination, such as the Polytechnic University conducting research and development with support from the Ministry of Education, the Academy of Sciences conducting independent research and studies, a licensing agency, the Ministry of Infrastructure and Energy making decisions, and transmission and distribution operators. If there were coordination and joint decision-making, projects would be more comprehensive, easily financed by second-tier banks, and attract more investors. A comprehensive map of Albania highlighting areas with renewable energy potential is missing.
- 4. Lack of specialized skills:** There is a shortage of specialized engineers in renewable energy for development, design, construction, and maintenance of renewable energy infrastructure. To address this issue, participants proposed upskilling and reskilling of existing engineers and specialists. There is a need for specialized programs in universities and higher institutes, offering scholarships and practical training opportunities in the

renewable energy industry. Additionally, improving collaboration between the private sector and the education sector to identify and prepare new talents and increasing budgets beyond solely relying on state funding is considered crucial.

5. **Need for updating processes to incorporate the latest technology:** Participants emphasized the need for updating standards in the renewable energy sector. It is important for competent authorities and the industry to stay abreast of the latest developments in renewable energy. This includes tracking new technologies, innovations, and advanced methods of renewable energy production, distribution, and utilization. Through the latest technological knowledge, new opportunities can be identified, and the performance of existing systems can be optimized. For instance, a revision of procedures for wind turbine installation is required.
6. **Integration with the existing energy system:** According to government representatives from the energy sector (KESH), there is potential to develop a sustainable hybrid system. Albanian lakes have the capacity to reserve water. Rather than just increasing capacity, investing in storage systems, such as Skavica, is also crucial.

As for other priority domains, findings emerged from the roundtable served as a starting point for discussions within the national workshop to arrive at a summary of the main strengths and weaknesses, opportunities and threats linked to the innovative development of the energy sector and better focus the main components of a policy mix for its further development in Albania.

From the discussions carried out within the workshop emerged a broad consensus that the renewable energy sector in Albania has witnessed significant growth and development in recent years, positioning the country as a promising player in the transition towards clean and sustainable energy sources.

With its favorable geographical location, abundant natural resources, and a growing commitment to environmental stewardship, Albania has made substantial strides in harnessing renewable energy to meet its energy needs.

Moreover, the energy sector has also created even greater opportunities for investment, job creation, and economic growth.

Recognizing the strategic importance of the renewable energy, Albania has strategically targeted the renewable energy sector as a key area for the development of smart specialization paths.

6.3.2.1 SWOT

From the summary report provided by the S3 team for all elements of the SWOT analysis several key insights were identified which can support the definition of the vision and the policy mix.

Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Abundant renewable energy resources, including solar, wind, hydro, and biomass ➤ Increasing public awareness and support for clean energy ➤ Favorable geographic location for solar and wind power generation ➤ Potential for job creation and economic growth in the renewable energy sector ➤ High level priority and support from the government in terms of investments to increase capacities (including licenses for solar energy plants) and finalization of interconnection 	<ul style="list-style-type: none"> ➤ Reliance on traditional energy sources for electricity generation, resulting also in low level of biomass and organic waste usage for energy production due to the lack of recycling plants ➤ Still limited infrastructure for renewable energy generation and transmission and lack of energy storage systems ➤ Inadequate regulatory framework and incentives for renewable energy development (referring to the need for more legal acts) ➤ Lack of a masterplan for zoning and targeting areas with potential for investment in renewable energy (including lack of land categorization for more efficient information management, also as a consequence of the lack of supporting statistical data) ➤ Lack of specialized workforce capacities for emerging technologies, highly dynamic for the sector ➤ Absence of dedicated academic programs and scientific research ➤ Lack of an energy market (due also to lack of smart energy meters systems for measuring consumption) ➤ Lack of incentives to promote more efficient consumption among citizens and businesses
Opportunities	Threats
<ul style="list-style-type: none"> ➤ Growing demand for clean energy in domestic and international markets ➤ Access to European Union (EU) funding and support for renewable energy projects 	<ul style="list-style-type: none"> ➤ Dependence on imported energy resources and fluctuating prices due to geo-political instability impacting the energy sector globally ➤ Competition from neighboring countries in attracting renewable energy investments

<ul style="list-style-type: none"> ➤ Potential for technology transfer and collaboration with international partners ➤ Potential for Investment/research in smart grids applying the concept of the Internet of Things (houses, buildings, hotels, roads, etc.) ➤ Development of energy market analytics linked to the liberalization of the sector and the creation of Albanian Energy Stock Market ALPEX ➤ Growing attention of citizens and businesses towards sustainable energy use practices ➤ Increasing incentives for attracting investment and development of the domestic supply chain for renewable energy ➤ Potential for use of biomass and organic waste as a renewable energy source ➤ Potential of the applications of AI and new technologies for the development of agrovoltaic ➤ Growing demand for the provision of renewable energy systems applied to new buildings 	<ul style="list-style-type: none"> ➤ Technical challenges related to grid integration and energy storage ➤ High cost of initial investments in renewable energy plants ➤ Cyber security issues related to management of energy systems, due also to lack of specialized skills ➤ Emigration of workforce ➤ Limited incentivizing/subsidizing framework only for large-scale producers ➤ Risk arising from climate change to the stability of the renewable energy supply (including water resources)
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

6.3.2.2 Vision

The vision for Renewable Energy sector is to make Albania a leader of renewable energy in the region and assure exploiting and responsible management of its abundant natural resources, fostering environmental sustainability, energy security, green transition and increase competitiveness of the economy, through strategic investments, innovative technology, and sector reforms that will create sustainable and clean energy production in respect of the environment.

Pursuing this vision will mean focusing policy action on the development of specific trajectories of innovation, such as:

- diversification of the renewable energy mix through the development of solar and wind energy sources;
- wide application of waste-to-energy technologies;
- creation of smart grids and a national energy storage infrastructure;
- sustainable forest management.

6.3.2.3 Policy mix

To translate the vision into a mix of support measures consistent with the objective of promoting smart specialization in the energy sector in the medium term some possible lines of action have been identified.

In this context, enabling and more horizontal in nature lines of action are measures to decrease the emigration and abandoning of the rural areas from young people.

More specifically, priority specific lines of action are to be considered

1. Consistent policy and regulatory framework

- Promoting support measures for integration of alternative energy sources and energy efficiency.
- Boosting investments in renewable energy, including through liberalization of the energy market.
- Streamlining procedures for issuing permits and licenses for the companies operating in the sector and improving the legal and regulatory framework, including through developing under-regulations and guidelines to facilitate the implementation of energy-related laws.
- Improve the capacities of the National Agency for Natural Resources (AKBN) and other institutions on collecting and processing the statistical data, also for developing a master plan for zoning areas with renewable energy potential.

2. Creation of a smart energy infrastructure:

- Supporting solar and wind energy source projects to diversify the renewable energy portfolio, harnessing Albania's ample sunlight and wind resources for clean power generation.
- Investing in the development of smart grids and storage systems, to support smart grids and energy storage infrastructure that can efficiently handle the various nature of renewable energy resources and enable cross-regional energy sharing.
- Enhancing energy infrastructure, including the construction of technology centers (TECs) and charging stations to support electric transportation.

3. Enhancement of skills capacity and research:

- Strengthening the partnership between academia, businesses, and the government to bridge the skills gap.
- Enhancing education and training programs to improve knowledge and skills in renewable energy, including through updating and revising VET curricula to align with industry needs.
- Providing financial support for lifelong learning initiatives in the energy sector.
- Supporting research and development efforts for energy-efficient technologies.
- Introducing licenses for the specialists operating in the energy sector to guarantee the specific know how.

4. Sustainable energy use practices:

- Promoting awareness about environmental value of using renewable energy sources in schools.
- Encouraging energy efficiency and energy-saving practices, through communication campaigns aimed at citizens and businesses.
- Implementing energy efficiency measures and energy-saving practices in public administration.
- Encouraging the utilization of waste-to-energy technologies, innovative technologies and biomass resources for clean energy production, reducing landfill waste.
- Implementing responsible forest management practices, including reforestation and sustainable timber harvesting, to balance economic gains with environmental conservation.

6.4 ICT sector

6.4.1 Round tables and Workshops participants

Domain	Event	Participants from				
		Academia	Business	Civil society	Government	Total
ICT	Round table	8	17	7	32	64
	Workshop	9	25	7	21	62
	<i>Total</i>	<i>17</i>	<i>42</i>	<i>14</i>	<i>53</i>	<i>126</i>

Source: Albanian national S3 team

ICT sector meetings registered a good level of participation. In total the participants were 126, but with a prevalence of government representatives (53) over businesses (42).

In line with what was observed for the meetings of the other domains, the participation of representatives of universities and research centres and representatives of civil society was significantly lower. In qualitative terms, the involvement from academia, government and businesses was considered good.

It should be emphasized that ICT, Digitalisation and the usage of advanced technologies for smart growth was also a topic brought up in every meeting in every priority domain. Therefore, ICT has been suggested many times from various participants to be considered as an integral part of every domain.

6.4.2 Findings

In recent years, the ICT sector in Albania has experienced significant growth, with numerous companies offering ICT services and solutions across various fields. At the same time, Public institutions in Albania are also modernizing and developing advanced information systems to provide more efficient services to citizens and businesses.

During the organized discussions on the ICT sector in Albania, key points were highlighted in two roundtable sessions focused on startups and innovation.

To further support the sector's growth and create a smart and sustainable ecosystem, several areas for intervention and improvement were identified:

1. **Clear framework of institutional responsibilities:** Participants highlighted that there is no specific ministry responsible for innovation in Albania. Instead, an Interministerial Committee led by the Prime Minister oversees innovation policies, with each ministry responsible for promoting innovation in its respective field. Currently, this decentralized system for allocation of available funds and grants, leads to their underutilization by all interested parties. Thus, participants suggested the creation of a specific Ministry or Department.
2. **Dynamic legal and regulatory framework:** The technology sector requires a flexible legal and regulatory framework to facilitate its development. Participants discussed the need for a group of qualified lawyers to define this digital transition and propose new initiatives, avoiding mere replication of European Union models.
3. **Creation of favorable financing conditions:** Startups face challenges in accessing financing in Albania, since bank credit for these businesses is not easily accessible. Grants and investments from established businesses were identified as more suitable options. Financial instruments that support innovation include grants from the National Agency for Scientific Research and Innovation, grants from the Business Support Agency AIDA,

grants from the Ministry of State for Entrepreneurship Support, and international instruments such as those offered by the European Union.

4. **Stakeholders Collaboration:** Collaboration between academia, businesses, and the government was emphasized as crucial for the development of the startup and innovation ecosystem. Participants highlighted the need for research funding and proposed donations from businesses as a way to finance research and generate revenue. They also stressed the importance of student internships, organizing business forums, and promoting cooperation between universities and businesses.
5. **Digital infrastructure development:** Improving digital infrastructure was identified as a priority to enhance the development of advanced digital services across Albania. This includes upgrading internet networks, installing fiber optics, and deploying advanced cellular networks. Building data centers and ensuring digital security were also mentioned as other important factors.
6. **Human capital:** Developing workers' skills in information and communication technology (ICT) was recognized as crucial for advancing the sector. This can be achieved through specialized training programs and promoting STEM fields in the education system. Providing internship and employment opportunities in the ICT industry was highlighted as a means to improve local talent.
7. **Need for specialization in ICT sub-sectors:** Creating sub-sectors within ICT was seen as a way to prioritize development and extend the sector's impact into other industries. Examples include software development, online platforms, mobile applications, and digitalization, analysis and security of data.

These findings serve as a starting point for further discussions within the workshop to address the identified challenges and develop strategies for the development of the ICT sector in Albania.

During the national workshop for the ICT sector, two key issues requiring attention and priority were mainly focused.

The first is the development of human capital to improve skills and capacities within the industry. Investing in educational programs and training focused on ICT-related disciplines will empower the workforce with the knowledge and expertise needed to meet the demands of a rapidly evolving digital market. The education system needs updating and revision in curricula, training programs, establishment of research laboratories, and increased collaboration with career offices to meet specific market needs. By equipping individuals with advanced skills, Albania can create a highly specialized workforce that can drive innovation and competition.

The second level of priority lies in improving infrastructure and supporting digital transformation. This aspect includes investments in strong ICT infrastructure, including high-speed internet connectivity, data centers, and digital platforms. Enhancing digital infrastructure will create a

favorable environment for business development, attracting investments, and supporting the growth of the ICT ecosystem. Additionally, promoting the use of digital technologies in various sectors such as e-governance, e-commerce, and digital services will contribute to overall efficiency, productivity, and economic growth.

Ultimately, fostering a conducive environment for innovation, strengthening collaboration between stakeholders, improving financing options, and developing necessary infrastructure and human capital were identified as key factors in realizing the potential of the ICT sector in Albania.

6.4.2.1 SWOT

From the summary report provided by the S3 team for all elements of the SWOT analysis several key insights were identified which can support the definition of the vision and the policy mix.

Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Growing interest of young people in ICT and related fields and strong entrepreneurial spirit, resulting in a significant growth trend in the number of startups and push for digital transformation ➤ Favorable ecosystem for start-ups (incubators, co-working spaces, etc.) ➤ Favorable legal and institutional framework ➤ Attractive wages compared to other sectors, but competitive in the regional and international context 	<ul style="list-style-type: none"> ➤ Offer of the educational system not adequate to the demand for profiles required by the sector, resulting in few LLL curricula for ICT, mainly offered by private companies, limited soft business skills and know-how in startups and companies and lack of highly specialized skills ➤ Prevalence of basic services outsourcing business models that do not facilitate the arising of more advanced business models in the ICT sector ➤ Absence of a specific industrial policy for the sector, resulting in the absence of a Ministry of innovation and information technology, low investment and participation of the public and private sector in R&D activities, also due to the lack of research laboratories, and in weak collaboration between academia and business ➤ Telecom infrastructure of relatively low quality and incomplete coverage of the territory ➤ Absence of venture capitalists

	<ul style="list-style-type: none"> ➤ Alignment of the legal framework with technological advancements ➤ Low level of digital literacy among non-young people, resulting in lack of consumer education and in an inadequate development of the internal market ➤ The entire education system (pre university + HE) needs updating and revision in curricula, training programs, establishment of research laboratories, and increased collaboration with career offices to meet specific market needs ➤ Lack of analyses for skills needs ➤ Limited professional capacities of academic staff (trainings, experience exchange with other countries, participation in projects, etc.) ➤ Inadequate development of data protection systems
Opportunities	Threats
<ul style="list-style-type: none"> ➤ Potential access to EU funds ➤ Opportunity to launch new business ideas in the sector without the need for large initial investments ➤ Growing demand in the global ICT market, also driven by digital transition, industry 4.0 and 5G development ➤ Collaboration with the diaspora for knowledge exchange among research and innovation professionals ➤ Regional collaborations in joint projects ➤ Creation of Science and Technology Parks ➤ Development of the phenomenon of digital nomads thanks to attractive 	<ul style="list-style-type: none"> ➤ Brain drain ➤ Lack of a centralized competence center for managing support measures and allocation of financial resources ➤ Need for constant large investments to ensure cybersecurity ➤ Slow adaptation of curricula in respect to new developments ➤ Weak legal framework dedicated to the validation of ICT products

<p>climatic conditions and favorable geographical position</p> <ul style="list-style-type: none"> ➤ Growing orientation of new curricula and lifelong learning offer towards the labor market needs ➤ Plan for strong digitalization of public administration 	
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

6.4.2.2 Vision

The vision for smart specialization of Republic of Albania in ICT sector is to develop a sustainable and diversified ICT sector capable of successfully competing in international markets supporting all priority sectors to ensure competitiveness and technological development.

6.4.2.3 Policy mix

To fulfil this vision enabling and more horizontal in nature lines of action should be aimed at reducing the emigration of talent and the abandonment of the rural areas from young people.

More specifically, priority specific lines of action are to be considered

1. Favorable policy and regulatory framework:

- Implementation of specific industrial policy mainly (but not only) based on: i) support measures for the adoption of digital technologies by businesses, including through the integration of digital technologies in other sectors, such as agriculture, tourism, green energy, and manufacturing; ii) support measures for the development of a national ecosystem of startups.
- Review legal framework to support digitalization, including through support from regulatory authorities.
- International collaboration and partnerships for knowledge exchange, including through diaspora involvement, international agreements and participation to international fairs.

2. Infrastructure development and connectivity boost:

- Enhancing digital infrastructure, including broadband/optic fiber, 5G, and emerging technologies.
- Measures for promoting connectivity and access to digital services by businesses and citizens.

- Support measures for digitalization of public services at Local Public Administrations

3. Enhancement of skills and research capacity:

- Development of digital skills, through curriculum updates and creation of credit-based courses by universities.
- Strengthening of ICT laboratories and connectivity in all schools and development of continuous training of teaching staff in the ICT sector.
- Lifelong learning opportunities and short courses for up-skilling and re-skilling of workers.
- Promotion of collaboration between academia and businesses for applied scientific research and skill development.
- Measures to retain talent and prevent brain drain, including through specific support measures for students in R&D programs.
- Promotion of scientific research and innovation in line with market needs and focused on subsectors.
- Increasing the international knowledge exchange and cooperation.

6.5 Manufacturing sector

6.5.1 Round tables and Workshops participants

Domain	Event	Participants from				
		Academia	Business	Civil society	Government	Total
Manufacturing	Round table	16	22	15	51	104
	Workshop	6	22	2	24	54
	<i>Total</i>	22	44	17	75	158

Source: Albanian national S3 team

In Manufacturing domain, the meetings organized registered a medium-high level of participation, compared with other domains. In total the participants were 158. However, as for other domains it has been experienced a prevalence of government representatives (almost 50% of overall participants). The number of businesses involved was significant too (44).

In line with what was observed for other domains, the participation of representatives of academia and civil society was significantly lower.

In qualitative terms, there was a good involvement of the Government representatives and associations of industries that led the discussions, but lower involvement in discussions from representatives of the companies itself and academia and low participation from NGOs.

The subsector which attracted the highest interest regarding the quality of discussions and had the highest participation proportionally to the number of the stakeholders of this subsector, was the one in Raw materials.

This subsector has recently gained a lot of attention from business sector, academia and government level. It is believed by all actors that Albania has a lot of untapped potential in this area taken into consideration the richness of the country in raw materials.

The establishment of the EIT Raw Materials Hub already agreed for 2023 during high level meetings with all the stakeholders involved from autumn 2022 and in collaboration with EIT Raw materials, demonstrates the interest and potentiality of this subsector. These was also discussed during EDP events.

6.5.2 Findings

Considering the particular breadth of innovation applications in the manufacturing sector and taking into account inputs from the innovation potential mapping exercise conducted by the JRC to better focus discussions under the national workshop 5 thematic roundtables were held. The sub-sectors on which the discussions focused are:

- Raw Materials
- Wood Processing
- Automotive
- Building Materials
- Textiles and Leather

Common or specific findings were highlighted for the sub-sectors as follows:

1. **Inadequate industrial Infrastructure:** Currently Albania has relatively limited industrial infrastructure, including transportation networks. This results in additional costs for businesses to ensure goods transportation, outdated production facilities, and a lack of specialized industrial zones. Participants suggested the establishment of specialized industrial zones to minimize costs and provide better services for businesses.
2. **Limited and Low-Quality Workforce:** Participants identified a shortage of workers, partly due to emigration, and a lack of skilled workforce engaged in specific processes, such as design and marketing, especially in sub-sectors like wood processing and textiles. Improved coordination between the government, businesses, and academia was

emphasized to address this issue, including collaboration in job demand-supply, curriculum adaptation, and on-the-job training.

3. **Need for investment in innovation and technology:** Participants stressed the importance of investing in new technology and innovation for competitiveness and strategic specialization. The use of advanced technologies in producing "Made in Albania" products was deemed crucial. Challenges included high private investment costs for technology and difficulties accessing financing from second-level banks. Participants proposed the creation of an industry development fund and transparent access to grant schemes as desired incentives for businesses.
4. **Lack of Scientific Research:** Continuous scientific research is lacking in all sub-sectors, primarily due to budget constraints in universities. Joint research activities with other countries are limited, with research predominantly funded privately by businesses. Encouraging the establishment of research laboratories and securing state funding was deemed necessary.
5. **Costs, Security, and Quality of Electricity Supply:** Business representatives highlighted the relatively high and fluctuating costs of electricity, as well as the lack of security in the continuous and consistent supply of energy. These factors directly impact the operations and competitiveness of the manufacturing industry, making production process planning and maintenance more challenging.
6. **Safety and Quality of Industrial Materials:** Albania has a limited number of accredited laboratories for testing and certifying industrial materials used in the manufacturing industry and its sub-sectors. While a state-accredited laboratory exists at the Polytechnic University for wood processing, textile, and leather materials, it is insufficient. Businesses prefer importing raw materials from neighboring countries to meet contract standards, resulting in higher costs. Encouraging the establishment of testing laboratories within universities and securing state financing was deemed necessary.
7. **Lack of Government Presence to Increase Regional Cooperation:** Business representatives emphasized the need for partnerships and participation in trade fairs to exchange experiences and expertise. They suggested increased government presence and funding for such activities.
8. **Proposal for Cluster Creation:** In the Wood Processing sub-sector, a proposal was made to create clusters. An organization has already been established by businesses and other stakeholders, positively contributing to exchanges between parties. However, clusters are not yet regulated by law. Establishing clusters can help organize the entire value chain of the wood processing industry, allowing businesses to combine resources, share costs, increase production quantity and quality, and target larger markets, such as the European Union and regional markets.

These findings served as a starting point for further discussions within the workshop to identify strengths, weaknesses, opportunities and threats to consider for a smart specializations of the manufacturing sector in Albania.

The discussions carried out in the context of the workshop highlighted that the manufacturing sector encompasses diverse subsectors such as food processing, leather and textile, automotive, electronics, and more.

However, the SWOT elements that emerged from the discussions as most relevant did not highlight a major importance of some of these sub-sectors, useful for more precisely targeting a smart specialization in the manufacturing sector.

Participants pointed out the relevance of horizontal factors such as strategic geographical location to access EU markets and competitive labor costs, without identifying other more specific factors capable of focusing policy choices for smart specialization in the manufacturing sector.

They broadly stated that implementing a smart specialization strategy can leverage technological advancements, innovation, and targeted investments to enhance competitiveness, productivity, and sustainable growth in the manufacturing sector.

6.5.2.1 SWOT

From the summary report provided by the S3 team for all elements of the SWOT analysis several key insights were identified which can support the definition of the vision and the policy mix.

Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Strategic location and proximity to major markets in Europe, the Balkans, and the Mediterranean region ➤ Natural resources such as agricultural produce, mineral raw materials, and renewable energy sources, which can support specific manufacturing activities ➤ Cost competitiveness compared to some neighboring countries 	<ul style="list-style-type: none"> ➤ Limited technological adoption ➤ Reliance on imports on raw materials, machinery, and equipment, which can increase costs ➤ Fragmented industry structure/value chain leading to limited economies of scale ➤ Skills gap to meet the evolving demands of advanced manufacturing technologies ➤ Lack of collaboration between academia-private sector-public sector ➤ Lack of laboratories for R&D and quality and safety certifications

	<ul style="list-style-type: none"> ➤ Lack of industrial policy, resulting in low level of incentives and lack of dedicated support measures and taxation policy ➤ Inadequate legal framework (Bureaucracy and inefficient procedures for licensing; lack of studies on the market needs and potentialities; inadequate regulations for IPR protection and enhancement of Made in Albania trade mark) ➤ Difficulty in accessing credit ➤ Low presence of treatment and recycling plants, resulting in a low capacity of use of waste as a secondary raw material for the manufacturing industry
Opportunities	Threats
<ul style="list-style-type: none"> ➤ Policies for integration into global value chains, including through support to FDI and adoption of law on strategic investments ➤ Trend favorable to broader innovation and technology adoption and development of sustainable manufacturing practices ➤ Enhancement of connectivity, reduction of costs, and attraction of manufacturing investments, resulting from increasing investments in infrastructure for industrial zones, such as transportation, logistics, and energy ➤ Participation in EU chains and opportunities to enhance collaboration with other EU countries (Establishment of EIT raw materials Hub in Albania, WB6, Open Balkan and other initiatives opening the market to the region) ➤ Potential reduction in energy-related production costs resulting from the liberalization of the energy market 	<ul style="list-style-type: none"> ➤ Competition from low-cost manufacturing destinations for certain subsectors ➤ Rapid technological advancements ➤ Global economic uncertainties and geo-political instability, resulting in fluctuations in exchange rates and electric energy cost ➤ Trend of increasing energy costs for businesses ➤ Infrastructure gaps, especially in rural areas, affecting logistics and supply chain efficiency ➤ Skills migration ➤ Frequent changes of fiscal policies ➤ Not favorable framework conditions for business development (Corruptive practices, informality, unfair competition, disproportionality of administrative penalties and interests, high customs duties) ➤ Exchange rate fluctuations and not stable monetary policy

<ul style="list-style-type: none"> ➤ Growing demand for construction sector and for goods and services related also to development of tourism ➤ Collaboration and involvement of Diaspora in promoting initiatives linked to the start-up of innovative businesses (i.e. hackathons, initiatives promoted by Fab Labs) 	<ul style="list-style-type: none"> ➤ Lack of evaluation of the EU integration processes
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------

6.5.2.2 Vision

The vision for the manufacturing sector in Albania is to establish a thriving and competitive industry that contributes significantly to economic growth and job creation.

In the medium term the goal is to position Albania as a reliable destination for manufacturing investments, known for its focus on innovation, efficiency, and sustainable practices.

By leveraging existing strengths, embracing technological advancements, and fostering a supportive environment for businesses, a future is foreshadowed in which the manufacturing sector plays a vital role in driving economic development and enhancing Albania's global competitiveness.

This vision will be stimulated by the adoption of eco-friendly practices, minimizing environmental impact, promoting recycling and ensuring responsible resource management to support a more sustainable manufacturing industry, adhering to sustainability goals of the European Green Deal.

Pursuing this vision will mean focusing policy action on the development of specific trajectories of innovation, such as the enhancement of the exploration, exploitation and processing of mineral raw materials, also by encouraging cooperation and participation in extraction, processing and refining EU supply chains and establishment of organizations/institutions as EIT raw materials hub/center.

6.5.2.3 Policy mix

To translate the vision into a mix of support measures consistent with the mentioned goal some possible lines of action have been identified.

Firstly, enabling and more horizontal in nature lines of action should be aimed at reversing the trend towards emigration and abandonment of the rural areas from young people, convincing young people to stay in the rural areas through grants and other incentives.

More specifically, priority specific lines of action are to be considered

1. Favorable Policy and Regulatory Framework:

- Strengthening the public-private dialogue to develop and update regulatory framework and collaboration with research institutes, also with a view to implementing best practices in the industry.
- Adoption of sustainable fiscal policies to support private investment in manufacturing, including through lowering of customs tax and implementation of CEFTA agreement.
- Development of employment aid measures that promote job creation and job stabilization in the manufacturing industry, including measures to attraction/retention of talent through competitive salaries, career advancement, and favorable working conditions.
- Improve legal framework for use of land for manufacturing, including through land reform and regulatory measures for unused lands.
- Improve regulatory framework through streamlined administrative procedures and reduced bureaucracy for getting property documents.

2. Infrastructure development and better business environment:

- Investment in infrastructure development to improve logistics, connectivity, and access to markets.
- Encouraging technology transfer, that lead to technological advancement, economic growth and sustainable resource management, including through the establishment of technology hubs.
- Provision of necessary support mechanisms for product assurance, quality control, and certifications, including the adoption of international environmental standards and regulations and the integration of sustainability criteria in procurement processes and supplier selection.
- Measures for facilitating access to banking finance, grants, and incentives for manufacturing businesses.
- Encouragement of entrepreneurship in the manufacturing sector, especially among young people, including through supporting business incubators and start-up assistance services and bringing old enterprises into use.

- Define support measures to stimulate investments of Diaspora in the areas of origin.

4. Talent Development and Education:

- Development of specialized training programs to enhance the skills of the manufacturing workforce.
- Collaboration between educational institutions and industry to align curricula with industry needs.
- Support for continuous learning and professional development opportunities for manufacturing professionals.
- Support the possibility of contracting level 5 of EQF specialists.

5. International Cooperation and Market Access:

- Establishment of partnerships and collaborations with international organizations and businesses, including through bilateral and regional agreements on a basis of reciprocity, economic diplomacy, and trade missions.
- Support measures for participation in international trade fairs, exhibitions, and conferences to showcase Albanian manufacturing capabilities.
- Support for Albanian manufacturers in meeting international standards and certifications.
- Exchange of expertise and best practices with other countries to enhance competitiveness.

6. Support to Digital and Green transition of manufacturing sector:

- Implementation of support schemes that foster digital transformation and adoption of green technologies in manufacturing processes
- Promotion of sustainable manufacturing practices, through responsible resource management such as waste reduction, recycling, eco-friendly production, utilization of renewable energy sources and of local raw materials.
- Implementation of green supply chain practices to minimize environmental impact, including integration of sustainability criteria in procurement processes and supplier selection.

6.6 Tourism sector

6.6.1 Round tables and Workshops participants

Domain	Event	Participants from				
		Academia	Business	Civil society	Government	Total
Tourism	Round table	54	65	19	64	202
	Workshop	5	16	4	38	63
	<i>Total</i>	<i>59</i>	<i>81</i>	<i>23</i>	<i>102</i>	265

Source: Albanian national S3 team

Tourism sector is the domain that registered the highest level of participation to the EDP meetings from quadruple helix stakeholders. In total the participants were 265. Although a prevalence of participants from government entities is also confirmed in this case, the high number of participants representing companies (81) and research (59) must be underlined, testifying to the high level of interest existing nationwide on the sector as a potential domain for smart specialisation.

The discussions during the meetings organized in the tourism priority domain were mainly focused on specializing on subsectors such as cultural heritage, health tourism (combined with agriculture, medicinal plants, culinary (combined with agriculture, food) as well as natural and rural tourism (agro tourism, adventure and sports tourism). Use of made in Albania products and cultural heritage was evidenced as an important topic for all type of tourism but also as a bridge with other domains as agriculture, handicraft products of leather, textile, stone, etc.

6.6.2 Findings

The high level of interest in the smart growth of the Tourism sector suggested to organize six different roundtable discussions focused on the following possible paths of innovation:

- Mountain Tourism
- Health Tourism
- Agro Tourism
- Sea Tourism
- Diversification of Tourism
- Development of the tourism and hospitality market.

The discussions revealed common findings as well as specific findings for each of the topics covered, as follows:

1. **Limited Human Capital:** The first and most significant challenge identified in all roundtable discussions was the shortage of skilled professionals in the Albanian tourism sector, which hinders its development and competitiveness. This challenge can be broken down into several related aspects:
 - **Education and Training:** The current challenge lies in the lack of an effective education and training system for professionals in the tourism industry. Specialized programs and high-quality training standards are needed to develop the professional capacity of employees in areas such as hotel management, gastronomy, tour guiding, etc. Improvement of professional curricula, in terms of duration and content of professional courses were emphasized as further key factors.
 - **Brain Drain:** Albania is experiencing a steady trend of emigration of tourism specialists to foreign countries, partly due to institutional and international recognition and accreditation of diplomas. This diminishes the country's human capital base and results in a shortage of experienced and highly qualified professionals in the tourism sector.
 - **Salaries and Working Conditions:** Salaries in the tourism sector are relatively low compared to other tourist destinations, causing skilled Albanian professionals to seek employment opportunities abroad. Moreover, working conditions and the benefits offered by employers in the tourism sector often fail to attract and retain qualified employees.

To address these issues, participants emphasized the importance of developing long-term policies and strategies that may include investments in specialized education and training, improving working conditions and increasing salaries, standardizing and improving the reward system, as well as providing secure employment contracts for students and tourism professionals. Subsidies for seasonal employees may also be necessary.

2. **Need for greater formalization of market operating practices:** Market formalization emerged as another significant challenge in the Albanian tourism sector. Participants highlighted the need to implement government rules and laws to regulate business operations, taxation, and necessary permits in the tourism industry. The persistence of informal practices creates unfair competition for formal businesses. Strengthening control measures and ensuring compliance with quality and standards, particularly in agrotourism and medical tourism, were proposed.
3. **Boost investments in marketing and Digitalization:** Participants emphasized the need to develop innovative solutions capable of allowing a complete mapping of tourist attraction points, calendars of events and accommodation offers to provide systematic and unified ways of accessing information at a national level. They suggested installing screens to promote tourism in Albania 24 hours a day, digitalizing public transportation (installing

digital timetables), virtual museums, and utilizing AR/VR technology to establish direct communication with the audience. These measures would enhance visibility and the image of destinations, thereby increasing interest in choosing Albania as a tourist destination.

4. **Development of MICE in Tourism (Meetings, Incentives, Conferences, Exhibitions):** Participants proposed developing MICE tourism in municipalities beyond Tirana, which has already initiated such activities. To achieve this, improvements in infrastructure, efficient accommodation systems at the local level (to avoid overbooking), operation of other airports in the country, promotional incentives, and interregional partnerships were suggested.
5. **Promotion of Art and Crafts:** Collaboration between local and national structures can create a rich cultural and artistic environment in Albania. Proposed steps include organizing artistic events, supporting local art performers and craftsmen through financial and technical assistance programs, promoting local art through galleries, social media, and online platforms, as well as collaborating with accommodation to incorporate art and crafts as part of the tourist experience.
6. **Promotion of Cultural and Entertainment Activities for Year-round Tourism:** Participants stressed the importance of cultural and entertainment activities throughout the year. Key aspects to consider include:
 - **Protecting Cultural Heritage:** Ensuring the preservation of cultural heritage in Albania, including historical settlements, cultural monuments, and areas of special cultural value.
 - **Regulation and Facilitation of Drone Usage:** Establishing clear rules and guidelines for drone usage, such as limiting flight areas, setting maximum altitude limits, and respecting privacy and safety considerations.
 - **Controlling Noise Pollution:** Implementing effective regulations and monitoring noise levels to minimize the negative impact of noise pollution on cultural and entertainment activities.
 - **Involving Youth and Engaging the Local Community:** Encouraging youth participation and involving the local community in promoting best practices to foster respect for the cultural and social environment.
7. **Development of Infrastructure, Transport Network, and Internet Coverage:** Investment in tourism infrastructure, including smart internal systems in hotels and restaurants, tourist routes, attractions, recreational facilities, and reliable internet coverage, is crucial for providing a satisfactory experience for visitors and enabling diversified tourism offerings. Combined with quality and friendly services for visitors, these factors are essential for creating a positive experience.

8. **Investing in Waste Management, Environmental Protection, and Collaboration with Local Authorities:** Proper waste management is vital to preserve the natural environment and ensure a clean experience for tourists. This includes protecting natural areas, national parks, the coastline, historical monuments, and cultural heritage sites. Close collaboration between local and central government authorities and businesses, along with clear division of responsibilities, is necessary.
9. **Boosting Controlled Designation of Origin products:** Adding Controlled Designation of Origin products to the European Union's list of attractions is suggested. Additionally, organizing events that showcase the history of these products, along with their promotion and sales, can help tourists learn about traditional production methods and how they are part of the local identity. This brings visitors closer to the country's culture and heritage.
10. **Ensuring reliable statistical data and understanding market trends for better planning:** reliable statistics are essential for measuring and monitoring the performance of the tourism industry, developing informed policies and strategies, and making fact-based and sustainable decisions. Improved coordination between the government, tourism institutions, and the tourism industry is needed to facilitate performance monitoring and enhance strategies and policies for sustainable tourism development. A key role for a better planning can be played by the university system to which more resources should be allocated to conduct research to analyze market trends and define new tourism solutions and products, by involving the Destination Management Organizations (DMOs) too.
11. **Supporting Local Action Groups:** The inclusion of local action groups (in the meaning defined at EU level by the LEADER approach) plays a crucial role in building local identity, promoting attractions and local products, as well as developing new tourist products. Through their involvement in tourism development, local action groups help increase tourist visits, generate income, and stimulate economic development in their areas.
12. **Findings related to specific trajectories of innovation:** The participants highlighted the development of health care, mainly the development of dental care, aesthetics, ophthalmology services, natural resources of spas (natural thermal springs and mineral-rich waters). They identified the need for scientific research following these trends to provide medical and therapeutic tourism and the specialization of students in these fields.

The national workshop helped to review the above findings in order to identify strengths, weaknesses, opportunities and threats to be considered for a smart specialization path of the tourism sector.

From the discussions within the workshop emerged as a general common view that Albania possesses a diverse and promising tourism landscape that encompasses a range of subsectors, including sea, mountain, cultural heritage, adventure, and ecotourism. Particularly, with its

coastline along the Adriatic and Ionian Seas, mountain ranges, rich cultural heritage, and preserved natural areas, Albania has the potential to attract a growing number of international and domestic tourists interested in the so-called “experiential tourism”. To harness this potential and foster sustainable tourism development, the implementation of a smart specialization strategy can play a crucial role. By strategically focusing on specific sub-sectors and leveraging technological advancements, Albania can enhance its competitiveness, improve visitor experiences, and maximize the socio-economic benefits of its tourism industry.

6.6.2.1 SWOT

From the summary report provided by the S3 team for all elements of the SWOT analysis several key insights were identified which can support the definition of the vision and the policy mix.

Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Natural beauty: Albania can boast of having 4 UNESCO World Heritage sites and its nature is rich in beaches, rugged mountains, national parks, natural thermal springs and mineral-rich waters, offering diverse and attractive landscapes for tourists ➤ Cultural heritage: the country's rich history, archaeological sites, and cultural traditions provide unique opportunities for cultural tourism and heritage exploration ➤ Affordability: compared to other European destinations, Albania offers relatively lower costs, making it an appealing option for budget-conscious travelers ➤ Authentic experiences: Albania's relatively unexplored tourism landscape allows visitors to experience authentic and untouched destinations, contributing to a sense of adventure and discovery (“experiential tourism”) ➤ High strategic focus by Government on the development of the sector, which translates into a dedicated fiscal policy, an offering of supportive financial schemes 	<ul style="list-style-type: none"> ➤ Human capital/workforce: this includes limited skilled workforce, skills gaps and mismatch, seasonal employment, training and professional development, Language skills ➤ Seasonal concentration: the tourism industry in Albania is highly seasonal, with a majority of visitors arriving during the summer months, leading to underutilization of resources and limited year-round employment opportunities ➤ Infrastructure gaps: while improvements have been made, there are still gaps in infrastructure development, particularly in remote mountainous areas, limiting access and the overall visitor experience ➤ Quality of services: the quality of hospitality services, including accommodation, dining, and tourist facilities, needs further enhancement to meet international standards and customer expectations ➤ Low development of digital services within businesses and for accessing tourist services

<p>and in the implementation of marketing strategy to promote Albania as an international tourist destination</p> <ul style="list-style-type: none"> ➤ Geographic position and favorable climate ➤ Perception of Albania as a safe tourist destination 	<ul style="list-style-type: none"> ➤ High weight of informal market and lack of business standardization ➤ Lack of sustainable tourism practices, in terms of regulations and guidelines to encourage responsible tourism, including waste management systems, energy-efficient practices, and conservation initiatives to protect cultural heritage and preserve natural ecosystems ➤ Inadequate development of Public transport services ➤ Low level of collaboration between business sector, academia and government ➤ Absence of a long term policy in tourism, due to weak planning capacity, resulting also in frequent changes in legal framework and in the lack of harmonization of urban planning rules that do not allow companies to plan their investments
Opportunities	Threats
<ul style="list-style-type: none"> ➤ Growing investments in the development of infrastructure to support tourism, including transport networks and connectivity, hotels, resorts, and recreational facilities, to accommodate increasing tourist demand ➤ Digital marketing and online presence: leveraging digital platforms and social media channels can significantly enhance Albania's visibility, attract a broader audience, and engage with potential tourists ➤ Potential for diversification of tourism products: adventure tourism, cultural festivals, gastronomy tours, and wellness retreats, can attract niche markets and extend the tourism season 	<ul style="list-style-type: none"> ➤ Environmental sustainability: Balancing tourism growth with environmental conservation is essential to preserve Albania's natural beauty and prevent the negative impacts of overcrowding and overdevelopment ➤ Competitive destinations: Albania faces competition from other Mediterranean and Southeast European destinations that have well-established tourism industries and robust marketing strategies ➤ Geopolitical factors: Political instability globally or unfavorable international relations can impact tourist perceptions and deter potential visitors ➤ Safety and security concerns: Addressing safety and security issues and ensuring a safe environment for tourists is crucial to

<p>➤ Collaboration and partnerships: encouraging public-private partnerships, engaging local communities, and collaborating with international stakeholders can unlock new opportunities, foster knowledge exchange and support sustainable tourism development</p>	<p>build trust and attract international travelers</p> <p>➤ Pandemics and global crises: External shocks, such as pandemics or global economic crises, more than in other sectors, can impact the industry's growth and stability, disrupting tourism flows</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

6.6.2.2 Vision

The vision is to position Albania as a premier sustainable tourism destination, offering diverse and authentic experiences that celebrate its rich cultural heritage, beautiful landscapes, culinary delights, and wellness offerings, that contribute to the well-being of its communities.

It is envisioned as a dynamic diverse, country-wide, all year tourism sector, that contributes to the socio-economic development of the country while promoting responsible practices and preserving Albanian natural and cultural treasures for future generations.

Pursuing this vision will mean focusing policy action on the development of specific trajectories of innovation, such as:

- Enhancement of the Cultural Heritage and traditions, by preserving and promoting Albania's historical and cultural sites, museums, and traditions.
- Support Health and Wellness Tourism, by exploiting connections with agriculture and medicinal plants sub-sector;
- Support Ecotourism, Agro tourism and Experiential Tourism, by exploiting connections with agriculture and food sectors.

6.6.2.3 Policy mix

To support this vision, the implementation a policy mix based both on enabling measures and priority-specific ones is considered crucial.

Firstly, more horizontal in nature lines of action should be aimed at reversing the trend towards emigration and abandonment of the rural areas from young people.

More specifically, priority specific lines of action are to be considered

1. Long-term specific Policy Strategy:

- Development of a new tourism policy based on a new vision for the industry, including through the adoption of regional master plans to identify local services and products.
- Creation of a compelling narrative for Albania and its cities as tourist destinations, including through branding of Albanian products and promotion of "Made in Albania" goods.
- Implementation of tax reforms to align value-added tax (VAT) rates for accommodation and food services.

2. Infrastructure and connectivity:

- Improvement of road infrastructure and enhancement of public transportation systems (including airport connection services) and signposting for tourists.
- Strengthening of digital infrastructure in tourist areas to enhance connectivity.
- Implementation of smart information points and audio guides for visitors.

3. Better regulation:

- Improvement of legislation on private property rights to encourage investment, including completion of land and property reform for agro-tourism related developments.
- Update the legal framework with measures aimed at preventing environmental pollution and strengthening sanctions and controls.
- Streamlining of administrative processes and reduction of associated fees.
- Simplification of entry procedures at border points and development of a centralized registry for foreign and domestic tourists.

4. Support to businesses for sustainability and quality enhancement:

- Support to hospitality businesses for adoption of green energy solutions and digitalization.
- Support action for the promotion of sustainable practices and eco-friendly initiatives in the tourism sector.
- Implementation of smart waste management systems at territorial level to ensure environmental sustainability of tourism.
- Upscaling of service standards and quality through accreditation and monitoring.

5. Workforce development and collaboration:

- Establishment of a dedicated higher education institution for tourism studies.
- Enhancement of workforce qualifications and skills through training programs, including continuous training of hospitality staff to deliver quality services.
- Incentives to attract young professionals to work in the tourism sector.
- Reorganization of business representation for constructive dialogue and collaboration.
- Strengthening of partnerships and collaborations with local and international stakeholders.

6. Enhance marketing actions in the tourist attraction strategy:

- Creation of a comprehensive information system for tourism offerings and unified digital platforms and channels for tourism promotion.
- Creation of tourism apps and digital mapping for ancient sites and tourist attractions, public transportation and event calendars.
- Analysis and targeting of specific tourism markets for effective marketing strategies.
- Provision of a digitalized address directory for citizens and tourists.
- Incentives for tour operators and touristic agencies for building and promoting eco-friendly touristic packages and for low season packages.
- Strengthening of collaboration between Cost Agencies, Agency for tourism and tour operators on touristic package offers.

7. Support measures related to specific trajectories of innovation with higher potential

- Leveraging Albania's natural thermal springs and mineral-rich waters.
- Promoting Albania as an affordable and reliable destination for medical procedures, such as dental work, cosmetic surgery, and fertility treatments, including through the development of partnerships with top medical institutions and healthcare providers to offer high-quality medical treatments, surgeries and rehabilitation.
- Developing eco-friendly health resorts that emphasize sustainability and eco-conscious practices, attracting health-conscious and environmentally aware tourists.

- Integrating traditional Albanian healing practices and alternative medicine into health tourism offerings. Examples include but are not limited to herbal remedies, and holistic therapies.
- Promoting rural tourism by connecting visitors with local farms and agritourist activities, emphasizing sustainable food production. Examples include but are not limited to:
 - Offering farm tours and experiences, based on engaging visitors in hands-on activities such as harvesting, cheese-making, milking etc.;
 - Offering farm-to-table dining, based on promoting the consumption of locally sourced fresh products. This is of dual benefit as it encourages locally grown food and also supports small-scale farmers. Such experiences can also be accompanied with culinary workshops;
 - Offering farmers' markets and agro-festivals, based on organizing regular farmers' markets and agro-festivals where local producers can sell their goods directly to visitors. These events can feature cultural performances and workshops to enrich the experience.
 - Encouraging farmers to adopt sustainable and eco-friendly practices, promoting environmental certifications from farmers. This may include responsible waste management and conservation of natural resources.
 - Encouraging hiking tourism, adventure and sports tourism to prioritize sustainable tourism practices that minimize negative environmental impacts and maximize social ones.

7. Conclusive remarks

Ultimately, the EDP indicate that:

- **in the agriculture, energy and tourism priority areas emerged a fairly defined vision.** Besides, **the policy mix appears to be coherently structured** for achieving innovative development based on diversification and the existing strengths are also correctly oriented from an outward looking perspective, with the view to make the **Blue and Green economy** two architraves that will orient the entire S3 horizontally. **Sustainable and diversified tourism, healthy and sustainable food chain, renewable energy and natural resources, seems to be evidenced during EDP as S3 priority domains.**
- for **BPO sector, ICT sector and manufacturing** the discussions held highlighted many cross-cutting issues and findings are not probably strongly enough for the identification of a sound specific vision and for a coherent focus of specific policy action. Those priority areas seem to be less mature for supporting a smart specialization path of the country, but the discussions carried out have highlighted that **ICT and knowledge-intensive services constitute for all priority domains a relevant factor for smart specialization in a horizontal manner.**
- As regards the manufacturing sector, indications mainly underline the need to strengthen the context conditions to make them more favourable to the growth of businesses and the development of investments, while no strong indication concerns the opportunity of focusing public support on a specific sub-sector compared to others, with the expectation of the **manufacturing of raw materials that seems to be a priority area to focus on S3**, considered the natural wealth in mineral raw materials and the potential of development and application of new and innovative technologies in their extraction and processing.

From the entrepreneurial discovery process emerged also the need for defining and implementing a broader policy agenda functional to support the S3 with the creation of enabling context conditions.

As main horizontal lines of action to be considered were highlighted measures aimed at:

- **reversing the trend towards emigration and abandonment of the rural areas from young people**, making it attractive for young people to stay in rural areas through grants and other incentives;
- **improving the context for accessing to finance and credit;**
- **strengthening network infrastructures** such as access to internet broadband and transport infrastructures and enhancing public transport and logistics services.

Moreover, the entrepreneurial discovery process brought out the importance of defining **horizontal/cross-cutting measures more specifically related to improving the national innovation ecosystem.**

1. Firstly, the EDP suggested that it will be essential to **invest in human capital by increasing scientific and technological skills at all levels.**
 - This must include a review of educational and training programs, based on a skills and qualifications need analysis, that provides for a significant strengthening of curricula, with a focus on STEM disciplines and specific curricula related to S3 priorities, the harmonization of the education system with the VET system, review of curricula from primary education till higher education and the creation of university curricula capable of accompanying Albania in digital and green transitions and strengthening the specialization of the national economy in the S3 priority domains.
 - At the same time, it is essential to invest more in lifelong learning to implement a broad program of reskilling and upskilling of workers, taking into account the challenges posed by circular economy and artificial intelligence.
2. **Building up the culture of innovation** in schools and among young generations aimed at enhancing talents and preventing their emigration must be another goal to be pursued with specific policy actions.
 - Firstly, it is important to develop a favourable context that allows young generations to stay and contribute to the smart growth of Albania. The turning on of public information portals/services dedicated to **pushing curricula and job opportunities linked to the S3 specialization areas** and the support for the creation of places devoted to encouraging open innovation (such as living labs and fab labs) and capable of accompanying the growth in demand for innovation coming from civil society and young innovators should be considered as relevant actions.
 - Secondly, a key role on this could be played by the direct involvement of the diaspora. The return of talents and successful Albanians could be favoured by introducing stable financial support to companies for hiring researchers and workers with high skills and work experiences coming from abroad, inspiring confidence in the younger generations towards smart, sustainable, and inclusive growth of the country. The brain circulation and involvement of the diaspora from their country of stay will bring knowledge and skills to the Albanian market enabling also new ideas and innovation, knowledge transfer, new partnerships and joint projects, as an added value in the innovation ecosystem and closing the gaps for knowledge and skills evidenced by stakeholders' part of quadruple helix through the EDP.
3. A **sound industrial/innovation policy framework** must be defined with the aim of creating a favourable business climate for companies to develop research and innovation.
 - This passes through an overall review of incentive schemes aimed at promoting the priority domains of S3 with specific aid measures, including through the

adoption of sustainable fiscal policies, and the definition of a legislative and regulatory framework aligned with EU standards and which can encourage investments by local companies and foreign investments and the development of clusters. It will be important to achieve a strong simplification of the procedures for starting business investments and a policy tool kit to support businesses in accessing public funding dedicated to R&I, including through the establishment of informative platforms and a dedicated communication strategy. The strengthening of the R&I incentive framework must also be directed towards the cross-sectoral introduction of eco-friendly and sustainable practices and processes and towards the adoption of digital technological solutions, both in private and public sector.

- A key role should be assigned to the strengthening of collaboration between academia, businesses, and the government and a growing involvement of organizations representing civil society. This collaboration can be achieved by strengthening agreements between the educational and university system and businesses for company internships of students and researchers, dual VET schools and on the job training, collaborating in the organization of business forums and innovation fairs up to revitalizing economic diplomacy.
4. It will also be essential to **define a specific support framework for technology transfer processes** (vertical and horizontal) by *“strengthening of linkages between technology supply side, technology adopters and the intermediary support service provider”*¹³.
- The participants in the EDP asked for enhancing the institutional role and internal skills of state agencies such as AIDA and others for increasing Albanian participation in international events to boost networking, support “Made in Albania” products and the integration into global value chains of the S3 priority sectors.
 - The development by universities and research bodies of the so-called Third Mission activities, including through support to spin-offs, and creation of a national network of innovation intermediaries such as Industrial Innovation Hubs, Tech Parks and Clusters will require specific public support. Within these places the quadruple helix stakeholders can cooperate stably, with the aim to provide easier access to KIBS and better matching of SMEs’ demand for innovation and foster the dissemination of technological innovations across sectors and territory.

The joint consideration of all these findings can help Albania to focus its S3 on enhancing the existing innovative potential and creating favourable conditions for smart growth of the Albanian economy and society.

¹³ <https://www.etf.europa.eu/en/news-and-events/news/technology-transfer-and-skills-western-balkans-key-growth-and-innovation>

References

European Commission, Directorate-General for Research and Innovation, *A Western Balkans agenda on innovation, research, education, culture, youth & sport*, Publications Office of the European Union, 2021, <https://data.europa.eu/doi/10.2777/831554>

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *An Economic and Investment Plan for the Western Balkans* {SWD(2020) 223 final}

Multi-annual Action Plan for a Regional Economic Area in the Western Balkans Six, Regional Cooperation Council, 2017, <https://www.rcc.int/docs/383/consolidated-multi-annual-action-plan-for-a-regional-economic-area-in-the-western-balkans-six>

Matusiak M., Kleibrink A. (ed.), *Supporting an Innovation Agenda for the Western Balkans: Tools and Methodologies*, Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-79-81870-7, doi:10.2760/48162, JRC111430.

Fabbri, E., Gerussi, E., Hollanders, H. and Sinjari, I., *The identification of Smart Specialisation priority domains in Albania. A mapping exercise*. Gerussi, E., Hollanders, H. (editors), Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/322286, JRC130660.

Foray, D., *Smart Specialisation: Opportunities and Challenges for Regional Innovation Policy*, Routledge, Abingdon/New York, 2015.

Perianez-Forte I. and Wilson J., *Assessing Smart Specialisation: The Entrepreneurial Discovery Process* EUR 30709 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-37823-5, doi:10.2760/559139, JRC124405.

Marinelli, E. and Perianez Forte, I., *Smart Specialisation at work: The entrepreneurial discovery as a continuous process S3*, Working Paper Series No. 12/2017, EUR 28838 EN, Publications Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-74377-1, doi:10.2760/514714, JRC108571.

Zhezha, E., *EDP in the EU Enlargement and Neighbourhood Region in 2022 Smart Specialisation process in the Republic of Albania*, 2022.

European Training Foundation, *Analysing the skills dimension of technology transfer in the Western Balkans*, 2023.

Annex 1 - List of the horizontal issues considered for the drafting of the conclusive remarks

- Strengthen the collaboration between academia, businesses, and the government
- Enhance student internships, organizing business forums, and promoting cooperation between universities and businesses
- Skills development according to the country's needs for smart and competitive growth
- Prioritization of VET and Higher education curricula towards national priority domains
- Promotion of lifelong learning / micro credentials that allows specialization, upskilling and reskilling on national priority domains
- Development of a positive environment that enables the young generation to stay and contribute in the growth of their region
- Orienting the education curricula from early childhood to university to enable smart growth
- Work culture development through the introduction of practice curricula in the pre-university system and enhance in job training
- Harmonization of educational system when moving from one level to the other
- Increase the number of specialized staff and workforce
- Identification of talents and dedicated support to their growth
- Promoting the diaspora involvement in the development of the country, by supporting brain circulation platforms and practices that allow exchange of ideas, expertise, fostering collaboration and attraction of investments and supporting the return of diaspora in the origin cities and regions
- Fostering research and innovation through initiatives that promote collaboration among quadruple helix actors, such as Industrial Innovation Hubs, Tech Parks and Clusters
- Establishment of informative platforms for legislation and information exchange, dedicated communication strategy
- Improvement of collaboration with stakeholders within and outside the country
- Improvement of legislation and alignment with EU standards
- Orienting businesses on the possibility to access in finance and trainings on how to apply for projects. Access to EU financial/incentive schemes, projects and programs for sectorial development in the country
- Improve access to finance and information
- Financial support and investment incentives. Adoption of sustainable fiscal policies
- Incentives for investments in research, development, and innovation (R&D&I)
- Need for clear and sustainable policies and legislation to encourage investments
- Revitalizing economic diplomacy and increased participation in international events for promotion and contract connections, organized and supported by state agencies such as AIDA
- Development of Industrial policy
- Integration into global value chains, circular economy, clusters
- Develop and orient businesses towards sustainable economic policies.

- Promote eco-friendly practices
- Support measures/incentives to promote “Made in Albania”
- Preservation of traditions
- Digitalization/ Digital transformation in the private and public sectors, including public services, application of artificial intelligence.
- Improve internet access and broadband infrastructure
- Improve transport infrastructure/networks
- Review of incentive schemes that promote the priority domains of S3
- Adoption of new technological practices and training for all stakeholders
- Simplify administrative procedures
- Improve land management and property registration
- Enhance investment on technology and technology transfer
- Improving the legal framework, implementation of international standards
- Market formalization, fight informality
- Harmonization of strategies and strategic frameworks
- Alignment with international standards and compliance. Certification of operational standards
- Decentralization of digital infrastructure for rural areas
- Improvement of living condition and social life in rural areas, especially through the strengthening of health and educational services
- Review of the legal framework to support digitalization (more incentives/exemption from taxation for businesses supporting R&D or students giving grants, etc.)
- Enhancing connectivity and access to digital services
- Development of technological ecosystems and start up support/ Supportive policies for business
- Competitiveness diagnostic is needed

Annex 2 - Summary table of the main findings of the bilateral meetings

Country Meeting	Shared Priority Domain	Challenges	Solutions	Collaboration Potential
Albania - Kosovo	Sustainable Agriculture	<ul style="list-style-type: none"> - Climate change - Lack of interest by new generations - Urbanization impact - Asymmetric market positions - Limited access to information 	<ul style="list-style-type: none"> - Green agenda and diversification - Technological improvements - Promotion of organic farming - Territorial product exploration 	<ul style="list-style-type: none"> - Research joint projects - Investment in certified joint labs - Pollution reduction initiatives
Albania - North Macedonia	Renewable Energy	<ul style="list-style-type: none"> - Climate change - Urbanization effects - Energy balance - Regulatory hurdles 	<ul style="list-style-type: none"> - Clean energy transition - Energy storage - Market coupling 	<ul style="list-style-type: none"> - Joint energy projects - Research collaboration - Regulatory knowledge sharing
Albania - Montenegro	Raw Material Industry/Sustainable Materials	<ul style="list-style-type: none"> - Urbanization effects - Lack of collaboration - Regulatory barriers 	<ul style="list-style-type: none"> - EIT Raw Materials Hub - Secondary raw materials utilization 	<ul style="list-style-type: none"> - Joint mineral exploration - Research collaboration

Country Meeting	Shared Priority Domain	Challenges	Solutions	Collaboration Potential
				<ul style="list-style-type: none"> - Regulatory cooperation
Kosovo - Montenegro	ICT	<ul style="list-style-type: none"> - Digitalization lag - Cybersecurity concerns - GDPR compliance - Workforce shortages 	<ul style="list-style-type: none"> - Digital innovation - Cybersecurity center - Digital Excellence Center 	<ul style="list-style-type: none"> - Joint platforms for academia - Data science system - Cybersecurity capabilities
Kosovo - Montenegro	Sustainable Agriculture and Food Value Chain	<ul style="list-style-type: none"> - Digitalization in enterprises - Labor shortages - Regulatory issues 	<ul style="list-style-type: none"> - Legal policy harmonization - Quality assurance agreements 	<ul style="list-style-type: none"> - Joint research institute - Agro-processing tracking system - Finance access initiatives

"Policy Recommendations for Enhancing Competitiveness in Western Balkan and Regional Economies, in the context of Smart Specialization Strategy"

In the Context of the Project: Promoting Smart Specialisation Strategy as a Regional Perspective in the Western Balkans

Prepared by Florensa (Haxhi) Kovaci, Albanian S3 Team member, Coordinator for EDP Regional Workshops

September 2023



Acknowledgements

We would like to express our heartfelt gratitude to all those who contributed to the successful completion of this report, a collaborative effort between government, private sector, academia and civil society entities from four countries. This project would not have been possible without the support, dedication, and expertise of the following individuals and organizations:

We would like to acknowledge the support of the Deputy Prime Minister, Mrs. Belinda Balluku and her Office, who is leading the process of Smart Specialization in Albania, the Head of the National Team of Smart Specialization in Albania, Mrs. Linda Pustina, as well as the members of the team, who showed great commitment in organizing these 3 workshops with Kosovo, Montenegro and North Macedonia.

A special thank goes to the National Teams of Smart Specialization and in particular their heads, from Kosovo, North Macedonia and Montenegro, respectively Mr. Vedat Sagonjeva, Mrs. Jasmina Majstoroska and Mrs. Marijeta Barjaktarovic Lanzardi. Their dedication and enthusiasm in organizing the bilateral workshops in the context of the process of smart specialization and regional cooperation have been crucial to the success of this report.

We extend our appreciation to Open Society Foundation for Albania, for their support in organizing the three bilateral workshops and their unwavering commitment to promoting sustainable development and fostering collaboration between civil society and government bodies in the context of the Smart Specialization Strategy and regional cooperation. Their invaluable resources and support have been crucial to materialize this project. A special thank you goes also to the Joint Research Center, of the European Commission, that provided guidance and the methodology which stirred the process. Their support has been important for organizing these events and through the entire process of S3.

We extend our gratitude to the private sector stakeholders, especially to the Union of Albanian Producers, and Mr. Arben Shkodra, secretary General, who provided input, feedback, and support throughout this project. Your perspectives have enriched our work.

Our sincere thanks go to the experts from academia who generously shared their knowledge, insights, and expertise, and were an integral part of each workshop.

We would like to acknowledge the diligent work of our project team members who spent countless hours in research, analysis, and workshop preparation. Their dedication is greatly appreciated.

This report is a testament to the power of collaboration and shared commitment to advancing smart specialization for the development of our countries. We are honored to have worked alongside such dedicated individuals and organizations.

Thank you for your unwavering support and belief in our mission.



Contents

06

Introduction – Smart Specialization in Albania

10

Regional Perspective

11

Overview of Meetings, Workshops, and Trainings

15

Bilateral Workshops

34

Ongoing Regional Cooperation

41

Appendix – Agreements between Albania and Kosovo, North Macedonia and Montenegro

51

References

Introduction – Smart Specialization in Albania

In recent years, countries, and regions in the European Union (EU) have developed Smart Specialization Strategies (S3) as a new tool for boosting innovation and regional development. The S3 approach, that is gaining increasing interest worldwide, represents a place-based innovation policy concept that seeks to identify promising areas for public and private intervention in terms of promising innovation niches and domains where knowledge-based value-added can be increased. It stresses the potential of cross-sectoral linkages, besides traditional industries and promotes the diversification based on these linkages.

As part of the planned activities for European Union accession, the Republic of Albania initiated the process of preparing the Smart Specialization Strategy (S3) in 2017, following the methodology and guidelines of the European Commission's Joint Research Centre (JRC) .

S3 represents an interplay of industrial, educational, research/scientific, and innovation policies aiming to create economic growth by leveraging a country's competitive advantages. S3 aims to address Albania's key socioeconomic challenges by achieving better alignment between innovation and research capacities and development opportunities. In 2021, a group of independent experts conducted a detailed analysis of Albania's capacities, resources, and competitive advantages.

Nowadays, a strong focus on innovation policies is even more urgent due to the growing need of addressing the societal challenges of the last decade.

The introduction of S3 to the Western Balkans is considered within the context of the EU's enlargement policy that provides an accession perspective and envisages support for several policy areas including socio-economic development. As a result, S3 became part of the WB6 regional agenda, as part of the Smart Growth pillar in MAP REA followed by the Common Regional Market Action Plan 2021-2024 in the context of the Berlin Process, and of the EU Agenda for the Western Balkans 2021-2027. S3 is also part of the Chapter 20 "Enterprise and Industrial Policy" and Chapter 25 "Science and research" of EU Acquis in the framework of Albania EU integration.

To assist Western Balkan economies in the design process of designing of their S3 JRC of EC has developed an S3 Framework that includes all steps to the final draft of the strategic document to be used as a guideline.

Smart Specialization is expected to be of high importance not only for Albania's integration in the EU, but also for the growth of Albanian's economy, unlocking the innovation and competitiveness potential in specific domains.

Albania started the process of designing its S3 in 2016 and in 2017 it registered in the platform of the Joint Research Centre (JRC) of the European Commission for S3 .

Considering the importance of this process for the Albanian Government and the fact that it covers a wide number of sectors, the process is coordinated by the Deputy Prime Minister leading the S3 Interministerial Committee and assisted by the National S3 Team. The Interministerial Committee is composed ministers and other representatives from the quadruple helix:

- the Minister of Finance and Economy;
- the Minister of Education and Sports;
- the Minister of State for Protection of Entrepreneurship;
- the Minister of Agriculture and Rural Development;
- the Minister of Tourism and Environment;
- the Minister of Culture;
- the Minister of Health and Social Protection;
- the Minister of State for Service Standards;
- the General Director of the State Agency for Strategic Programming and Aid Coordination (SASPAC);
- the General Director of INSTAT;
- the General Director of the Albanian Investment Development Agency (AIDA);
- the General Director of the National Agency of the Information Society (AKSHI);
- the General Director of the General Directorate of Industrial Property;
- the Head of the S3 National Team.
- the Chairman of the Conference of Rectors;
- the Chairman of the Academy of Sciences;
- the Head of the Union of Chambers of Commerce;
- the Head of the Union of Albanian Producers;
- the Chairman of the Association for Local Autonomy.

The Albanian S3 Team is composed mainly by experts and representatives of the different institutions at technical level.

The Committee has the political leadership of the process of drafting the S3 and its implementation. Albanian S3 Team developed an S3 Roadmap based on the JRC Framework and so far several steps have been taken to develop a Strategy at national level and at the same time by keeping a regional perspective.

National S3 Team supports the Committee with expertise and deals with preparation of the S3 and the implementation of the S3 Roadmap.

The country finalized the first steps of context analysis, through a thorough Quantitative and Qualitative mapping of the economic, innovative, scientific, and productive domains that might be considered in the selection of technological potential of the country identifying potential vertical and horizontal S3 priority areas. Such priority domains are identified based on the economic, innovation, and scientific strengths of a region or a country, expert knowledge, and stakeholder dialogue, the latter being one of the main features of the strategic process.

As a result, six priority areas for a Smart Specialisation Strategy in Albania (sub-articulated in 11 industries) and 4 cross-sectorial areas: intelligent specialization were identified as potential domains where innovation would bring an added value to the economy:

1. Agriculture, Fishing & Aquaculture, and Forestry
2. Manufacturing
3. Energy
4. Tourism
5. ICT
6. Business Process Outsourcing (BPO)

Cross-sectorial identified areas: Blue economy; Healthy food; Renewable resources energy; Extended BPOs.

One of the most distinctive and important features of the S3 strategy development methodology is the implementation of a bottom-up approach known as the Entrepreneurial Discovery Process (EDP).

This participatory process, envisages that the priority domains are not to be defined top-down by policymakers alone, but rather agreed through a comprehensive dialogue between the stakeholders of the territory, called the Entrepreneurial Discovery Process (EDP). This enables the identification and prioritization of key activities that connect innovation and scientific research with economic growth. It involves structured consultations with all actors involved in the Quadruple Helix (1. Central and Local Government, 2. Academia, 3. Business, 4. Civil Society). In this process, each actor has a crucial role, highlighting the leading role of entrepreneurship and productive businesses in identifying strategic development priorities, the role of academia in providing specialization aligned with the country's development priorities, the role of civil society as a catalyst for change and conveying the voice of society in the process, and finally, the role of central and local government in translating these needs and priorities into concrete policies with an impact on the development of innovative priority sectors.

The inputs from EDP working groups complemented and validated the outcomes from the mapping phase and will be used for drafting the final S3 document. During the EDP in Albania, to promote the stakeholders' dialogue within the 6 thematic domains emerged as relevant from the mapping exercise, a total of 32 events were organized by the S3 National Team from October 2022 to July 2023. These events included: national events, sectorial workshops, roundtables, bilateral meetings with cross-border countries, etc. The events were attended by 1275 participants from the quadruple helix. National S3 experts facilitated the discussion and helped to collect the inputs.

Each meeting was facilitated and moderated by at least two experts from the National S3 Team and experts of the relevant sectors. The organization of the national workshops aimed at involving subjects able to contribute to the dialogue by providing value added information and points of view useful for carrying out the SWOT analysis, the definition of the vision and the consequent identification of possible actions of the policy mix.

Regional Perspective

The Western Balkan countries are in the process of finalizing or initiating the implementation of their S3 strategies and have already identified priority areas with the potential for intelligent specialization in the coming years. It is of particular importance that the countries in the region focus on taking initiatives and collaborative efforts among government actors, researchers, businesses, and other societal actors to deliver innovative results that contribute to the development of each of the Western Balkan economies and the region. The intelligent specialization process should serve as a tool to identify regional priority sectors in conjunction with national ones. The idea is for each country to specialize in a field where it has more advantages and potential in terms of human and capital resources, enabling the region to benefit and enhance its competitive advantage.

Therefore, it is suggested that the WB6 countries collaborate to facilitate the exchange of ideas and experiences on key aspects that should be incorporated in the S3 Strategies to maximize their potential for boosting the economic performance of each country and the region. Furthermore, a special emphasis should be placed on the role and importance of collaboration between each of these countries in enhancing the performance of their shared priority sectors.

In this context, in addition to the 29 national EDP events, the National S3 Team, organized 3 bilateral workshops with representatives from government, academic, business sector and organizations from Kosovo, Montenegro and North Macedonia with a view to promote smart specialization, based on the identification of priorities of common interest with these neighbor countries and develop cooperation paths. The meetings were organized in collaboration with the National S3 Teams of the three countries during the period June - July 2023. The goal was to identify and prioritize activities that bridge innovation, scientific research, and economic development.

These meetings played a vital role in promoting cross-border cooperation, sharing knowledge, and enhancing regional integration. The findings and recommendations from each meeting will serve not only as an input for the drafting and implementation of the Smart Specialization Strategy in accordance with EU regulations, but also as first steps to common initiatives and cooperation agreements on specific topics of interest. The recommendations will also help the countries to better absorb and utilize EU funds allocated for the implementation of this strategy through increasing the collaboration and engaging in mutual projects.

Overview of Meetings, Workshops, and Trainings

In line with EU methodologies, the Smart Specialization Strategy (S3) and Entrepreneur Discovery Process (EDP) processes in Albania have actively engaged key stakeholders from government, business, academia, and civil society, fostering an inclusive approach:

- **Bottom-up Approach:** The S3 and EDP processes in the Western Balkans have adopted a bottom-up approach, guided by methodologies from the Joint Research Centre (JRC) of the European Commission. This approach involves gathering input and insights from all relevant stakeholders at the very early stages of strategy development, ensuring inclusivity and a wide spectrum of perspectives.
- **Engagement of Quadruple Helix Actors:** These processes have seen active involvement from representatives of the Quadruple Helix, which includes key stakeholders from government, business, academia, and civil society. Their participation has been instrumental in shaping the strategies and plans.
- **Participation Across Priority Areas:** A total of 1,275 participants engaged in the overall EDP process. This engagement spanned various priority fields and was structured as follows:
 - 175 participants in the opening event
 - 964 participants in national roundtable discussions
 - 136 participants in regional workshops

National meetings:

Helix	Agriculture	BPO	Renewable Energy	ICT	Manufacturing	Tourism	Total
Academia	57	10	14	17	22	59	179
Business	95	29	32	42	44	81	323
Civil Society	42	8	8	14	17	23	112
Government	55	29	36	53	75	102	350
Total	249	76	90	126	158	265	964

Regional meetings:

Bilateral Meetings	Date	Number of participants
Albania - Kosovo	26.06.2023	50
Albania - North Macedonia	07.07.2023	43
Albania - Montenegro	17.07.2023	51

Overall, the participation of the quadruple helix actors from both countries in each event organized was very satisfactory, in qualitative terms. A considerable part of the actors invited responded positively to the invitations and confirmed their participation. Some of them even proposed other qualified subjects to be invited in the events, thus contributing to promoting awareness of the S3 approach among stakeholders. Their engagement during the meetings was generally very high and most of the participants were very active during the discussions taking the initiative to propose new perspectives and new ideas.

- **Additional Workshop Training:** In May 2023, a two-day workshop organized by the Joint Research Centre (JRC) of the European Commission in cooperation with the Office of the Deputy Prime Minister of Albania was held in Tirana. The workshop, titled "Smart Specialization Framework in the EU Enlargement and Neighborhood Region: Policy Mix and Monitoring for Smart Specialization for Albania and Kosovo," aimed to provide members of S3 teams and policymakers from involved ministries of both countries with information on key concepts of policy mix and S3 monitoring. The workshop also introduced a consistent methodological approach to S3 implementation and emphasized the identification of robust instruments and indicators for inclusion in the final S3 document.
- **Structure of the workshops:** The participants were distributed in different working groups/tables, each made up of about 10-12 people. The composition of the groups considered the need to bring together representatives from quadruple helix from both countries. Within each working group, a member of the S3 national team acted as a facilitator, both by asking the participants specific questions and by taking notes on a specific board of the opinions/considerations expressed. For each work session, a list of the most relevant points that emerged from the discussion was thus produced and a member of each group presented to other groups the main findings coming from the dialogue about SWOT, vision and policy mix.

Significant Outcomes:

- **Inclusive Strategy Development:** The inclusive approach to strategy development has yielded positive results, fostering cooperation among diverse stakeholders, and enhancing the quality of strategic plans.
- **Policy Recommendations:** As a notable outcome, these meetings and workshops have generated valuable policy recommendations. These recommendations have addressed challenges and opportunities within the Western Balkans, setting the stage for improved collaboration which will contribute to economic development.
- **Regional Collaboration:** The engagement of participants from various Western Balkan countries has promoted regional collaboration and created a stronger relations between representatives of both countries that led also to application on common projects and initiatives. This collaborative spirit has contributed to the recognition of the region's importance in the EU integration process.

Bilateral Workshops

1. Albania - Kosovo Bilateral Workshop

The bilateral workshop with Kosovo was an opportunity to jointly discuss and provide input on these two shared priority domains identified within the S3 framework. The outcomes and recommendations from this workshop will benefit both countries and enhance bilateral cooperation.

The workshop started with a welcome speech from both heads of National S3 Teams who stressed the importance of finalizing this strategy and collaborating on shared priority domains. In addition, it was mentioned that this strategy is important for both countries integration agenda in the European Union, specifically within the framework of chapters 20 and 25, which deal respectively with Enterprises and Industrial Policies, and Science and Research. It is also aligned with the European Union's Western Balkans Agenda on Youth, Sport, Innovation 2021-2027 and the Western Balkans Common Market Action Plan 2021-2024 in the context of the Berlin Process.

Kosovo's Progress towards finalization of S3

Kosovo's Engagement in the Smart Specialization Process

Kosovo began its engagement in the Smart Specialization process in 2018 when it officially registered in the Smart Specialization Platform. The government of Kosovo, on March 23, 2018, expressed its commitment to this initiative. Subsequently, the National Team for the Smart Specialization Platform was established, initially in 2018, and later revised in 2020 to include a wider range of institutions and stakeholders from academia, civil society, and the private sector.

The National Team, led by the Office for Strategic Planning within the Office of the Prime Minister, comprises central-level institutions such as the Ministry of Education, Science, Technology, and Innovation, the Ministry of Industry, Trade, and Entrepreneurship, the Ministry of Economy, the Academy of Sciences, the University of Prishtina, the University for Business and Technology, the Chamber of Commerce, and business associations related to ICT, metals, and energy.

The National Team is responsible for leading and coordinating the process related to the Smart Specialization Platform, including the preparation of necessary policy and document analyses for this platform.

Since then, Kosovo has designed a roadmap for the Smart Specialization Strategy development with the assistance of the European Union, aligning it with the methodological framework of the Joint Research Centre (JRC) for Smart Specialization in the Western Balkans and EU Neighborhood. According to the JRC methodology, the key steps for this process include:

- Decision to initiate the process and analysis of the strategic framework.
- Diagnostics - which involves quantitative and qualitative analysis of economic, innovative, and scientific potential, leading to the identification of priority fields.
- Stakeholder engagement, known as the Entrepreneurial Discovery Process (EDP), involving representatives from the public, private, academic, and civil society sectors to identify challenges and policy instruments.
- Design of the monitoring, implementation, and financing system.
- Preparation of the strategic document for Smart Specialization.

Kosovo has completed the first three phases and is now in the process of establishing the monitoring, implementation, and financing framework based on the results of stakeholder dialogues.

II. Identification of Priority Fields

The quantitative and qualitative analyses conducted in 2021 and 2022 have identified several industries and sub-sectors with potential for innovation and development, setting the stage for stakeholder dialogues as a crucial step in Smart Specialization. These analyses include a combination of statistical methodologies to explore Kosovo's economic, scientific, and innovative potential. The qualitative analysis integrates the results of public consultations and interviews.

The qualitative analysis integrates the results of public consultations and interviews, covering more than seventy interested parties from the quadruple helix of the national ecosystem.

The analysis identified three verticals:

- wood processing, agro-processing, and green energy and two horizontals
- ICT and creative industries economic and productive sectors as priorities for Smart Specialization

III. Stakeholder Dialogues - EDP Process

As a result of the analyses, a consultative process known as the Entrepreneurial Discovery Process (EDP) began in September 2022 and concluded in early 2023. This process engaged stakeholders from both the public and private sectors, including academia and civil society. The primary focus of this process was discussing specific needs and policy instruments to support innovation.

During the EDP, three workshops were conducted, each focusing on one of the prioritized fields. The discussions in the first and second rounds of workshops, held from September to December 2022, primarily revolved around developing and finalizing SWOT analyses. These analyses identified the strengths, weaknesses, opportunities, and threats for each sector, serving as an initial step to assess the current situation and inform the selection of policy instruments.

The third round of workshops, held from January to March 2023 as part of the EDP, addressed policy instruments (policy mix). During this round, contributions from various stakeholders were gathered, focusing on measures contributing to achieving strategic objectives and actions, as well as performance indicators.

B. Shared Priority Domains identified:

- **ICT**
- **Food Processing**

Both countries after analyzing the priority domains identified through the S3 Process agreed on the shared priority domains worth exploring together in the bilateral workshop. During the joint bilateral meeting, representatives from both countries (business sector, academia, government, and civil society) congratulated the initiative to join and discuss together the possibilities for pushing forward selected priorities related to innovation and development.

The workshop represented a significant opportunity to collaborate and work towards common goals for innovation and economic growth in Albania and Kosovo in ICT and food processing areas.

At the bilateral workshop with Kosovo, discussions on shared domains were organized into working tables with participants representing all four helixes—government, industry, academia, and civil society.

Below, it is presented a concise summary of the key findings and priorities highlighted during the meeting, in alignment with the agenda for the shared priority domains:

ICT:

	Challenges	Solutions	Joint Projects
Digitalization and Innovation	Digitalization of work processes, real-time information exchange, cybersecurity, AI exploration, harmonized systems, technology adoption, ICT use encouragement, synergies, best practices sharing	Digital skills education, Start-Up support, smart product development, interoperability, legal harmonization, GDPR compliance, addressing labour shortages	Joint platform, research network, hubs, comprehensive Data Science system
Digital Skills and Economic Development	Digital education, Start-Up support, smart product development, interoperability, legal harmonization, GDPR compliance, labour market challenges	Up-skilling and Re-skilling, recognized services, Cybersecurity Centre, Digital Excellence Centre	Bilateral cooperation, digital education projects, Digital Excellence Centre

Food Processing:

	Challenges	Solutions	Joint Projects
Legal and Policy Harmonization in Agriculture	Legal policy harmonization, contract enforcement, communication gaps, joint research institute, university collaboration	Legal harmonization, contract enforcement, communication channels, joint research institute, university collaboration	Legal policy harmonization, contract enforcement, joint research institute
Smart Agriculture and Agro-processing	Digital tracking system, labour shortages, finance access, smart product development, standards harmonization, supply coordination	Training, finance access, smart product promotion, standards harmonization, supply coordination, subsidy schemes, knowledge sharing, structural collaboration, agro-processing focus, export exploration, sustainable practices	Joint fund, consortia, EU-certified labs, trade fairs, training programs, shared audit, innovative techniques
Trade Policies and Agro-Processing	Legislation completion, input taxation, subsidies, agency empowerment, certification, standardization, origin determination, technology investment, intergovernmental agreements	Legislation completion, input taxation elimination, subsidies, agency empowerment, certification, standardization, origin determination, technology investment, intergovernmental agreements	Joint fund, consortia, EU-certified labs, trade fairs, training programs, shared audit, innovative techniques, coordination agency

2. Albania - North Macedonia S3 Bilateral Workshop

The Joint Bilateral Meeting between Albania and North Macedonia started with a warm welcome from the Heads of National S3 Teams, who expressed their sincere appreciation for the presence of participants. They emphasized the need to expand collaboration beyond conventional processes with Western Balkan countries. Identified priority sectors for cooperation included agriculture, manufacturing, energy, and raw materials. This diverse gathering included private sector representatives, government officials, academia, and civil society from both nations, highlighting the significance of their joint efforts.

The government representative from North Macedonia discussed recent priorities supported by the EU and potential EU/regional programs for bilateral/regional cooperation. Two significant packages were discussed: one focusing on a regional program for cross-border cooperation between North Macedonia and Albania, **with a budget of 12 million euros**. The program aligns with the Smart Specialization Strategy, emphasizing environment protection, climate change mitigation, and research and innovation facilities.

The second package includes multi-country programs aimed at supporting various sectors, including youth cooperation, digital transition, Roma inclusion, gender equality, and the common regional market. The representative shared North Macedonia's experience in effectively managing EU funds under a special coordination structure, involving key institutions to boost the economy and support green policies.

A. North Macedonia's Progress towards finalization of S3

North Macedonia initiated its involvement in the Smart Specialization process in alignment with the Berlin Process requirements, similar to other Western Balkan countries. The process officially commenced in 2018 when North Macedonia registered on the Smart Specialization Platform. This commitment was underscored by the government of North Macedonia, demonstrating its dedication to the Smart Specialization initiative. The National Team for the Smart Specialization Platform was established in July 2018 and underwent revisions in 2020 to ensure broader representation from various institutions and stakeholders, including academia, civil society, and the private sector. Led by the Ministry of Education and Science, this National Team comprises central-level institutions such as the Ministry of Economy, the Ministry of Agriculture, Forestry, and Water Economy, the Ministry of Information Society and Administration, the Ministry of Environment and Physical Planning, the Ministry of Finance, the State Statistical Office, and universities, research institutes, and business associations relevant to the identified priority sectors.

The National Team is entrusted with the responsibility of **spearheading** and coordinating the Smart Specialization **Platform's** processes. This includes the preparation of essential policy analyses and documents crucial to the **platform's** objectives.

The Smart Specialization Strategy development in North Macedonia has been guided by a roadmap designed with the assistance of the European Union. This roadmap aligns with the methodological framework provided by the Joint Research Centre (JRC) for Smart Specialization in the Western Balkans and EU Neighborhood. The JRC methodology outlines key steps in this process:

1. Initiating the Process and Analyzing the Strategic Framework: This phase involves making the decision to commence the process and analyzing the strategic framework.

2. Diagnostics: Diagnostics entail quantitative and qualitative analyses of economic, innovative, and scientific potential, leading to the identification of priority fields.

3. Stakeholder Engagement (Entrepreneurial Discovery Process - EDP): This phase engages representatives from the public, private, academic, and civil society sectors to identify challenges and policy instruments.

4. Designing the Monitoring, Implementation, and Financing System: This step focuses on creating the system for monitoring, implementing, and financing the Smart Specialization Strategy.

5. Preparing the Strategic Document for Smart Specialization: This stage involves the preparation of the strategic document outlining the Smart Specialization Strategy.

North Macedonia has successfully completed the initial four phases and is currently in the process of drafting the strategic document.

II. Identification of Priority Domains

The quantitative and qualitative analyses conducted in 2021 and 2022 have identified several industries and sub-sectors with significant potential for innovation and development. These analyses draw from a combination of statistical methodologies to explore North Macedonia's economic, scientific, and innovative potential. The qualitative analysis integrates results obtained through public consultations and interviews.

The analyses have pinpointed the following vertical priority areas:

- Electro Mechanical Industry - Industry 4.0
- Sustainable Materials and Smart Buildings
- Smart agriculture and food with high added value
- ICT
- As a horizontal are proposed two domains
- Energy for the future
- Tourism

and each of the priority domains has plenty and diverse opportunities for cross-innovation, with both vertical and horizontal domains.

These sectors represent the strategic areas where North Macedonia aims to concentrate its efforts and resources to drive innovation, foster economic growth, and enhance competitiveness.

III. Stakeholder Dialogues - Entrepreneurial Discovery Process (EDP)

Building on the insights gained from the analyses, North Macedonia initiated a consultative process known as the Entrepreneurial Discovery Process (EDP) in September 2022, which concluded in early 2023. The EDP engaged stakeholders from both the public and private sectors, including academia and civil society. The primary objective of this process was to facilitate discussions on specific needs and policy instruments required to support innovation within the identified priority sectors.

The EDP process included three workshops, each dedicated to one of the prioritized sectors. The discussions during the first and second rounds of workshops (held from September to December 2022) were primarily centered around the development and finalization of SWOT analyses. These analyses aimed to identify the strengths, weaknesses, opportunities, and threats for each sector, providing an initial assessment of the current situation and insights for the selection of policy instruments.

The third round of workshops (conducted from January to March 2023) within the EDP addressed policy instruments, often referred to as the "policy mix." During this phase, contributions from diverse stakeholders were solicited, focusing on measures that contribute to achieving strategic objectives and actions, as well as performance indicators.

This stakeholder-driven approach aims to tailor the Smart Specialization Strategy to the specific needs and opportunities identified within North Macedonia, fostering an environment conducive to innovation, economic development, and competitiveness in the identified priority sectors.

B. Shared Priority Domains identified:

- Sustainable Agriculture
- Renewable Energy
- Manufacturing industry
- Raw Material Industry and Sustainable Value-added Processing

The joint workshop aimed to foster cross-border collaboration, knowledge-based growth, and innovative approaches in shared domains, paving the way for a stronger partnership and a prosperous future, with the support of EU programs and funding.

Sustainable Agriculture:

	Challenges	Solutions	Joint Projects
Sustainable Agricultural Practices	Green agenda, organic farming, territorial products, traditional practices, technology enhancement, blue economy, knowledge exchange	Climate change adaptation, next-gen farming, urbanization effects, retaining experts, storage efficiency, market balance, modernization, farmer cooperation, information access, sustainability frameworks, technology integration, invasive species, climate risk mitigation	Research, innovation, digitalization, environmental protection, education, regional collaboration
Support for Agricultural Education and Innovation	Collaboration, digital services, research, innovation, skill development, product quality testing	University cooperation, digitalization, technical assistance, research support, certified institutions	Research infrastructure, smart specialization, information sharing, digital literacy, waste reduction

Renewable Energy:

	Challenges	Solutions	Joint Projects
Energy Transition and Sustainable Power	Transition to clean energy, decarbonization, efficient solutions, renewable energy investment, energy storage, diverse sources	Climate impact mitigation, urbanization adaptation, sustainable building, green agenda alignment, talent retention, information access, legal frameworks	Regional energy projects, research, innovation, education, energy cooperation
Supporting Education and Innovation	University-industry collaboration, digitalization, green transition assistance, research, innovation, skill development, product testing	Facilitating collaboration, digitalization, technical assistance, research, innovation support, certified testing	Research infrastructure, smart specialization, information sharing, digital maturity, education programs

Raw Material Industry:

	Challenges	Solutions	Joint Projects
Raw Materials and Mining Collaboration	EIT raw materials Hub, strategy development, secondary raw materials, mineral exploration, regional projects	Urbanization effects, talent retention, information access, strategy implementation	Research, innovation, digitalization, education, regional collaboration
Support for Education and Innovation	University-industry collaboration, digitalization, research, innovation, skill development, product testing	Collaboration, research optimization, project participation, information exchange, digital transformation, upskilling, reskilling	Research infrastructure, knowledge exchange, regional collaboration, waste management

3. Albania - Montenegro S3 Bilateral Workshop

In the workshop with Montenegro, participants from both Albania and Montenegro came together to explore possibilities for collaboration in the context of Smart Specialization Strategies (S3). The bilateral workshop aimed to identify common priority areas and foster regional partnerships to promote economic growth and innovation. The Head of the National S3 Team of Albania stressed the importance of cross-border collaboration and the need to explore joint projects and investment opportunities. While the Head of the National S3 Team from Montenegro acknowledged the challenges of implementing the S3 strategy but highlighted the potential benefits of regional cooperation.

A. Montenegro's Progress towards finalization of S3

I. Montenegro's Engagement in the Smart Specialization Process

Montenegro embarked on the journey of Smart Specialization with the aim of promoting economic growth, stability, and competitiveness. This process aligns with Montenegro's efforts to build a market economy based on the rule of law and stable institutions, which began at the turn of the new millennium. Furthermore, Montenegro's involvement in the Stabilization and Association Process has contributed to its political stability and created favorable conditions for economic activities.

The Smart Specialization Strategy (S3) drafting process in Montenegro adheres to the methodology developed by the Joint Research Centre of the European Commission (JRC). The activities related to Montenegro's Smart Specialization Strategy commenced in early 2017. This strategy's development has been a collaborative effort, ensuring participation from various stakeholders at each stage, including public consultations to involve citizens. To facilitate inter-agency cooperation, an appropriate governance structure was established initially.

The S3 drafting process in Montenegro has followed key phases:

- **Initiation and Strategic Framework Analysis:** This phase involved initiating the process and analyzing the strategic framework.
- **Diagnostics:** Quantitative and qualitative analyses were conducted to identify preliminary priority S3 domains.
- **Entrepreneurial Discovery Process (EDP):** EDP, characterized by a bottom-up approach, utilized inputs from preliminary analyses to identify final priorities and conduct SWOT analyses for each priority sector.
- **State-level and Public Consultations:** Following the EDP, state-level consultations and public consultations in accordance with national legislation were conducted. The Government of Montenegro formally adopted the Smart Specialization Strategy.
- **Submission to the European Commission:** The finalized S3 Strategy was submitted to the European Commission for an opinion.

The Ministry of Science (MoS), with support from the Ministry of Economy (MoE), played a central role in coordinating the development of Montenegro's Smart Specialization Strategy. A quadruple helix governance model was adopted, ensuring collaboration between the government, academia, the private sector, and civil society. Experts from the European Commission provided systematic assistance throughout the process.

II. Entrepreneurial Discovery Process (EDP)

The EDP process in Montenegro followed the preliminary identification of seven priority areas based on quantitative and qualitative analyses. It emphasized broad stakeholder involvement, particularly business sector representatives, in discovering and generating information about potential new activities and opportunities. EDP aims to identify areas for innovation and development through interactions among policymakers, businesses, academia, and civil society.

The preparation for the EDP included training for the Montenegrin delegation on initiating the S3 process and leading entrepreneurial discussions. The EDP officially commenced with the S3.me Conference, bringing together participants from various sectors, followed by numerous workshops in priority areas, continuous monitoring by experts, and an interactive web questionnaire for all interested parties.

The final EDP conference involved over 150 representatives from different sectors, with more than 300 actors participating in this phase. This continuous process allowed for the collection of data and insights to refine priority areas, establish a vision for each sector, and define goals with concrete indicators and measures for implementation.

III. Identified priority domains are:

- Sustainable agriculture and food value chain, Energy and sustainable environment, and Sustainable and health tourism – as vertical priorities;
- and Information and Communication Technologies (ICT) – as a horizontal priority.

In summary, Montenegro's Smart Specialization Strategy emphasizes a collaborative, stakeholder-driven approach, integrating quantitative and qualitative analyses, and EDP to identify priority sectors and promote economic growth, innovation, and competitiveness. Through continuous engagement and systematic support from the European Commission, Montenegro aims to capitalize on its comparative advantages and diversify its economic activities for sustained development.

B. Shared Priority Domains identified:

- ICT
- Sustainable and Health Tourism
- Sustainable agriculture and food value chain

During the joint workshop, the participants recognized the complementary nature of their economies and the potential for value chain creation and knowledge exchange. They discussed the importance of effective communication channels, capacity building, and financial resources to support the implementation of the S3 strategy.

The participants also acknowledged the significance of incorporating a gender perspective in the strategies and promoting the economic empowerment of women in the region. They highlighted the role of women-led businesses in various sectors and the importance of creating equal opportunities for women in decision-making processes.

Overall, the workshop served as a platform for fruitful discussions and identified potential areas of collaboration. The participants expressed their commitment to continue working together and to explore opportunities for joint projects and funding mechanisms. The collaboration between Albania and Montenegro is seen as a steppingstone towards a more prosperous and innovative future for boosting collaboration in the Western Balkans region.

The workshop was divided into 3 working sessions. The findings for each sector are presented below:

ICT:

	Challenges	Solutions	Joint Initiatives/Projects
Innovation and Entrepreneurship	Youth programs, innovation funds, incubation, legal framework	Collaboration, mentorship, startup support, legal regulations, innovation fund establishment	Cross-border programs, knowledge exchange, innovation centers
Education and Lifelong Learning	Early-stage programs, lifelong learning	Lifelong learning programs, short courses	Joint curricula, open lessons, summer courses
Collaboration and Partnership	Ecosystem development, collaboration tools	Sustainable ICT solutions, collaboration among stakeholders, support funds	Regional/bilateral agreements, joint projects, communication platforms
Human Resources and Expertise	Lack of experts, brain drain	Talent attraction, expertise retention	Exchange programs, expert networks

Sustainable and Health Tourism:

	Challenges	Solutions	Joint Initiatives/Projects
Education and Lifelong Learning	Lifelong learning programs	Short courses, lifelong learning	Joint curricula, open lessons, promoting traditional products
Collaboration and Partnership	Ecosystem development, financial resources	Stakeholder collaboration, financial assistance	Regional/bilateral agreements, joint projects, marketing
Tourism and Cultural Heritage	Cross-border collaboration, sustainable products	Sharing projects, sustainable tourism promotion	Joint touristic tours, sharing experiences
Human Resources and Expertise	Lack of experts, brain drain	Expertise attraction and retention	Collaboration in education, standardization

Sustainable Agriculture and Food Value Chain:

	Challenges	Solutions	Joint Initiatives/Projects
Education and Lifelong Learning	Lifelong learning programs, joint curricula	Short courses, open lessons, summer courses	Joint curricula, student exchange
Innovation	Technology adoption, genetic research	Tools, research, genetic species preservation	Collaborative projects, research labs
Collaboration and Partnership	Producer-government collaboration	Communication channels, collaborative projects	Certification centers. cluster development
Human Resources and Expertise	Lack of experts, brain drain	Expertise support, advisory bodies	Business support, network creation
Environment	Environmental preservation	Sustainable use of resources	Waste management, technology utilization

Ongoing Regional Cooperation

In the context of the bilateral workshops, it's worth noting that Albania, Kosovo, North Macedonia, and Montenegro, as neighbouring countries in the heart of the Western Balkans, share a rich history of collaboration. Their shared history, cultural affinities, and geographical proximity have served as the foundation for numerous agreements over the years. These agreements span a wide range of domains, including economic, cultural, and political cooperation, underscoring the depth of their interconnectedness.

These nations, with their commonalities and shared aspirations, have worked together to strengthen their ties and foster regional development. The ongoing collaborations showcased in this Report reflect their commitment to pursuing innovation, sustainable economic growth, and cross-border partnerships. These endeavours not only promote shared progress and prosperity but also highlight the potential for future collaboration and the pivotal role of regional cooperation in their collective journey towards a brighter, interconnected future.

In addition, the collaboration between the WB6 countries. Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia, intensified when the Leaders of Western Balkans endorsed the Multi-annual Action Plan on Regional Economic Area in the Western Balkans (MAP REA), at the Trieste Summit held on 12 July 2017. The MAP REA, aimed to enable unobstructed flow of goods, services, capital and highly skilled labour, making the region more attractive for investment and trade; and accelerating convergence with the EU, thus bringing prosperity to Western Balkans citizens.

On November 10, 2020, the leaders of the WB6 endorsed at the Berlin Process Summit held in Sofia, the Common Regional Market (CRM) Action Plan 2021-2024. It builds on the achievements of the Regional Economic Area (REA). The CRM goal was to have a transformative effect by putting the region on the map for global investors, thereby creating jobs and offering greater choices at lower prices for its consumers and enabling people to work throughout the region. The implementation of the regional actions represents a steppingstone for WB6 businesses to better integrate into the European value chains and strengthen their competitiveness in the European and global marketplace .

The Smart Specialization Strategy has been included both at the Regional Economic Area (REA) and its Multi Annual Action Plan, and the Common Regional Market (CRM). It is a regional as well as national priority for the WB6 countries and collaboration between them during this process is crucial.

Despite the work and collaboration on drafting the Smart Specialisation Strategies, the countries have a long history of cooperation through the years. In this context, several of significant agreements have been signed between them, which show the good will and engagement of the Leaders to take common initiatives that will have an impact in the national economies as well as in the development of the region as a whole. Some of these agreements focusing on various areas, are presented below.

Albania – Kosovo Agreements

Kosovo and Albania share a history of collaboration and have entered into numerous agreements since Kosovo's declaration of independence. To date, both nations have engaged in over 100 agreements spanning economics, education, defense, and development. However, the implementation of these agreements has faced challenges, with only 49% being fully realized. This extensive collaboration has been fostered through a biannual tradition of joint meetings since 2014.

These agreements have encompassed a wide array of domains, including education, transportation, energy, infrastructure, and tourism. Notably, the most recent agreements were signed in June 2022 during the eighth official meeting since Kosovo's declaration of independence, further solidifying their commitment to bolster bilateral ties.

In the context of our workshop, it's relevant to highlight agreements in the food processing sector. These agreements include commitments to harmonize legal policies in agriculture, ensure product quality, and develop smart agricultural products. Additionally, both countries have expressed their dedication to promoting sustainable agricultural practices and exploring opportunities for exporting animal-origin products to the EU.

Key recent agreements related to our workshop's focus include:

Agriculture:

- Agreement on Cooperation between the Ministry of Finance and Economy of the Republic of Albania and the Ministry of Economy, Employment, Trade, Industry, Entrepreneurship, and Strategic Investments of the Republic of Kosovo for Labor Mobility.
- Agreement of Cooperation in the Implementation of Agricultural Support Programs and Rural Development between the Ministry of Agriculture and Rural Development of the Republic of Albania and the Ministry of Agriculture, Forestry, and Rural Development of the Republic of Kosovo.
- Agreement of Cooperation for the Exchange of Experience in Technical Processes between the Ministry of Agriculture and Rural Development of the Republic of Albania and the Ministry of Agriculture, Forestry, and Rural Development of the Republic of Kosovo.

ICT:

In the ICT sector, Albania and Kosovo have also established agreements to ensure cybersecurity, develop harmonized systems, and promote the extensive use of ICT across all sectors. These agreements aim to boost digitalization, improve service quality, and create a conducive environment for digital innovation.

Key recent agreements related to ICT include:

- Memorandum of Cooperation on Establishing the 5G Digital Corridor and Facilitating Future Movement between the Ministry of Infrastructure and Energy of the Republic of Albania and the Ministry of Economy and Environment of the Republic of Kosovo.
- Memorandum of Cooperation between the Ministry of Education, Sports, and Youth of the Republic of Albania and the Ministry of Education and Science of the Republic of Kosovo for the Common Digital Platform of Pre-University Education.

These agreements reflect the ongoing commitment of Kosovo and Albania to fostering collaboration and advancing various sectors of their economies, including those discussed in our workshop.

At the Appendix below there are the overall agreements signed between these two states through the last years.

Albania – North Macedonia Agreements

The first meeting of the two governments, held in Pogradec on December 15, 2017, was a pivotal moment. It was the first of its kind between the governments of both countries, and it marked a joint commitment to building a sustainable long-term mechanism with the aim of elevating the relations between Albania and North Macedonia to a new qualitative level. The jointly defined agenda, expressed in the Common Declaration signed at the end of this meeting, has a concrete substantive approach and aims for tangible outcomes.

This agenda includes intensifying bilateral relations through increased dialogue and exchanges in all areas of cooperation, mobilizing efforts to fulfill commitments within the framework of integration into Euro-Atlantic structures, working to further connect Albania and North Macedonia through the development of road, railway, and energy infrastructure, improving the standards of the free movement of goods, people, and capital by following the One-Stop-Shop customs model.

Additionally, these agreements were signed:

No.	Document Title
1	Joint Declaration between the Prime Minister of the Republic of Albania, H.E. Edi Rama, and the Prime Minister of the Republic of North Macedonia, H.E. Zoran Zaev, within the framework of the first intergovernmental meeting Albania - North Macedonia.
2	Memorandum of Understanding between the Council of Ministers of the Republic of Albania and the Government of the Republic of North Macedonia for the prevention and combatting of violent extremism and radicalization leading to terrorism.
3	Plan for cooperation and consultations between the Ministry of Foreign Affairs of the Republic of North Macedonia and the Ministry for Europe and Foreign Affairs of the Republic of Albania.
4	Memorandum of cooperation between the Ministry of Internal Affairs of the Republic of North Macedonia and the Ministry of Interior of the Republic of Albania, on strengthening cooperation in the field of internal control.
5	Memorandum of cooperation between the General Directorate of Archives of the Republic of Albania and the Institute of Spiritual and Cultural Heritage of Albanians - Skopje.

The consecutive meeting of the two governments Albania-North Macedonia, held in Skopje on November 14, 2022, saw the signing of agreements and memorandums covering various areas, including cooperation in the EU integration process, collaboration in defense and security, joint border control at the common border crossing point Qafë-Thanë, and a memorandum of cooperation in the economic and energy sectors.

Key recent agreements related to the common priority areas can be found in the Appendix below.

Albania – Montenegro Agreements

The First Intergovernmental Meeting between Albania and Montenegro took place on July 3, 2018, in Shkodra. The meeting included delegations consisting of 11 ministers from both governments. A joint press conference concluded the meeting, and a Business Forum, organized by the Chambers of Commerce and Industry as well as the Investment Agencies of both countries, was held on the sidelines of the event. During this meeting, a Joint Declaration and seven Memoranda of Understanding/Cooperation were signed.

- **Intergovernmental Meeting and Press Conference:** Prime Minister Rama viewed this meeting as a significant step toward enhancing bilateral relations. Both countries have been cooperating effectively within the Euro-Atlantic integration process and the Berlin Process. Key topics discussed included the Adriatic-Ionian Highway, increasing border crossing points, infrastructure development between Velipoja and Ulcinj, and a common approach to Kosovo and its Dialogue with Serbia. The opening of border crossing points and the positive role of minorities were also highlighted.
- **Business Forum:** The Albania-Montenegro Business Forum, organized by the Union of Chambers of Commerce and Industry of both countries, aimed to boost cooperation in various sectors, including trade, tourism, energy, transport, agriculture, IT, and wood processing. Approximately 170 company representatives from both nations participated. Discussions focused on cross-border projects, improving economic ties, addressing non-tariff barriers, and promoting trade and investment exchanges.

This meeting marked a significant step forward in bilateral relations and demonstrated untapped potential in various areas, such as the economy, trade, tourism, and cross-border cooperation. The participation of numerous companies in the Business Forum indicated the strong interest and potential for collaboration between Albania and Montenegro.

The signed documents were:

Agreement/Collaboration	Description
Joint Declaration between Prime Ministers	An agreement signed during the first Albanian-Montenegrin Intergovernmental meeting.
Framework Agreement on Trans-boundary Water Management	Agreement on bilateral relations in the field of trans-boundary water management.
Mutual Assistance in Emergency Situations	Agreement on mutual assistance in emergency situations between the Council of Ministers of Albania and the Government of Montenegro.
Cross-border Operations for Airspace Patrolling	Agreement between the Council of Ministers of Albania and the Government of Montenegro on cross-border operations for airspace patrolling.
Border Crossing Opening (Zogai-Skie)	Agreement between the Council of Ministers of the Republic of Albania and the Government of Montenegro on the opening of a border crossing Zogai-Skie for road and waterway traffic on Lake Shkodra.
Cultural Cooperation Program (2018-2020)	Program of cultural cooperation between the Ministry of Culture of the Republic of Albania and the Ministry of Culture of Montenegro for the period 2018-2020.
Memorandum of Understanding for Mutual Cooperation	Memorandum of Understanding for Mutual Cooperation between the Albanian Investment Development Agency (AIDA) and the Montenegrin Investment Promotion Agency.
Cooperation Agreement between Chambers of Commerce	Cooperation Agreement between the Union of Chambers of Commerce and Industry of Albania and the Chamber of Economy of Montenegro.

During the second joint meeting on 27th of February 2023 between the government of the Republic of Albania and the Government of Montenegro, several cooperation agreements were signed. These included a Joint Declaration between the Prime Minister of the Republic of Albania, Edi Rama, and the Prime Minister of Montenegro, Dritan Abazovic; a bilateral Agreement between the Republic of Albania and Montenegro regarding the construction of a bridge over the Buna River; and an Agreement for the opening of the common border crossing point Shën Nikollë – Pulaj on the territory of the Republic of Albania, signed by Prime Minister Edi Rama and Prime Minister Dritan Abazovic. Furthermore, ministers from both governments signed agreements and memorandums in various fields, such as energy, fishing, plant protection, social protection, sports, culture, media, defense, and healthcare.

Other recent agreements related to the common priorities of the two countries are listed in the Appendix below.

Appendix – Agreements between Albania and Kosovo, North Macedonia, Montenegro

Agreements between Albania and Kosovo

No.	Agreement Name	Date of Signing
1	Cooperation agreement on border management	7.3.2006
2	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on the recognition of the rights of the Albanians of Montenegro	27.3.2007
3	Agreement on cooperation in the eld of agriculture	27.3.2007
4	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on the recognition of the rights of the Albanians of Montenegro	4.5.2007
5	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on cooperation in the eld of environmental protection	4.5.2007
6	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on the mutual recognition of higher education diplomas	4.5.2007
7	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on cooperation in the eld of science and technology	4.5.2007
8	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on cooperation in the eld of public order and security	4.5.2007
9	Agreement on cooperation in the eld of telecommunications and postal services	4.5.2007

No.	Agreement Name	Date of Signing
10	Agreement on cooperation in the eld of education, youth, and sports	4.5.2007
11	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on cooperation in the eld of health	4.5.2007
12	Agreement on cooperation in the eld of culture and protection of cultural heritage	4.5.2007
13	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on cooperation in the eld of transport	4.5.2007
14	Agreement on cooperation in the eld of economic development	4.5.2007
15	Agreement on cooperation in the eld of emergency management	4.5.2007
16	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on cooperation in the eld of public administration	4.5.2007
17	Agreement on cooperation in the eld of justice	4.5.2007
18	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on cooperation in the eld of customs and scal affairs	4.5.2007
19	Agreement on cooperation in the eld of agriculture	27.11.2007
20	Agreement on cooperation in the eld of education, youth, and sports	27.11.2007
21	Agreement on cooperation in the eld of justice	27.11.2007
22	Agreement on cooperation in the eld of culture	27.11.2007
23	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on cooperation in the eld of public administration	27.11.2007
24	Agreement on cooperation in the eld of tourism	27.11.2007

No.	Agreement Name	Date of Signing
25	Agreement on cooperation in the eld of transport	27.11.2007
26	Agreement on cooperation in the eld of environmental protection	27.11.2007
27	Agreement on cooperation in the eld of health	27.11.2007
28	Agreement on cooperation in the eld of emergency management	27.11.2007
29	Agreement on cooperation in the eld of customs and scale affairs	27.11.2007
30	Agreement on cooperation in the eld of telecommunications and postal services	27.11.2007
31	Agreement on cooperation in the eld of economic development	27.11.2007
32	Agreement on cooperation in the eld of science and technology	27.11.2007
33	Agreement on cooperation in the eld of public order and security	27.11.2007
34	Agreement on cooperation in the eld of public administration	27.11.2007
35	Agreement on cooperation in the eld of justice	30.12.2007
36	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo on the mutual recognition of higher education diplomas	30.12.2007
37	Agreement on cooperation in the eld of telecommunications and postal services	30.12.2007
38	Agreement on cooperation in the eld of customs and scal affairs	30.12.2007
39	Agreement on cooperation in the eld of public administration	30.12.2007
40	Agreement on cooperation in the eld of public order and security	30.12.2007
41	Agreement on cooperation in the eld of science and technology	30.12.2007
42	Agreement on cooperation in the eld of economic development	30.12.2007
43	Agreement on cooperation in the eld of transport	30.12.2007
44	Agreement on cooperation in the eld of agriculture	30.12.2007
45	Agreement on cooperation in the eld of education, youth, and sports	30.12.2007
46	Agreement on cooperation in the eld of justice	7.6.2010

No.	Agreement Name	Date of Signing
47	Agreement on cooperation in the eld of customs and scal affairs	7.6.2010
48	Agreement on cooperation in the eld of economic development	7.6.2010
49	Agreement on cooperation in the eld of public administration	7.6.2010
50	Agreement on cooperation in the eld of telecommunications and postal services	7.6.2010
51	Agreement on cooperation in the eld of science and technology	7.6.2010
52	Agreement on cooperation in the eld of transport	7.6.2010
53	Agreement on cooperation in the eld of agriculture	7.6.2010
54	Agreement on cooperation in the eld of education, youth, and sports	7.6.2010
55	Agreement on cooperation in the eld of health	7.6.2010
56	Agreement on cooperation in the eld of environmental protection	7.6.2010
57	Agreement on cooperation in the eld of justice	7.6.2010
58	Agreement on cooperation in the eld of culture	7.6.2010
59	Agreement on cooperation in the eld of tourism	7.6.2010
60	Agreement on cooperation in the eld of emergency management	7.6.2010
61	Agreement on cooperation in the eld of public order and security	7.6.2010
62	Agreement on cooperation in the eld of justice	27.5.2013
63	Agreement on cooperation in the eld of customs and scal affairs	27.5.2013
64	Agreement on cooperation in the eld of economic development	27.5.2013
65	Agreement on cooperation in the eld of public administration	27.5.2013
66	Agreement on cooperation in the eld of telecommunications and postal services	27.5.2013
67	Agreement on cooperation in the eld of science and technology	27.5.2013
68	Agreement on cooperation in the eld of transport	27.5.2013
69	Agreement on cooperation in the eld of agriculture	27.5.2013
70	Agreement on cooperation in the eld of education, youth, and sports	27.5.2013

No.	Agreement Name	Date of Signing
71	Agreement on cooperation in the eld of health	27.5.2013
72	Agreement on cooperation in the eld of environmental protection	27.5.2013
73	Agreement on cooperation in the eld of justice	4.4.2016
74	Agreement on cooperation in the eld of customs and scal affairs	4.4.2016
75	Agreement on cooperation in the eld of economic development	4.4.2016
76	Agreement on cooperation in the eld of public administration	4.4.2016
77	Agreement on cooperation in the eld of telecommunications and postal services	4.4.2016
78	Agreement on cooperation in the eld of science and technology	4.4.2016
79	Agreement on cooperation in the eld of transport	4.4.2016
80	Agreement on cooperation in the eld of agriculture	4.4.2016
81	Agreement on cooperation in the eld of education, youth, and sports	4.4.2016
82	Agreement on cooperation in the eld of health	4.4.2016
83	Agreement on cooperation in the eld of environmental protection	4.4.2016
84	Technical Agreement for military aviation training	13.1.2020
85	Cooperation protocol for diplomatic representation	23.04.2020
86	Implementation protocol in cultural diplomacy	23.04.2020
87	Cooperation agreement for EU accession negotiations	23.04.2020
88	Protocol amending cooperation agreement for security	2.10.2020
89	Amending Protocol for double taxation avoidance	2.10.2020
90	Cooperation agreement in railway transport	2.10.2020
91	Cooperation agreement for disaster assistance	2.10.2020
92	Joint Basketball League cooperation	2.10.2020
93	Additional protocol for health cooperation (COVID-19)	2.10.2020
94	Working group for <u>Presheva Valley</u> support fund	2.10.2020
95	Film co-production agreement	2.10.2020

No.	Agreement Name	Date of Signing
96	Cooperation agreement in cultural heritage and museums	2.10.2020
97	Joint annual cultural calendar	2.10.2020
98	Cooperation for 5G digital corridor	2.10.2020
99	Mobility at work cooperation	2.10.2020
100	Digital platform for pre-university education	2.10.2020
101	Working group for support in Montenegro	4.12.2020
102	Protocol for consular representation in Struga	4.12.2020
103	Defense cooperation agreement with Slovenia	18.5.2021
104	Cooperation agreement between statistics agencies	7.6.2021
105	Facilitation of temporary residence permits	26.11.2021
106	Rules of local border traffic regime	26.11.2021
107	Amendment of the Common Border Crossing Point	26.11.2021
108	Mutual legal assistance in civil and commercial matters	26.11.2021
109	Agriculture cooperation	26.11.2021
110	Durrës-Prishtina railway construction	26.11.2021
111	Social security agreement	26.11.2021
112	Mutual facilities in customs and entry/exit control	26.11.2021
113	Diploma and certificate recognition	26.11.2021
114	Cultural heritage and museums cooperation	26.11.2021
115	Joint annual cultural calendar	26.11.2021
116	5G digital corridor and future mobility	26.11.2021
117	Mobility at work cooperation	26.11.2021
118	Joint digital platform for education	26.11.2021
119	Pharmaceutical and medical devices cooperation	26.11.2021
120	Cross-border health service cooperation	26.11.2021
121	Local border traffic regime in border areas	26.11.2021

No.	Agreement Name	Date of Signing
122	Civil status cooperation	26.11.2021
123	Declaration of Ministers of Justice	26.11.2021
124	Tourist information and promotion platform	26.11.2021
125	Vlora LNG terminal development	26.11.2021
126	Mountain Search and Rescue cooperation	26.11.2021
127	Joint working group for economic cooperation	26.11.2021
128	Joint Border Control Activities at Shishtavec-Krushevë	20.06.2022
129	Agreement between the Ministry of Infrastructure and Energy of the Republic of Albania and the Ministry of Environment, Spatial Planning and Infrastructure of the Republic of Kosovo to co-fund the feasibility study and the design of Durrës-Prishtina railway project.	20.06.2022
130	Administrative agreement on implementation of the social accord between the Republic of Albania and the Republic of Kosovo.	20.06.2022
131	Protocol between the Ministry of Interior of the Republic of Albania and the Ministry of Interior of the Republic of Kosovo for the implementation of joint border control at the joint border crossing point Morinë / Kukës (Vërmicë / Prizren).	20.06.2022
132	Cooperation agreement on implementation of support programs for agricultural and rural development between the Ministry of Agriculture and Rural Development of the Republic of Albania and the Ministry of Agriculture, Forestry and Rural Development of the Republic of Kosovo	20.06.2022
133	Cooperation agreement on exchanging experiences in technical processes between the Ministry of Agriculture and Rural Development of the Republic of Albania and the Ministry of Agriculture, Forestry and Rural Development of the Republic of Kosovo.	20.06.2022
134	Cooperation agreement between the Ministry of Education and Sports of the Republic of Albania and the Ministry of Education, Science, Technology	20.06.2022

No.	Agreement Name	Date of Signing
135	Agreement on cooperation in the field of pharmaceuticals and medical devices between the Ministry of Health and Social Protection of the Republic of Albania and the Ministry of Health of the Republic of Kosovo.	20.06.2022
136	Cooperation agreement on mutual cross-border health service between the Ministry of Health and Social Protection of the Republic of Albania and the Ministry of Health of the Republic of Kosovo.	20.06.2022
137	Protocol between the Ministry of Interior of the Republic of Albania and the Ministry of Internal Affairs of the Republic of Kosovo on the regime of local border traffic in the border areas between the state border of the Republic of Albania and the Republic of Kosovo.	20.06.2022
138	Memorandum of Understanding between the Ministry of Interior of the Republic of Albania and the Ministry of Internal Affairs of the Republic of Kosovo for cooperation on civil status.	20.06.2022
139	Joint Statement by the Ministers of Justice of the Republic of Albania and the Republic of Kosovo.	20.06.2022
140	Cooperation agreement between the Ministry of Tourism and Environment of the Republic of Albania and the Ministry of Industry, Entrepreneurship and Trade of the Republic of Kosovo on the creation of a joint digital information and tourism promotion platform.	20.06.2022
141	Memorandum of Understanding on the energy sector between the Ministry of Infrastructure and Energy of the Republic of Albania and the Ministry of Economy of the Republic of Kosovo.	20.06.2022
142	Cooperation agreement between the Ministry of Infrastructure and Energy of the Republic of Albania and the Ministry of Environment, Spatial Planning and Infrastructure of the Republic of Kosovo on assessing the current state and improving roads infrastructure in cross-border villages connecting the Albania-Kosovo border areas.	20.06.2022

No.	Agreement Name	Date of Signing
143	Agreement between the Minister of State for Youth and Children of the Republic of Albania and the Ministry of Culture, Youth and Sports of the Republic of Kosovo for cooperation on the field of youth.	20.06.2022
144	Cooperation agreement between the Council of Ministers of the Republic of Albania and the government of the Republic of Kosovo on co-funding a major project on Albanian studies, namely the Albanian encyclopaedia.	20.06.2022
145	Memorandum of cooperation between the Ministry of Infrastructure and Energy of the Republic of Albania and the Ministry of Economy of the Republic of Kosovo for cooperation on the construction of Vlora's Lungomare terminal.	20.06.2022
146	Agreement between the Ministry of Defense of the Republic of Albania and the Ministry of Defense of the Republic of Kosovo on cooperation on mountainous and maritime search and rescue operations.	20.06.2022
147	Memorandum of Cooperation between the Ministry of Finance and Economy of the Republic of Albania and the Ministry of Finance, Labor and Transfers of the Republic of Kosovo on the establishment of a joint working group for customs unification.	20.06.2022

Agreements between Albania and North Macedonia

Agreement Title	Relevant Domain
Memorandum of Understanding and Cooperation on the area of Public Finance and the EU Accession process	Education Exchange
Memorandum of Understanding between the Ministries of Foreign Affairs for cooperation in diplomatic training	Education Exchange
Cooperation Programme between Ministries of Education and Sports (2022-2025)	Education Exchange
Memorandum of cooperation for proofreading and Albanian language editing	Education Exchange
Memorandum of cooperation on Albanian sign language implementation	Education Exchange
Memorandum on energy sector cooperation	Energy
Agreement on cross-border road connectivity	Energy
Memorandum of Understanding on defence cooperation	Energy
Memorandum on the digitization of consular services	Energy
Agreement on joint security task forces	Raw Materials/Manufacturing
Cooperation agreement for the return of illegally exported icons	Raw Materials/Manufacturing
Cooperation on digital technology transformation	Raw Materials/Manufacturing
Agreement on cross-border air traffic services delegation over Lake Ohrid	Raw Materials/Manufacturing
Memorandum of cooperation on social policies and child protection	Sustainable Agriculture
Health cooperation agreement	Sustainable Agriculture
Cooperation between the Ministry of Economy of North Macedonia and the Ministry of State for Enterprise Protection of Albania	Sustainable Agriculture

References

- <https://s3platform.jrc.ec.europa.eu/>
- <https://s3platform.jrc.ec.europa.eu/w/the-identification-of-smart-specialisation-priority-domains-in-albania.-a-mapping-exercise>
- <https://s3albania.org>
- <https://s3platform.jrc.ec.europa.eu/w/the-identification-of-priority-domains-in-kosovo.-a-mapping-exercise>
- <https://s3platform.jrc.ec.europa.eu/north-macedonia>
- <https://s3platform.jrc.ec.europa.eu/montenegro>
- <https://g2g.kryeministria.al/>
- <https://www.rcc.int/>



PRIORITY DOMAIN: RENEWABLE ENERGY

Measure	Activity	Institutions/org anisations involved (leader in bold)	Start date	Completi on date	Estimated budget needed (euro)	Source of funding					Financial Gap (euro)	Output Indicator	Output Target	Outcome Indicator	Outcome Target
						Total foreseen in actual State Budget (euro)	Foreseen in State Budget (euro)	Foresee n for 2025 (euro)	EU funds (euro)	Donor Contributions (euro)					

Strategic Objective No. 1: Promote the development of solar and wind energy projects to diversify the renewable energy portfolio, harnessing Albania's ample sunlight and wind resources for clean power generation.

Specific objective 1.1 Boosting investments in renewable energy, including through liberalization of the energy market.

M1. Raise awareness promoting RES and energy efficiency investments and initiatives and increasing capacity building of potential RES investors**	A.1 Developing a unique portal for informative purposes for all RES and energy efficiency investments and initiatives, supporting schemes and financing alternatives.	MIE, AEE, CSDs	2025	2025	100,000	100,000		20,000	-	-	-	The portal established and operational.	Na	Percentage increase in trained RES investors as a result of capacity-building Initiatives./Number of awareness campaigns conducted promoting RES and energy efficiency investments.	35%
	A.2 Several trainings to be performed by addressing all RES segments, including prosumers, with special focus on women entrepreneurs	MIE, OSHEE, CSDs	2025	2030	100,000	-	100,000	20,000	-	-	-	Number of training sessions conducted for different RES segments annually/ Number of participants in training sessions, disaggregated by gender and RES segment.	20 trainings organized for the entire period. At least 600 potential RES investors and prosumers trained, from which at least 300 women.		
	A.3 Organizing events in schools for promoting environmental value of RES.	MIE, MES	2026	2030	200,000	-	200,000		-	-	-	No of students aware about environmental value of using renewable energy sources (annually)	40 events organized for the entire period		
	A.4 Further development of the understanding of the new regulatory environment at different levels, focused on the new energy package and energy transition	MIE, ERE, OSHEE, OST, KESH, AEE	2025	2026	150,000	-	150,000		-	-	-	Number of workshops, seminars or training sessions conducted to disseminate information on the new regulatory environment and energy package.	10 trainings and seminars organized for the entire period		
M2. Improving the statistical analysis and RES data	A.1 Investing in NANR and ERE capacity building for improving the data analysis automatization	NANR, ERE	2025	2025	250,000	0	250,000		-	-	-	Number of AKBN and ERE staff trained for improving the data analysis automatization	10 staff member trained. A soft for improving the data analysis automatization secured.	Percentage increase in the accuracy and timeliness of statistical reporting on RES after the implementation of data analysis automation.	60%
	A.2 Developing a master plan for zoning areas with RES potential, if possible, for each technology to potentially attract investments for each RES technology	MIE, OST, DSO, NANR	2025	2026	500,000	0	500,000		-	-	-	Master plan for zoning areas with RES potential finished and published and available for all potential RES investors for all zoning areas for each RES technology	na		
Total SO 1.1					1,300,000	100,000	1,200,000	40,000	-	-	-				

Specific Objective 1.2 Streamlining procedures for issuing permits and licenses for the companies operating in the sector and improving the legal and regulatory framework, including through developing under-regulations and guidelines to facilitate the implementation of energy-related laws

M1. Promoting cross border cooperation and facilitate the permitting procedures.**	A.1 Conclusion of MoU with neighboring regulators for enabling the recognition of Albanian energy licenses	ERE	2025	2026	NA							No of mutually recognized licenses in force	At least 3 MoU concluded	Improvement in Efficiency of Permitting Process (measured by the reduction in the average time and number of steps required to obtain permits after the amendments have taken place, compared to the baseline before the initiative).	20%
	A.2 Identification of the acts that need to be amended in order to facilitate the permitting procedures	MIE, OST, OSHEE, MTE, MoSLG, MUNICIPALITIES	2025	2026	NA							analyses performed	na		
	A.3 Review of the acts identified to be amended in A2	MIE, OST, OSHEE, MTE, MoSLG, MUNICIPALITIES	2027	2028	NA							Legal and regulatory framework in the sector improved	na		
M2. Increasing liquidity within ALPEX markets and promote cross border cooperation	A.1 Introducing new products within ALPEX markets (intraday etc.). Preparatory work for joining the Single Day Ahead Coupling, as one of the preconditions for potential exemption from EU's Carbon Border Adjustment Mechanism	ALPEX	2025	2026	250,000	-	250,000		-	-	0	Number of workshops, seminars or training sessions conducted to disseminate information on the new regulatory environment and energy package.	Introducing intraday market and all other products part of the ALPEX Rules.	Percentage increase in the volume of cross-border energy trades conducted as a result of joining the Single Day Ahead Coupling, showcasing enhanced cross-border cooperation.	10%
	A.2 ERE to enable issuance of standardised "guarantees of origin" and digital register for the administration of GO*	ERE	2025	2025	Na							Digital register for the administration of GO operational.	Trading of GO operational		
Total SO 1.2					250,000	-	250,000	-	-	-	0				
Total Strategic Objective No. 1:					1,550,000	100,000	1,450,000	40,000	0	0	0				

Strategic Objective No. 2: Encourage the utilization of waste-to-energy technologies, innovative technologies and biomass resources for clean energy production, reducing landfill waste and promoting resource efficiency.

Specific objective 2.1 Encouraging the utilization of waste-to-energy technologies, innovative technologies and biomass resources for clean energy production, reducing landfill waste and promoting awareness

	A.1 Supporting innovative projects in order to promote the use of biomass in industry energy consumption within SMEs (olive oil, wood processing & win production) segment.	MIE, MARD, MF	2026	2030	Tbd (incentive)							Number of innovative projects supported for the use of biomass	Up to 10 projects financed		
	A.2 Adoption of a scheme for replacing fuel subsidy in the greenhouses.	MIE, MF, MARD	2025	2026	NA							Number of greenhouses receiving subsidies for installing solar and biomass facilities			

M1. Promoting the use of biomass, solar, alternative fuel, natural gas in industry energy consumption within SMEs segment.	A.3 Creating a national Green Fund for supporting energy projects at territorial level that expand the overall financial capacity, promoting innovative business models (PPP, ETS and so on) and reinvest in the sustainable transformation of the country. Supporting innovation projects in clean technology in the Albanian Municipalities in the Urban Transition Mission (UTM) as accelerator of the Albanian accession into the EU.	MIE, Municipalities	2025	2030	TBD							National Green Fund Established	Fund Established	Percentage Reduction in Fuel Expenditure for Greenhouses (% annually).	5%
	A.4 Replacing fuel subsidy with natural gas and support schemes for RES (solar and biomass) facilities in the greenhouses.	MIE, MF, MARD	2027	2030	6,000,000	0	6,000,000	0				No of beneficiaries profited from support schemes for RES annually/Reduction in greenhouse gas emissions resulting from the transition to RES facilities.			
Total Strategic Objective No. 2:					6,000,000	-	6,000,000	-	-	-	-				
Strategic Objective No. 3: Promote a diverse mix of renewable energy sources and emerging technologies to reduce dependence on a single source.															
Specific objective 3.1 Promoting support measures for integration of alternative energy sources, energy efficiency and diversification of electricity production mix.*															
M1. Promote integration and new RES investments .	A.1 Adoption of incentives through support schemes as well for other RES technologies (biomass, wind off-shore etc.)	MIE	2025	2026	311,520	311,520	0	0	0			Incentive schemes adopted/Legal framework in the sector improved.	Incentive schemes adopted	% increase in installed RES capacity across all sectors	5% increase of RES investments within the prosumers segment due to the introduction of support schemes..
	A.2 Amending by-laws for enabling as well other RES technologies within prosumers segment	MIE	2025	2026	311,520	311,520	0	0	0	0	Percentage of identified acts that have been successfully amended/Legal framework in the sector improved.	At least 90%			
	A.3 Auctions for allocating the support measures for the rest of the RES technologies, including biomass, off-shore wind etc. **	MIE	2026	2030	500,000	0	0			500,000	No of RES contracts concluded.	At least 2 contracts for each technology.			
	A.4 Completion of a study on the potential of a hydrogen economy in Albania	MIE	2025	2026	300,000	0	0	0		300,000	Study conducted	Study completed.			
	A. 5. Partnering with the Clean Hydrogen Mission for framing strategic working stream into European dedicated network.	MIE	2025	2030	150,000		150,000	-		-	Accessing the European dedicated network				
M2. Transforming KESH into a production hub, diversifying its portfolio and to benefit from the transfer of know-how	A.1 Pilot project for the installation of a biomass facility of 2 MW, off-shore wind project and a battery project with 3 MW. KESH to become the promoter of new RES technologies in Albania	KESH	2025	2028	11,000,000	-	11,000,000	-		-	Biomass facility project, off-shore wind project and the battery project successfully implemented and operational./Amount of clean energy generated by the pilot projects within the first year of operation.	23,000 MWh/year of clean energy generated.	Percentage increase in KESH's total production capacity from RES sources as a result of the new biomass, offshore wind, and battery storage projects.	1% increase in KESH production	
	A.2 The output of A.1 to be evaluated in order to enable the investment in these hybrid projects in larger scales	MIE, KESH	2028	2029	100,000	-	100,000	-		-	Evaluation of pilot project outputs finished.				
	A.4 Establishing cooperation with the region for cross border joint RES energy projects and investments	MIE, KESH	2027	2030	NA						Number of cooperation agreements signed/concluded with regional partners for joint RES energy projects and investments	At least 2 cooperation agreements concluded.			
M3. Promoting energy communities and R&D projects for energy sharing, peer-to-peer trading and energy efficiency.**	A.1 Incentivize a Pilot Project for the establishment of a Renewable energy community in a designated area and facilitating energy transition to zero emissions. Analysis of the output.	MIE, MF, MoSLG, Municipalities	2026	2029	1,500,000	-	1,500,000	-		-	Pilot Project for the establishment of a RES energy citizen community implemented	Establishing the first renewable energy community.	Percentage improvement in energy efficiency or performance in pilot areas due to R&D initiatives./ % of R&D projects supported	40% improvements in energy efficiency or performance 20% R&D projects supported	
	A.2 Support for innovative R&D projects for distributed RES, energy efficient technologies and demand side management, involving quadruple helix actors	MIE, MES	2026	2030	Tbd						Number of R&D projects funded	Up to 15 projects financed.			
M4. Promoting energy efficiency and energy-saving in public administration	A.1 Implementation of an energy register of public buildings to establish energy requalification objectives and priority funding for interventions.*	MIE, AEE	2025	2026	NA			0			The energy register of public buildings created and implemented.	n/a	Percentage reduction in energy consumption and improvement in energy efficiency across all public administration buildings as a result of the implementation of new policies	20%	
	A.2 Support to develop advanced and EU compliant energy efficiency and climate measures, that can filter all the private investments	MIE, AEE	2025	2030	150,000		150,000				Advanced and EU compliant energy efficiency and climate measures developed	n/a			
	A.3 Adoption of mandatory energy efficiency measures and energy-saving practices and investments in public administration buildings	MIE, AEE	2026	2027	NA						Mandatory energy efficiency measures and practices for public administration buildings adopted.	n/a			
	A.4 Financing pilot projects related to energy efficiency	MIE, AEE	2027	2030	5,000,000		5,000,000				Number of energy efficiency projects financed	3 energy efficiency projects financed for 3 main buildings of public administration			
	A.5 Nomination of an energy manager in public administration facilities	MIE, AEE	2025	2025	NA			0			Energy manager in public administration facilities nominated.	n/a			
Total SO 3.1					19,323,039	623,039	17,900,000	0	0	0	800,000				
Specific objective 3.2 Strengthening the partnership between academia, businesses, and the government to bridge the skills gap and enhance education and training programs, reviewing curricula, including upskilling and reskilling															
M1. Promoting research and Albanian researchers. Promoting EU projects	A.1 Financial support for scientific research to encourage Albanian researchers to contribute to the EU Green Deal.	MIE, MES, HEIs	2026	2030	2,000,000		2,000,000				Number of research projects funded that contribute to the EU Green Deal.	10 projects financed under EU Green Deal	% Increase of Participation of Albanian Researchers in EU Green Deal Projects	% Increase of Participation of Albanian Researchers in EU Projects	

	A.2 Training for researchers to improve cooperation with businesses.	MIE, MES, HEIs	2026	2030	100,000	100,000						Number of trained researchers				
M2. Establishment of the Albanian Excellence Energy Institute (AEEI) as an independent state owned entity part of Albanian Agency of Innovation and Excellence, bridging the knowledge transfer gap between industry and academia.	A.1 Establishment of AEEI as in charge for the implementation of scientific research and innovative approach in the field of energy, aligned or within the Albanian Agency of Innovation and Excellence	MIE, MES, AAIE	2025	2026	NA							AEEI established and operational.	na	% increase effectiveness of the AEEI in bridging the gap between industry and academia, measured by joint projects and collaborative research activities.	Increase in effectiveness of the AEEI in bridging the gap between industry and academia	
	A.2 Develop an incentivizing scheme for attracting top experts and scientists, including those of diaspora, becoming AEEI the focal point of all decarbonisation efforts of Albania.	MIE, MES, AIE	2026	2030	NA							Scheme already functional and producing tangible results.	na			
	A.3 Attract foreign investments to support the activity of the AEEI	AEEI, MIE, MES, AIE	2026	2030	Tbd							Amount increased in Foreign investments				
M3. Increasing capacity building for RES and energy efficiency through a multi-disciplinary master programme as well as vocational studies.	A.1 Development of training curricula and infrastructure for continues learning processes related to RES, energy efficiency, decarbonisation, related technology innovation and latest trends	MES, HEIs, Industry	2026	2030	200,000	200,000						Nr of VET curricula revised/Nr of master programme for RES is in place/Nr of Training curricula for continues learning processes related to RES, drafted and adopted./No of students enrolled annually.		Percentage of graduates trained in RES and energy efficiency	0.8	
	A.2 Provide support and leverage opportunities for funding and designing innovative projects in RES, energy efficiency, e-mobility, applied research in AI, Machine Learning and Data Analytics.	MIE, MES	2026	2030	Tbd							Nr of projects innovative funded in RES, energy efficiency, e-mobility, applied research in AI, Machine Learning, and Data Analytics.	At least 5 projects financed			
	A.3 Promoting cooperation between Academia, Industry and International Partners for technology transfer and sharing in the energy sector	MIE, MES	2026	2030	Tbd							Number of cooperation agreements between academia, industry and international partners.	At least 5 cooperation agreements			
Total SO 3.2					2,300,000	2,300,000										
Total Strategic Objective No 3:					21,623,039	623,039	20,200,000					800,000				
Strategic Objective No. 4: Support modern and flexible grid infrastructure and energy storage that can efficiently handle the various nature of renewable energy resources and enable cross-regional energy sharing.																
Specific objective 4.1 Investing in the development of smart grids and storage systems, to support smart grids and energy storage infrastructure that can efficiently handle the various nature of renewable energy resources and enable cross-regional energy sharing.																
M1. Facilitating the smooth exchange of RES in electricity. Promoting active customers through IoT.	A.1 Adoption of a regulation for energy-smart appliances to enable interoperability and their participation in demand response schemes. Simplifying balancing rules for enabling demand side (VPP) schemes and cross border balancing.	ERE	2025	2026	50,000	50,000						Regulation for energy-smart appliances in place	n/a	The increase in end-user engagement in the electricity market following smart meter installation.	60%	
	A.2 Installation of smart meters technology for the end consumers, to actively be part of the electricity market - Pilot project for a designated area	DSO	2025	2027	50,000,000	50,000,000						Number of smart meters installed for end consumers	Up 200,000 smart meters installed			
	A.3 Installation of smart meters technology for all the remaining end consumers, to actively be part of the electricity market	DSO	2028	2030	Tbd							Number of smart meters installed for end consumers	Up 1,000,000 meters installed			
	A.4 Incentivise and guide integration in the power sector of artificial intelligence, cyber security measures and other IoT, for facilitation of RES integration, management and sector development.	MIE, DSO, OST, AKCESK	2025	2027	Tbd							guidance offered and number of project supported.				
M2. Introduction of auctions for storage project implementation and support scheme for these projects.	A.1 Identification and adoption of the legal acts enabling storage projects investments	MIE	2025	2025	250,000					250000		Legal acts identified and adopted for enabling on-grid storage projects investments.	n/a	The total energy storage capacity secured through auctioned projects, compared to the pre-auction period.	100%	
	A.2 Initiation of auctions for the support schemes for storage projects	MIE	2026	2030	250,000					250,000		No of auctions organized / No of contracts concluded.				
M3. Increasing energy system security through diversification of the storage alternatives of Drini cascade.	A.1 Perform a Feasibility Study & ESIA for KESH Pumped Hydro Storage	KESH	2025	2025	800,000					800000		Feasibility Assessment and Environmental and Social Impact Assessment (ESIA) for the KESH Pumped Hydro Storage project concluded.	n/a	The increased capacity and resilience of the energy system due to the addition of the pumped hydro storage project, measured by the reduction in peak load energy deficits.	25%	
	A.2 Implementing the hydro pumped storage project	KESH	2026	2030	Tbd							The hydro pumped storage project initiated implementation.	Project financed and EPC contract concluded.			
Total SO 4.1					51,350,000	50,000	50,000,000			1,300,000						
Specific objective 4.2 Enhancing energy infrastructure, including the construction of technology centers (TECs) and charging stations to support electric transportation.																
M1. Incentivizing projects within e-mobility component.	A.1 Transposition of the green deal package, enabling the charging of the e-vehicles	MIE	2025	2025	150,000					150000		LEA for transposing of the green deal package finalised./Legal framework improved and harmonise.	n/a	The percentage reduction in emissions within the local public transport sector following the introduction of e-vehicles and renewable energy-powered charging stations.	20%	
	A.2 Incentives for e-vehicles, including for local public transport, Wi-Fi and renewable energy mobile charging stations for the local population of a rural touristic designated area	MIE, MF, MoSLG, Municipalities	2026	2027	580,000	0	580,000	0		0		Number of e-vehicles purchased /Number of renewable energy mobile charging stations installed in the rural touristic designated area.	Purchase of 15 e-vehicles, one e-bus and 3 charging stations			
	A.3 Promoting the outcome of the project	MIE, MF, MoSLG, Municipalities	2027	2030	50,000	0	50,000	0		0		Number of promotional activities conducted to highlight the outcomes of the e-mobility project.	At least 3 promotional activities concluded.			
Total SO 4.2					780,000	0	630,000		0	150,000						

Total Strategic Objective No 4:						52,130,000	50,000	50,630,000	0	0	1,450,000				
Strategic Objective No. 5: Implement responsible forest management practices, including reforestation and sustainable timber harvesting, to balance economic gains with environmental conservation.															
Specific objective 5.1 Sustainable energy use practices															
M1. Implementation of sustainable forest management policies.	A.1 Amendment of the Albanian forest policy document aiming the use of efficient harvesting techniques that minimize waste and environmental impact and to ensure the efficient collection and utilization of forest residues, such as branches, tops and bark left behind after timber harvesting.	MTE, NAF, MSHPV	2025	2026	Tbd							Forest policy documents amended to include efficient harvesting techniques and utilization of forest residues	n/a	Percentage increase in the area of forests managed under sustainable practices and certified by forest certification standards	
	A.2 Introduction of forest certification standards to guarantee sustainable management of forests	MTE, NAF, MoSLG	2026	2027	Tbd							Number of forest areas certified under new sustainable forest management standards			
	A.3 Initiation of a pilot project for the implementation of the forest certification	MTE, NAF, MoSLG	2027	2030	Tbd							Number of pilot projects initiated for forest certification implementation			
	A.4 Initiation of a pilot project for the implementation of the biomass plantation on non-forest area, involving the cultivation of specific tree species for energy production.	MTE, NAF, MoSLG, MIE	2027	2030	Tbd							Number of pilot projects initiated for biomass plantation on non-forest areas			
Total Strategic Objective No 5						-	-	-	-	-	-				
Total						81,303,039	773,039	78,280,000	80,000		1,450,000	800,000			

* Activities which are marked with NA or 0 in the budget column will be financed within the approved budgets of the involved entities, and as such, will not have any direct budgetary impact. Activities which are marked with TBD are those activities that have not been reported with a specific budget in the action plan considering they need preliminary studies for detailed costing. Their budget will be reviewed in the updated budget plan foreseen 1 year from S3 approval

** Specific objectives marked with two asterisks are the ones that have been included in the Growth Plan (SO3: 4.1.1 Align with electricity integration package to enable electricity market coupling of the EU and Albania, establish the intraday electricity market, operationalise the package in line with the market coupling operator integration plan by 2025; 4.2.1 Develop transparent and competitive quantity-based action plan for renewable energy: Planning for 3 years in place; 4.2.2. Implementation of the Renewable Energy Directive: adopt RES legislation, streamline permitting, establish the renewable energy communities, operationalise guarantees of origin; 4.4.1. Adoption and implementation of long-term building renovation strategy, and energy efficiency scheme)

PRIORITY DOMAIN: NATURAL RESOURCES - RAW MATERIALS

Measure	Activity	Institutions/organisations involved (leader in bold)	Start date	Completion date	Estimated budget needed (euro)	Source of funding					Gap	Output Indicator	Output target	Outcome Indicator	Outcome Target
						Total foreseen in actual State Budget (euro)	To be foreseen in the State Budget (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donor Contributions (euro)					
SPECIFIC OBJECTIVE 1: ORIENTATION OF MINING SECTOR OF ALBANIA TO BECOME EU STRATEGIC PARTNER AND A VALUABLE CONTRIBUTOR TO THE EU'S CRITICAL RAW MATERIALS SUPPLY CHAIN															
M.1. STRENGTHENING THE COLLABORATION WITH EU INSTITUTIONS/ACTORS/ORGANIZATIONS OPERATING IN THE RAW MATERIAL SECTOR.	A.1. Support the operation of the EIT Regional Raw Materials Center in Elbasan for the yearly implementation of its action plan and for cooperation with other similar local structures of the innovation ecosystem, such as the National Agency of Innovation and Excellence.	MIE EIT raw materials Center of Albania NANR AGS AIE AIDA AIC	2025	2030	1,480,000	1,440,000			40,000	0	0	Successful operation of EIT RM RIC. MoU signed between EIT RM RIC and institutions from the ecosystem	At least 5 MoU signed	Degree of the mining sector's alignment with EU sustainability objectives as laid out in the Green Deal, Net Zero Industry Act, and CRM Act	100%
	A.2. Support the dialogues between the local and European EIT Raw Material Partners, discussing the issues related to innovative technologies, automation processes and scientific news from the sector. Support the synergies with the EU and Global Missions Platform as high level and relevant network to address the following priority of the EU CRMs Act	MIE EIT raw materials Center of Albania NANR AGS	2025	2030	100,000		0		100,000	0	0	Nr of Dialogues	1 dialogue / year		
	A.3. Encourage industrial actors, public institutions, trade unions, civil society, research and technology organizations and investors operating in the raw and advanced materials sector, to become members of ERMA (European Raw Material Alliances).	MIE EIT raw materials Center of Albania PUT/FGM NANR AGS AIE AIDA	2025	2030	0	0	0		0	0	0	new memberships registered with ERMA from the targeted sectors (disaggregated according to sectors: industrial actors, public institutions, trade unions, civil society, research and technology organizations, and investors)	6 memberships		
M.2. REFORMING THE INSTITUTIONS AND OPTIMIZING THE DIVISION OF RESPONSIBILITIES, TO ENABLE A BETTER OPERATION AND COORDINATION BETWEEN THEM, BY STRENGTHENING SCIENTIFIC RESEARCH, INNOVATION AND EFFICIENCY IN THE MINING SECTOR, AIMING ECONOMIC GROWTH AND THE ACHIEVEMENT OF THE OBJECTIVES FORESEEN IN THE GREEN DEAL, NET ZERO INDUSTRY ACT AND CRM ACT	A.1. Perform sector evaluation and provide necessary interventions to ensure harmonization of functioning between institutions, division of responsibilities and elimination of overlaps and/or fragmentation, strengthening of research and development	MIE EIT raw materials Center of Albania PUT FGM NANR AGS	2025	2026	45,000	45,000	0		9,000	0	0	Evaluation report developed and approved provisions implemented	na	Policies Implemented to Support the reforming of the institutions	60%
	A.2. Strengthening the current legal and regulatory framework to enable becoming a strategic EU partner in the Raw Materials sector, contributing to the objectives of the CRM act. Certain regulations acting in the mining sector, environmental and recycling of raw materials, as well as on the tax regulations will be considered to intervene in order of achieving the CRM act objectives.	MIE EIT raw materials Center of Albania NANR AGS	2025	2026	20,000		20,000		10,000	0	0	regulations act approved based on CRM Act	na		
	A.3. Streamlining procedure for issuing permits and licenses in the sector. Transformation (digitalization) of the exploration and mining permits services to fully on-line, including also the Mining Register Map Service, application process for permit, reservation process for permit, extending the validity of an exploration permit and compensation information. Creating a mutual digital platform for exchanging in real time the data between NANR-AGS-MIE **	MIE EIT raw materials Center of Albania NANR AGS	2025	2028	700,000	0	0				700,000	Mining permitting services fully on-line adopted	na		
	A.4. Launching the Communication campaigns for promoting the Social License of Operate (SLO) targeting the local communities, where the mining projects are under development.	MIE EIT raw materials Center of Albania NANR AGS	2025	2026	15,000	15,000	0		3,000	0	0	Communication campaigns launched	Two / year		
M.3. COMPILING A NATIONAL PROGRAMME FOR GENERAL EXPLORATION TARGETED AT CRITICAL RAW MATERIALS	A.1. Updating the digital archive of the mineral deposits map with new field data.	AGS	2025	2027	80,000	0	0		0		80,000	the digital archive updated and revised and field trips	At least 20 field trips	% Increases of efficiency as a result of improvements made to the digital archive system of mineral deposits.	up to 30%
	A.2. Implementing comprehensive geochemical surveys to collect new samples.	AGS	2025	2027	80,000	0	0		0		80,000	Number of samplings and for each samples a set of chemical and mineralogical analyses will be performed	Up to 200.		
	A.3. Digital processing and reprocessing of the new and historical data for producing the predictive maps and 3D models.	AGS	2025	2027	120,000	0	0		120,000	0	0	Digital processing of the field data completed/ The database with geological data will be updated. At least the module on preparation of 3D models will	na		
	A.1. The development of the new Mining National Strategy, incorporating the S3 strategy/findings and aligning with EU directives. Engagement with EU organizations, government bodies, and stakeholders is crucial to ensure that the strategy reflects collective insights and adheres to EU regulations.	AGS	2026	2028	100,000	70,000	0		0		30,000	Mining National Strategy developed and adopted	na		

M.4 REVIEWING LEGAL AND REGULATORY FRAMEWORK OF THE MINING SECTOR IN SUPPORT OF ITS REFORM.	A.2 Review the legislation for classifications of the river's inert as primary raw material in collaboration with the Ministry of the Environment, and enforce the monitoring role of NANR on the excavations of the inert from the rivers.	MIE EIT raw materials Center of Albania NANR AGS MTE	2025	2026	10,000	10,000	0	5,000	0	0	0	0	0	Legislation amended and approved	na	Percentage increase in compliance rates among mining companies with the updated legal and regulatory framework.	0.6
	A.3 Review the salaries of public employees foreseeing the mining sector as a priority of the Government and provisions related to reimbursement of expenses for field expeditions.	MIE MF EIT raw materials Center of Albania NANR AGS	2025	2026	0	0	0	0	0	0	0	0	0	Salary and reimbursement policy in the mining sector adopted	At least 30 % of employees in the mining sector benefiting from salaries increase		
M.5 TACKLING UNFAIR TRADE PRACTICES RELATED TO RAW MATERIALS AND INCREASING ENFORCEMENT AND CONTROL.	A.1 Review legal framework for implementation and managements of contracts to have fair contracts, adhere to international standards, and ensure the rights and obligations of all involved parties.	MIE NBC EIT raw materials Center of Albania NANR AGS	2025	2026	15,000	15,000	0	7,500	0	0	0	0	0	Legal framework reviewed and aligned with international standards	na	The stability of raw material markets, reflected in reduced price fluctuations and increased market predictability, as a result of consistent evaluation of market dynamics and trends.	up to 40%
	A.2 Setting up of mechanisms for monitoring raw material markets and immediate detection of unfair behavior.	MIE EIT raw materials Center of Albania NANR AGS	2025	2026	80,000	0	0	80,000	0	0	0	0	0	The market monitoring mechanisms established and fully operational	na		
	A.3 Consistently evaluating market dynamics and trends as an essential tool for protecting the sector against price fluctuations.	MIE EIT raw materials Center of Albania NANR AGS	2025	2030	200,000	200,000	0	40,000	0	0	0	0	0	the annually report on the market dynamics	1 report/year		
Total Special Objective 1					3,045,000	1,795,000	20,000	74,500	340,000	0	890,000						
Specific Objective 2 The enlargement of existing mineral deposits and exploring new deposits of CRM/SRM minerals																	
M.1. PROMOTING APPLICATIONS OF ADVANCED TECHNOLOGIES ON EXPLORATIONS.	A.1. Exploring potential new deposits minerals for CRM and SRM or expanding the existing one, through the Airborne Geophysical Survey.	AGS MIE EIT raw materials Center of Albania FGM NANR	2025	2027	20,000,000			0					20,000,000	dataset and maps of potential new mineral deposits	na	Increase of geological reserves for CRM/SRM	20%
	A.2 Applying for Research & Developing projects for testing and implementing the new technologies and methods under EU programs in exploration of new CRM/SRM mineral deposits.* Exploration for raw materials CRM/SRM/and others commodities **	AGS MIE EIT raw materials Center of Albania FGM NANR	2026	2028	450,000	0	0	450,000						research and development project submitted,initiated and completed for testing new exploration technologies and methods in CRM/SRM mineral deposits.	At least one per year		
M.2 EXPLORATION OF NEW POTENTIAL DEPOSITS AND THE ASSESSMENT OF EXISTING DEPOSITS PART OF THE CRM/SRM ACT LIST.	A.1 Exploration for raw materials CRM/SRM/and others commodity Evaluating the estimated geological reserves for the group of mineral deposits part of the CRM and SRM list. Evaluating the Lithium and REE potential in brines, gypsum and clays formations. **	AGS MIE EIT raw materials Center of Albania FGM NANR	2025	2027	2,100,000	0	0	2,100,000						geological reserve assessment conducted for CRM/SRM mineral deposits, including evaluations of Lithium and REE potential in brines, gypsum, and clay formations. (Lab equipment + analysis+ staff-external expertise -new technologies)	na	% exploration sites identified as new deposits	20%
	A.2 Assessment of phosphate and uranium-bearing phosphorites deposits (Fushë Bardhë, Sotire, Janjar, Bogaz and Gusmara.) Assessment of economic potential of Teletthermal mineralization for Arsenic and Associated elements in the Koman region.**	AGS MIE EIT raw materials Center of Albania FGM NANR	2025	2027	1,800,000	800,000	0	160,000	1,000,000					Assessment of phosphate and uranium-bearing phosphorites deposits finalised (Lab equipment + analysis+ staff-external expertise -new technologies)	na		
	A.3 Reassessment of mineral deposits according to UNFC for classifying the mineral resources based on European standards (UNFC).Establishing the databases for different resources in Albania (geo energetic, water, or mineral resources) according to UNFC. **	AGS NANR	2025	2026	200,000	200,000	0	40,000	0	0	0			UNFC categorisation completed for all geological reserves. Database established	na		
Total Special Objective 2					24,550,000	1,000,000	0	200,000	3,550,000	0	20,000,000						
Specific objective 3: Strengthening of mineral processing, Increasing the efficiency of non-renewable resources by adopting new waste-free technologies, trying to approach the green and circular economy model																	
	A.1 Adapting innovative and environmentally friendly technologies, such as acid leaching or bio-leaching processes in the extraction of valuable elements, Fe-Ni and Ni-Si, including the tailings. Encouraging companies through two key incentives: Tax Holiday, Companies that implement these advanced techniques would be eligible for a 3-5 year tax holiday or by increasing the depreciation rate for equipment and machinery technologies 3.0 or 4.0 used in these processes.* *	MIE MF AIDA AIC	2025	2030	1,830,000	0	1,830,000	366,000	0	0	0			A state mechanism (subsidy fund) for the payment/compensation of the interest rate for loans to all companies that use the 3.0 or 4.0 generation equipments in place.	At least 4		

M.1 STRENGTHENING OF MINERAL PROCESSING SECTOR	A.2. Improving the mechanisms for monitoring the companies operating in the processing of minerals and ensure the compliance with legal provisions.	NANR MIE EIT raw materials Center of Albania AGS	2025	2030	0					0	0	0	mechanism in place for monitoring the companies operating in the processing of minerals improved and functional	na	% Increase in the value-added contribution of the mineral processing sector to the Gross Domestic Product (GDP).	1%
	A.3. Integrating cutting-edge technologies for increasing the recovery grade of the valuable elements from low-grade Cr and Cu deposits, and implementing the novel pre-enrichment methods into the technological operations, enabling the full scheme of Cu and Cr processing, with the aim of exporting final or semi-final products of high value from those minerals, also in collaboration with the Albanian Missions HUB for leveraging an pooling resources in that framework**	MIE FGM AGS NANR MF	2025	2030	3,500,000	1,500,000	2,000,000	400,000	0	0	0	0	companies implementing innovative and environmentally friendly technologies in extraction processes that receive tax holiday benefits or increased depreciation rates for equipment and machinery.	na		
M.2 PROMOTING THE CIRCULAR AND GREEN ECONOMY MODELS ON THE MINING SECTOR	A.1.Application of remote sensing technologies (UAV/drone) for digital inventory and creation of 3D models for mining and technological waste to reuse and reprocessing.	MIE FGM AGS NANR	2025	2026	80,000	80,000	0	40000	0	0	0	0	digital inventories for mining waste completed/ the total of mining waste sites assessed and inventoried	100% of total mining waste assessed and inventoried	The reduction in the volume of mining waste through reprocessing, green technology and recycling initiatives.	0.25
	A.2 Assessing waste from mining and technologies to find appropriate recyclable materials for alternative uses.	MIE FGM AGS NANR	2025	2030	200,000	40,000	0	8,000	0		160,000	0	Assessment conducted to identify recyclable materials from mining waste for alternative uses	20% of the existing mining waste evaluated		
	A.3 Introduce legal provisions to incentivize companies adopting eco-friendly processes/products or utilizing secondary raw materials from mining waste in the construction sector, post-verification of properties in the building materials code. Promoting green and circular public procurement.	MIE MF AIDA AIC	2025	2030	100,000	100,000	0	20000	0	0	0	0	legal provisions drafted and adopted	na		
	A.4 Promote the collaboration in the EU and Global Missions' territorial Climate Resilient Clusters	EIT raw materials Center of Albania MTE	2025	2030	TBD											
	A.5. The assessment of groundwater in the areas of exploitation and processing of minerals, the impact on groundwater and their management. Mitigating environmental issues and community risks by rehabilitating brownfield and closed mines.	MIE EIT raw materials Center of Albania AGS	2025	2030	400,000	80,000	0	16000	0		320,000	0	groundwater assessments in all identified mining areas completed	100% of groundwater assessed for all mining areas		
	A.6 To encourage companies to adopt energy efficiency measures and utilize renewable energy in their daily technological processes, a proposed incentive includes a 3-5 year tax holiday or a subsidy fund to offset loan interest rates. This initiative aims to reduce both costs and emissions associated with mining operations.	MIE EIT raw materials Center of Albania MIE AIDA AIC	2025	2030	12,000,000	10,000,000	0	2000000	0		2,000,000	0	a new incentivization policy drafted and adopted	na		
Total Special Objective 3				18,110,000	11,800,000	3,830,000	2,850,000	0	0	2,480,000						
Specific Objective 4 EMPOWERING OF INFRASTRUCTURE, SCIENTIFIC AND HUMAN CAPACITIES																
M.1 Supporting the open research infrastructure for the sector including the government academia and research institutions.	A.1 Investing for the central laboratory on geosciences, to promote and strengthen research, based on the open infrastructure model, as well as simultaneously promoting the integration of advanced digital tools in university teaching.	MIE EIT raw materials Center of Albania PUT NANR AGS NASRI	2026	2028	2,521,000	0	0			2,521,000	0	0	virtual tools (VR) of advanced digital tools implemented and utilized in HEIs for digital teaching and research in geosciences.	At least 20	Increase in the number of collaborative research projects and publications produced by the sector, including contributions from government, academia, and research institutions	50%
	A.2 Establishing a semi-industrial laboratory, to test new mineral processing technologies.	NASRI NANR PUT/FGM AGS	2025	2030	1,000,000	0	0			0		1,000,000	semi industrial laboratory	1 laboratory		
	A.3 Establishing the digital system for monitoring the mining activities in real time through Earth Observation Technologies, using UHV (Drones) and Lidar image for 3D modeling.	MIE NANR ASIG	2026	2030	600,000	200,000				400,000	0	0	The digital system for monitoring the mining activities in real time through Earth Observation Technologies	na		
	A.4 Investing for the new premises for the AGS's Laboratories.	MIE	2025	2030	1,300,000	0	0			0		1,300,000	New building constructed for AGS laboratory.	na		
A.1 Review the curricula/open new study programs aligned with industry demands in raw materials sector and with focus on emerging technologies (geology, mining, mineral processing and petroleum, etc) as part of vocational high schools or as special classes in the high schools premises in the regions where the mining sector is more developed (Bulqiza, Kukësi, Lushnje, Berat).	MIE MECI NAVETQ MES HEIs EIT raw materials Center of Albania	2025	2027	180,000	180,000	0	36,000	0	0	0	0	0	Curricula reviewed, opened, curricula aligned with industry standards/ enrollment rate in new programs	At least 3 Curricula reviewed/ One new study programs opened/ 30 % of the curricula aligned		

M.2 STRENGTHENING THE HUMAN CAPACITIES	A.2 Review and update study curriculum and training programs in raw materials sector, transferring to students the technologies and techniques for exploration and exploitation. Joint master education and research programs will be promoted by HEIs in cooperation with EU partners to increase expertise in geology, mining engineering and environmental management	EIT raw materials Center of Albania MIE MES HEIs;	2026	2028	70,000	0	50000	0	20,000	updated curricula and training programs in raw materials sector implemented in HEIs, and at least one joint master education and research programs established with EU partners.	At least 4 updated curricula and 2 training programs	% Increase in the number of students pursuing careers in mining due to grants and scholarships offered for those committing to work in the sector for a predefined period	20%		
	A.3 Promoting the young professionals working in universities and scientific research institutions, as well as students, based on their achievements, by providing respectively complementary salaries, career growth opportunities, and scholarships for best students.	MIE MES EIT raw materials Center of Albania HEIs	2025	2030	3,000,000	3,000,000	0	600,000	0	0	0			young professionals and students per year, receiving complementary salaries, career growth opportunities, and scholarships based on their achievements	At least 100
	A.4 Incentivize the young generation to pursue careers in mining (attracting talents) through grants for scholarships for who will contribute working in the sector for a predefined period of time	MES EIT raw materials Center of Albania HEIs	2025	2030	180,000	180000	0	36000	0	0	0			scholarship per year to be granted to students pursuing careers in mining	At least 2 /year
	A.5 Supporting the post university course designed for the profiled specializations in the Mineralogy, Micropaleontology, Macro-paleontology, Sedimentary Petrography, Petrology, Geochemist, Stratigraphy, Tectonic, Geophysics (Electrometry and Seismic)	EIT raw materials Center of Albania MES HEIs	2025	2027	87,500	87,500	0	17,500	0	0	0			junior professionalist to be enrolled in post-university courses specialized in mineralogy, micropaleontology, macro-paleontology, sedimentary petrography, petrology, geochemistry, stratigraphy, tectonics, and geophysics.	At least 10
	A.6 Encourage the participation on the Erasmus Mundus Joint Master, financed and labeled by EIT Raw Material, to increase expertise in geology, mining engineering and environmental management.	EIT raw materials Center of Albania MIE NASRI HEIs	2025	2030	300,000	300,000	0	60,000	0	0	0			students enrolled in the Erasmus Mundus joint Master program in geology, mining engineering, and environmental management.	At least 10
	A.7 Mentoring the young generation by the senior and experienced professionals in the raw materials sector and inviting the international experts to accelerate knowledge transfer process. Promote cooperation between HEIs and organisations/entities operating in the field of education / research sector such as EIT Raw Materials	EIT raw materials Center of Albania MIE NASRI HEIs	2026	2028	50,000	0	0	0	0	50,000	Mapping the junior and senior professional in diaspora; Create a network;			At least 20 mentoring workshops+20 promotions events/activities throughout the year	
Total Special Objective 4				9,288,500	3,947,500	50,000	749,500	2,921,000	0	2,370,000					
TOTAL				54,993,500	18,542,500	3,900,000	3,874,000	6,811,000	0	25,740,000					
* Activities which are marked with NA or 0 in the budget column will be financed within the approved budgets of the involved entities, and as such, will not have any direct budgetary impact. Activities which are marked with TBD are those activities that have not been reported with a specific budget in the action plan considering they need preliminary studies for detailed costing. Their budget will be reviewed in the updated budget plan foreseen 1 year from S3 approval											54,993,500				
** Measures / Activities marked with two asterisks are the ones that have been proposed to be included in the Growth Plan															

PRIORITY DOMAIN: SUSTAINABLE AND DIVERSIFIED TOURISM & ENVIRONMENT

Measure	Activity	Institutions/organisations involved (leader in bold)	Start date	Completion date	Estimated budget needed (euro)	Source of funding					Output indicator	Output target	Outcome Indicators	Outcome Target
						State Budget (euro)	State budget to be foreseen (euro)	EU funds (euro)	Donors (euro)	Gap (euro)				
Strategic Objective: Develop a dynamic, diverse, country-wide, all year tourism sector that contributes to the socio-economic development of the country while promoting responsible practices and preserving our natural and cultural treasures for future generations.														
Specific objective 1. Preserve and promote Albania's historical and cultural sites, museums, and traditions to attract heritage enthusiasts, ensuring that Albania's cultural heritage, will be preserved, restored, and promoted.														
M1. Preserve and promote cultural sites, museums and traditions through the implementation of sustainable models and digitalization for Cultural Tourism	A1. Identification of Cultural and Heritage Sites including historical landmarks, archaeological sites, culturally significant landscapes, and traditional practices and prepare a digitalized interactive platform/register.	MECI, MTE	2025	2028	200,000	200,000		0	0		Number of cultural and heritage sites identified and documented.	4	M.1 Increase in visitor engagement rates at cultural sites and museums, as measured by interactions with digital and augmented reality tools, completed heritage trails, and utilization of smart signage and interactive maps annually.	40%
	A2. Develop an Action Plan to preserve the Identified Cultural and Heritage Sites.	MECI, MTE	2026	2030	110,000		110,000	0	0		Nr. cultural heritage sites preserved through promotion projects	5		
	A3. Use modern technology like augmented reality, interactive displays, and multilingual guides to enhance the visitor experience through effective storytelling and interpretation in Museums.	MECI, MTE	2025	2030	1,000,000	0	300,000	0	0	700,000	Number of interactive displays and augmented reality installations successfully deployed in museums annually.	20		
	A4. Use augmented reality (AR) to enhance the experience in underground cultural areas.	MECI, MTE	2025	2030	1,000,000	0	300,000	0	0	700,000	Number of underground cultural areas equipped with augmented reality experiences each year	30		
	A5. Develop targeted marketing strategies to promote cultural and heritage site, like Creating tourist trails featuring cultural and historical elements, creating compelling narratives around these sites and utilizing various marketing channels.	MECI, MTE	2025	2030	100,000	70,000		0	0	30,000	Number of tourist trails successfully developed and marketed annually, highlighting cultural and historical sites.	5		
	A6. Implement smart signage with QR codes for information on cultural and historical elements.	MECI	2025	2030	280,000	0		0	280,000	0	Number of smart signage with QR codes implemented for providing information on cultural and historical elements.	60		
	A7. Develop an interactive smart mapping with real-time information on tourist spots.	MTE	2025	2028	430,000			0	430,000		Nr of Smart Mapping developed and functional	20		
	A8. Use virtual reality (VR) experiences in for remote tourism exploration in different cultural sites.	MTE	2025	2030	300,000	300,000		0	0	0	Number of VR experiences developed and launched annually for remote tourism exploration of cultural sites.	30		
	A9. Use drone surveillance for coastline monitoring and safety in cultural zones and establishing clear rules and guidelines for drone usage in these sites	Civil Aviation Authority, Mti	2025	2028	260,000	0	100,000	0	0	160,000	Drone surveillance for coastline monitoring and safety in cultural zones implemented	26 zones		
	A10. Incentivize integration of smart technologies in accommodation facilities for energy efficiency in cultural zones.	MIE, MTE	2025	2028	500,000		500,000				Nr of accommodation facilities in designated cultural zones which have implemented smart technologies for energy efficiency	500		
	A11. Establish standards to ensure high-quality services in cultural and heritage tourism.	MECI, MTE	2025	2028	70,000	70,000		0	0	0	Number of cultural and heritage tourism operators certified to meet high-quality service standards	700		
	A12. Regularly monitor and evaluate the impact of tourism on cultural and heritage sites through the respective platform	MECI, MTE	2025	2028	100,000	0	100,000	0	0		User satisfaction rate of the quality of services in cultural and heritage tourism	1,000,000 tourist surveyed		
M2. Promote mining heritage and industrial abandoned sites as added value for tourism	A1. Preparing the proposals for the transformation of mines and abandoned industrial sites that are accessible, and safe and take the didactic & touristic values into tourist attractions/museums/wine cellars, etc.	MIE, MECI, MTE	2025	2026	1,720,000	1,720,000		0	0	0	Nr of project developed and submitted for the transformation of mines and industrial sites into tourist attractions annually.	3	M.2 Tourism revenue increase attributable to the heritage sites.	30%
	A2. Evaluate Albanian geosites and geoparks that can aspire to be declared by UNESCO as protected UNESCO sites and prepare respective proposals for UNESCO.	MTE, MECI	2025	2026	200,000	0	100,000	0	0	100,000	Number of evaluated geosites and prepared proposals submitted to UNESCO annually.	4		
M3 Using advanced technologies to classify and diversify tourist areas	A1 Preparation of digital maps classifying and designating areas (mini destinations) by typology of the tourist product (elite tourism/mass tourism, agritourism, mountain tourism, Cultural Tourism, Health tourism, nature tourism, concerts, etc.	MECI, ADF	2025	2028	100,000	100,000					Nr of areas classified by development categories and typologies that guide investments. (a. Spaces well identified according to the typology of the tourist product. b. Priority areas for the development of cultural tourism that will be used as targets to attract certain types of investments in the future.)	4	M.3 The increase in tourism-related economic activity in areas that were classified and diversified (measured by tourist spending, hotel occupancy rates, etc.).	30%
	A2 Preparation of digital maps by tourism thematic: identify specific areas dedicated to agritourism, concerts, camping, cultural tourism, health tourism, natural/sports tracks/paths, etc) to be used for regulating at national level the permits by area and to orient respective public/private investments based on the area typology.	ADF	2025	2028	150,000	150,000					Nr of Digital maps preped for the allocation of cultural and artistic activities according to the type of tourist area and the level of development of the area.	10		

	A.3. Identify and prepare tourist trails (of natural, cultural, culinary/tradition, historical character) and establish a digital platform and apps.	MECI, MTE, ADF	2026	2030	100,000	100,000						Nr of data set for ecotourism and hiking targets, trace creation in the map. Carrying capacity assessment for nr of ecotourist and other types of visitors which will produce indicator comparing with the number of population in areas, ex number of tours that can host a ecodestination, etc	20	
Total SO1					6,620,000	2,710,000	1,510,000	0	710,000	1,690,000				

Specific objective 2. Development of Health and Wellness subsector of Tourism by tapping into Albania's natural and therapeutic resources

M1. Promote the development of Health Tourism and Wellness Tourism in Albania	A.1. Promoting Albania as an affordable and reliable destination for medical procedures, such as dental work, cosmetic surgery, fertility treatments and rehabilitation	MoHSP, MTE	2025	2030	700,000	700,000		0	0			% Increase in the number of international patients seeking medical procedures in Albania	40%	M.1 Increase in Revenue generated from foreign patients undergoing Health Tourism and Wellness Tourism in Albania	40%
	A.2. Development of partnerships with top medical institutions and healthcare providers to offer high-quality medical treatments, surgeries and rehabilitation.	MoHSP	2025	2027	0	0		0	0			Number of partnerships established with top medical institutions and healthcare providers to offer high quality medical treatments, surgeries and rehabilitation	15		
	A.3. Collaborate with healthcare providers for integrated programs through agreements	MoHSP	2025	2030	0	0		0	0			Number of partnership agreements signed with healthcare providers	30		
	A.4. Ensure sustainable harvesting practices to avoid the extinction of certain Medical Plants	MARD, MoHSP	2025	2030	200,000	200,000						Percentage reduction in the number of medicinal plant species at risk of extinction annually due to improved sustainable harvesting practices.	30%		
	A.5. Incentivize the development of eco-friendly health resorts and traditional healing practices.	MoHSP	2025	2030	350,000	350,000		0	0			Number of eco-friendly health resorts established	10		
	A.6. Develop wellness tourism packages to offer unique wellness experiences that are tied to Albania's culture and natural resources, integrating traditional Albanian healing practices and alternative medicine	MTE, MoHSP	2025	2030	50,000	50,000						Number of wellness tourism packages developed and sold, detailing the integration of traditional Albanian healing practices and the utilization of natural resources.	10		
	A.7. Incentivize the establishment of spa and wellness centers that utilize the albanian natural resources as springs, mineral rich-waters, etc	MoHSP	2025	2030	350,000	350,000		0	0			Number of spa and wellness centers that utilize Albania's natural resources established	10		
	A.8. Promote conservation and community involvement.	MoHSP	2025	2030	280,000	280,000		0	0			Number of conservation projects initiated with community involvement, quantifying the engagement and participation of local communities in environmental conservation efforts.	28		
	A.9. Support touristic structures that emphasize sustainability and eco conscious practices, attracting health conscious and environmentally aware tourists through advisory packages and roadmaps	MTE	2025	2030	500,000	500,000						Number of touristic structures certified for sustainability and eco-conscious practices.	500		
	A.10. Creation of a strong brand that highlights the unique aspects of Albania's natural and cultural resources to effectively market Albania as a destination for health and wellness tourism.	MTE, MoHSP	2025	2030	100,000	70,000		0	0	30,000		Number of strategic partnerships formed with health and wellness tourism operators and promotional campaigns launched annually.	20		
	A.11. Organize events such as wellness festivals, health and wellness workshops, and conferences to educate people about the benefits of sustainable and health tourism.	MTE, MoHSP	2025	2030	500,000	150,000				350,000		Number of wellness events organized annually, including participant attendance figures.	500		
M2. Digitalization and technological development in the context of health tourism in Albania	A.1. Incentivize businesses to use technology for personalized wellness program creation.	MoHSP	2025	2030	300,000	300,000						Number of businesses receiving grants for adopting technology-based wellness programs	300	Improvement in Health Tourism Experience by increase in satisfaction rate among health tourists for digital health services	20%
	A.2. Update the legal framework with provisions that allow and facilitate the digitalization of medical records and the implementation of e-health services to improve efficiency and patient experience. Additionally, ensure these digital health services are accessible to tourists, enhancing their confidence and satisfaction with healthcare while visiting, thereby boosting the appeal of the destination	MoHSP	2025	2030	462,000	462,000		0	0			Legal Framework updated for the digitalization of healthcare records and e-health services deployment.	n/a		
	A.3. Revise health insurance and reimbursement policies to make medical procedures more accessible and affordable, especially for non-residents. This change aims to position Albania as a prime destination for health tourism by ensuring that visitors can easily obtain high-quality medical care at competitive prices. By simplifying the insurance process and offering clear benefits for medical tourists, Albania can attract a global audience seeking excellent healthcare services, contributing smartly to the growth of its tourism sector.	MoHSP	2025	2030	250,000	200,000		0	0	50,000		Annual increase in the number of medical tourists visiting Albania, measured through hospital and clinic data on non-resident patient intake.	30		
	A.4. Introduce necessary legal provisions for patients data protection, complying with international data protection standards.	MoHSP	2025	2030	320,000	320,000		0	0			Legal provisions introduced and enforced for patient data protection in compliance with international data protection standards	n/a		
Total SO2				4,362,000	2,982,000	950,000	0	0	430,000						

Specific objective 3. Natural, adventure and rural tourism

	A.1. Encouraging hiking tourism, adventure and sports tourism to prioritize sustainable tourism practices	MTE, MARD	2025	2030	110,000	70,000		0	0	40,000		Percentage Increase in the number of visitors engaging in hiking, adventure, and sports tourism activities.	10%	
--	-----------------------------------------------------------------------------------------------------------	-----------	------	------	---------	--------	--	---	---	--------	--	-------------------------------------------------------------------------------------------------------------	-----	--

M1. Development of natural and adventure tourism and extend the tourism season	A.2. Strengthening of digital infrastructure in tourist areas to enhance connectivity.	MIE	Jul-05	2030	1,000,000		1,000,000				Improvement in digital infrastructure in tourist areas, measured by connectivity speed and coverage.	20%	M.1Improvement in local employment rates due to extended tourism seasons and the development of natural and adventure tourism	25%
	A.3. Incentivize practices that certify businesses with international standards and the digitalization of these practices to facilitate the process and make it as popular as possible (Ex. Blue Flag)	MTE	2025	2030	40,000	0	40,000	0	0	0	Number of businesses certified with international standards for sustainable tourism practices	20		
	A.4. Develop and support ecotourism destinations communities, including hiking and wildlife conservation, adventure and sports tourism	MTE	2025	2026	1,200,000	0	1,200,000	0	0	0	% increase of ecotourism destinations developed and supported annually, including new hiking trails, wildlife conservation areas, and adventure and sports facilities.	increase with 20%		
M2 . Develop Strategic Policies in tourism by using data	A.1. Create a national tourism statistical database (develop the project and implementation)	MTE	2025	2030	1,063,300	0	0	389,300	674,000		A national tourism database established and implemented	1	M2. Increase in tourism revenue and visitor numbers due to data-driven strategic policies	20%
	A.2. Use big data analytics for strategizing tourism growth.	MFE	2025	2030	70,000	70,000	0	0	0	0	Number of strategic plans developed using big data analytics for tourism growth annually. Tracking Method: Analysis of strategic plan documents, integration reports from big data analytics platforms, and progress reports on the implementation of data-driven tourism strategies.	2		
	A.3. Develop policies for sustainable tourism growth	MTE, NGOs and national organisations	2025	2030	110,000	80,000	0	0	30,000		Number of sustainable tourism policies developed and implemented annually. Tracking Method: Review of policy documents, annual policy implementation reports, and assessments of the impact of these policies on tourism growth and sustainability.	1		
Total SO3					3,593,300	220,000	1,040,000	1,200,000	389,300	744,000				

Specific objective 4. Promote rural tourism by connecting visitors with local farms and agritourist activities, emphasizing sustainable food production.

M1. Developing Agro tourism and Farm-to-Table Experiences	A.1. Encouraging farms to open their doors to visitors and engage them in hands-on activities such as harvesting, cheese-making, milking etc. to diversify the activities on the farm	MARD, Researchers, experts, HEIs, international organisations	2025	2028	350,000	0	150,000	0	0	200,000	Number of farms participating in the educational and recreational agritourism program, along with visitor counts and program satisfaction ratings annually by tracking through a digital registry where all participating farms register and report visitor counts on a regular basis (monthly or quarterly).	35	M.1 Percentage Increase in the income earned by local farmers and producers through direct sales to tourists and participation in farmers' markets and agro-festivals.	20%
	A.2. Promote the consumption of locally sourced, fresh produced, through incentivizing restaurants/hotels to use local products and supporting promotion of local products	MARD, MTE, HEIs, NGOs	2025	2027	300,000	0	100,000	0	0	200,000	Number of restaurants and hotels participating in programs that incentivize the use of locally sourced products.	300		
	A.3. Organize regular farmers' markets and agro-festivals where local producers can sell their goods directly to visitors.		2025	2030	700,000	0	230,000	0	0	470,000	Number of farmers' markets and agro-festivals organized annually	100		
	A.4. Encourage and incentivize farms to adopt sustainable and eco-friendly practices.		2025	2030	700,000	0	230,000	0	0	470,000	Number of farms certified under sustainable and eco-friendly practice standards each year.	100		
	A.5. Certify farms that meet specific sustainability criteria to attract eco-conscious tourists.		2025	2030	490,000	0	200,000	0	0	290,000	Number of farms achieving sustainability certification annually.	50		
	A.6 Support development of applications that facilitate farm to table experiences for tourists and albanian population		MARD	2025	2026	400,000	200,000				200,000	Number of farm-to-table applications developed and actively used by tourists and local residents annually by developing farm-to-table applications through monthly active users, session durations, and user satisfaction surveys to assess engagement and effectiveness.		
	A.7 Promote dedicated and market oriented certified international bodies to certify local providers.	MARD, MTE, HEIs, NGOs	2025	2027	100,000	100,000					Establish a tracking system to monitor the number of local providers who receive certifications from dedicated international bodies annually, measuring the growth in certified providers and assessing the market impact of these certifications.	1		
	A.8 design and development of an innovative "job-tourism" nature-based space representing the brand "made-in-Albania", where local, digital nomads and tourists can come together in a unique environmental and socio-economic experience. The first prototype will be located in Vlorë or in an other UTM (Urban Transition Mission) Municipality, then scaled up globally to relaunch the Albanian brand and reputation worldwide. This space will represent a best practise in terms of climate mitigation and adaptation, regenerative transformation of spaces and ESG impact. It will include: innovative systems of building, agri-farming and food market, sustainable mobility, water and waste management, hospitality and regenerative recreative activities (such as wellness, yoga, meditation, sportive retreats ad so on).	MTE, Municipalities	2024	2030	15,000,000	0	5,000,000			10,000,000	Prototype established	1		
A.1. Providing tours and activities on farms that involve visitors in interactive tasks like picking crops, producing cheese, and milking, among others.	MTE, MARD	2025	2030	875,000	0	250,000	0	0	625,000	Number of farms offering interactive tours and activities, tracked annually to measure the increase in farm-based tourism offerings.	70			

M2. Promoting tourism in rural areas through connecting tourists with local farming activities and agritourism experiences, while highlighting sustainable methods of food production.	A.2. Incentivize farm-to-table dining, based on promoting the consumption of locally sourced fresh products	MARD, MTE, international organisations	2025	2027	875,000	0	250,000	0	0	625,000	Number of restaurants and hotels participating in the farm-to-table program, measured annually to evaluate the adoption rate of local sourcing initiatives.	1000	Increase in the number of tourists visiting rural areas and participating in agritourism activities	30%
	A.3. Certifying Farmers to enter to developed European markets through incentivizing them for sustainable and eco-friendly practices.	MARD, NGOs	2025	2030	600,000	0	300,000	0	0	300,000	Number of farmers certified annually to meet European market standards through sustainable and eco-friendly practices.	150		
	A.4. Promoting rural tourism by connecting visitors with local farms and agritourist activities, emphasizing sustainable food production	MTE, Foundations, HEIs, etc.	2025	2028	840,000	840,000		0	0		Increase in the number of rural tourism visits connected to local farms and agritourist activities annually by data collection through visitor surveys and bookings at participating farms, and monitor the annual growth in tourist registrations at agritourism sites.	100		
	A.5. Installing screens to promote tourism in Albania 24 hours a day	MTE, Municipalities	2025	2030	2,000,000		660,000			1,340,000	Nr. Of screens installed	40		
	A.6. Leveraging digital platforms and social media channels can significantly enhance Albania's visibility	MTE, Municipalities	2025	2030	0						at least 7 municipalities have established digital platforms	7		
	A.7. Organization of different cultural festivals in rural zones	MoSLG, Municipalities	2025	2030	1,050,000		300,000			750,000	Number of cultural festivals organized in rural zones annually. Tracking Method: Maintain a detailed event calendar and gather attendance data for each festival to measure the annual increase in cultural activities hosted in rural areas.	10		
	A.8. Local Typical Products Event Promotion and Development (Rakia Day, Apple Day etc)	MARD, Municipalities	2025	2028	400,000		400,000				Number of local product events hosted annually, such as Rakia Day and Apple Day. Tracking Method: Track the frequency and scale of local product events through registration and participation records, assessing the growth and diversity of these events year over year.	at least 2 festivals/year		
	A.9. Analysing and targeting specific/niche tourism markets for effective marketing strategies	Academy of Sciences, NGOs, HEIs	2025	2030	240,000	0	100,000	0	0	140,000	Nr of marketing campaigns tailored to specific niche markets, measured by the number of targeted campaigns launched annually. Tracking Method: Analyze campaign data to assess engagement levels and conversion rates in targeted niche markets.	10		
	M3. Development of Sustainable Agriculture	A.1. Promote through various events to promote the combination of agri-tourism experiences with visits to cultural and historical sites	MTE, MARD, MoSLG, Municipalities	2025	2030	200,000	200,000					Number events organized		
A.2. Introduce specific subjects in the educational programs that focus on sustainable farming practices, biodiversity, and the preservation of traditional agricultural methods			2025	2030	0						Number of new educational programs or subjects introduced that focus on sustainable farming, biodiversity, and traditional methods. Tracking Method: Track the implementation and student enrollment in these programs annually to evaluate reach and interest.	20		
A.3. Developing a strong brand for Albanian agri-tourism that highlights the uniqueness of its agricultural products, cuisine, and rural landscapes		MARD, MES, HEIs	2025	2030	700,000				700,000		Nr of registered Albanian agri-tourism brand. Tracking Method: Monitor the brand's adoption rate among local businesses and its recognition in market surveys to assess its impact and visibility in promoting Albania's agricultural uniqueness.	1 registered brand		
A.4. Support participation of rural farmers and their organizations in international food and travel fairs, and collaborations with travel agencies		MARD	2025	2030	850,000				850,000		Nr. Of farmers supported to participate in fairs	1000		
A.5. Engaging local communities in the development and management of agri-tourism activities			2025	2030	150,000				150,000		Number of local community organizations actively involved in agri-tourism activities each year. Tracking Method: Annual surveys of agri-tourism sites to record community participation and management roles, ensuring sustained local engagement and contribution to tourism development.	100		
A.6. Establishing quality standards and certification for agri-tourism establishments to ensure high-quality experiences for tourists		MoSLG, Municipalities MTE, HEIs, MARD, NGOs	2025	2030	1,100,000	1,100,000		0	0	0	Nr. Of agro-tourism establishments that receive quality standards and certification	200		
A.1. Train communities and businesses in sustainable practices.	MTE, HEIs, NGOs	2025	2030	360,000	0	120,000	0	0	240,000	Number of community members and business owners trained in sustainable practices each year. Tracking Method: Training attendance records, pre-and post-training assessments, and follow-up surveys to measure the adoption and impact of sustainable practices within the communities and businesses.	30			

M4. Promoting Sustainable Tourism and Environmental Management through Eco-Friendly Practices and Innovation	A.2. Develop eco-friendly tourism models and support green business practices.	MTE, HEIs, NGOs	2025	2030	1,000,000	0	300,000	0	0	700,000	Number of eco-friendly tourism models developed and green business practices adopted. Tracking Method: Annual surveys and reports from tourism businesses to assess the implementation of eco-friendly practices and the development of new sustainable tourism models.	50	M.4 Percentage decrease in the overall carbon footprint of tourism activities within the region or destination, compared to a baseline year.	20%
	A.3. Introduce apps for monitoring carbon footprints of tourists.	MTE, Municipalities, MIE	2025	2030	1,200,000	0	400,000	0	0	800,000	Number of app downloads and active users monitoring their carbon footprint while traveling. Tracking Method: Monitor the monthly statistics of app downloads, active users, and engagement rates to assess adoption and usage trends.	200/year		
	A.4. Strengthen collaboration between tourism agencies and operators through mutual online communication platforms for building and promoting eco-friendly touristic packages and for low season	MTE, Associations of Tourist Operators	2025	2030	1,800,000	1,800,000		0	0		Number of eco-friendly touristic packages offered during low seasons, as recorded through the online communication platforms. Tracking Method: Annually assess the number and diversity of eco-friendly touristic packages promoted on the platforms and track the adoption rate among tourism agencies and operators.	100		
	A.5. Develop sustainable policies to promote tourism businesses that focus on organic production based on research	HEIs, NGOs	2025	2030	200,000	0	100,000	0	0	100,000	Number of tourism businesses adopting sustainable policies and engaging in organic production. Tracking Method: Monitor the annual increase in certified tourism businesses that incorporate sustainable practices and organic production into their operations.	20		
	A.6. Invest in infrastructure for environmental conservation.	MIE, municipalities	2025	2030	3,076,923	3,076,923		0	0	0	Number of environmental conservation projects initiated. Tracking Method: Annual tracking of the number and type of conservation infrastructure projects launched, including details on location, scope, and investment amount.	60		
	A.7. Develop waste management systems	MIE, municipalities	2025	2030	90,000,000	90,000,000		0	0	0	Nr of Waste management systems for tourism sites developed	100		
	A.8. Support tour operators and touristic agencies for building and promoting eco-friendly touristic packages and for low season.	MTE, HEIs, NGOs	2025	2030	0						Number of eco-friendly and low-season tour packages offered by operators and agencies. Tracking Method: Collect data on the annual increase in eco-friendly and low-season tour packages registered with tourism authorities and monitor their seasonal distribution and uptake rates.	20		
	A.9. Incentivize sustainable tourism practices that minimize negative environmental and social impacts.	MTE, MF, HEIs, NGOs	2025	2026	300,000	300,000					Percentage increase in tourism businesses adopting certified sustainable practices annually. Tracking Method: Monitor the number of certifications issued to tourism businesses for sustainable practices each year and evaluate their compliance through regular assessments.	30%		
Totall SO4				125,856,923	97,316,923	9,390,000	1,700,000	0	17,450,000					

Specific objective 5. Development of niche touristic products and services with focus on culinary

M1. Promoting Rural Experience Culinary	A.1. Developing a project study for farm stay opportunities where tourists can live on a working farm, participate in agricultural activities, and experience rural life firsthand	MARD, MTE	2025	2030	120,000	0	120,000	0	0		Number of project studies completed and farm stay opportunities created annually. Tracking Method: Record the completion of each project study and track the establishment of new farm stay opportunities to measure the implementation rate and participant feedback for quality assessment.	3	M.1 Percentage increase in the number of tourists participating in rural culinary experiences, such as farm stays, culinary tours, and cooking classes, compared to the previous year.	50%
	A.2. Organizing culinary tours that allow tourists to explore local cuisines, visit traditional markets, and learn about local ingredients and cooking methods	MTE, MARD	2025	2030	6,000,000	6,000,000		0	0	0	Number of culinary tours organized	60		
	A.3. Capitalizing on Albania's winemaking tradition by offering wine tasting tours that include visits to vineyards and cellar	MARD, MTE	2025	2030	50,000	0		0	0	50,000	Number of wine tasting tours conducted and number of participants engaged in these tours annually. Tracking Method: Maintain registration data for each tour to monitor participation rates and use participant surveys to measure satisfaction and gather insights for continuous improvement.	10		
	A.4. Hosting festivals and markets that celebrate local agricultural products and traditions.	MTE, MECI, MARD	2025	2030	600,000	600,000		0	0		Number of festivals and markets hosted that celebrate local agricultural products and traditions.	10		
	A.5. Create culinary trails that guide tourists through regions known for specific dishes, ingredients, or culinary traditions	MTE, MARD	2025	2030	250,000	0	100,000	0	0	150,000	Number of culinary trails developed and number of tourists participating in these trails annually. Tracking Method: Use digital tracking tools to collect data on trail usage and participant feedback to assess the popularity and satisfaction with the culinary experiences.	25		

	A.6. Offer cooking classes where visitors can learn to prepare traditional Albanian dishes.	MARD	2025	2030	300,000	0	100,000	0	0	200,000	Number of cooking classes conducted and participants enrolled annually. Tracking Method: Maintain records of class schedules, participant registrations, and feedback to monitor engagement and satisfaction levels.	1000		
M2. Culinary Tourism Research and Development	A.1. Conduct research to understand market trends and tourists' preferences in culinary tourism.	MTE, HEIs, NGOs	2025	2030	100,000	0	50,000	0	0	50,000	No of research studies conducted to understand market trends and tourists' preferences in culinary tourism.	2	M.2 Percentage increase in the adoption and utilization of newly developed culinary tourism products and experiences by tourists, compared to existing offerings.	40%
	A.2. Innovate and develop new culinary tourism products based on research insights	MTE, HEIs, NGOs	2025	2030	500,000	0	165,000	0	0	335,000	Tourist satisfaction rate for culinary experiences in Albania.	10% increase of culinary or creating 10 new products		
	A.3. Provide training and support to local producers, chefs, and tour operators to ensure high-quality culinary experiences.	MTE, MARD, MoSEBC, MECI, HEIs, NGOs,	2025	2030	240,000	0	100,000	0	0	140,000	Number of local producers trained	300		
	A4. Register and certify the typical local products (STG)	MARD	2025	2030	50,000	50,000					Number of local products registered and certified as traditional specialties guaranteed	50		
Totall SOS					8,210,000	6,650,000	635,000	0	0	925,000				
Specific objective 6. Development of skills in tourism and collaboration														
M1. Developing the necessary skills needed for the development of the S3 identified sub sectors of tourism	A.1. Establishing a specialized institution focused on higher education in tourism studies.	MECI, MF	2025	2027	5,000,000					5,000,000	A specialized institution focused on higher education in tourism studies established.	1	M.1 Increase in customer satisfaction ratings and feedback regarding the quality of services provided by professionals in S3 subsectors, reflecting enhanced skills and capabilities.	15%
	A.2. Support upskilling and reskilling to enhance the workforce qualifications and skills through training programs, including continuous training of hospitality staff to deliver quality services.	MTE, MES, MEKI, HEIs, NGOs	2025	2027	1,200,000	0		1,200,000	0	0	Number of training programs implemented for workforce qualification and skill enhancement in the hospitality sector	12		
	A.3. Incentivize to attract young professionals to work in the S3 subsectors of tourism sector.	MTE	2025	2028	500,000			200,000		300,000	No of incentive programs to attract young professionals to work in the S3 subsectors of the tourism sector.	50		
M2. Ongoing Training and Upskilling in Cultural Tourism	A.1. Youth Engagement and Career Development Programs in the tourism sector, with a focus on cultural tourism.	MoSYC, MTE, MEKI, HEIs	2025	2028	500,000	0	165,000	0	0	335,000	Youth engagement rate increase in the tourism sector (disaggregated by tourism type)	10%	M.2 Percentage of individuals completing ongoing training programs in cultural tourism, compared to the total number of participants enrolled.	60%
	A.2. Training locals as tour guides, encouraging the development of locally-run accommodations and eateries, and promoting local arts and crafts	MTE, MoSYC	2025	2030	240,000	0	100,000	0	0	140,000	Number of trained local tour guides and new locally-run accommodations and eateries established annually. Tracking Method: Monitor the completion of tour guide training programs and the registration of new local accommodations and eateries, assessing the growth in local arts and crafts sales through periodic market surveys.	240		
	A.3. Mapping of skills needed and develop training programs.	NAVETQ, MECI, MTE	2025	2026	300,000	0	100,000	0	0	200,000	Number of skills mapping analyses completed and training programs developed annually. Tracking Method: Track the completion of skill assessments and the launch of new training programs, measuring participation rates and program effectiveness through follow-up surveys and skill application in real work scenarios.	30		
	A.4. Align university curricula with industry needs in this sector.	MES, HEIs, MF, MTE	2027	2030	0						University curricula in tourism studies and the identified industry needs in the cultural tourism sector aligned	n/a		
	A.5. Establish specialized educational programs and high-quality training standards for tour guiding etc.	MTM, MES, HEIs, NAVETQ, MECI	2025	2028	300,000	0	100,000	0	0	200,000	Number of educational programs and events organized that focus on the cultural and historical significance of sites, including workshops, cultural festivals, exhibitions, and historical re-enactments.	10		
	A.6. Establish educational programs and organize events that focus on the cultural and historical significance of the sites, including workshops, cultural festivals, exhibitions, and re-enactments of historical events.	MTE, Municipalities, international organisations, HEIs, NGOs	2025	2030	10,000,000	10,000,000					Number of educational programs and cultural events conducted annually at historical sites. Tracking Method: Maintain a detailed log of all events and programs, including participant numbers, feedback scores, and media coverage, to evaluate engagement and educational impact.	100		
	A.7. Ongoing training for quality assurance	MTE, Municipalities, international organisations, HEIs, NGOs	2025	2027	240,000	0		0	0	240,000	Number of training sessions conducted annually for quality assurance. Tracking Method: Track and report the number of quality assurance training sessions held each year, assessing participant satisfaction and skill improvement post-training.	240		
Totall SOS					18,280,000	10,000,000	465,000	1,400,000	0	6,415,000				
Total SUSTAINABLE TOURISM					166,922,223	119,878,923	13,990,000	4,300,000	1,099,300	27,654,000				
Horizontal priority: Blue Economy														

M1. Development of Blue Economy and sustainable Coastal Tourism	A.1. Use satellite imagery and AI for blue economy planning and development.	MTE, ASIG, MD, NCPA	2025	2030	350,000	350,000	0	0	0	0	Number of satellite imagery analyses and AI-based assessments conducted annually for blue economy planning. Tracking Method: Maintain a log of satellite data usage and AI model applications, monitoring their impact on planning accuracy and decision-making processes in blue economy development.	10	M.1 Percentage increase in the contribution of the blue economy sectors (such as fisheries, aquaculture, marine tourism, etc.) to the overall GDP. Improvement in accessibility and amenities in coastal areas, enhancing the overall visitor experience and supporting tourism growth.	1% and 30%
	A.2. Prepare investment strategies for sustainable activities in the Blue Economy.	MTE, SASPAC	2025	2030	115,000	80,000	0	0	35,000	Publication of strategic investment plans for sustainable blue economy activities. Tracking Method: Track the development and release of investment strategies through documented phases of research, stakeholder consultation, strategy formulation, and final approval.	2			
	A.3. Draft an Action plan for improving infrastructure, transport network, and internet coverage in coastal areas.	MIE, MTE	2025	2030	115,000	80,000	0	0	35,000	Completion of a comprehensive action plan for infrastructure, transport, and internet improvements in coastal areas. Tracking Method: Monitor the milestones of drafting, stakeholder engagement, approval, and publication stages of the action plan.	2			
	A.4. Monitoring smart mechanisms to monitor the entire coastline	MI	2025	2030	280,000	280,000	0	0	0	Smart mechanism in place to monitor the coastline	n/a			
	A.5. Equipment of beaches with safety signs that contain key information (Signals along the Coast (Beaches))	MTE, MI	2025	2030	576,923	576,923	0	0	0	Nr. Of beaches equipped with safety signs	10			
Total Blue Economy					1,436,923	1,366,923	0	0	0	70,000				
PRIORITY DOMAIN: ENVIRONMENT														
Strategic Objective: Improve the Quality of Urban Air														
Specific objective 1. Updating of National Air Quality Management Plan														
M1. Prepare and revise Urban Air Quality Plans to reach national goals	A.1. Revision of the National Air Quality Management Plan for 2025-2030	MTE	2025	2028	143,000	0	143,000	0	0	0	The National Air Quality Management Plan for 2025-2030 drafted and approved.	n/a	Reduction in the number of air pollution-related health problems and illnesses, such as respiratory diseases, cardiovascular issues, and premature deaths.	20%
	A2. Prepare and approve local plans for all 9 municipalities	MTE, MoSLG, Municipalities	2025	2026	225,000	0	100,000	0	0	125,000	Nr of municipalities which have prepared and approved local air quality plans	9		
	A.3. Build local government capacity on environmental legislation obligations.	MTE, MoSLG, NEA	2026	2030	54,000	0	54,000	0	0	0	% local government officials trained on environmental legislation obligations	20%		
M2. Modernization and upgrading of monitoring network	A.1. Increase number of automatic monitoring stations	MTE, NEA	2025	2030	315,000	0	0	0	0	315,000	number of automatic air quality monitoring stations	10	M.2 Percentage increase in the accuracy and reliability of air quality data collected through the upgraded monitoring network, as assessed through comparison with reference measurements or quality assurance checks.	15%
	A.2. Monitor sustainability metrics through IoT (Internet of Things) sensors.	MTE, NEA	2025	2030	300,000	0	0	0	0	300,000	Nr of monitoring stations which implement sustainability metrics monitoring through IoT sensors	10		
	A.3. Train NEA staff in analyses, reporting and presentation of data.	MTE, NEA	2025	2027	80,000	0	0	0	0	80,000	Number of NEA staff trained in analyses, reporting, and data presentation	100		
	A.4. Implement calibration procedures with portable calibrator.	MTE, NEA	2025	2030	180,000	180,000	0	0	0	0	Number of calibration procedures successfully implemented using portable calibrators annually. Tracking Method: Monitor and record each calibration event, ensuring documentation of procedural adherence and calibration accuracy.	20		
	A.5. Develop short-term forecasts of major pollutants.	MTE, NEA	2025	2030	309,600	309,600	0	0	0	0	Number of accurate short-term forecasts for major pollutants developed and implemented annually. Tracking Method: Evaluate the accuracy and frequency of forecasts through regular environmental assessments and feedback from monitoring stations.	10		
Total SO1					1,606,600	489,600	297,000	0	0	820,000				
Strategic Objective 2. Monitoring of Water Bodies														
M1. Increasing the quality of monitoring	A.1. Increasing the number of monitoring station	MTE	2025	2026	5,000,000	0	5,000,000	0	0	0	Increase rate of water quality monitoring stations.	Increase with 30%	M.1 Percentage increase in the number of water bodies meeting or exceeding water quality standards and objectives, as determined by monitoring data.	20%
	A2. Enhance the indicators monitored according to the water framework directive	MTE	2025	2026	250,000	250,000	0	0	0	0	Increase in the number of environmental indicators monitored according to the Water Framework Directive. Tracking Method: Track the expansion of the monitoring list annually, comparing the new indicators monitored each year to ensure comprehensive water quality assessments.	10%		
	A.3. Implement Online reporting of surface water quality	MTE	2025	2027	785,000	785,000	0	0	0	0	Online reporting for surface water quality implemented.	n/a		
	A.1. Increasing the number of indicators accredited in NEA	MTE, NEA	2025	2028	250,000	250,000	0	0	0	0	Increase rate in the number of indicators accredited in NEA for water quality monitoring	20%		

M2. Increasing capacities for monitoring	A.2 Promotion of the quality of bathing waters alongside elite tourism areas	MTE, NEA	2025	2030	420,000	420,000		0	0	0	No of programs for public awareness of water quality using flag color codes created and implemented	20	M.2 Percentage increase in the number of water bodies monitored for key parameters, compared to the baseline coverage	30%
	A.3 Developing software to assess water quality and determine safe swimming areas based on flag colors.	MTE, NEA	2025	2027	350,000	350,000		0	0	0	Number of software applications developed and deployed for assessing water quality and flagging safe swimming areas	30		
Total SO2					7,055,000	2,055,000	0	5,000,000	0	0				
Specific objective 3. Boost Innovative Industries														
M1. Align legal framework to EU directives for boosting innovative industries	A.1 Transpose the Industrial Emissions Directive	MTE	2025	2028	20,615	11,000		0	9,615	0	Successful transposition of the Industrial Emissions Directive into national legislation	n/a	Improvement in regulatory clarity and consistency, as evidenced by assessments of the legal framework's effectiveness in fostering innovation.	30%
	A2. Adapt and translate Best Available Techniques	MTE	2025	2028	21,415	11,800		0	9,615	0	Number of Best Available Techniques (BAT) adapted and translated for local industry use. Tracking Method: Monitor the completion of BAT document adaptations and translations, verifying their distribution and implementation across relevant industries annually.	2		
	A.3. Promote Eco-friendly ideas in processing industries.	MTE	2025	2028	21,915	12,300		0	9,615	0	Number of eco-friendly initiatives promoted in processing industries	2		
	A.4 Implement industrial water treatment	MTE	2025	2030	19,770	10,155		0	9,615	0	Number of industrial water treatment facilities implemented. Tracking Method: Track the completion of water treatment facility installations and assess the operational status annually to ensure they meet regulatory standards.	1		
Total SO3					83,715	45,255	0	0	38,460	0				
Specific objective 4. Improve inspection														
M1. Increasing the capacities of inspection bodies for environmental permits through the use of advanced technologies	A.1 Training on effective inspection methods and new technologies	MTE, NEA	2025	2030	30,000	30,000		0	0		Number of inspectors trained in effective inspection methods/ sampling methods / mobile device usage.	100	M.1 % of inspectors with improved capabilities on inspection methods	30%
	A.2 Use advanced technologies for improving inspection times and increase identification of issues / inspection	MTE, NEA, Civil Aviation Authority, ASIG	2025	2030	100,000	100,000					Reduction in average inspection time and increase in issues identified per inspection cycle.	40% reduction of inspection time		
	A.3 Training of inspectors on the sampling methods and mobile devices usage.	MTE, NEA	2025	2030	30,000	0	30,000	0	0		Number of inspectors trained in advanced sampling methods and mobile device usage. Tracking Method: Maintain records of training sessions completed and monitor the application of new skills in field inspections to evaluate the effectiveness of the training program.	30 / year		
	A.4 Purchase monitoring devices for industrial pollution.	MTE, NEA	2025	2030	270,000	0	100,000	0	0	170,000	Number of monitoring devices purchased for industrial pollution inspection.	2		
Total SO4					430,000	130,000	130,000	0	0	170,000				
Total ENVIRONMENT					9,175,315	4,086,778	427,000	5,000,000	38,460	1,060,000				
TOTAL					177,534,461	125,332,624	14,417,000	9,300,000	1,137,760	28,784,000				

* Activities which are marked with NA or 0 in the budget column will be financed within the approved budgets of the involved entities, and as such, will not have any direct budgetary impact. Activities which are marked with TBD are those activities that have not been reported with a specific budget in the action plan considering they need preliminary studies for detailed costing. Their budget will be reviewed in the updated budget plan foreseen 1 year from S3 approval

PRIORITY DOMAIN: HEALTHY AND SUSTAINABLE FOOD CHAIN

Measure	Activity	Institutions/org anizations involved (leader in bold)	Start date	Completo n date	Estimated budget needed (euro)	Source of funding					Financial Gap	Output indicator	Output target	Outcome Indicator	Outcome Target
						State Budget (euro)	To be Foreseen in State Budget (euro)	Foreseen in 2025	EU funds (euro)	Donor Contributions (euro)					
Strategic Objective: Transform the Agriculture Sector to deliver healthy food by focusing on the development of sustainable food chain based on tradition and foster value addition and competitiveness in the market.															
Specific Objective 1.1: Sustainable Farming and Certification: Increasing the economic sustainability of farms to tackle current and future challenges (i.e. Climate change) through cost reduction, sustainable production and certification															
M1. Enhance agricultural productivity and sustainability by mitigating risks from natural disasters and optimizing resource usage through technology.	A.1 Innovate the natural disaster mitigation in agriculture through predictive analytics, artificial intelligence (AI), and drone technology into insurance pilot schemes. This advanced approach would utilize data analytics for accurate disaster forecasting, AI for risk assessment, and drones for quick damage assessment post-disaster.	MARD, AARD	2025	Annual	200,000		200,000	40,000				Number of Agricultural Insurance Claims Processed Using AI and Drone Assessments.	100 farms	M.1 Increase in Agricultural Yield and Reduction in Losses Due to Natural Disasters: This indicator would measure the percentage increase in crop yields and the reduction in losses attributable to natural disasters following the implementation of insurance pilot schemes and precision agriculture technologies.	At least 10% increase in crop yields
	A.2. Implementation of precision agriculture technologies: Support for the adoption of GPS and advanced technologies (UAS, Satellites) that allow precise monitoring and management of crop and soil needs, reducing waste and pesticide use and increasing yield.	MARD, AARD	2025	2029	9,000,000		9,000,000	1,800,000				Number of Agricultural Units Adopting Precision Agriculture Technologie	36 annual		
	A.3. Establishment of the Advanced Agriculture Technology Center in Korca for upskilling/reskilling in precision agriculture and adoption of agriculture advanced technologies in Korca Municipality in cooperation between quadruple helix actors	Korca Municipality, HEIs (University of Korca, Agriculture University of Tirana), MARD, business associations	2025	2026	200,000		200,000	40,000				Center established			
M2. Comprehensive Land Management and Modernization	A1. Implement a comprehensive land documentation system that guarantees every parcel of agricultural land is accurately recorded with definitive property titles. This system will utilize cutting-edge geospatial technology and blockchain for immutable record-keeping, enhancing legal clarity and boosting investor confidence in agricultural land ownership.	MARD, ASHK	2025	2027	600,000		600,000	120,000				Total Ha of land parcel documented using advanced technology	Total ha of land parcel documented	M.2 Percentage of Agricultural Land with Updated Titles and Integrated into the Land Information System	100%
	A2. Develop and implement a forward-thinking land consolidation law, employing advanced geospatial analytics and artificial intelligence to facilitate the strategic reallocation of land parcels. This law will enhance the structural efficiency and productivity of agricultural holdings by optimizing their size and configuration, guided by data-driven insights that ensure environmental sustainability and economic viability.	MARD, ASHK	2027	2028	-		-	-				Law drafted and adopted	Law drafted and adopted		
	A.3 Deploy digital technologies for the mapping and categorization of agricultural lands to support informed decision-making in land prioritization, utilization, and conservation. Develop an Agricultural Land Information System that integrates land property documents, consolidation plans, and digital land maps	MARD, ASHK, ASIG	2025	2030	1,500,000	1,500,000		300,000				% of Agricultural Land processed with Information System in place	100% of land 2030		
M.3. Expand organic farming, streamline the food supply chain, and enhance food safety and quality in line with European standards, fostering a sustainable and competitive agricultural	A1. Develop a comprehensive financial and technical assistance program that leverages cutting-edge agricultural technologies and sustainable practices to facilitate the transition from conventional to organic farming. This initiative will expand the area under organic agriculture, incorporating IoT-based monitoring systems and precision farming techniques to optimize resource use and crop health.	MARD, AARD	2025	2027	100,000	100,000		20,000				Number of Farms Adopting Technology Solutions and obtain organic certification (10)	100 Farms	M.3 Increase in Organic Certification and Market Access for Organic Products (measure by the percentage increase in the number of farms obtaining organic certification and the increase in the surface area of land cultivated with organic methods.	200 farms certified for Organic Products and access markets of Organic products. 100 Ha cultivated with organic methods
	A.2 Launch an innovative grant program designed to revolutionize short food supply chains. This initiative will actively promote the proliferation of hyper-local, zero-kilometer products, substantially reducing the carbon footprint associated with transportation and enhancing local economic resilience.	MARD, AARD	2025	2030	36,900,000	8,400,000		1,680,000	28,500,000			Number of businesses producing zero-kilometer products annually after receiving grants	160 beneficiaries		
	A.3 introduce a digital support platform that assists farmers in obtaining Global G.A.P. certification through streamlined applications and real-time guidance, thereby elevating their products to internationally recognized standards of quality and safety.	MARD, AARD	2025	2030	200,000			-		200,000		Number of farmers obtaining Global G.A.P. certification annually via the digital support platform.	10 annual beneficiaries		
	A.4. Reinforcing the professional capacities of agroprocessing employees through trainint for HACCP	MARD, AARD	2025	2030	300,000	300,000		60,000				Number of agroprocessing employees trained in HACCP annually.	327 employees trained		

369.0.0.0	A.5 Improving analyses capacities at national level to offer certified analyses to producers expanding the activity at regional level for neighboring countries, by establishing a Regional Laboratory in Korea for Agricultural Product Analysis and Certification, implementing EU quality standards and certification processes	MARD, Municipality of Korca	2025	2026	160,000		160,000	32,000				Regional Laboratory in Korca established and functional			
	A.6. Introduce modern technologies such as blockchain for traceability, mobile applications for direct farmer-to-consumer sales, and innovative storage solutions to preserve the quality of organic and short-chain products.	MARD, AARD	2026	2028	500,000		500,000	100,000				Number of agricultural producers adopting blockchain for traceability, Mobile sales applications in place and functional Innovative storage solutions in place			
	A.7 Create a network of food hubs, specifically five key centers, to facilitate the connection between small-scale producers and the HORECA sector (Hotels, Restaurants, and Catering), ensuring a steady and sustainable supply of local products to these businesses.	MARD, AARD	2025	2027	2,000,000			-		2,000,000		Number of Food Hubs Established and Operational	Number of Food Hubs Established and Operational		
M4. Increasing competitiveness and market orientation of the agri-food sector	A.1 Support scheme on new technological monitoring methods as use of microchips and sensors for monitoring	MARD, AARD	2025	2030	42,000,000	12,000,000		2,400,000	30,000,000			Number of Agri-Food Entities Adopting New Technologies and Sustainability Practices	540 Agri-Food Entities	M.4 Number of agricultural farms that have implemented the new technological monitoring and resource-efficient practices	100 farms
	A.2 Incentivize innovative investments on efficient and environmentally friendly use of land, water and energy on green houses	MARD, AARD	2025	2030	42,000,000	12,000,000		2,400,000	30,000,000			Number of greenhouses implementing energy-efficient and environmentally sustainable technologies annually.	1000 farms		
	A.3. Establish Agri-tech accelerator programs that encourage innovation by connecting technology startups with farmers and investors	MARD, regional centers for agricultural extension	2025	2030	300,000	300,000		60,000				Number of partnerships formed between technology startups, farmers, and investors each year through the accelerator program.	1 national programme, 300 participants form farmers, collector processors		
M.5 Technological Enhancement for Agricultural Sustainability	A.1. Investment in smart advanced irrigation systems to optimize water usage, enhancing water efficiency and supporting sustainable agriculture.	MARD	2025	2027	26,800,000			-	26,800,000			Number of Implemented Advanced Irrigation Systems and Agro-Meteorological Stations	12800 ha Pilot Area	M.5 Improve the natural resources efficiency through innovative irrigation techniques and enhanced Financial Resilience of Farmers (Increase in access to credit for farmers)	Irrigation in place for 12800 Ha 220 farmers have accessed to credits
	A.2. Advanced agro-meteorological stations: digital platform for smart agriculture	MARD	2025	2027	500,000			-	500,000			Number of advanced agro-meteorological stations deployed and operational across agricultural regions, providing real-time data accessible through the digital platform.	2000 ha pilot area		
	A.3. National scheme on financial instruments (sovereign warranty)	MARD	2025	2027	10,000,000	10,000,000		2,000,000				Number of agricultural businesses receiving financial support under the sovereign warranty scheme annually.	2200 units		
M.6. Support new farmers and technology transfer	A.1. Grant for the installation (start-up) of young farmers	MARD	2025	2030	80,000,000	80,000,000		16,000,000				Rate of Adoption of Advanced Agricultural Technologies by New Farmers	No of young farmers supported 800 annually	Percentage increase in employment and business startup rates among program participants within one year of completing training.	up to 4000 program participants employed/engaged in start ups
	A.2. Mentorship programs linking young and experienced farmers: Establish formal programs where experienced farmers mentor young entrants, facilitating knowledge and skill transfer.	MARD, regional centers for agricultural extension	2025	2030	300,000	300,000		60,000				Number of mentorship pairings established annually between experienced and young farmers.	1 national programme, 100 participants form young farmers		
	A.3. Develop training curricula on advanced agricultural technology for farmers, students, and workers in the Advanced Agriculture Technology Center in Korca, building partnerships with educational institutions and businesses to provide practical, market-oriented training, and measuring program success through participant employment rates and entrepreneurship.	MARD, MES MÈKI, Municipality of Korca, Korca University	2025	2027	100,000		100,000	20,000				Number of participants completing training programs annually at the Advanced Agriculture Technology Center.			

M.7. Agricultural Clusters development	A.1. Improvement on the law on agricultural cooperation, and clustering	MARD, AARD	2025	2026	-	-	-	-	-	-	Law drafted and adopted	Law drafted and adopted	Increase in the number of registered agricultural cooperatives and clusters	4 clusters
	A.2. Targeted grant programs that specifically support the formation and expansion of agricultural clusters in key sectors such as olives, fruits, and vegetables. These grants will prioritize initiatives that demonstrate innovative approaches to production, sustainability, and market expansion.	MARD, AARD	2025	2030	600,000	600,000	120,000	-	-	-	nr of established clusters	60 supported producers		
	A.3. Transform the Agricultural Chamber to act as a central platform for agricultural clusters, facilitating the integration of products and sharing of best practices. This platform will also support the creation of regional labels and the transfer of technology among cluster members, enhancing the visibility and competitiveness of regional agricultural products globally.	MARD, regional centers for agricultural extension	2025	2030	80,000	80,000	16,000	-	-	-	Number of agricultural clusters actively using the platform and number of regional labels created annually through the Agricultural Chamber.	6 pilot chambers		
Total for Specific Objective 1.1					254,340,000	125,580,000	10,760,000	27,268,000	88,500,000	27,300,000	2,200,000			
Specific Objective 1.2: Food Processing and Value-Added Products														
M.1 Investments on enhancing processing facilities and marketing of agro-food and fishery products	A.1 Strengthen the agro-industry value chain by investing in enhancing food processing, storage, and packaging technologies with targeted investments	MARD, AARD	2025	2030	40,000,000	28,000,000	5,600,000	12,000,000	-	-	Increase in the processing capacity of agro-industry facilities, storage, and packaging technologies	70 beneficiaries	M1/Expansion of market share, added value and reach for processed agro-food and fishery products in domestic and international markets.	at least 70 agroprocessors applying innovative technologies
	A.2.Regulatory framework to enforce environmental conditionalities for agro-industrial investments to mitigate climate impact by incorporating innovative technologies that reduce carbon footprints and energy usage	MARD, AARD	2025	2030	-	-	-	-	-	-	Regulatory framework in place	10 000		
	A.3.Implement a national support scheme to catalyze technological advancements in farms and processing units, emphasizing sustainable practices.	MARD, AARD	2025	2029	9,700,000	3,000,000	600,000	6,700,000	-	-	Number of farms and processing units adopting new technologies through the support scheme.	36 annual		
	A.4.Subsidizing private investments in renewable energy solutions for farms and agro-food processors enhancing energy self-sufficiency and sustainability through recognition of expenses	MARD, AARD	2025	2029	-	-	-	-	-	-	Increase in renewable energy adoption among farms and agro-food processors resulting from investments in renewable energy solutions.	40 units		
	A. 5. Boosting of quality local products by approving territory products labels	MARD	2025	2030	-	-	-	-	-	-	Nr of labels approved annually.	4 product labels annually		
	A.6 Offer service contracts and direct financial support for farm advisory services to improve agricultural productivity and innovation	MARD, AARD	2025	2030	1,000,000	300,000	60,000	700,000	-	-	Number of Farm Advisory Service Contracts Awarded	25 000 farmers		
	A.7. Transform 'Portali i Fermerit' into a comprehensive digital marketplace to bridge the gap between agro-producers, retailers, and consumers, thereby improving market accessibility and product visibility.	MARD, AARD	2025	2030	100,000	100,000	20,000	-	-	-	Transformed Portali i Fermerit into a digital market place by 2026 including 60 products. Expanding the range of products including all agriculture and livestock products by 2030	1virtual market place		
M.2. Innovative and Sustainable Agricultural and Breeding Practices	A.1. Implement streamlined protocols for Good Agricultural and Environmental Practices (GAEP), simplifying compliance and improving ecological sustainability across farming operations	MARD, AARD	2025	2030	80,000	80,000	16,000	-	-	-	Adoption of international protocols Nr of farms achieving GAEP certification.	100 farms	M2 Percentage increase in agriculture productivity applying sustainability metrics	30 % increase in agriculture productivity
	A.2. Deploy precision livestock farming technologies utilizing sensor-based systems to monitor animal health, optimize feeding schedules, and enhance overall animal welfare and farm productivity	MARD, AARD	2025	2030	9,000,000	3,000,000	600,000	6,000,000	-	-	Number of Farms Adopting Precision Livestock Farming Technologies	36 farms annual		
	A.3. Adopt advanced manure management technologies that convert waste into bioenergy and high-quality compost, minimizing environmental impact and generating new revenue streams through sustainable practices	MARD, AARD	2025	2030	3,000,000	100,000	20,000	2,900,000	-	-	Number of active users (producers, retailers, and consumers) registered on the digital marketplace annually.	12 annual		

	A.4. Construct state-of-the-art laboratories dedicated to ensuring food security and compliance with EU standards, enhancing the quality control and safety of agricultural products	MARD, AARD	2025	2028	20,300,000			-	20,300,000			Number of Laboratories Constructed	6 new laboratories 1000 new analysis		
	A.5. Promote knowledge exchange and enhance scientific research within the agricultural sector by establishing an Agricultural Knowledge and Information System (AKIS), fostering collaboration and innovation	MARD, HEIs	2025	2030	500,000	500,000		100,000				AKIS established and functional	AKIS established and functional		
M3. Transfer of knowledge and innovation in the agricultural sector and rural development	A.1 Launch a long-term program to establish model agricultural hubs that serve as technology transfer centers, showcasing best practices and cutting-edge innovations in sustainable farming	MARD, AARD	2025	2030	300,000	300,000		60,000				Number of farms which use the agricultural hubs	50 farms annual	M.3 Percentage increase in the adoption of innovative agricultural practices, technologies, and methodologies among farmers and agricultural stakeholders	20 % increase of adoption of new technologies
	A.2. Create a support program that acts as an incubator for young graduates in the agricultural sector, providing resources, mentorship, and investment opportunities for start-up ventures	MARD, AARD	2025	annual	250,000	250,000		50,000				Growth and sustainability of agricultural start-up ventures resulting from support programs and incubation initiatives.	50 former students		
	A.3 Undertake a reform of existing agricultural technology transfer institutions to streamline the dissemination of new technologies and practices, enhancing their reach and impact	MARD	2025	2025	-			-				Fagulatory framework in place	5 institutions		
	A.4 Establish a National Research Center for Fisheries Sciences in Albania dedicated to advancing marine biotechnology, sustainable fisheries, and aquaculture practices	MARD, AARD	2025	2030	200,000	200,000		40,000				National Research Center for Fisheries established	1 centre established		
	A.5 Conduct a comprehensive review and update of the HE curricula in agricultural disciplines to better align with current market demands and future job trends	MES, MARD	2025	2030	-			-				Degree of alignment of higher education curricula in agricultural disciplines with current market demands and future job trends.	Degree of alignment of higher education curricula in agricultural disciplines with current market demands and future job trends.		
Total for Specific Objective 1.2					84,430,000	35,830,000	-	7,166,000	28,300,000	20,300,000	-				
Specific objective 1.3 Sustainable Fisheries and Aquaculture															
M1. Foster a balance between economic growth and environmental conservation within the marine sector, ensuring long-term sustainability and innovation in fishing, tourism, and aquaculture industries.	A1. Implement a National Scheme offering grants for the eco-friendly modernization and renewal of fishing fleets, aimed at boosting efficiency and sustainability without increasing fishing efforts	MARD, MTE	2025	2030	1,200,000	1,200,000		240,000				Number of fishing vessels upgraded with eco-friendly technologies and practices.	100 boats above 12 meters (200,000 euros/year)	Increase in the number of sustainable marine operations certified with environmental standards	25%
	A2. Allocate grants to stimulate the blue economy, focusing on sustainable maritime tourism and eco-innovation. Specifically, provide 50% state grants to subsidize investments in smart circular bins for fisheries to diversify economic benefits and preserve marine ecosystems.	MARD, MTE, MECI	2025	2030	100,000			-	100,000			Number of projects funded annually that contribute to sustainable maritime tourism and the preservation of marine ecosystems.	15 Grants Allocate / year		
	A.3. Aquaculture equipment modernization grants: Provide financial incentives for the adoption of new technologies such as automated feeding and harvesting equipment, which can improve efficiency and reduce labor costs.	MARD	2025	2030	300,000	300,000		60,000				Number of aquaculture operations receiving modernization grants for adopting automated feeding and harvesting equipment			
	A.4. Development of sustainable offshore aquaculture systems support the establishment of offshore aquaculture operations that can utilize deeper, less crowded water bodies, reducing the environmental impact on coastal zones and enable the cultivation of a broader range of species.	MARD	2025	2030	300,000	300,000		60,000				Number of new offshore aquaculture operations established utilizing deeper, less crowded water bodies.			
Total for Specific Objective 1.3					1,900,000	1,800,000	-	360,000	100,000	-	-				
Specific objective 1.4 Medicinal aromatic plants, oils and extracts production															
	A1.Launch a grant program scheme to fund technological upgrades for collectors and processors in the Medicinal and Aromatic Plants (MAP) sector, enhancing efficiency and product quality.	MARD, AARD	2025	2030	4,500,000	1,500,000		300,000	3,000,000			Nr of collectors and processors of MAP supported through grants	5 units		
	A.2 Establish a quality ensure standard system to ensure local products meet international standards enhancing their marketability	MARD, AARD			-			-							

M1. Drive the MAP sector towards global competitiveness, sustainability, and resilience by integrating technological, educational, and environmental strategies	A.3 Implement a support scheme that subsidizes the cost of obtaining global G.A.P. certification for MAP producers, aiming to elevate agricultural practices to international standards	MARD, AARD	2025	2030	300,000	300,000		60,000				Nr of MAP producers and processors compliant with recognized quality standards and certifications	10 annual beneficiaries	Rate of adoption of sustainable technologies and practices within the MAP sector.	50%
	A.4 Incentivize in house final products	MARD, AARD	2025	2027	50,000			-	50,000			nr of companies producing in house final products	at least 2 company till 2027		
	A.5 support cluster establishment among MAP companies	MARD, AARD	2025	2027	10,000		10,000	2,000				Nr of clusters established	at least 1 cluster		
	A.6 Develop a training program for agro-processing unit employees to become proficient in HACCP systems, on best cultivation practices, including organic methods, ensuring food safety and quality control	MARD, AARD	2025	2030	300,000	150,000		30,000		150,000		Nr. Of employees trained (100)	100 trained employees		
	A.7. Create model farms for the demonstration of innovative farming practices within the MAP sector, encouraging the adoption of sustainable and advanced agricultural technologies	MARD	2025	2030	90,000	60,000	30,000	18,000				Model farms established	2 model farms/year		
	A.8. Promote the research, development, and adoption of sustainable drying technologies, such as solar or biomass systems, providing more energy-efficient and eco-friendly options for MAP processing	MARD	2025	2030	200,000	200,000		40,000				Nr of MAP processors that have adopted sustainable drying technologies as part of their processing operations 20 units	20 units		
Total for Specific Objective 1.4					5,450,000	2,210,000	40,000	450,000	3,050,000	-	150,000				
1.5. Strengthening agritourism and business development in rural areas															
M.1. Develop rural tourism and Agri tourism and improve living conditions in rural areas	A.1. Direct grants toward innovative agritourism ventures that leverage local specialties, fostering niche markets and experiential tourism tied to the region's unique agricultural products and traditions	MARD, AARD	2025	2030	28,000,000	5,000,000		1,000,000	23,000,000			Number of agritourism ventures receiving grants for leveraging local specialties and fostering niche markets (100 farms)	100 Farms	Increase in number of tourists visiting rural agritourism facilities that has integrated innovative infrastructures or introduced new experiential offerings	60%
	A.2 Launch a grant program for agritourism entities that specialize in unique, high-quality visitor experiences, combining local culture with digital storytelling and smart facility management	MARD, AARD		2030	750,000	750,000		150,000				No of rural tourism units supported	100 rural tourism units		
	A.3. Invest in smart rural infrastructure that aligns with regional strengths and fosters connectivity, such as smart energy grids, IoT-enabled agricultural tools, and high-speed digital networks	local government Payment agency	2025	2030	16,000,000	4,800,000		960,000	11,200,000			new investments	90 new investments		
	A.4. Adapt the LEADER approach to rural development by integrating smart specialization strategies, encouraging projects that capitalize on local knowledge and digital innovation (M5 IPARD III)	MARD, AARD	2025	2030	6,000,000	1,500,000		300,000	4,500,000			No of rural development projects supported under the adapted LEADER approach	10 Leader groups (2027)		
Total for Specific Objective 1.5					50,750,000	12,050,000	-	2,410,000	38,700,000	-	-				
Total					396,870,000	177,470,000	10,800,000	37,654,000	158,650,000	47,600,000	2,350,000				

* Activities which are marked with NA or 0 in the budget column will be financed within the approved budgets of the involved entities, and as such, will not have any direct budgetary impact. Activities which are marked with TBD are those activities that have not been reported with a specific budget in the action plan considering they need preliminary studies for detailed costing. Their budget will be reviewed in the updated budget plan foreseen 1 year from S3 approval

CROSS-CUTTING PRIORITY DOMAIN: Advancing Education - Fostering Innovation and Workforce Readiness, through Digitalization and Curriculum Modernization

Measure	Activity	Institutions/organisations involved (leader in bold)	Start date	Completion date	Estimated budget needed (euro)	Source of funding					GAP	Output Indicator	Output Target	Outcome Indicator	Outcome target	
						State Budget (euro)	Total foreseen in State Budget (euro)	Foreseen additional State Budget (euro)	Foreseen for 2025 (euro)	EU funds (euro)						Donor Contributions (euro)
Strategic Objective. Transform Education and Workforce Development to Support Albania's Digital and Green Transitions																
Specific Objective 1. Strengthen collaboration among academia, businesses, government and civil society (QUADRUPLE HELIX) to enhance innovation and workforce readiness.**																
M1. Enhance cooperation between the educational institutions and business sector **A7-Q30	A.1 Conduct thorough assessments of current internship and apprenticeship programs to identify improvement opportunities	MES, MECI, HEIs, NAES, NAVETO, NEC, MoSEBC	2025	2025	na								Complete and publish a comprehensive assessment report on evaluating current internship and apprenticeship programs, identifying gaps and opportunities for improvement.	n/a	M.1 Graduate Employment Rate as a result of cooperation between academia and businesses: percentage of graduates from participating educational institutions who secure employment within their field of study in the business sector within six months of graduation.	30% increase
	A.2 Establish new internships and fieldwork practice within study programs (reviewing existent curricula or licensing new study programs), that meet the standards set by ASCAL, ensuring high-quality learning experiences. Guaranty, through review of the legal framework, the real involvement of the business community in curricula preparation and of the business community/associations in the development and quality assurance of educational curricula.	MES, MECI, NEC, MoSEBC, HEIs, ADAPE, ASCAL	2025	2027	55,000	35,000	20,000		11,000			0	Number of new internships and fieldwork placements established within study programs meeting ASCAL standards	7 new internship programs		
	A.3 Introduce incentives for collaboration between HEIs and business sector, particularly in facilitating internships and practical fieldwork, based on their future employment in the diploma specialization field	MES, MF, MoSEBC, NEC	2026	2028	75,000		75,000					0	Number of collaborative agreements established between HEIs and businesses for facilitating internships and practical fieldwork	10 agreements/year		
	A.4 Implement a dynamic monitoring system to assess the effectiveness and impact of internship and apprenticeship programs, incorporating feedback mechanisms from all stakeholders involved, including key performance indicators and success metrics, to guarantee ongoing enhancement and alignment with the evolving needs of industry.	MES, NEC, HEIs, MoSEBC	2025	2028	90,000		90,000		10,000			0	Monitoring system established which provides quarterly updates on the progress of internship and apprenticeship programs.	n/a		
	A.5 Incentivize and support dual VET schools that combine traditional classroom learning with practical, hands-on job training to provide a comprehensive educational experience.	MECI, MoSEBC, NEC	2025	2029	200,000		200,000		40,000			0	20% increase in dual VET system enrollments by 2027, supported by annual progress report and adjustments strategies based on industry feedback. Number of dual VET schools supported that combine traditional classroom learning with practical, hands-on job training	20% increase in dual VET system enrollments and 30 dual VET schools supported		
	A.6 Organize online courses within Albrain platform in cooperation between HEIs and Business sector, involving diaspora professionals where possible, for upskilling and reskilling	NEC, HEIs, MEFA, MECI, MoSEBC	2025	2027	30,000					30,000		0	No of online courses within Albrain platform in cooperation between HEIs and Business sector	Organizing at least 20 online courses per year		
	A.7 Incentivize and support the collaboration between academia and the business community to organize business forums and innovation fairs, aiming to narrow the gap between education and industry, and to revitalize economic diplomacy	MECI, NEC, NAES, MES, HEIs	2025	2027	30,000		30,000		6,000			0	Number of business forums and innovation fairs organized in collaboration with academia and the business	2 business forums / year or 6 in total community		
	A.8 Revise the legal framework to introduce incentives, such as tax benefits and recognition programs, for business investments in education and research focusing on S3 priorities and that actively engage in education activities, and the legal framework on the establishment of the Skills Fund	MECI, MES, HEIs, MF, NASRI, MoSEBC, NEC, MIE, MTE, MARD	2026	2028	na								Updated legal framework by 2025 Number of businesses receiving tax benefits or recognition for investments in education and research focused on S3 priorities	n/a		
M2. Ensure continuous EDP process	A1. Review legal framework to foresee the introduction of the bottom up approach and EDP process for draft law, strategies and main bylaws preparation process.	MoSEBC, DPMO, NEC, MECI	2025	2026	na								Updated legal framework by 2026	n/a	M.2 Engagement Level of adurple helix actors in EDP Process. (This indicator would measure the degree of active participation by quadruple helix actors (government, academia, industry, and civil society) in EDP)	70% engagement
	A2. Introduce monitoring process and institutional framework to foresee the implementation of the bottom up approach and EDP process	MoSEBC, DPMO, NEC, MECI	2025	2025	na								Annual Monitoring Report on EDP process implementation effectiveness by Q1 2026, every year on EDP process (showing the engagement and activity of the quadruple helix actors)	6 Monitoring Reports		
	A3. Incentivize initiatives/projects foreseeing involvement of quadruple helix actors	MoSEBC, DPMO, NEC, MECI	2025	2027	150,000		150,000		30,000			0	n of 5 new projects-supported through grants initiated by joint initiatives (at least 2 of the quadruple helix actors) in collaboration with donors/International partners,	At least 5 new projects/ year		
M3. Establish Regional Hubs at universities across various municipalities, starting with a pilot project in Korca, to transform the University into a regional innovation hub. This initiative aims to promote smart growth and act as a benchmark for converting regional universities into centers of innovation and development, strategically aligned with S3 priorities	A1. Conduct a comprehensive review of Korca University's organizational structure to align with regional smart growth strategies and S3 priorities	Korca University, Municipality of Korca, MES	2025	2025									Restructuring plan finalized, providing specific recommendations for enhancing organizational alignment with S3 priorities	n/a	M3. Korca University functions as an Innovation Hub and used as a model for other universities	4 regional universities replicate the model of Korca University
	A2. Review the legal framework to facilitate the integration of advanced technologies in teaching, fieldwork, and internships	MES	2025	2026	na								Legal amendments enacted by mid-2026, enabling greater adoption of innovative technologies in academic programs	n/a		
	A3. Develop joint degree programs with EU universities and engage in European Universities Alliances	MES, Korca University	2026	2027	na								Launch at least three joint degree programs by 2027. Active participation in European Universities Alliances.	at least 3 joint degree programs		
	A4. Create a collaborative framework with Tirana-based universities for joint study programs, research, and innovation	Korca University, MES, Municipality of Korca	2026	2028	na								Formalize agreements with at least three Tirana universities by 2027. Joint programs launched and effectively implemented.	At least 3 agreements with Tirana universities		
Total Specific Objective 1						610,000	35,000	525,000	-	97,000	30,000	-	20,000			
Specific Objective 2. Enhance lifelong learning programs to foster a resilient and agile workforce through reskilling and upskilling of workers, taking into account the challenges posed by circular economy and artificial intelligence																
M1. Strengthen policies to ensure lifelong learning and micro credentials to validate varied educational paths and skills mastery and develop a comprehensive national skills certification and business collaboration framework	A.1 Review the legal framework to align with new developments in LLL, including the review of the DOM on Life Long Learning to introduce the concept of micro-credentials in line with the EU Recommendation on a European approach to micro-credentials for LLL and employability, and to adapt with the latest flexibility and recognition of various learning developments.	MECI, MES, NAVETO	2025	2026	na								legal amendments or policies introduced to incorporate micro-credentials in lifelong learning programs.	n/a	M.1 Increase in Enrollment and Completion Rates of Lifelong Learning Programs and Micro-Credential Courses.	40% increase
	A.2 Introduce legal provisions for introducing categories of professionals based on their competences/knowledge/skills based on previous successful experiences. Provide provisions on related mechanisms including recognition of prior learning and job experience, learning from best practices and earlier experiences	MECI, NAVETO, NAES	2027	2029	na								Creating a national system for at least 3 specific professions beyond those regulated.	n/a		

	A.3 Review the legal framework for professional orders in line with EU directive 36/2005 CE and harmonize provisions on different regulated professions and the establishment of the professional order of Architects and Engineers in line with the Directive 36/2005 CE on Recognition of Professional Qualifications.	MES, MES, MIE, MoHSP	2025	2026	na							Updated Legal framework and harmonization of the legal framework for professional orders with EU directive 36/2005 by 2025, and establish a professional order for Architects and Engineers that is compliant with the directive by 2026.	n/a		
M2. Promote a collaborative framework for upskilling and reskilling, partnering with business sector**	A.1 Establish and incentivize on-the-job training and combined learning with practical experience to ensure alignment with industry needs	MECI, NAES	2025	2027	50,000		50,000		10,000			Establish at least 5 new on-the-job training programs per year that integrate practical experience in line with industry needs, with annual evaluations on program effectiveness and industry alignment.	at least 5 new on-the-job training programs per year	M.2 The percentage of businesses in identified priority sectors that have adopted the new upskilling and reskilling programs into their training frameworks	20%
	A.2 Prepare curriculum models and guidelines on upskilling and reskilling, targeting sectors vital for national economic growth, such as S3 priority domains and introducing, when possible, concepts of circular economy and AI	MECI, NAVETO, MES, MIE, MARD, MTE, NAES	2025	2026	na							Number of curriculum models and guidelines developed and implemented for upskilling and reskilling in S3 priority domains, incorporating circular economy and artificial intelligence concepts.	6 new curriculum models		
	Total Specific Objective 2				50,000		50,000		10,000						
Specific Objective 3. Curriculum modernization at all levels to better equip Albania for the digital and green transitions, and for strengthening the specialization of the national economy in the S3 priority areas and increasing scientific and technological skills across all levels**															
M1. Review pre-university educational programs to better meet current and future market needs, ensuring that students are equipped with relevant skills and knowledge for the evolving workforce**	A.1 Conduct a thorough evaluation of the current pre-university curriculum with broad participation of quadruple helix actors, including teachers and parents to identify core areas for changes and modernization.	MES, AQAPE, MoSEBC, NEC	2025	2025	80,000						80,000	Complete an evaluation with a report detailing needs for modernization and change, with participation from teachers, parents, and industry and community representatives.	n/a	M.1 The percentage of graduated students who possess the skills and knowledge that align with current and emerging market demands or % of students who are workforce-ready upon graduation.	80%
	A.2 Incorporate practical subjects and/or modules aimed at developing skills in work culture, environment protection, active citizenship, and that facilitate interaction with the work environment and strengthen partnership with the business sector.	MES, AQAPE, MoSEBC, NEC	2025	2026	na							Number of educational programs incorporating practical subjects and modules focused on work culture, environmental protection, active citizenship, and business sector partnerships	at least 3 new programs		
	A.3 Introduce new curricula as necessary, and ensure the existing ones incorporate findings from the SQNA, and taking into consideration the STEM approach, ensuring alignment with the priority areas of S3 and the balance of content and number of hours between subjects to optimize student learning outcomes, as well as region-specific subjects in the curricula, reflecting local labour needs and region specialization and with focus on work-related topics.	MES, AQAPE, HEIs, MoSEBC, NEC	2025	2026	na							Introduce by 2026 new curricula that integrate findings from SQNA, align with S3 priority areas, and optimize learning outcomes and teaching hours, with annual reviews to ensure local labor market alignment.	6 new curricula		
	A.4 Review pre-university textbooks, based on best practices and earlier experiences.	MES, AQAPE, HEIs	2025	2026	200,000		200,000		40,000			Pre-university textbooks reviewed and updated by 2026 to incorporate best practices, with input from educational and industry stakeholders.	n/a		
	A.5 Implementing the updated curriculum and supporting teachers with materials to reflect changes in the curriculum.	MES, AQAPE,	2027	2030	200,000						200,000	Number of teachers trained and provided with updated materials to reflect changes in the curriculum	100 teachers		
	A.6 Development of comprehensive training programs for teachers on the effective teaching methodologies and implementation of the updated or new curricula introduced	MES, AQAPE, HEIs	2025	2026	na							Develop at least 5 new comprehensive teacher training programs on effective teaching methodologies.	at least 5 new comprehensive teacher training programs		
	A.7 Develop a comprehensive incentive system for schools and teachers performance with benefits and reward structures performance based, including the provision of soft loans, options for early retirement, including their engagement and achievements in extracurricular activities, performance outcomes of their students in higher AQF/ECQF levels, as well as their participation and success in national and international competitions.	MES, MECI, AQAPE, HEIs	2025	2025	80,000				80,000			Performance-based incentive system for schools and teachers developed, including benefits, soft loans, and early retirement options, with annual assessments of impact on teacher engagement and student achievement.	n/a		
M2. Enhancement and diversification of language skills to meet labour market demands.	A.1 Increase the number of students learning foreign languages, with focus on Italian language, to respond to labour market demands and to strengthen cultural connections.	MES, AQAPE, HEIs, MEFA (intergov agreement AL-IT)	2025	2027	500,000		500,000		100,000		0	% increase in number of student following foreign language courses in schools, with focus on Italian language	50 schools	M.2 Percentage of graduates with proficiency in multiple languages meeting labor market demands	30%
	A.2 Review legislation to facilitate the opening of branches of foreign schools teaching in their foreign language, ensuring curriculum permeability for students, facilitating diaspora families returning in Albania and promoting internationalization	MES, AQAPE, MEFA (intergov agreement AL-IT)	2025	2025	na							Complete legislative review by 2025 together with an analytic report to simplify the establishment of foreign language school branches.	n/a		
	A.3 Enable broader access of the Albanian population on Italian TV channels to improve language skills proficiency and increase awareness of tradition, culture and economic collaboration.	RTSH, MEFA, MECI (intergov agreement AL-IT)	2025	2025	na							Italian TV broadcasted in the entire territory	na		
	A.4 Introduce foreign languages in kindergarten for children aged 3-6, establishing an early foundation for multilingual skills	MES, AQAPE, Municipalities, MoSLG, HEIs	2025	2027	na							Introduce English language program in all kindergartens to establish early multilingual skills development/ No of kindergartens which have introduced language programs.	50 kindergartens		
	A.5 Engagement of community of foreign professionals in Albania to actively participate in activities that foster a multicultural environment and enhance language skills.	MEFA, MI, MES, HEIs, MECI (intergov agreement AL-IT)	2025	2027	150,000		150,000		30,000		0	Establishment of an annual program that integrates foreign professionals into a national network to organize community-led language and culture activities annually.	at least 10 community-led language and culture activities annually.		
M3. Review university educational programs and facilities to better meet current and future market needs, ensuring that students are equipped with relevant skills and knowledge for the evolving workforce.**	A.1 Harmonize higher education curricula to assure continuation from pre-university education to address knowledge gaps between the two systems, and to address the skills needs in S3 priority domains	MES, HEIs, ASCAL, AQAPE,	2025	2027	80,000		80,000		16,000		0	1. An analytic report on the harmonization of higher education curricula with pre-university standards and S3 priority domains by 2025 2. Curricula harmonized by 2027	n/a	M.3 Increase in the degree to which the skills and knowledge of the university graduates match the specific requirements of labor market within S3 priority domains	40%
	A.2 Introduce high school system/coefficients to be used for an improved merit based selection of student accessing to Higher Education	MES, HEIs, AQAPE,	2025	2025	10,000					10,000		A merit-based selection system is drafted and implemented with new coefficients by the 2025-2026 academic year.	n/a		
	A.3 Review teacher training curricula to ensure alignment with revisions in pre-university education curricula	MES, HEIs, ASCAL, AQAPE,	2025	2027	TBD							Review and updated teacher training curricula completed	n/a		
	A.4 Review the bylaws to align with law in higher education and to allow curricula adaptation to labour market needs.	MES, HEIs, ASCAL, CES, MoSEBC, NEC	2025	2026	n/a							Bylaws revised and aligned with HE law to enhance curricular responsiveness to labor market needs, including feedback from annual industry surveys	n/a		
	A.5 Introduce and incentivise short-term, specialized courses in partnership with businesses, tailored to the labour market's specific requirements.	MES, HEIs, ASCAL, MoSEBC, NEC	2025	2027	200,000		200,000		40,000			At least 5 short-terms courses/year/S3 priority domain	At least 5 short-terms courses/year		
	A.6 Upgrade laboratory infrastructure in HEIs.	MES, HEIs	2025	2027	500,000						500,000	At least new 10 laboratories are upgraded and established in HEIs	At least new 10 laboratories		
	A.7 Update the legal framework and establish licencing and quality assurance standards that require universities to include business sector representatives in curricula development, review and assessment, strengthening ties with the business sector and set up advisory boards at HEIs including business sector representatives	MES, HEIs, ASCAL, MoSEBC, NEC	2025	2026	na							Legal framework updated Number of universities including business sector representatives in curricula development, review, and assessment processes. Number of advisory boards established at HEIs with business sector representatives	8 Universities including business sector in curricula development, 5 Advisory boards established at HEIs with business sector representatives		

	A.8 Review the bylaw defining teaching loads for academic staff to include research and innovation and institutional contribution, participation in national and international projects, patents, etc., improving quality of education and research in HEIs and internationalisation and partnerships in projects.	MES, HEIs, ASCAL, NASRI	2025	2025	na									Review and implement a revised bylaw that accounts for academic staff's contributions to research, innovation, and projects.	n/a			
	A.9 Review the DCM provisions defining priority sectors to ensure alignment with S3 priority domains and including teacher study programs in priority domains based on specific ad hoc analyses.	MES, HEIs	2025	2025	na									Conduct a comprehensive review of DCM provisions by Q4 2025 to align with S3 domains.	n/a			
M4. Profiling of HEIs based on regional development needs	A.1 Conduct a study to identify the main national regional labour market needs with focus on S3 priorities and specialization of the respective region in Albania, that should be addressed by the respective university. Analyze the transformation of universities and identify the necessary steps to align them with regional development needs.	MES, MoSEBC, MoSLG, MTE, MIE, MARD, HEIs	2025	2025	45,000							45,000	0	Detailed labor market needs study report prepared by 2025	n/a	M4. The proportion of graduates employed in their field of study within the region	60%	
	A.2 Review the funding and grants schemes for HEIs to incentivize study programs aligned with country's priorities.	MES, HEIs, MoSEBC, MoSLG, NEC.	2027	2028	20,000							20,000	0	funding and grants schemes reviewed	n/a			
	A.3 Establish an alumni network to provide mentoring, financial support, industry connections, internationalization, and opportunities for joint projects and strengthen career offices within universities to better support students and alumni and develop an advanced program to track students, supporting universities in monitoring and enhancing student outcomes and career progression.	MES, HEIs, MoSEBC, NEC.	2025	2026	80,000								80,000	A fully operational alumni network established, together with mapping of successful Albanians in Diaspora	n/a			
	A.4 Revise the legal framework to allow access in public administration of candidates holding all types of higher education qualifications, including level 5 AQF/EQF.	MoSPAAC, MES	2026	2028	10,000	5,000			N/A		N/A		5000	Legal revisions completed	n/a			
	A.5 Establish a digital platform for the collection and standardization of higher education data in collaboration with INSTAT.	INSTAT, MES, HEIs	2028	2030	100,000								100,000	An online digital platform established for HE data collection by 2030	n/a			
M5. Comprehensive modernization of VET curricula and VET system based on labour market needs and future S3 specializations	A.1 Perform regularly biennial SQNA to ensure curricula offering is aligned with the progress in labour market needs, ensuring educational offerings are responsive to technological advancements and economic shifts within the country.	MECI, NAVETO, NAES, MES, MoSEBC, NEC	2025	2030	120,000							120,000	-	Biennial SQNA conducted by 2030 with at least 10 meetings/per year organized	at least 10 meetings/per year	M5. Percentage of VET graduates employed in fields related to their training within 1 year of graduation.	70%	
	A.2 Periodically review and update the list of professions, to ensure it reflects the real-world demand for skills and qualifications, increasing employability in the degree specialization field.	MECI, NAVETO, MES, MoSEBC, NEC	2025	2030	n/a									The professions list is reviewed and updated every two years until 2030 associated with a reporting document.	at least 3 reporting documents			
	A.3 Review/update VET curricula and training programmes based on SQNA, ensuring that they reflect skills and qualifications needs in line with S3 priority domains. Tailor the VET offering to meet the specific needs of each region, ensuring that regional labour market demands are adequately addressed, and students are equipped with the skills most in demand in their locality and incorporate and emphasize digital skills training across all VET programs to ensure learners are prepared for the increasingly digitalized global economy.	MECI, NAVETO, VET Providers, MoSEBC, MoSLG, NEC.	2025	2027	n/a									Updated VET curriculum and training programmes to reflect SQNA findings. A report on the VET curriculum update prepared. At least a new module on digital skills in VET programs is prepared.	at least 2 modules			
	A.4 Review of the structure of curricula in VET and general preuniversity education to allow better permeability between both systems **	MECI, NAVETO, MES, AQAPE	2025	2027	100,000	-						100,000	-	20,000	A structural review is completed to enhance VET and general pre-university education curricula permeability.			n/a
	A.5 Improve career guidance and orientation instruments and services in VET providers with focus at students in lower secondary school **	MECI, MES, NAES, VET Providers	2025	2027	120,000	-						120,000	-	24,000	A blueprint on career guidance, a guide on professional education, % of students in lower secondary school receiving career advice			100% of students of 8th to 9th grade receiving career advice/year
	A.6 Design and pilot VET campus models implementing best practices and highest standards for VET provision, including grants and supports for students coming from rural areas introducing a new concept of social support for in need families that enhance access to education	MECI, NAVETO, NAES MoSEBC, MoSLG, NEC.	2025	2026	450,000							450,000	-	0	Nr of models of VET campuses in place with restructured facilities (dormitories, labs, applicative labs/farms) Number of students from rural areas receiving grants and social support to enhance access to education at VET campuses			2 model VET Campuses upgraded with new facilities. 50 students receiving 1000 Euros grants/year
	A.7 Implement successful VET campus models widening this new concept	MECI, NAVETO, NAES MoSEBC, MoSLG, NEC.	2027	2030	1,600,000							1,600,000	-	0	VET models implemented in other VET schools in the country			8 VET Schools
	A.8 Improve the utilization of public school infrastructures to expand the availability of VET programs, particularly in regions/municipalities with a high demand for vocational training with focus in S3 priorities	MECI, MES, NAVETO, MoSLG, NEC, EIT raw materials Center of Albania/MIE, MTE, MARD	2025	2026	200,000	-						200,000	-	40,000	Number of public schools repurposed or upgraded to offer VET programs in regions/municipalities with high demand for vocational training.			at least 20 public schools repurposed offering VET programs for vocational training.
	A.9 Incentivize companies investing in creating a positive work environment and social incentives for their employees in S3 related fields	MoSEBC, NEC, MTE, MIE, MARD, MF	2025	2027	150,000							150,000	-	30,000	Number of companies receiving incentives for implementing positive work environment initiatives and social incentives for employees in S3 related fields			at least 10 companies/year
	A.10 Strengthen the collaboration with business involving them in preparation of curricula/and on-the-job trainings programs and their QA evaluation.	MECI, NAVETO, MoSEBC, NEC.	2026	2028	n/a										Number of businesses involved in the preparation and quality assurance evaluation of curricula and on-the-job training programs			10 workshops; at least 5 meetings;
M6. Establish innovative grants and incentives for schools and students in Pre-university education ensuring better study results, better results in competitions, enhancing their participation in community and environment friendly initiatives, and talent development	A1. Introduce a new system of grants/incentives for all Pre-university students to incentivizing better students results, talents, better results in competitions, contribution to recycling and eco friendly initiatives, community engagement, etc	MES, AQAPE, MTE, MoSYC	2025	2027	200,000	-					200,000	-	0	Number of pre-university students receiving grants or incentives for academic achievements, talents, competition results, contributions to recycling and eco-friendly initiatives, and community engagement	50 students/year	M6. participation rates in community and environmentally friendly projects.	40%	
	A.2 Review legal framework to allow increased autonomy for schools	MES	2025	2025	n/a									Updated legal framework	na			
	A.3 Establish agreements among schools, businesses and NGOs that are actively engaged in recycling and environmental management to foster collaboration and concrete recycling initiatives	MES, MoSEBC, NEC, MTE, MoSYC	2025	2026	n/a									nr of new agreements with schools, businesses and NGOs	at least 20 new agreements with schools, businesses and NGOs			
	A.4 Introduce incentives for schools and businesses that actively participate in recycling initiatives setting clear, measurable targets for recycling initiatives	MES, MoSEBC, NEC, MTE, MoSYC	2025	2025	85,000							85,000	0	nr of info-sessions; nr of 10 workshops; nr of competitions;	na+M80 M88			
	A.5 Organise competitions among students/schools to acknowledge and reward the most effective and innovative recycling efforts	MES, MoSEBC, NEC, MTE, MoSYC	2025	2028	100,000							100,000	-	20,000	nr of competitions/year; nr of supported student for new ideas			At least 5 competitions/year; at least supporting 5 students new ideas/year.
	A.6 Launch a comprehensive public awareness campaign on the new grant/incentive scheme and to promote the importance of recycling, featuring the involvement of all actors involved.	MoSEBC, MES, NEC, MTE, MoSYC	2025	2028	120,000							120,000	-	24,000	Nr of info-sessions on public awareness; A social media campaign;			At least 20 info-sessions on public awareness/year
	A.7 Offer innovation vouchers and awards to students who devise creative and impactful solutions for recycling and environmental sustainability, encouraging a culture of innovation and environmental consciousness among the younger generation.	MoSEBC, MES, NEC, MTE, MoSYC	2025	2030	150,000							150,000	-	30,000	nr of innovation vouchers			50 innovation vouchers / year
Total Specific Objective 3					5,650,000	5,000	4,590,000	-	414,000	-	-	1,055,000						
Specific Objective 4. Reversing the trend towards emigration and abandonment of the rural areas from young people, making it attractive for young people to stay in rural areas and engage in rural development**																		

M1. Incentivize young people to contribute in future smart rural development by strengthening the education system and developing youth-oriented services	A.1 Update and upgrade the bylaw (DCM nr 666/2019, updated) on financial support for the pre-university students and their families aligned with S3 priority domains.	MES, MoSLG	2026	2028	n/a	-	-	0	Bylaw updated	n/a	M. 1. Percentage increase in youth participation in rural development initiatives and youth-oriented services	50%	
	A.2 Develop a scheme of incentives/grants to support pre-university students to study in VET in subjects needed for the smart development of their own communities.	MECI, MoSLG	2025	2030	600,000	-	600,000	-	120,000	Nr of pre-university students receive grants in overall Albania;			100 pre-university students
	A.3 Make accessible for students/pupils in remote areas, w-4, broadband and smart travel services supporting connectivity.	ME/NAIS, MES	2026	2029	150,000	-	150,000	-	-	Created a smart system for internet support			50 schools
	A.4 Develop a scheme of financial bonuses for students returning to work in their areas of origin for a predefined period of time following completion of VET/HE level studies.	MECI, MES, MoSLG, NAES	2025	2029	400,000	-	400,000	-	80,000	nr of Supported students (offering a bonus of 2000 euros / year)			40 students / year
	A.5 Develop a scheme supporting talented youth in all fields including sports and arts for participation in national teams and academies (i.e. Dyrrah academy, etc) in cooperation with Sports federations.	MES, MoSYC, MoSLG, Municipality of Durres; Federation of Sport	2025	2029	300,000	-	300,000	-	60,000	nr of Supported with scholarship			at least 50 students / year
	A.6 Launch a program that promotes youth exchanges between young albanians residing in Albania and those in the diaspora, and finance rural summer/winter youth programs with access for albanians and their peers abroad.	MoSYC, MEFA, MoSLG	2026	2029	100,000	-	-	-	100,000	Mapping the Albanian diaspora network, nr of signed MoUs; nr of supported students through the exchange program			at least 5 MoUs; At least 50 students/year supported through the exchange program
M2. Enhancing the educational offering and infrastructure for general pre-university and VET education **	A.1 Establish a digital application portal utilizing blockchain for transparent and secure transactions, ensuring efficient distribution of grants and incentives to students, pupils, and families in targeted areas.	MES, MECI	2025	2026	100,000	-	100,000	-	20,000	Created a digital platform	n/a	M/2 The rate of students' involvement in incentivized programs.	70%
	A.2 Implement a performance-based digital system to reward teachers working in designated areas with extra salaries, using data analytics to assess their impact and contributions.	MES, MECI	2025	2026	50,000	-	50,000	-	10,000	A report; Created a performance-based digital system;	n/a		
	A.3 Launch an alumni engagement app to unite former students, fostering collaboration, and supporting schools through digital fundraising campaigns, talent mentoring, and scholarships for gifted student	MES; MoSYC	2025	2026	100,000	-	100,000	-	20,000	Mapping alumni; Created a mobile app for alumni collaboration	1 Mobile App		
	A.4 Create a remote platform for joint classes, facilitating virtual teaching involving senior level teachers from urban areas enhancing quality education in rural areas, and collaborations between urban and rural schools, providing interactive content, live sessions, and forums.	MES, MoSYC, MoSLG	2025	2026	100,000	-	100,000	-	-	Created an online platform	1 online platform		
	A.5. Introduce a scheme of fully funded scholarships including also living, food and school expenses in campuses for VET students, upon committing to return to work in their area of origin for a predefined period post graduation.	MECI, MoSYC, MoSLG	2025	2026	300,000	-	300,000	-	60,000	Scheme approved and in place nr of fully funded scholarships	50 students / year (average monthly expenses about 500 Euros/student)		
	A.6 Establish a virtual platform accessible for students and teachers in pre-university system that contains digital school books, language courses, virtual cultural tours, access to school subjects information and materials, online competitions, access to dedicated emergency numbers for domestic violence and medical urgency, afterschool courses for talent development and booking system, etc. Integrate a comprehensive e-learning platform for both general pre-university and VET programs, incorporating interactive modules, assessments, and virtual labs.	MES, MECI	2025	2026	1,600,000	-	-	-	1,600,000	Launch a virtual platform by Q4 2026 offering comprehensive educational resources, emergency support services, and development programs / Platform established and operational	1 virtual platform		
	A.7 Introduce a digital VET package that includes specialized e-learning modules, practical simulations, and an online mentorship program (within the virtual platform).	MECI, NAVETQ	2025	2026	200,000	-	200,000	-	40,000	VET package approved and introduced	n/a		
M3. Building up the culture of innovation towards smart, sustainable and inclusive growth in schools and among young generations aimed at enhancing talents and preventing their emigration	A.1 Establish and support innovation hubs, fab and living labs, incubators, and accelerators providing resources, mentorship, and funding to young entrepreneurs especially focusing in rural areas. Implement digital platforms for collaboration and knowledge-sharing	MECI, MoSYC; MoSLG, AIE	2025	2027	1,100,000	-	-	-	1,100,000	nr of info-sessions; nr of innovation hubs	At least 20 info-sessions; At least 2 innovation hubs	% increase in the number of student-led initiatives and projects that demonstrate innovative thinking and contribute to smart, sustainable growth	40%
	A.2 Develop online platforms for young entrepreneurs to showcase their products and services locally and nationally, fostering market access, visibility, and networking opportunities and promoting Made in Albania products.	MECI, MoSYC; MoSEBC	2025	2026	100,000	-	-	-	100,000	Created a platform	1 platform		
	A.3 Conduct regular competitions focusing on generating innovative ideas in areas like environmental protection and digital solutions. Use digital platforms for submission and evaluation, engaging students, and young professionals in proposing and developing creative solutions.	MECI, MTE, MIE, MoSYC; AIE	2025	2028	100,000	-	-	-	100,000	nr of competitions;	At least 10 competitions;		
	A.4 Utilize TV and social media for awareness campaigns on sustainable growth, environmental protection, and digital advancements. Incorporate interactive content, documentaries, and informational posts to educate the public and inspire innovation	MECI, MIE, MTE, MES	2025	2027	70,000	-	70,000	-	14,000	nr of social media campaigns nr of TV campaigns	At least 20 social media campaigns at least 5 TV campaigns		
	A.5 Execute in-field initiatives involving youth in environmental conservation efforts, such as tree planting, clean-up drives, and sustainable community projects.	MoSYC, MTE	2025	2028	30,000	-	30,000	-	6,000	nr of new initiatives supporting new ideas	15 new initiatives supporting new ideas		
	A.6 Create and promote mobile applications that enable citizens, especially the youth, to report waste disposal abuses and other environmental issues, enhancing community engagement and providing real-time data for addressing environmental concerns.	MoSYC, MTE, MES	2026	2029	100,000	-	-	-	100,000	A mobile application in place and promoted	1 mobile App		
	A.7 Develop policies and programs that create a favourable context for young generations to stay and contribute to the smart growth of Albania. This includes incentives for start-ups, innovation, and sustainable practices.	MoSYC, MoSEBC	2026	2029	n/a	-	-	-	-	Policies developed and approved	n/a		
	A.8 Launch public information through updating and maintaining S3 portal for pushing curricula and job opportunities linked to the S3 specialization areas, contributing also to bridging the gap between education and industry needs.	MoSYC, MoSEBC, MIE, MTE, MARD	2025	2030	50,000	-	-	-	50,000	S3 portal updated and maintained regularly	n/a		
Total Specific Objective 4					5,550,000	-	2,400,000	-	430,000	250,000	2,900,000		
TOTAL					11,860,000	40,000	7,565,000	-	844,000	30,000	250,000	3,975,000	

* Activities which are marked with NA or 0 in the budget column will be financed within the approved budgets of the involved entities, and as such, will not have any direct budgetary impact. Activities which are marked with TBD are those activities that have not been reported with a specific budget in the action plan considering they need preliminary studies for detailed costing. Their budget will be reviewed in the updated budget plan foreseen 1 year from S3 approval

** Linked with the Growth Plan (SO1: "Revise the VET System to Match Labor Skills Demand", SO3: "Update the National Qualifications Framework"; SO4: "Advance Digital Skills and Literacy for Youth")

CROSS-CUTTING PRIORITY DOMAIN: DIGITAL INFRASTRUCTURE & CONNECTIVITY

Measure	Activity	Institutions/orga nisations involved (leader first institutions)	Start date	Completi on date	Estimated budget needed (euro)	Source of funding					Financial Gap	Output indicator	Output Target	Outcome indicators	Outcome target
						State Budget (euro)	To be foreseen in State Budget (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donor Contrib utions (euro)					

Strategic Objective: Optimize Digital and Connectivity to Boost Economic Efficiency

Specific objective 1.1 Advancing Infrastructure Development and Enhancing Connectivity through Strategic Investments and Technological Upgrades

M1. Reducing the digital divide and providing inclusive broadband services **	A1. Preparation of conceptual and operational design for broadband development in rural areas.	MIE	2025	2026	70,000	20,000	50,000					Conceptual and operational design prepared	n/a		
	A2. Update FS for broadband development in rural areas in eight counties: Shkoder, Kukës, Diber, Korçë, Gjirokastrë, Fier, Vlorë.	MIE, AKEP	2025	2027	150,000	70,000	80,000	30,000				Updated Feasibility Study for broadband development in rural areas	n/a	Percentage of the targeted 'white areas' that have access to broadband services.	50% of the targeted white areas that have access to broadband services.
	A3. Investments in optic fibers in 'white areas' (areas currently without broadband services), ensuring that these areas have access to reliable and high-speed internet connectivity.	MIE, AKEP	2026	2030	1,220,000	220,000	1,000,000					Investments in 'white areas' with new optic fiber providing high-speed internet implemented	at least 2 Investments in 'white areas' with new optic fiber providing high-speed internet implemented		
M2. Improve data infrastructure and data gathering **	A1. Invest in establishment of data centers and advanced tools for data collection, processing, and analysis to support evidence-based policymaking in S3 priority domains	MECI, MIE	2025	2030	1,500,000		1,500,000	300,000				Established 3 data centers (one for each S3 priority domain)	3 data centers established		
	A2. Develop international standards and practices to ensure high-quality, reliable data is available for decision-making and strategy formulation in the digital domain.	MIE, MECI	2025	2026	500,000		100,000	20,000		400,000	International standards developed and adopted	2 international standards developed and adopted	The degree of improvement in data use, data services, data products, data sources.	90% improvement	
	A3. Implement pilot projects including cases of usage of data collected in priority domains	MIE, MECI	2026	2017	200,000		50,000	10,000		150,000	4 pilot cases developed and implemented	4 pilot cases developed and implemented			
M3 Improving digital services in public transport	A.1. Web and app development on real time public transport itinerary	MIE, Municipalities	2025	2026	80,000		25,000	5,000		55,000	web and app services providing real-time public transport itineraries launched	1 web and 1 app developed			
	A.2 Implementation of electronic tickets for public transport	MIE, Municipalities	2025	2027	250,000		250,000	50,000			Electronic tickets system introduced and functional for 1 pilot city	1 Electronic ticket system for 1 pilot city			
	A.3. Development of training curricula for public transport staff	MIE, Municipalities	2026	2027	200,000		70,000		130,000	public transport staff trained under the new curricula	at least 500 public transport staff trained under the new curricula				
	A.4. Awareness campaign on promoting the digital services on public transport	MIE, Municipalities	2026	2027	300,000		100,000		200,000	3 awareness campaigns implemented	3 awareness campaigns implemented				
	A.5 Adopt relevant legislation for ITS frameworks and standards for road in line with EU Acquis and implement traffic data collection systems and road user information systems **	MIE, Municipalities	2025	2027	0			0		Successful legislation adoption for ITS frameworks and commencement of first-phase implementation	n/a				
	A.6 Adopt relevant legislation for ITS frameworks and standards for rail in line with EU Acquis **	MIE, Municipalities	2025	2027	0			0	0	Successful legislation adoption for ITS frameworks and commencement for rail	n/a				
	A.7 Development of ERTMS	MIE, Municipalities	2026	2028	200,000		200,000			ERTMS developed and functional	1 system developed and functional				
Total budget for Specific Objective 1.2.					4,670,000	310,000	3,425,000	405,000	0	0	835,000				

Specific Objective 1.2. Reducing processing times for transporters, maritime agencies, freight forwarders, and logistic companies to streamline operations and increase efficiency.

M1. Reengineering Services offered by Public Agencies to Transporters, Maritime Agencies, Freight Forwarders and Logistic companies	A.1 Joint Business Process Review in Port areas by Public agencies based on user workflow	MECI, MF, Albanian Customs; MIE, Port Authorities	2025	2025	600,000		300,000			300,000	Completion of a business process review leading to increased efficiency in port areas	n/a	The improvement in the speed and accuracy of service delivery to stakeholders as a direct result of the reengineered processes and new guidelines.	80% of the services improve in time efficiency and accuracy of service delivery.	
	A.2 Establishment of New Guidelines for Transporters, Maritime Agencies, Freight Forwarders and Logistic companies	MECI, MF, Albanian Customs, Port Authorities	2025	2025	500,000		250,000			250,000	Publication and implementation of new guidelines for logistic operations	n/a			
M2 Automation and Digitalisation of Customs and Logistic Procedures for Port users	A.1 Development of a digitization and automation plan for services related to exporters and importers	MECI, MF, Albanian Customs, Port Authorities;	2025	2025	100,000		100,000		0		Official approval and commencement of digitization and automation plans for exporter and importer services	n/a	The average reduction in time required for customs clearance processes post-implementation of digital services.	50% reduction in time required for customs clearance processes;	
	A.2 Implementation of digital and automated services for exporters and importers	MECI, MF, Albanian Customs, Port Authorities, NAIS	2025	2030	1,500,000		1,500,000	300,000			New Digital and automated services used by importers and exporters	at least 30 exporters and importers use the new digital and automated services;			
Total budget for Specific Objective 1.2.					2,700,000	0	2,150,000	300,000	0	0	550,000				
Total budget					7,370,000	310,000	5,575,000	705,000	0	0	1,485,000				

* Activities which are marked with NA or 0 in the budget column will be financed within the approved budgets of the involved entities, and as such, will not have any direct budgetary impact. Activities which are marked with TBD are those activities that have not been reported with a specific budget in the action plan considering they need preliminary studies for detailed costing. Their budget will be reviewed in the updated budget plan foreseen 1 year from S3 approval

** Specific objectives marked with two asterisks are the ones that have been included in the Growth Plan (SO1: "Comply with the Digital Identity Regulation" and "Update the Framework for Cyber Resilience")

CROSS-CUTTING PRIORITY DOMAIN: Empowering Youth and Retaining Talent																
Measure	Activity	Institutions/org anisations involved (leader in bold)	Start date	Completi on date	Estimated budget needed (euro)	Source of funding					Output Indicator	Output Target	Outcome Indicator	Outcame Target		
						State Budget (euro)	To be foreseen in State Budget (euro)	Foreseen in 2025	EU funds (euro)	Donor Contributions (euro)					Financial Gap	
Strategic Objective nr. 1: Develop youth capacities and retain human capital to promote growth in Albania																
Specific objective 1.1 Reverse youth trends towards emigration and abandonment of the rural areas by increasing quality of public services offered and making it attractive for youth to remain in Albania and engage in rural development																
M1. Invigorate youth employability, employment, and entrepreneurship through the Youth Guarantee and similar policies and improve programs and services that provide support for youth mobility, and cooperation between them within the country and beyond	A.1 Set up a "Youth for Youth" platform, enhancing youth employability, fostering entrepreneurship, and promotin youth employment and enabling improvement of digital literacy focussing on remote and rural areas.	MoSYC, NAY, MECI, NAES	2025	2029	180,000				180,000			1. Platform established and functional by 2025 2. Number of youth people mentored in acquiring employability skills	1. na 2. 5000 active users of the platform within the first year and at least 500 mentored each year	Improve youth support for employability, mobility, entrepreneurship and cooperation within the country and beyond	Na	
	A.2 Set up a labor market participation incentive for youth and workers who are far from large employment centers and are not involved in employment activities.	MoSYC, NAY, MECI, NAES, MF	2025	2029	16,650	16,650			3,330			Number of activities developed to encourage participation in the labor market of young people not involved in employment activities.	24 activities per year in each of the labour offices in Albania			
	A.3 Establish digital youth information corners (info-points) in all municipalities by making use of smart tables and digital devices.	MoSYC, NAY, MoSLG	2025	2029	31,000	31,000			6,200			nr of municipalities establishing youth corners	61 municipalities			
	A.4 Analyses of youth mobility working far from home for helping foreseeing supporting measurs for intercity public transport and review the legal framework to improve provisions on ticket reimbursement for youth under f 29 when they are employed near their hometown.	MoSYC, NAY, MF	2025	2026	na							1. Report prepared with recommendations by 2025 2. Legal framework improved	n/a			
M2. Innovate and improve primary health care and emergency services in rural/touristic areas by equipping them with advanced technologies and integrating services with specialized health workforce /professionals	A1. Conduct a GIS mapping of existing healthcare and pharmaceutical services in the entire country to plan a better and efficient distribution and accessibility of these services in rural areas	MoHSP, ASIG	2025	2025	200,000		200,000	40,000			0	GIS mapping in place and implementation plan prepared	n/a	Percentage increase in timely access to primary health care services in rural and touristic areas following the implementation of advanced technologies and integrated services.	Equip rural/touristic primary health care facilities with advanced technologies, achieving 60% coverage with advanced healthcare services and timely access	
	A2. Establish 6 different models of integrated healthcare centers in rural/touristic areas equipped with advanced technologies such as telemedicine to provide remote access to medical specialists and improve healthcare delivery.	MoHSP, MoSLG, MTE	2025	2025	2,400,000		2,000,000	400,000			400,000	Models established	n/a			
	A3. Implement the 6 models in the rest of the rural areas (around 200-220).	MoHSP, MoSLG, MTE	2025	2027	6,000,000		5,500,000	1,100,000			500,000	Implementation rate of new models in rural areas	6 models			
	A4. Implement a digital interactive exchange platform for integrated healthcare centres connecting online central healthcare professionals support, health emergency center, pharmaceutical service (pharmacies) and virtual connection	MoHSP, MIE	2025	2025	300,000		30,000	6,000			270,000	Platform in place and functional	n/a			
	A5. Provide high speed internet connection for the integrated healthcare centres and entities part of the virtual exchange platform	MoHSP, MIE	2025	2025	90,000		90,000	18,000			0	IHC provided with high speed internet connection	20 pilot centers and 200 centers afterwards			
	A6. Equip the integrated healthcare centers with the necessary equipments	MoHSP	2025	2025	2,000,000		1,500,000	300,000			500,000	IHC equipped	220 centers equipped			
	A7. Establish a collaboration with Albanian Post Authority for medicinals and biological samples delivery and implement drone technology for emergency and cost effective deliveries .	MoHSP, Albanian Post Authority, Civil Aviation Authority	2025	2026	0						0	Agreement signed	n/a			
	A8. Train remote located professionals to use advanced technologies provided for the integrated healthcare centers.	MoHSP, Albanian Post, Civil Aviation Authority, HEIs	2025	2025	330,000		100,000	20,000		100,000	130,000	Number of remote located healthcare professionals successfully trained in the proficient use of advanced technologies provided for integrated healthcare centers	200 health professionals trained			

M3. Support specialized health workforce /professionals in rural areas	A1. Incentivize health professionals to work in these areas through salary bonus, accommodation and soft loans, travel reimbursements, possibilities for career development	MoHSP, MES, MF	2025	2028	2,000,000	2,000,000	400,000	0	Number of health professionals attracted to work in rural areas due to incentivization measures, including salary bonuses, accommodation support, soft loans, and travel reimbursements.	50 people each year	% increase in specialized health workforce employed in rural areas	25 % Increase the number of specialized health workforce/professionals in rural areas			
	A2. Offer advantages for career development for health professionals working for a minimum nr of years in rural areas through specializations abroad at the end of the period, grants for further studies /specialization, etc	MoHSP, MES, MF	2025	2028	500,000	500,000	100,000	-	support scheme established within 2025 till 2026 50 % of IHC staff received advantages till 2027 75% of IHC staff received advantages till 2028 100% of IHC staff received advantages	50 people each year					
M4. Revitalize social and cultural life in rural areas by making use of smart technologies	A1. Combine traditional and innovative experiences to develop diverse ranges of cultural and tourism activities to revitalize rural areas via festivals, shows, experiences combining innovative technologies and traditional craft making.	MTE, MECI, MoSYC, MoSLG	2025	2030	1,000,000	1,000,000	200,000	-	Number of diverse cultural and tourism activities developed in rural areas.	10 events per year	Improved rural community satisfaction and perceived quality of life, overall well-being, sense of cultural identity, and satisfaction with available social and cultural activities by revitalizing social and cultural life through the integration of smart technologies.	1. 30% increase in access to cultural and social activities 2. at least 50% cultural hubs equipped with smart technologies in rural communities			
	A2. Develop annual plans for cultural events promoted through social media and funded by local and central government entities in collaboration with other stakeholders and Civil Society.	MTE, MECI, MoSYC, MoSLG	2025	2030	300,000	300,000	60,000	-	Number of annual plans approved	7 annual plans, one per year					
	A3. Promote a sense of community by organizing artistic and musical events focusing on both events and involve where possible new talents grown locally.	MoSYC, MTE, MECI, MoSLG	2025	2030	10,203	3,000	7,203	2,041	Number of cultural events taking place each year	4 events per year with a cost of 20000 EUR over 6 years					
	A4. Revitalize public spaces with digital technologies introducing concepts of smart living and updating cultural local venues with advanced technologies	MoSLG, MECI, MIE, MTE	2025	2027	1,500,000	1,500,000	300,000	-	Extent of revitalization achieved in public spaces through the integration of digital technologies	at least 50 centers supported					
Total Specific Objective 1							16,857,853	350,650	14,427,203	2,955,571	180,000	100,000	1,800,000		
Specific objective 1.2 Advance talent development and holistic development of youth, by supporting and implementing a comprehensive array of amateur sports, arts, arts and crafts programs, and extracurricular activities.															
M1. Implement a comprehensive talent development program by introducing a diverse range of extracurricular courses after school to cater to various talents and interests that are identified from an early age through national schemes.	A1. Implement yearly talent checks in elementary schools creating a digital database and platform with assessment data and follow up options. Develop framework curricula for extracurricular courses, including a standardized evaluation system, competitions at different levels and diverse activities, possibility to be evaluated by students and parents, assessment of knowledge and skills. Provide the identified talented students with the opportunity to follow extracurricular courses after school. Utilize digital platforms to tailor courses to specific talents and interests, ensuring specialized instruction and further development opportunities	MoSYC, MES	2025	2030	71,430	20,000	4,000	51,430	1. Digital database platform in place including a standardized evaluation system 2. Percentage of students assessed for talent 3. % of talented young students identified and participating in extracurricular courses 4. Number of framework extracurricular courses offered 5. Number of competitions and activities developed	1. na 2. 95% of 9 year schools students assessed 3. 5% of young talents identified from the students assessed 4. at least 50 extracurricular courses offered 5. at least 1 competition for each framework extracurricular course/year	National-level advancement in talent support systems, student exchange programs, and school functionality, measured by increased community and alumni engagement, fostering a lasting sense of belonging and support through generations.	na			
	A2. Review the workload for teachers and assure flexibility in order to engage them in extracurricular activities balancing their engagement with salaries (connected with measure in Education action plan)	MES, MoSYC	2025	2026	10,000	-	10,000	-	bylaws reviewed assuring a balance between teacher workload in teaching and in extracurricular activities and assuring flexibility in their engagement	na					
	A3. Use digital platforms to tailor courses to specific talents and interests, ensuring specialized instruction and further development opportunities.	MoSYC, MES	2025	2030	500,000	50,000	10,000	450,000	1. Number of courses tailored using digital platforms 2. Nr of Students engagement levels in specialized instruction	1. at least 100 courses 2. at least 2000 students					
	A4. Set up interschools talent centers, as a second level of the JOM program, for the discovery and development of talents by updating children and youth centers following on models similar to the house of the pioneer /"Abergo Difusso" model.	MoSYC, MECI, MES	2025	2027	9,000,000	2,200,000	440,000	6,800,000	-Number of talent centers constructed and established	12 regional centers with branches in 50 major urban and rural areas.					

A5. Grant schools increased autonomy and provide support for organizing alumni networks. Utilize digital platforms to foster community engagement and mobilize resources for talent development initiatives from alumni, donors, parents and other sources	MES, MoSYC	2025	2027	1,500,000		1,500,000	300,000			-	1. % of schools with increased autonomy 2. % of schools that have established alumni networks and/or mobilized resources for talents development	1. 60% by 2025, 90% by 2026, 100% by 2027 2. 60% by 2025, 90% by 2026, 100% by 2027
A6. Introduce a rewards system with special premiums or grants for students or pupils who excel and win national or international competitions in various fields, encouraging and recognizing their exceptional talents	MoSYC, MES	2025	2030	30,613		30,613	6,123			-	Number of students at national levele receiving premiums or grants for each extracurricular activity (50 extracurricular activities)	10 students receiving premiums/grants for each extracurricular activity each year (total 3000 students receiving premiums/grants)
A7. Expand talent development opportunities by establishing TUMO branches mobile bus labs, and offering travel expenses and insurance for participating students under 18, ensuring access to centralized locations for skill-building activities and workshops	MES, MoSYC, Municipality of Tirana, TUMO, MoSLG	2025	2027	825,000		700,000	140,000			125,000	Number of TUMO mobile branches established and mobile bus labs deployed and functional (including all operational costs, teachers salary and transport)	5 mobile branches established
A8. Ensure full participation of Albania in Erasmus+, establishing Erasmus+ Agency. Facilitate international education and cultural exchange experiences by providing full mobility opportunities under the Erasmus+ program, enhancing the overall development of talents	MES	2025	2027	3,000,000		30,000	6,000	2,700,000		270,000	Erasmus+ Agency established (Approximate fee to set up an Erasmus+ Agency - tbc with EU)	na
Total Specific Objective 1				14,937,043	0	4,530,613	906,123	2,710,000	6,800,000	696,430		
Total Objective 1				31,794,896	350,650	18,957,816	3,861,693	2,890,000	6,900,000	2,696,430		

* Activities which are marked with NA or 0 in the budget column will be financed within the approved budgets of the involved entities, and as such, will not have any direct budgetary impact. Activities which are marked with TBD are those activities that have not been reported with a specific budget in the action plan considering they need preliminary studies for detailed costing. Their budget will be reviewed in the updated budget plan foreseen 1 year from S3 approval

CROSS-CUTTING PRIORITY DOMAIN: Engaging Diaspora - Boosting Human Capital, Technology and Culture

Measure	Activity	Institutions / organisations involved	Start date	Completion date	Estimated budget needed (euro)	Source of funding					Financial Gap	Output indicator	Output Target	Outcome Indicator	Outcome target
						State Budget (euro)	To be foreseen in the state budget	Foreseen in 2025	EU funds (euro)	Donor Contributions (euro)					
Strategic objective: Engage diaspora and migrants in all aspects of smart and digital development in Albania leading to a more effective EU integration process															
Specific objective 1.1 Diaspora expertise provides effective contribution in generating human capital development especially in rural Albania															
M1. Incentivize the return of talents, professionals, and successful Albanians from Diaspora	A.1 Launch a comprehensive digital platform as a one-stop-shop for diaspora return and investments, providing streamlined information, services, and resources to facilitate their integration into the Albanian business ecosystem	MEFA, MES, MARD, MoSEBC, HEIs, Diaspora Business Chamber	2025	2026	1,000,000		1,000,000	200,000		0		Platform effective and in use during 2026	n/a		
	A.2 Implement a stable financial support program for companies, specifically designed to encourage the recruitment of highly skilled researchers and workers from abroad, and for startups and initiatives involving diaspora in the economic development of Albania. Leverage a digital application process for transparency and efficiency and utilize online platforms to streamline applications, foster networking, and support innovative projects	MECI, MoSEBC, Union of Producers, MEFA	2025	2028	22,200,000		22,200,000	4,440,000		0		Number of researchers or highly skilled professionals and workers hired through the program by a transparent digital process and supported in their return process	400 researchers or highly skilled professionals hired 2000 workers hired through this program		
	A.3 Develop an incentive program targeting diaspora professionals returning to Albania, offering tailored benefits and support packages to ease their reintegration and contribution to the local workforce	MEFA, MARD, MF, MECI, MoSLG	2025	2028	3,550,000	2,000,000	1,500,000	700,000			50,000	Programs of incentives developed.	20-50 people / year.		
	A.4 Implement an incentive program for diaspora investing in 53 priority domains, leveraged by targeted campaigns and online platforms to attract diaspora investments both nationally and in their respective areas of origin	MEFA, MF, MECI, MARD, MoSLG	2025	2028	1,000,000		1,000,000	200,000		0		the success of the incentive program for diaspora investment in 53 priority domains, measured by the number and value of investments made by diaspora members, tracked through program registrations and documented investment activities	Secure a minimum of 5 million euro in diaspora investments in 53 priority domains within the first year of implementing the incentive program, with at least 30% of investments directed towards projects in the diaspora's respective areas of origin	M.1 The percentage of talented individuals, professionals, and successful Albanians who have returned to Albania from the diaspora.	20% increase of the number of returns
	A.5 Establish a diaspora funding scheme for supporting investments in their area of origin communities based on needs identified by open community consultations, utilizing online platforms to gather input, and ensuring effective allocation of resources (IOM).	MEFA, MF, MARD, MECI, MoSLG, MoSEBC, IOM	2025	2028	400,000		400,000	80,000		0		1. Number of community consultations on the needs in each community and contributing the establishment of the funding scheme. 2. Funding scheme established and functional	1. 122 consultations (61 municipalities x 2 consultations 2. na		
	A.6 Support the finalization and enhance the AlBrain platform to facilitate quadruple helix communication through innovative approach, engaging also the diaspora, fostering collaboration, dialogue, joint projects, start ups, etc. App development for IOS and android	MoSEBC, Union of Producers, NEC, MES, MEFA, MECI, LIFE	2025	2026	250,000		100,000	20,000		150,000		Platform finalized / number of users	1000 per year		
	A.7 Create a digital Diaspora Register for efficient tracking and communication. The online platform ensures accurate and up-to-date information, streamlining coordination and engagement efforts	MEFA	2025	2026	200,000		200,000	40,000		0		Register created	n/a		

	A.8 Incentivise brain circulation and diaspora expertise /contribution of diaspora from their country of stay, bringing knowledge and skills to the Albanian market enabling also new ideas and innovation, knowledge transfer, new partnerships and joint projects, as an added value in the innovation ecosystem and closing the gaps for knowledge and skills	MEFA, MoSEBC, Union of Producers, NEC, MES, HEIs, MECI, LIFE	2025	2028	200,000		200,000	40,000	0		Number of campaigns in social media and digital platforms.	Bi-weekly campaigns every other month during the first year
Total					28,800,000	2,000,000	26,600,000	5,720,000	0	150,000	50,000	

Specific objective 1.2 Promote technological development based on diaspora contribution and research to stimulate economic growth

M1. Establish a Diaspora 4 Development (D4D) programme supporting human capital development and the involvement of diaspora and immigrant communities in the development of areas where innovation is lacking, and technological expertise is missing	A.1 Host a virtual Diaspora 4 Development national conference to connect with diaspora communities related to under-developed regions in Albania.	MEFA, MoSLG, MARD	2025	2026 occurs bi-annually	400,000	400,000		80,000	0		Participants in the conference from Diaspora. Number of conference sessions of initiatives presented	400 - 500 participants	1. Number of Projects Initiated under the Diaspora 4 Development (D4D) Programme in Areas Lacking Innovation and Technological Expertise 2. Percentage Increase in Local Innovation and Technological Expertise in Areas Supported by the Diaspora 4 Development (D4D) Programme.	1, 12 projects 2, 25% within the next 3 years.
	A.2 Develop a digital mapping system to identify diaspora professionals related to 53 priority areas for development. Create an interactive online platform to catalog their skills, expertise, and interests in the respective fields of ALBrain).	MEFA, MoSLG, MTE, MARD, MIE, Diaspora Business Chamber	2025	2027	200,000	100,000	100,000	40,000	0		Development of a living database of agriculture diaspora experts. Number of people participating in diaspora conferences related to agriculture	400 - 500 experts registered each year		
	A.3 Design a national scheme of visiting diaspora/migrants professors/researchers in priority areas, involving them in university teaching programs and in preparing asynchronous post-secondary programs of qualifications, using hybrid methods of engagement, incorporating digital and face-to-face meetings and events.	MEFA, MES, HEIs	2025	2028	40,000	20,000	20,000	8,000	0		A national network on diaspora professors; At least	10 meeting per year; at least 10 workshops/per year		
	A.4 Set up a national fund to finance the development of innovative municipal action plans for the involvement of Diaspora and immigrant communities in SME, technology, agriculture, aquaculture, live-stocking, beekeeping, etc. Municipalities compete for the funding which is open to 6-10 municipalities each year. (GIZ)	MEFA, MoSLG, MoSEBC, NEC, MTE, MARD, MIE, HEIs	2025	2030	5,000,000			0	5,000,000	0	Number of action plans developed Number of projects identified	10 action plans per year approved with municipal council decision		
	A.5 Map out in GIS format, digitally accessible to the public worldwide, the priority projects and related areas priority /emergency projects and interventions identified in the municipal action plans. Develop a GIS passport for each project including funding requirements that becomes accessible through the official webpage/social media channels of each municipality.	MEFA, MoSLG, MoSEBC, NEC, MTE, MARD, MIE, HEIs	2025	2027	200,000	100,000	100,000	40,000			Number of GIS project passports developed Level of usage of the GIS information.	122 passports (61 municipalities x 2 passports)		
	A.6. Develop a module in ALBrain outlining technology projects and interventions that seek diaspora and immigrant community support. The app allows engagement, commitment, and financing of the projects.	MEFA, MoSLG, MoSEBC, NEC,	2025	2027	50,000		50,000	10,000			Modul developed within ALBrain	n/a		
	A.1 Support diaspora families and individuals returning in Albania with soft loans for housing and children's education. Allow access for applications through a virtual platform facilitating easy application, providing personalized financial advice, and tracks repayment through an online portal.	MEFA, MARD, MECI, MoSYC, MES, MF	2025	2028	6,000,000	3,000,000	3,000,000	1,200,000	0		Number of families and individuals returning each year.	20 - 30 families returning each year		

M2. Incentivize the return of diaspora workforce	A2 Facilitate procedures and bureaucratic burden for recognition of diploma and partial preuniversity education for pupils being transferred in Albania with their families through revising legal framework, developing an online user-friendly interface/portal with step-by-step instructions and a manual for applications to guide and facilitate the recognition of diplomas and partial preuniversity education (CIMEA)	MES, MEFA	2025	2025	200,000		200,000	40,000			0	Procedures streamlined.	n/a	Percentage Increase in the Number of Diaspora Workforce Members Returning to their Area of Origin due to Incentive Initiatives, 70%
	A3. Offer bridge courses for pupils transferring to the Albanian educational system. Utilize multimedia elements, interactive content, and assessments to facilitate a smooth transition, allowing pupils to join the appropriate grade seamlessly.	MES, MEFA	2025	2030	1,200,000		1,000,000	200,000			200,000	1. Number of digital courses developed 2. number of students benefiting	1. 100 courses each year from grade 1 to grade 12, at least 1 per subject	
	A4. Review the legal framework to allow opening of schools with foreign education programs to allow easy transfer from foreign preuniversity education systems and to facilitate recognition.	MES, MEFA	2025	2025	20,000		20,000	4,000			0	Legal framework reviewed and changes implemented, following the review study.	n/a	
	A5. Implement a blockchain-based platform for automatic recognition of Higher Education qualifications, using advanced technologies to verify academic credentials, streamlining the internationalization process and reducing manual efforts, securely and efficiently (CIMEA).	MES, HEIs	2025	2026	50,000		50,000	10,000			0	Platform established	n/a	
	A1. Launch targeted TV and social media campaigns to engage the diaspora community. Develop informative and engaging content that highlights opportunities, cultural events, and updates, ensuring a consistent and interactive online presence.	MEFA, RTSH, AMA, MTE	2025	2028	260,000		200,000	40,000			60,000	Number of campaigns in social media and digital platforms. Nr. of informative contents and transmissions	biweekly campaigns bimonthly for the first two years	
	A2. Establish a new TV channel, RTSH Diaspora, specifically designed to cater to the needs and interests of the diaspora community. Use this channel as a dedicated platform for information, entertainment, and community engagement.	RTSH, AMA, MEFA	2025	2026	2,000,000		2,000,000	400,000			0	TV channel established. Viewership data	n/a	
	A3. Establish agreements to broadcast RTSH Diaspora and RTSH 1 in other countries with significant Albanian diaspora populations. Ensure wider accessibility through partnerships with international broadcasters	RTSH, AMA, MEFA	2025	2028	0			0				Number of agreements finalized. Number of platforms broadcasting Albanian language channels.	2 agreements per year	
	A4. Develop and implement awareness campaigns encouraging the young generation of diaspora families to learn the Albanian language. Utilize RTSH Diaspora and RTSH 1 transmitted in other countries, digital platforms, social media, and online resources to provide language-learning opportunities.	RTSH, AMA, MEFA, MES, MoSYC	2025	2028	200,000		100,000	20,000			100,000	Language course established Number of campaigns in social media and digital platforms.	weekly campaigns every first week of each month during the first two years. Preparation of 9 language courses within the first two years.	

M3. Enhance information for diaspora on the possibilities, incentives for their engagement/return to Albania and invest on albanian language and culture knowledge for young diaspora generation	A5. Establish summer, scouting, and winter camps that bring together young people from the diaspora, local communities, and tourists visiting Albania. These camps will offer participants the opportunity to learn the Albanian language, culture, and traditions while enjoying the beauty of our nature and landscapes through unique experiences. The aim is to attract young people from the diaspora to their country of origin, strengthen bonds among Albanian youth both at home and abroad, and enhance the youth tourist experience with fresh insights and diverse perspectives. Develop models for summer camps in Vlova and mountain/scouting camps in the Dibra region, with the goal of replicating these models in other regions.	MTE, MEFA Municipality of Vlova, Municipality of Dibra, MoSLG, MES, MARD	2025	2027	300,000			0			300,000	nr of model summer and winter camps number of summer and winter camps in place	2-4 models	Improvement in diaspora engagement and return rates to Albania, as evidenced by increased awareness and utilization of incentives, coupled with enhanced investment in Albanian language and cultural knowledge among the younger diaspora generation	By the end of 2028, achieve a 70% increase in diaspora engagement and return rates to Albania, accompanied by a 30% rise in participation among the younger diaspora generation in Albanian language and cultural knowledge programs.
	A6. Facilitate government agreements guaranteeing the teaching of the Albanian language as a second/third language option in schools in countries with a high number of Albanian diaspora. Use diplomatic channels and online platforms for coordination	MES, MEFA, MoSLG	2025	2028	2,400,000		2,400,000	480,000			0	Number of agreements finalized. Number of educational institutions offering Albanian language teaching. (support for 40 teachers with a yearly part time engagement of 12000 EUR per person per years)	2 country agreements per year; 40 teachers trained and paid part-time salaries for the teaching services.		
	A7. Create hybrid platforms for teaching the Albanian language in public and private schools abroad where there are concentrations of Albanian migrants/diaspora. Utilize online and offline resources, providing accessible and interactive learning experiences	MES, MEFA, Minister of State for Youth	2025	2028	200,000		200,000	40,000			0	Platform finalized / number of users	1 platform, 500 active users each year		
	A8. Establish a network of cathedra of Albanian studies/language in Higher Education Institutions (HEIs) in different countries. Use this network as a window to spread knowledge on Albanian studies, language, and culture through collaborative research, events, and digital platforms, based on projects	MES, HEIs, MoSLG, MEFA	2025	2028	1,000,000		500,000	100,000			500,000	Network established Nr. of projects completed	10 projects each year funded respectively with 20 - 30 thousand EUR.		
M4. Diaspora Members support cultural preservation and engaged in community support	A1. Establish an annual calendar of activities celebrating diaspora and their contributions towards cultural preservation	MEFA, MECI, MTE	2025	2027	1,500,000		1,500,000	300,000			0	Number of activities taking place each year. [Selection of a municipality each year to host the diaspora celebration activities in priority S3 domains (S3 - Diaspora Capital of the Year)]	6 activities/year in the capital city for Diaspora. 3 activities/year in the other municipalities	Percentage increase in diaspora members' financial contributions towards joint initiatives aimed at cultural preservation and community support	25% rise in diaspora members' participation and support towards joint initiatives for cultural preservation and community engagement
	A.2. Setting up of the project "Adopt a school/ kindergarten/ health unit/ cultural center or another local facility" through which diaspora members in cooperation with local municipalities support the communities of their areas of origin.	MEFA, MES, MoSYC, MoSLG	2026	2030	500,000			0			500,000	nr of infrastructure projects developed chosen to be financed through national competition	3 - 6 infrastructure projects supported by this project /year		
Total					21,720,000	3,620,000	11,440,000	3,012,000	5,000,000	0	1,660,000				
Specific objective 1.3 Enhance Technological and Entrepreneurial Capacities through Diaspora Engagement															
	A1. Establish a technological training facility using a suitable state-owned facility, adopting it for accommodating workshops and mentorship initiatives.	MEFA, MES, MECI	2025	2027	1,500,000		1,000,000	200,000	500,000		0	1. Training center established and training calendar including specific summer/winter camp activities with Diaspora expertise in place) 2. Expertise offered	1. 50 training posts in the training facility 2. expertise offered in 8-10 different areas of S3 priorities.		

M1. Develop a tech training facility to harness skills, knowledge, and expertise from the diaspora to communities through workshops and mentorship initiatives.	A2. Organize fund-raising events in cooperation with the Albanian Development Fund, targeting the diaspora community to raise funds to support the setup of the training facilities, including infrastructure and training equipment.	MEFA, MARD, MoSLG, MECI, MES, ADF, NAE5	2025	2026	50,000		50,000	10,000		0	Amount of funding collected	7 fund raising activities per year	The establishment and operation of a tech training facility, measured by the number of diaspora members actively involved as trainers, mentors, or workshop facilitators, contributing their skills, knowledge, and expertise to empower communities	Establish and operationalize the tech training facility, ensuring the active engagement of at least 20 diaspora members as trainers, mentors, or workshop facilitators within the first year of operation
	A3. Develop a comprehensive training calendar that outlines the schedule and content of workshops and mentorship initiatives. Involve diaspora expertise in planning and execution, ensuring a diverse range of skills and knowledge transfer.	MEFA, MARD, MoSLG, MECI, MES, ADF, NAE5	2026	2026	10,000	10,000		2,000		0	Training calendar in place	n/a		
M2. The development and implementation of a technology transfer curriculum within S3 priority domains, facilitated by vocational education and training facilities, with active involvement and contribution from diaspora communities in providing innovative solutions for development.	A1. Implement a model of technology transfer curriculum in a suitable VET center in S3 priority domains. Assess the facility's capabilities and resources to accommodate the curriculum.	MECI, NAVETQ, MEFA, MES, MARD, MTE, MIE	2025	2026	50,000		50,000	10,000		0	Model established / capacities assessed	n/a	The percentage of vocational education and training facilities successfully implementing the technology transfer curriculum within S3 priority domains, with documented instances of active participation and innovative contributions from diaspora communities towards developmental solutions.	at least 70%
	A2. Collaborate with diaspora expertise and leverage the support of Erasmus Plus to develop a technology transfer curriculum. Align the curriculum with Brain Gain strategies, emphasizing innovative solutions for development.	MECI, NAVETQ, MEFA, MES, MARD, MTE, MIE	2025	2026	100,000		100,000	20,000		0	nr of curriculum courses for technology transfer prepared	15 - 20 course curriculums approved by NAVETEQ		
	A3. Implement the model in VET centers	MECI, NAVETQ, MEFA, MES, MARD, MTE, MIE	2026	2027	0		0	0			Number of VET centers with technology transfer curriculum active	3 centers per year		
M3. An agripreneurship fund is developed to tap into Diaspora professional resources and engage them effectively in agri-food sector	A1. Establish a support scheme for incentivizing diaspora-driven agripreneurship initiatives in rural areas and return of diaspora specialized workers/immigrants in the agri-food sector, focusing on creating jobs in agri-food sector and especially in rural areas.	MARD, MECI, MEFA, MoSEBC, MTE	2025	2030	2,500,000		2,000,000	400,000		500,000	support scheme established / number of initiatives supported each year	10 initiatives in the form of medium enterprises developed	The establishment of an agripreneurship fund, measured by the number of Diaspora professionals engaged in the agri-food sector through financial contributions and active involvement in related initiatives	Establish the agripreneurship fund and secure active engagement of at least 50 Diaspora professionals in the agri-food sector within the first year of its implementation, and consecutively 100/year
	A2. Extend support for the establishment of cooperative ventures and small businesses led by the diaspora in areas experiencing higher migration, aiming to reverse migration trends by connecting regions facing agricultural or environmental challenges with development projects.	MARD, MECI, MEFA, MoSEBC, MTE	2025	2030	2,500,000		2,500,000	500,000		0	Number of cooperative ventures established	10 initiatives in the form of cooperatives / medium enterprises developed		
	A3. Facilitate the establishment of social enterprises that promote eco-tourism, leveraging diaspora input and engagement. Implement Brain Gain/Brain Circulation schemes to attract diaspora professionals and experts, contributing to sustainable rural development.	MARD, MECI, MEFA, MoSEBC, MTE	2025	2030	1,500,000		1,000,000	200,000		500,000	Number of social enterprises established	10 initiatives in the form of social businesses developed		
Total Specific Objective 2				8,210,000	10,000	6,700,000	1,342,000	500,000	0	1,000,000				
Total Objective 1				58,730,000	5,630,000	44,740,000	10,074,000	5,500,000	150,000	2,710,000				

* Activities which are marked with NA or 0 in the budget column will be financed within the approved budgets of the involved entities, and as such, will not have any direct budgetary impact. Activities which are marked with TBD are those activities that have not been reported with a specific budget in the action plan considering they need preliminary studies for detailed costing. Their budget will be reviewed in the updated budget plan foreseen 1 year from S3 approval

CROSS-CUTTING PRIORITY DOMAIN: Advancing Research and Innovation for Smart Growth

Measure	Activity	Institutions /organisations involved (leader in bold)	Start date	Completion date	Estimated budget needed (euro)	Source of funding						Output indicator	Output target	Outcome indicator	Outcome Target
						Total foreseen in actual State Budget (euro)	To be foreseen in State Budget (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donor Contributions (euro)	Gap				

Strategic Objective nr. 1. Ensure the transformation of the Research and Innovation through Digital innovation and technological advancement and ensure excellence in scientific research and innovation outcomes.

Specific objective 1.1. Leverage the collective expertise, resources, and perspectives of all government, industry, academia, and civil society stakeholders within the quadruple helix, promoting a synergistic approach creating a dynamic and effective innovation ecosystem resulting in sustained and impactful advancements**

M1. Reinforce the research system through digital and technological innovations both at the policy and practice levels	A.1 Approve the law on scientific research addressing challenges and needs for transforming the research sector in Albania, providing the legal framework and boosting cooperation among quadruple helix actors	MES, NASRI, MoSEBC, MECI, MIE, MARD, MTE	2025	2025	0	0					0	The law on scientific research approved	n/a	M.1 Percentage increase in research projects and efficiency due to the implementation of digital and technological innovations in the research system.	40%
	A.2 Enhance and bolster the NCPs network for European Union programs and establish a comprehensive evaluation mechanism to assess their performance outcomes	MES, NASRI,	2025	2026	60,000		60,000	12,000			0	Number of NCP trained for EU programs	6 trainings		
	A.3 Support the multi-level and multi-stakeholders platform of the EU and Global Missions in Albania, as collaborative space for multi-level and cross-sectoral collaboration aimed at implementing the SS, enabling an innovative and sustainable territorial growth and filling the industry gap with EU Single Market		2025	2030	480,000		430,000				50,000	Support for Multi-level platform secured	na		
	A.4 Incentivize/Encourage active engagement of universities and enterprises in European Union initiatives, collaborations, and projects. Broaden SASPAC's projects preparation assistance to include universities and assist businesses in applying for European Union projects	SASPAC, MES, HEIs, NEC, MoSEBC	2025	2028	150,000			40,000			110,000	Number of EU projects application from universities and businesses supported	100		
	A.5 Support quality and certified training courses for EU projects writing and management	SASPAC, MES, HEIs, NEC, MoSEBC	2025	2027	160,000			160,000				nr of university staff trained from SASPAC for project preparation	400 university staff (20 events)		
	A.6 Reevaluate and update the legal framework to streamline bureaucratic processes for both national and European Union projects. Simplify the reporting mechanisms for EU projects by creating an online reporting system for the Central Finance and Contracts Unit (CFCU).	MECI, SASPAC, NASRI, MES, HEIs, NEC, MoSEBC	2025	2025	100,000						100,000	Number of bureaucratic processes streamlined and legal frameworks updated for national and EU projects Number of EU projects utilizing the newly created online reporting system for the Central Finance and Contracts Unit (CFCU).	n/a		
	A.7 Adopt and Implement the European Charter for Researchers	NASRI, MES	2025	2026	na							European Charter for Researchers adopted	n/a		
	A.8 Reevaluate and update the legal framework to assess and quantify research efforts and productivity within HEIs	MES, NASRI, HEIs	2025	2025	na							Legal framework updated: Number of HEIs reporting quantified research efforts and productivity metrics under the new legal framework.	n/a		
	A.9 Implement a reward scheme offering financial benefits and career advancement opportunities to researchers who successfully secure European Union projects and procure financial backing for their institutions.	MES, NASRI, HEIs	2025	2027	300,000.00						300,000	% amount benefitted from researchers from the scheme. Review bylaws for career advancement	1% of the financial support secured from EU projects benefitted from researchers. Bylaws revised		
	A.10 Introduce provisions that support and encourage the investment of private sector in research and innovation climate mitigation and adaptation as a key EU priority	MECI, NASRI, MES, HEIs, NEC, MoSEBC	2025	2026	na							Legal provisions introduced	n/a		
Total for specific Objective 1					1,250,000	0	490,000	12,000	200,000	0	560,000				

Specific objective 1.2 Define a specific support framework for technology transfer processes (vertical and horizontal) by strengthening of linkages between technology supply side, technology adopters and the intermediary support service provider

A.1 Support trainings for employees of state agencies/entities to improve networking for Albanian companies that produce "Made in Albania" products	AIDA, AIC, MECI, MTE, MARD	2025	2027	30,000		30,000	6,000				Number of trainings for employees of state agencies/entities	1 training / year		
-----------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------	------	------	--------	--	--------	-------	--	--	--	--------------------------------------------------------------	-------------------	--	--

M1. Enhancing the institutional role and internal skills of state agencies such as AIDA and others for increasing Albanian participation in international events to boost networking, support "Made in Albania" products and the integration into global value chains of the S3 priority sectors	A.2 Support Albanian enterprises in integrating into international value chains, particularly emphasizing the S3 strategic priority sectors	AIDA, AIC, MECI, MTE, MARD	2025	2027	200,000		200,000	40,000				Number of Albanian enterprises integrated into international value chains in S3 strategic priority sectors	at least 20	
	A.3 Support the Albanian enterprises in their green and digital transformation according to the European ESG regulation, by a tailor made transformation program and AI driven tool that track their ESG progress and impact	AIDA, MECI, MTE, MARD	2025	2030	14,000,000		200,000			13,800,000		Tailor made transformation Programm in place		
	A.4 Support the connection of the Albanian researchers with EU and Global Missions networks (whose aim is making closer research&innovation with the priorities at local and national level), for focusing their activities on the concrete solutions needed for a sound sustainable country transformation	AIDA, MECI, MTE, MARD	2025	2030	280,000		280,000					Albanian Researchers part of the network of the EU and Global Missions	na	Increasing Albanian participation in international events to boost networking, support "Made in Albania" products and the integration into global value chains.
	A.5 Enhance networking opportunities and facilitate the involvement of Albanian companies in international trade fairs.	AIDA, AIC, MECI, MTE, MARD	2025	2027	500,000		500,000	100,000				Number of Albanian companies participating in international trade fairs	100	
	A.6 Revitalize approaches to economic diplomacy	AIDA, AIC, NEFA, MECI, MTE, MARD	2025	2026	300,000		300,000	150,000				Number of new or revitalized economic diplomacy initiatives implemented	6 events	
	A.7. Promote and Support strategic partnerships, agreements, collaborations, and knowledge exchange between domestic and international public entities, aiming to facilitate the transfer of technology and expertise in the development and deployment of innovative technologies	AIC, AIDA, MECI, MTE, MARD	2025	2027	200,000		200,000	40,000				Number of strategic partnerships, agreements, and collaborations established between domestic and international public entities	20	
	A.8 Support advocacy and lobby activities in the high potential framework of the EU and Global Missions Platform, with the aim of exploiting the Missions' resources for implementing the relevant projects in the S3	AIDA, MECI, MTE, MARD	2025	2030	250,000		250,000					Activities supported in the EU and Global Missions framework	na	
A.1 Support partnerships between universities and the business sector to create spin-offs and centers for development, research, and innovation, involving participants from the quadruple helix.	A.1 Support partnerships between universities and the business sector to create spin-offs and centers for development, research, and innovation, involving participants from the quadruple helix.	MES, MECI, HEIs	2025	2027	20,000		20,000	4,000				Number of spin-offs and innovation centers created	3 spinoffs at least 1 innovation center, and 1 closely linked with the EU and Global Missions that attract Climate Innovation resources and ensure a territorial wide impact	Tracking the increase in successful spin-offs and the establishment and sustainability of innovation intermediaries such as Industrial Innovation Hubs, Tech Parks, and Clusters. Evaluation of the effectiveness of cooperation among quadruple helix stakeholders: academia, industry, government, and civil society.
	A.2 Support establishment of industrial innovation hubs	MECI, MoSEBC	2025	2027	200,000		200,000	40,000				No of industrial innovation hubs established	at least 1	Collection of data on the number and growth of spin-offs, the development and operational success of innovation hubs and clusters, and the extent of stakeholder collaboration through surveys, financial reports, and qualitative assessments.
	A.3 Establishment of the first Technopark with focus on TIK Durana	AIC, MECI	2025	2027	11,500,000		1,500,000			10,000,000		Technological Park established	n/a	
	A.4 Establishment of the Ekonomik and Cultural Zone (ECZ)	AIC, MECI	2025	2029	tdb							Free Economic and Cultural Zone Established	n/a	
	A.5 Establishment of Technopark & university campus in Tirana	AIC, Municipality of Tirana, HEIs, MES	2025	2028	tdb							Technopark & university campus in Tirana established	n/a	
	A.6 Conduct a comprehensive examination and update of the legislation governing technology parks and TEDAs	AIC, MECI	2025	2026	na							Legislation updated and approved	n/a	
	A.7 Introduce provisions in the law on Scientific research that allows establishment of centres of excellence and facilitates international participation and collaborations in international/regional centres of excellence	AIE, MECI, MES, NASRI	2025	2025	na							Provisions introduced and approved	n/a	

30%

70%

M.2 Development by universities and research bodies of the Third Mission activities, including through support to spin-offs, and creation of a national network of innovation intermediaries such as Industrial Innovation Hubs, Tech Parks and Clusters, where the quadruple helix stakeholders can cooperate in a stable way.	A.9 Establishment of the centre of excellence in nanotechnology into an Innovation Hub in Berzhite	MES, MECI, Municipality of Tirana, AIE	2025	2028	60,000,000		10,000,000	2,000,000	50,000,000		-	Centre of excellence in nanotechnology established	n/a		
	A.10 Establishment of the Regional excellence centre for Biomarine Sciences in Vloca	MES, MECI, Municipality of Vloca, AIE	2025	2028	20,000,000		6,000,000	1,200,000	14,000,000		-	Regional excellence centre for Biomarine Sciences established in Vloca	n/a		
	A.11 Facilitate the development of new EIT KIC centers in Albania, prioritizing those that align with the S3 strategic priorities	MECI, AIE, MIE, MARD, MTE	2025	2028	n/a						0	Regulatory procedures and policies drafted to facilitate the establishment of EIT KIC centers aligned with S3 strategic priorities	n/a		
	A.12 Support the network of innovation nucleuses in public administration	AIE, MoSPA, DAP	2025	2025	30,000					30,000	0	Number of capacity-building programs and resources provided to existing innovation nucleuses in public administration	2 trainings		
	A.13 Support for cluster establishment in S3 priority areas	MECI, MIE, MTE, MARD, MES, NASRI	2025	2027	100,000	100,000		20,000			0	Nr of clusters established	at least 3 clusters		
A.14 Review the legal framework to support cluster establishment and include provisions in the law on Scientific research	MES, MECI, NASRI	2025	2025	10,000						10,000	Legal provisions reviewed and updated to support cluster establishment	n/a			
M.3 Provide easier access to KIBS and better matching of SMEs' demand for innovation and foster the dissemination of technological innovations across sectors and territory	A.1 Create a centralized online platform that provides SMEs with access to KIBS. This platform will offer a comprehensive directory of service providers, resources, and tools to support SMEs in finding the right innovation partners and services.	MECI, AIDA, MoSEBC	2025	2026	50,000		50,000	10,000				Platform established Number of SMEs registered and actively using the KIBS platform for innovation support.	at least 30 SMEs	Percentage increase in SMEs utilizing KIBS	60%
	A.2. Organize regular innovation matching events, such as workshops, seminars, and networking sessions, where SMEs can meet KIBS providers, learn about technological innovations, and explore collaboration opportunities. These events should be sector-specific and cover various regions to ensure wide participation.	MECI, AIDA, MoSEBC	2025	2030	120,000		120,000	24,000				Number of innovation matching events organized and the number of SMEs participating in these events	1 events/year		
Total SO1.2					107,790,000	100,000	19,850,000	3,610,000	64,000,000	40,000	23,800,000				

Specific objective 1.3 Define a sound industrial/innovation policy framework with the aim of creating a favourable business climate for companies to develop research and innovation

M.1 Review of incentive schemes aimed at promoting the priority domains of S3 with specific aid measures and by introducing provisions that support the investment of private sector in research and innovation	A.1. Perform a detailed review and assessment of current incentive schemes targeting the S3 priority domains including those foreseen in the action plan. This involves analyzing the effectiveness of existing measures, identifying gaps and barriers, and gathering feedback from stakeholders in the private sector.	MECI, MF	2025	2026	20,000		20,000	10,000				incentive schemes reviewed and assessment reports generated.	n/a	Increase in private sector investment in research and innovation within the priority domains of S3, measured as a percentage of total investment in these areas compared to the baseline year.	20%
	A2. Based on the assessment findings, design and implement new incentive programs specifically tailored to encourage private sector investment in research and innovation within the S3 priority domains. This could include tax incentives, grants, subsidies, and public-private partnership opportunities.	MECI, MF	2026	2030	500,000		500,000					Program developed and launched. Number of private sector companies investing in research and innovation by using the incentive program	10 businesses / year		
M.2 Adoption of sustainable fiscal policies	A.1 Establishment of a platform for foreign investments "Connect Albania".	MECI, AIDA	2025	2027	200,000	200,000		40,000			160,000.00	Platform established and operational	n/a	Measure of the growth in foreign investment in R&D activities - as a percentage change from the baseline year.	30%
	A.2 Lobbying for attracting foreign investments	MECI, AIDA, AIC	2025	2027	20,000	20,000		4,000			16000	Number of agreements with investors	8		

M.3 Definition of a legislative and regulatory framework aligned with EU standards and which can encourage investments by local companies and foreign investments and the development of clusters	A.1 Draft and approve the document on Industrial Policy	MECI, MIE	2025	2026	-							Document on Industrial Policy approved	n/a		
	A.2. Organize a series of stakeholder consultation workshops involving representatives from local companies, foreign investors, legal experts, and relevant government agencies. The aim is to gather input and recommendations on aligning the legislative and regulatory framework with EU standards. Based on the feedback and best practices, draft a comprehensive legislative and regulatory framework that encourages investments.	MECI, AIDA, MoSEBC	2025	2030	100,000						100,000	Number of stakeholder consultation workshops conducted. Draft legislative and regulatory framework document developed and reviewed.	20 workshops	Increase in the number of new local and foreign investments in targeted sectors.	
M.4 Strong simplification of the procedures for starting business investments	A.1. Create a one-stop-shop online portal that integrates all the necessary procedures for starting a business investment. This portal should provide a streamlined process for business registration, licensing, permits, and other regulatory requirements, making it easier for investors to complete all necessary steps in one place.	MECI, AIDA, MoSEBC	2025	2026	50,000						50,000	One-stop-shop online portal for registration and licensing established	n/a	Reduction in the average time and number of steps required to start a business, measured before and after the implementation of the simplified procedures.	at least 50%
	A.2. Design and implement a fast-track approval process for business investments, particularly for sectors identified as strategic priorities. This could involve setting up dedicated teams to handle applications swiftly, reducing the waiting time for approvals, and providing clear guidelines and support for applicants.	MECI, AIDA, MF, MoSEBC	2025	2027	-							fast-track approval process for business investments designed and implemented	n/a		
M.5 Introduce a policy tool kit to support businesses in accessing public funding dedicated to R&I, including through the establishment of informative platforms and a dedicated communication strategy	A.1. Create an informative online platform that provides comprehensive information on public funding opportunities dedicated to research and innovation (R&I). This platform should include guidelines on application procedures, eligibility criteria, deadlines, and contact point information for further assistance. It should also feature success stories and best practices to encourage more businesses to apply.	MES, NASRI, MECI	2025	2026	50,000						50,000	Online platform established Number of businesses registered and actively using the online platform.	At least 50 businesses	Increase in the number of businesses successfully accessing public funding for research and innovation.	30%
	A2. Develop and execute a dedicated communication strategy to raise awareness about the available EU public funding for R&I. This strategy should include organizing webinars, workshops, and information sessions, as well as leveraging social media, newsletters, and other digital marketing tools to reach a wide audience of potential applicants.	MES, NASRI, MECI	2025	2027	80,000				16,000		80,000	Nr of webinars, workshops, and information sessions, social media and newsletters, digital marketing tools	20		
	A.1 Support innovative solutions that enable and develop eco-friendly processes and technologies	MTE, MECI	2025	2027	150,000			150,000	30,000			Number of eco-friendly processes and technologies developed and implemented.	At least 5 businesses per year receive grants for developing new technologies		
	A.2 Incentivise the adoption of advanced and innovative technologies, along with digital solutions, to boost process efficiency, automation, and environmental sustainability, while also overpassing the limited human capital and workforce	MIE, MTE, MECI	2025	2027	3,000,000			3,000,000	600,000			Number of businesses adopting advanced and innovative technologies.	at least 10 businesses / year		
	A3 Support the development of territorial Economic Clusters for Climate Resilience (CresCCo) in the framework of the EU and Global Missions. The Albanian CresCCo case will be then scaled up at EU and global level as an advanced practice of public-private aggregation at territorial level that enables ESG resilience.	MECI, MTE	2025	2030	4,000,000			1,000,000			3,000,000	Nr of territorial clusters	at least 3 territorial clusters		
	A.4 Establish awarding programs for innovative ideas and processes within the public administration	MoSPAAC, MECI	2025	2027	75,000			75,000	15000			Number of awards for innovative ideas and processes within the public administration.	5 awards / year		
	A.5 Incentivize new patents registered in Albania	GDIP, MECI	2025	2028	120,000			120,000	24,000			Number of new patents registered annually.	at least 5 new patents/year		

M.6 Strengthening of the R&I incentive framework directed towards the cross-sectoral introduction of eco-friendly and sustainable practices and processes and towards the adoption of digital technological solutions, both in private and public sector	A.6 Incentivize companies investing in R & I and those investing in research and education	MECI, MES	2025	2027	1,500,000		1,500,000	300,000			number of private sector companies incentivized for investment in R&I and research and education.	at least 20 businesses / year	Increase in the number of private and public sector entities adopting eco-friendly and sustainable practices and digital technological solutions	50%
	A.7 Implement a tiered award system for scientists who publish in renowned journals, where rewards scale up with the journal's impact factor, starting from those with an impact factor more than 3	MES, NASRI	2025	2027	200,000		200,000	40,000			Number of awards given to scientists based on publication impact factor.	at least 10 awards / year		
	A.8 Review legal framework to facilitate bureaucratic procedures for national and EU projects	MECI, MES, NASRI	2025	2026	-						legal and regulatory changes implemented to streamline projects procedures.	n/a		
	A.9 Implement new curricula subjects focused on legislation on advanced technologies in university programs, emphasizing the practical application of these technologies.	MES, HEIs, ASCAL,	2025	2026	30,000		30,000	15,000		45,000	Number of new curricula subjects introduced in university programs.	10 new curricula per year		
	A.10 Incentivize research related to application of new technologies	MES, NASRI, HEIs	2025	2027	300,000						Number of research projects funded related to new technologies.	at least 3 projects		
	A.11 Support the knowledge transfer and provide training programs focused on embracing and implementing new technological advancements.	MES, NASRI, HEIs	2025	2027	100,000		100,000	20000		(120,000)	Number persons following training programs conducted	100 persons / year		
	A.12 Support strategic partnerships, agreements, collaborations, and exchanges among public entities in Albania and international entities to facilitate knowledge and technology transfer, crucial for the development and implementation of innovative technologies.	MES, MECI, NASRI, HEIs	2025	2027	150,000		150,000	30000		(180,000)	No of partnerships, agreements, collaborations, and exchanges among public entities in Albania and international entities supported	at least 5 partnership agreements		
TOTAL SO 1.3				10,645,000	220,000	6,845,000	1,144,000			3,111,000				

Specific Objective 1.4 Leverage advanced technologies, including AI, satellite imagery, and UAV data, to drive innovation, enhance decision-making processes, and assess scientific and innovation potential, while integrating high-quality statistical data to monitor and refine S3 priorities effectively.

M.1 Facilitate the responsible adoption and integration of UAS/UAV while ensuring regulatory compliance and fostering innovation in line with Smart Specialization priorities	A.1 Adopt and implement a legal framework for the registration and operation of UAS/UAV that aligns with European Union standards, accompanied by a comprehensive review of the aviation code	Civil Aviation Authority, MD	2025	2026	NA						Legal framework adopted	n/a	Percentage of industries reporting successful integration and innovative use of UAS annually.	30%
	A.2 Establish dedicated testing facilities for the deployment and evaluation of emerging technologies and programs	Civil Aviation Authority, PUT, Companies involved in manufacturing s UAV/UAS, GDIP	2025	2026	td next year after a first evaluation						Identify location, construction of the facilities, test the equipments part of the facilities Develop and approve testing methodology Testing facilities established	n/a		
	A.3 Establish a specialized academy dedicated to providing training in the operation and use of UAS/UAV	Civil Aviation Authority, PUT, MES, MECI	2025	2026	400,000		400,000	200,000			Nr of organisations certified and oversight in accordance with the applicable rules in force. Establishment of the academy Issuing first licences for UAV/UAS operators	at least 3 certified organisations		
	A.4 Initiate a registration process for UAS/UAV and develop a comprehensive platform accessible to all UAS/UAV operators for planning and managing UAS/UAV operations	Civil Aviation Authority, MIE, Albccontrol, MD, Mi	2025	2026	1,500,000		1,500,000				Platform in place and operational	n/a		
	A.5 Develop hazard mapping that delineates safe (green) and restricted (red) areas for drone operations.	Civil Aviation Authority	2025	2026	-						All green and red areas identified, approved and integrated in the platform	n/a		
	A.6 Introduce campaigns to educate the public about the potential risks and advantages associated with drone usage and other advanced technologies	Civil Aviation Authority, MIE, MES, MECI	2025	2030	250,000		150,000			100000	Nr of UAS/UAV registered by 2027 nr of UAS/UAV registered by 2030	At least 500 UAS/UAV registered by 2027 at least 750 UAS/UAV registered by 2031		

	A.7 Conduct a comprehensive reassessment and review of the law on privacy to incorporate considerations pertinent to the utilization of advanced technologies.	Civil Aviation Authority, Commissioner for the right to information and data privacy	2025	2027	60,000				60000		Study on the needs for changing the legislation based on best practices Legislation updated and approved	n/a		
	A.8 Introduce provisions for imposing penalties on the unproper use of UAS/UAV and other sophisticated technologies	Civil Aviation Authority	2025	2025	-						Albanian aviation code amended including the procedures to clearly identified relevant enforcements	n/a		
	A.9 Introduce and implement legal measures to safeguard sensitive zones such as airports, including provisions for intercepting unauthorized or unregistered UAS/UAV	MD, Civil Aviation Authority, Albcntrnol, MIE, Airports authorities	2025	2027	-						legal measures in place and approved	n/a		
	A.10 Facilitate collaborative efforts between government agencies, universities and other training and R&D institutions, for UAS/UAV operation training, certification and R&D, endorsing these institutions as official training and R&D providers	Civil Aviation Authority, HEIs, MES, MECI, NAVETQ	2025	2028	300,000	60,000	12000	240000			Nr of collaborations realized	at least 6 collaborations realized		
	A.11 Provide incentives to both public and private sectors for the development and adoption of advanced technologies, encompassing systems counteracting UAS/UAV, and the integration of data derived from UAS/UAV and satellite sources	MIE, MECI, Civil Aviation Authority, NCPA, MD, MARD, MTE, NohSP, Mt, Post Authority	2025	2030	3,000,000				3000000		Nr of entities supported	At least 50		
M.2 Enhance the use of advanced technologies and AI for proactive environmental monitoring and disaster preparedness, aiming to safeguard communities and ecosystems, and for enhanced decision-making and informed development planning focusing on S3 priorities	A.1 Offer technical support for the cost analysis and marketing of services and products derived from advanced technologies, while adhering to the EU directive on offering free of charge of the data with big value	ASIG	2025	2025	200,000				200,000		Realized cost analysis and marketing of services and products	n/a		
	A.2 Develop a tech tool for traffic management that work as system demonstrator in the EU and global Missions framework. It collects a broad range of socio-economic data useful for enabling a data-driven policy making and developing GHG emissions. It both monitors aspects such as air quality, but also share info about key public services for citizens	ASIG, MIE	2025	2025	500,000	250,000			250000		Tech tool established	At least in 3 major cities and 2 touristic destinations		
	A.3 Introduce a comprehensive package of services and products for both public and private sectors, utilizing imagery acquired from cutting-edge technologies such as satellites, UAS/UAVs, and 360-degree digital cameras. Harness the power of AI to analyze satellite images, predicting demographic changes in rural and residential areas. (This innovative application will provide actionable insights, guiding future development decisions such as the establishment of schools, medical centers, postal offices, and financial services. By optimizing public service investments, we aim to enhance the quality of life for residents.)	ASIG, MARD, MTE	2025	2029	8,000,000	1,000,000	200,000		7,000,000		1.Nr. of product and services 2. Awareness campaigns	1. 200 products and services 2. 15 awareness campaigns		
	A.4 Development of Machine Learning & AI in both SAR and Optical Satellite Image Combining the two sensors to improve the quality of existing and future remote sensing applications (i.e across multiple industries, etc). Deformations on the surface of the earth, Landslides (slides, etc.), Deformations of buildings in urban areas over time	ASIG, AIE, SDIC	2026	2027	10,000,000	2,000,000			8,000,000		Implementation of the system	n/a	Increase in the implementation of AI and advanced technology solutions for environmental monitoring and disaster preparedness.	40%
	A.5 Smart city Integrated Air Mobility Evolution with prototype results: Urban Digital Twin for intermodal mobility design and planning. Innovative aerial services provided by flight operations	ASIG, MIE, Tirana Municipality, MoSLG	2025	2026	4,000,000	1,000,000	200,000		3,000,000		Urban Digital Twin for intermodal mobility design and planning. Innovate aerial services provided by flight operations	n/a		

	A.6 Improve statistical literacy for selected target groups by offering tailored training on how to comprehend, interpret, and utilize statistical data effectively. Additionally, develop user-friendly guidelines to aid in the clearer interpretation of statistical information	INSTAT	2025	2030	250,000					250,000		1. Number of tailored trainings organized 2. User-friendly guidelines developed				
Total SO 1.4					32,770,000.0	7,460,000	632,000	500,000	20,395,000	4,415,000						
Specific Objective 1.5 Artificial intelligence, digitalization and cybersecurity for smart growth																
M.1 Facilitate the development and responsible adoption of AI technologies to generate added value for the economy, environment, and society	A.1 Support/incentivize the development and adoption of AI technologies that generate added value for the economy, environment and society	MECI, MIE	2025	2027	1,500,000			1,500,000	300000			No of AI projects supported	5 projects / year	Increase in the number of sectors and organizations adopting AI technologies responsibly	40%	
	A.2 Implement artificial intelligence technologies in the public procurement process	APP, NAIS	2025	2027	TBD			TBD				AI implemented in Public Procurement processes	n/a			
	A.3 Conduct a thorough reassessment and update of the legal guidelines to accommodate the utilization of AI in public procurement processes, aligning with European Union standards. This should be based on a clear and risk-tiered definition of AI, categorized into high, limited, and minimal risk levels by putting the end-user's interest, safety and privacy as an absolute priority	APP	2025	2025	100,000			100,000				Legal framework adopted and implemented	n/a			
M.2 Support knowledge transfer, partnerships and trainings in AI and address AI ethics issues	A.1 Conceive and offer AI based study programs in HEIs, drafting and implementing a national AI policy/program	MES, MECI, HEIs, MIE, ASCAL	2025	2026	120,000	0		120,000	24000			No of students enrolled in AI studies	at least 50	The participation rate in AI training programs, including online courses, certifications, and specialized workshops. -The nr of AI professionals who have completed ethics training specifically related to AI technologies.	40% at least 30	
	A.2 Establishment of an AI National Board in order to join efforts and contribution from industry, academia and the general public and address issues related to AI Ethics	MECI, MES, HEIs, MIE	2025	2025	20,000			20,000	4000			AI National Board established	n/a			
	A.3 Introduce concepts of Ethics on use of AI into the curriculum of pre-university education, starting from early educational stages	MES, MECI, ASCAP, MIE	2025	2026	10,000					10000		Preuniversity curricula updated	n/a			
	A.4 Develop Ethical Guidelines and Training Programs aimed at the responsible integration of AI in research and education	MECI, MES, HEIs, MIE	2025	2026	130,000					130000		Ethical guidelines for AI developed and disseminated Nr of training programmes developed	4 training programs			
	A.5 Introduce comprehensive legal provisions within the law on science to address ethical considerations pertaining to the development and deployment of AI systems, including provisions to counteract plagiarism in scientific research	MES, MECI, HEIs, MIE	2025	2025	-							New legal provisions addressing AI ethics enacted	n/a			
M.3	A.1 Implement a detailed cybersecurity law to strengthen the overall framework of national security	AKCESK	2025	2025	-	0		0	0	0		1. Cybersecurity law implemented 2. Nr of Articles introduced and nr of Bylaws approved	52 Articles + 18 Bylaws			
	A.2 Broaden the range of sectors regulated by AKCESK to achieve a more extensive coverage of cybersecurity protections	AKCESK	2025	2025	-			0	0	0		Nr of operators included in cybersecurity coverage by AKCESK	250 Operators			
	A.3 Perform a study to assess the feasibility of creating a National Certification Scheme, employing a Conformity Assessment Body to evaluate the services of operators	AKCESK	2025	2027	50,000	0		0	10000	40000		Study finalized. Nr of operators assessed for conformity	10 Operators			
	A.4 Establish and implement advanced cybersecurity protocols for critical and vital services, utilizing a National Security Operations Center (SOC) and establishment of a Threat Hunting team dedicated to identifying and mitigating cyber threats	AKCESK	2025	2025	25,000,000	0		19000000	6000000			1. Establish and implement advanced cybersecurity protocols for critical and vital services 2. Nr of Operators trained	151 Operators			

M.3 Strengthen Albania's cybersecurity framework comprehensively, ensuring resilience against cyber threats and promoting collaboration, capacity building, and innovation in the cybersecurity domain

A.5 Update the methodology for identifying critical and essential infrastructures, ensuring alignment with European Union standards.	AKCESK	2025	2025	-	0			0	0	0	Methodology updated	n/a	
A.6 Implement a three-tier cybersecurity architecture in Albania, clearly delineating the roles and responsibilities among National CSIRT, Sectorial CSIRT, and Operator CSIRT	AKCESK, Bank of Albania, AKEP, MIE, MES, MoHSP, MTM	2025	2029	95,000,000	60,000,000.0			-	35,000,000.0	-	Three-tier cybersecurity architecture in place	n/a	
A.7 Improve adherence to cybersecurity standards by implementing operational, administrative, and technical countermeasures, along with capacity-building initiatives	AKCESK	2025	2027	45,000,000	35,000,000.0				10,000,000.0	-	Operational, administrative and technical countermeasures in place and nr of operators trained	250 Operators	
A.8 Launch a Cyber Diaspora Forum to promote best practices in cybersecurity, including trainings, awareness campaigns, experience sharing, support during cyber attacks, and the coordination of conferences and workshops	AKCESK	2025	2025	-	-			-	-	-	Diaspora forum launched	n/a	
A.9 Strengthen both domestic and international partnerships by creating platforms for improved collaboration with organizations such as FIRST, CRI, and others	AKCESK	2026	2027	5,000,000	5,000,000.0			0,	-	-	1. Platforms in place 2. nr of agreements/ collaborations	50 International agreements/collaborations and 150 with Domestic Institutions	Percentage reduction in the number of successful cyber-attacks against critical infrastructure and public institutions annually
A.10 Develop a cyber training program to bridge the cybersecurity skills gap within all critical and essential infrastructures across Albania	AKCESK	2025	2027	10,000,000	5,000,000.0			-	5,000,000.0	-	Cyber training program developed	na	
A.11 Overhaul cybersecurity education across all levels, from elementary to higher education, in collaboration with EU higher education institutions. This includes training educators, reassessing curricula throughout the educational system, and establishing a national lifelong learning program in cybersecurity for operators in critical infrastructures within both public and private sectors	AKCESK, MES, MoSYC	2025	2029	10,000,000	5,000,000.0			-	5,000,000.0	-	1. Nr. of educators trained 2. Reassessed curricula throughout the education system 3. Established a national lifelong learning program in cybersecurity	300 educators trained	
A.12 Set up a pool of cybersecurity experts drawn from all Critical Information Infrastructure (CII) and Important Information Infrastructures (I3)	AKCESK, MIE, MoHSP, MF, MTE, NIEG, MoSLG, MES, NASRI, HEIs,	2025	2027	-	-			-	-	-	Pool of cybersecurity experts established	na	
A.13 Establish a research and development center in the cybersecurity field that engages all relevant stakeholders. This center will focus on research and big data analysis using data from National and Sectorial Security Operations Centers (SOCs) and facilitate PhD research on cybersecurity patterns to prevent the escalation of attacks.	AKCESK, HEIs	2027	2029	5,000,000	-				5,000,000.0	-	Research and development center in the cybersecurity field established	na	
A.14 National and governmental CERTs are fully operational in line with NIS2 requirements and reach at least 'accredited' status on TF-CSIRT Trusted Introducer.	AKCESK GOV	2026	2026	1,000,000	-			1,000,000.0	-	-	National and governmental CERTs are fully operational in line with NIS2 requirements and reach at least 'accredited' status on TF CSIRT Trusted Introducer.	n/a	
A.15 Frameworks introduced by NIS2 alignment (CVD framework, crisis management framework), are in place and fully operational	AKCESK	2025	2025	100,000	-			100,000.0	-	-	Frameworks introduced by NIS2 alignment in place and fully operational	na	
A.16 Approve the Law in identification and Trusted Services	AKCESK	2025	2025	-	-			-	-	-	Law approved	na	

70%

M.4 Accelerating Digital Transformation in Enterprises	A1. Co-financing grants scheme for dedicated customized digital solutions of non-ICT companies in S3 priorities that introduce advanced/innovative digital solutions towards a high level of automation and digitization of processes	MF, MoSEBC, MECI	2025	2030	3,000,000		2,000,000.0	400,000.0			1,000,000.0	No of non-ICT companies in S3 priorities / year that have successfully implemented digital solutions and report a higher level of process automation. Number of non-ICT companies receiving grants	5/year	Percentage increase in nr of enterprises that adopt automation, digitization of processes, and digital payment adoption resulting from the implemented activities such as collaboration with startups and academia, the promotion of e-commerce, and the use of digital eWallet systems.	20% increase
	A2. Collaboration platform with start-ups to acquire innovative solutions on digital transformation through advanced technologies	MF, MoSEBC, MECI	2025	2028	50,000	50,000.0		10,000.0				Platform established and functional	n/a		
	A3. Collaboration with academia to secure technical support for customization and implementation of digital solutions.	MF, MIE, MECI, HEIs	2025	2030	50,000		16,500.0	3,300.0			33,500.0	No of digital solution projects implemented by companies per year in collaboration with academic institutions	5		
	A5. Conduct campaigns to promote the use of the open data database among businesses and academic institutions.	MECI	2026	2027	50,000		50,000.0	10,000.0				No of campaigns organized	5		
	A6. Implement a Digital Wallet for public e-services, in compliance with EU standards by piloting as part of the public e-services Digital Identity Wallet, at least 10 public e-services	MF, MECI, NAIS	2025	2026	6,000,000	6,000,000.0		1,200,000.0				Adoption of Digital eWallet among public service users by December 2026.	n/a		
	A7. Preparation of the Action Plan and the Roadmap for e-commerce in Albania	MECI, Chambers	2025	2025	50,000	50,000.0						Action Plan and Roadmap for e-commerce prepared and implemented	n/a		
	A8. Support to develop case studies, pilot projects on e-commerce solutions and digital payments	MECI, MIE, Chambers	2025	2027	50,000				50,000.0			No of case studies/pilot projects developed	5		
	A9. Awareness campaign on e-commerce solutions and digital payments	MECI, Chambers	2025	2027	200,000		100,000.0				100,000.0	Campaign on e-commerce implemented	4 events		
	M 5. Enhancing Institutional and Regulatory Frameworks for Digital Transformation by Streamlining Policies and Promoting Innovation	A1. Conduct a comprehensive assessment of the current legal and regulatory framework to identify areas that require updates or new regulations to support technological innovation and digital transformation.	MIE, NAIS, MECI	2025	2025	10,000						10,000.0	Assesment finalized		
A2. Develop proposals for legal reforms that facilitate the growth and development of the technology sector		MIE, NAIS, MECI	2025	2025	-	NA						Package of legal reforms drafted	n/a		
A3. Draft a specific legal framework that facilitates the formation and operation of business clusters, particularly in high-potential sectors such as ICT, green technology, and innovative startups.		MECI, MIE, NAIS, MoSEBC	2025	2026	-							Successful establishment of a legal framework conducive to business cluster formation in ICT, green tech, and startups	n/a		
A4. Identify sectors where AI and digital technologies can be most effectively integrated to boost growth and competitiveness		MECI, NAIS, MIE, Chambers	2025	2025	-		NA					Report that identifies sectors with actionable plans for AI and digital technology integration	n/a		
Total SO 1.1					207,490,000	116,100,000	3,906,500	1,951,300	20,230,000	66,060,000	1,193,500				
Total					359,945,000	116,420,000	38,551,500	17,349,300	84,930,000	86,495,000	33,079,500				

* Activities which are marked with NA or 0 in the budget column will be financed within the approved budgets of the involved entities, and as such, will not have any direct budgetary impact. Activities which are marked with TBD are those activities that have not been reported with a specific budget in the action plan considering they need preliminary studies for detailed costing. Their budget will be reviewed in the updated budget plan foreseen 1 year from S3 approval

** Specific objectives marked with two asterisks are the ones that have been included in the Growth Plan (SO1: "Strengthen the R+I National Environment" and oFoster Innovation and Smart Specialization");

Main Domain Events and Interventions	Objective/Event	Institutions/organisations involved (leader in bold)	Period of implementation	Estimated budget needed	Foreseen for 2025 (euro)
Domain 1: Renewable Energy and Natural Resources					
Green Albania through Renewable Energy Transition Forum (one every year)	Present the evolution and initiatives implemented in the green energy transition.	MIE, Private Sector Operators	January 2025 - December 2030	90,000	18000
Climate resilience and green energy – The future?	National Information Campaign with schools		January 2025 - December 2030	70,000	14000
Innovation into Waste-to-Energy Hackathon (one every year)	Future generations and business-oriented stakeholders in enhancing the market of using waste management for clean energy		January 2025 - December 2030	100,000	20000
Sustainable Mining and Raw Materials Conference (one every year)	Promote responsible extraction and processing practices and integrate Albania into the EU supply chain.	MIE, MoSEBC	January 2025 - December 2030	90,000	18000
Environmental Preservation Symposium	Educate on the importance of biodiversity and ecosystems in economic planning and development. Impact assessments	MTE, MECI	September 2025 - June 2027	70,000	14000
Designing of digital content for social media to promote new initiatives in renewable energy and natural resources domain	Tailored desinged infographics, factsheet, leaflets for social media communication and dissemination	S3 Communication Team	September 2025 - December 2030	40,000	
A series of podcasts produced for the main domain/subdomains disseminated on S3 communication channels	Podcast will be produced and disseminated on a dedicated playlist on Youtube channel of S3.	S3 Communication Team	September 2025 - December 2030	70000	
TV appearances in specific TV shows and media	Facilitated paraticipation on TV shows based on demand or requested by S3 team.	S3 Communication Team	September 2025 - December 2030	0	
Participating in panel discussions on media with a focus on economic development.	Facilitated paraticipation on TV shows based on demand or requested by S3 team.	S3 Communication Team	September 2025 - December 2030	0	
Domain 2: Sustainable and Diversified Tourism					
Albanian Cultural Heritage Festival - every year	Highlight Albania's rich cultural heritage and traditions to attract tourists and preserve cultural assets.	MTE, MECI	September 2025 - June 2028	150,000	30000
Mapping the Agrotourism Sector of Albania (publication/mobile application/web platform development)	To provide promotion and facilitation for the sector, aiming to increase interest domestically and internationally.	MARD	September 2025 - June 2027	70,000	
"Farm-to-Table Experiences" - 3 National Conferences	Increased interest in tourists to Albania and the use of local culinary potential have surfaced the need to build a new approach to increase the potential of local production from farmers while also guaranteeing their selling of the food supply for the tourism offer. Addressing the needs of local farmers and agro-tourism businesses.	MARD; Line ministries; Municipalities	January 2025-December 2030	90,000	18000
Digital content for online media communication periodically disseminated aiming to inform public and the identified specific audiences	Tailored desinged products, infographics, factsheet, leaflets desing for social media communication and dissemination	S3 Communication Team	September 2025 - December 2030	40000	
A series of podcasts produced for the explanation of the priorities and needs of the sector.	Podcast will be produced and disseminated on a dedicated playlist on Youtube channel of S3.	S3 Communication Team	September 2025 - December 2030	70000	
TV appearances in specific TV shows and media	Facilitated paraticipation on TV shows based on demand or requested by S3 team.	S3 Communication Team	September 2025 - December 2030	0	
Domain 3: Sustainable Food Chain					
Food Processing and Innovation Summit - 2 events	Foster innovation in food processing and value addition and highlight cross-cutting investments.	MARD	January 2025-December 2030	40,000	8000
Addressing climate change effects in agriculture through innovation (at least 3 regional exchange visits in WB and Europe)	Technology can protect agriculture's private investments of farmers by including new technologies in the work process and exploring these opportunities through networking and exchange.	MARD	January 2025-December 2030	90,000	18000
Sustainable Fisheries and Aquaculture Workshop - 3 workshops	Educate on sustainable practices in fisheries and aquaculture—vision 2030.	MARD, MECI	January 2025-December 2030	70,000	
Digital contents for online media communication periodically disseminated with the aim of informing the public and the identified specific audiences.	Tailored desinged products, infographics, factsheet, leaflets desing for social media communication and dissemination	S3 Communication Team	September 2025 - December 2030	40000	
A series of podcasts produced for the explanation of the priorities and needs of the sector and domain.	Podcast will be produced and disseminated on a dedicated playlist on Youtube channel of S3.	S3 Communication Team	September 2025 - December 2030	70000	

TV appearances in specific TV shows and media related to this domain to promote new initiatives undertaken	Facilitated participation on TV shows based on demand or requested by S3 team.	S3 Communication Team	September 2025 - December 2030	0	
Promoting resources of the country through identified success cases and visualized over specified TV Shows engaged with the sector to promote the agru-cultural sector and capabilities to contribute to empower of local economies and farmer families	Facilitated participation on TV shows based on demand or requested by S3 team.	S3 Communication Team	September 2025 - December 2030	50000	
Human Capital / Research & Innovation / Competitiveness					
Four Workshops and Seminars	Enhance skills, spread knowledge, and foster a deeper understanding of topics relevant to Human Capital and R&I.	S3 Team, MECI	September 2025 - December 2030	40,000	
Networking and Collaboration Events - 3 Hackathons	Industry Meetups that connect researchers with business leaders. Cross-sector Networking Events to initiate a collaborative approach.	S3 Team, MoSEBC	September 2025 - December 2030	90,000	
Storytelling products	Digital Storytelling Platform; Podcast Series; Interactive Webinars;Doku-Series	S3 Team, MECI	September 2025 - December 2030	60,000	
National Skills Development Conference - 3 conferences	Discuss and promote strategies for enhancing skills and talent development in various industries through Keynote speeches, panel discussions, workshops, and networking sessions	MECI, MES	September 2025 - December 2030	70,000	
RTSH 3 TV Show to attract diaspora engagement	TV show dedicated to attracting diaspora and encourage return programs	S3 Team, MECI	September 2025 - December 2030	100,000	
Organisation of expo and fairs for Made in Abania Products - 2 Expos	Promote Made in Albania Products in the European and global markets	S3 Team, MECI	September 2025 - December 2031	200,000	
Digital content for online media communication periodically disseminated aiming to inform public and the identified specific audiences.	Tailored desinged products, infographics, factsheet, leaflets desing for social media communication and dissemination	S3 Communication Team	September 2025 - December 2030	40000	
A series of podcasts to raise awareness for Human Capital / Research & Innovation / Competitiveness, Digital Connectivity and Blue and Green Economy.	Podcast will be produced and disseminated on a dedicated playlist on Youtube channel of S3.	S3 Communication Team	September 2025 - December 2030	70000	
Digital campaign in promoting opportunities in Albania for youth and innovation.	Tailored desinged products, infographics, factsheet, leaflets desing for social media communication and dissemination	S3 Communication Team	September 2025 - December 2030	60000	
A tailored event at TUMO to increase knowledge of youth and interested targeted groups for the importance of inclusiveness of innovation in implementing start-ups, new business ideas and contribution of effective research instruments.	Outreach communication event	S3 Communication Team	September 2025 - December 2030	50000	
School Open Day (informative event)	Identified schools facing difficulties due to fewer registered students will raise awareness about digitalization and technology's contribution to the local community and engagement. One school per region of the country (AL) will serve as a model to showcase that change is possible.	S3 Communication Team	September 2025 - December 2030	30000	
TV show participation in series planned shows dedicated to education.	Facilitated participation on TV shows based on demand or requested by S3 team.	S3 Communication Team	September 2025 - December 2030	0	
Success stories of citizens, especially youth whose families have returned to the country after migrating, engaged in different sectors of Cross-Cutting Domains, aiming to promote Albania's opportunities in the process of brain gain.	S3 Web articles and stories - 5 each year	S3 Communication Team	September 2025 - December 2030	40000	
Digital Connectivity					
Digital Transformation Summit	Showcase advancements in digital services and infrastructure, and discuss future trends. Through Keynote addresses, panel discussions, technology showcases, and networking opportunities.	MIE, MECI	March 2026 - June 2026	50,000	
National Hackathon Series on digital innovations - 3 Hackathons	Encourage innovation in digital services by bringing together developers, designers, and entrepreneurs. Through Coding competitions, mentorship sessions, and project presentations	MoSEBC, S3 Team, MECI	September 2025 - December 2030	90,000	
Blue and Green Economy					
Blue Economy Symposium	Discuss the latest advancements in blue economy through Presentations, panel discussions, and technology showcases	MTE, MIE, MARD	January 2025 - December 2030	40,000	8000

Engagement Initiatives:					
3-5 public events annually to discuss the benefits and gather feedback on the S3 strategy.	Keep stakeholders informed on progress and benefits of S3 initiatives	S3 Team, MECI	January 2025 - December 2030	250,000	50000
Conduct regular online sessions to keep stakeholders informed and involved (3-5 online sessions per year).	Keep stakeholders informed on progress and benefits of S3 initiatives	S3 Team, MECI	January 2025-December 2030	40,000	8000
Encourage stakeholders to share their experiences and insights through articles and case studies.	Sharing knowledge and success stories	S3 Team, MECI	January 2025-December 2030	15,000	3000
Enhancement of Communication Channels and Tools					
Website Redesign	Enhance the S3 Albania website for improved user experience and content delivery, including bilingual capabilities.	S3 Team, MECI	September 2025 - March 2025	10,000	
Establishment of a S3 Communication Team	S3 Communication Team with at least 2-3 part time experts to coordinate S3 communication activities	S3 Team, MECI	January 2025-December 2030	70,000	14000
Social Media Expansion and maintenance (content writing, etc.)	Optimize existing channels (Facebook, Instagram, LinkedIn) and launch new ones (X, Threads, YouTube, TikTok) to reach broader demographics.	S3 Team, MECI	September 2025 - December 2030	60,000	
Media Collaborations	Regular use of both traditional and online media to disseminate news, updates, and success stories, TV transmission Smart Albania	S3 Team, MECI	September 2025 - December 2030	120,000	
Content Development					
Visual Content	Digital banners and infographics will be created to showcase the achievements and benefits of the S3 strategy.	S3 Team, MECI	June 2025 - December 2030	10,000	2000
Storytelling	Produce 10 podcasts and 10 video testimonials to share inspiring success stories and engage the community.	S3 Team, MECI	September 2025 - December 2030	60,000	
Public Relations	Develop and distribute PR articles and opinion pieces by experts to highlight critical successes.	S3 Team, MECI	September 2025 - December 2025	40,000	
Collaborations and Partnerships					
Local Media Engagement	Engage local media in public debates and discussions about the S3 strategy.	S3 Team, MECI	September 2025 - December 2030	60,000	
International Outreach	Explore opportunities for feature articles in the European Commission's newsletter and collaborations with platforms like EurActiv.	S3 Team, MECI	September 2025 - December 2030	20,000	
Closing Event:					
This event is a large-scale expo designed to highlight the key sectors identified in Albania's Smart Specialization Strategy, and to foster collaboration and investment. The event will aim to foster a spirit of innovation and collaboration that aligns with Albania's Smart Specialization Strategy goals, while also showcasing the country's rich cultural heritage and potential for future growth.	A major event to mark the approval of the strategy and showcase S3 Albania's future visions and and next steps	S3 Team, MECI	October 2025 - November 2025	100,000	
Gadgets and Visual Content					
PR & visual materials	Ensure that promotional materials and digital content are planned and distributed throughout the entire duration of the S3 strategy: - Branded merchandise (e.g., pens, tote bags, notebooks, USB drives) distributed at events. - Informative brochures and flyers. - Digital content (e.g., infographics, videos) shared through online platforms.	S3 Team, MECI	September 2025 - December 2030	90,000	
Total				3,285,000	243000

Priority : Energy		Estimated budget needed (euro)	Source of funding					
			Total foreseen in actual State Budget (euro)	Foreseen additional State Budget (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donor Contributions (euro)	Financial Gap (euro)
Strategic Objective No. 1: Promote the development of solar and wind energy projects to diversify the renewable energy portfolio, harnessing Albania's ample sunlight and wind resources for clean power generation.	Specific objective 1.1. Boosting investments in renewable energy, including through liberalization of the energy market	1,300,000	100,000	1,200,000	40,000	-	-	-
	Specific objective 1.2 Streamlining procedures for issuing permits and licenses for the companies operating in the sector and improving the legal and regulatory framework, including through developing under-regulations and guidelines to facilitate the implementation of energy-related laws	250,000	-	250,000	-	-	-	-
Total		1,550,000	100,000	1,450,000	40,000	-	-	-
Strategic Objective No. 2: Encourage the utilization of waste-to-energy technologies, innovative technologies and biomass resources for clean energy production, reducing landfill waste and promoting resource efficiency.	Specific objective 2.1 Encouraging the utilization of waste-to-energy technologies, innovative technologies and biomass resources for clean energy production, reducing landfill waste and promoting resource efficiency	6,000,000	-	6,000,000	-	-	-	-
Total		6,000,000	-	6,000,000	-	-	-	-
Strategic Objective No. 3: Promote a diverse mix of renewable energy sources and emerging technologies to reduce dependence on a single source.	Specific Objective 3.1 Promoting support measures for integration of alternative energy sources and energy efficiency and diversification of electricity production mix	19,323,039	623,039	17,900,000	-	-	-	-
	Specific objective 3.2 Strengthening the partnership between academia, businesses, and the government to bridge the skills gap and enhance education and training programs, reviewing curricula, including upskilling and reskilling	2,300,000	-	2,300,000	-	-	-	-
Total		21,623,039	623,039	20,200,000	-	-	-	800,000
Strategic Objective No. 4: Support modern and flexible grid infrastructure and energy storage that can efficiently handle the various nature of renewable energy resources and enable cross-regional energy sharing.	Specific objective 4.1 Investing in the development of smart grids and storage systems, to support smart grids and energy storage infrastructure that can efficiently handle the various nature of renewable energy resources and enable cross-regional energy sharing	51,350,000	50,000	50,000,000	-	-	-	-
	Specific objective 4.2 Enhancing energy infrastructure, including the construction of technology centers (TECs) and charging stations to support electric transportation	780,000	-	630,000	-	-	-	-
Total		52,130,000	50,000	50,630,000	-	-	1,450,000	-
Strategic Objective No. 5 Implement responsible forest management practices, including reforestation and sustainable timber harvesting, to balance economic gains with environmental conservation.	Specific Objective 5.1 Sustainable energy use practices	tbd	-	-	-	-	250,000	-
Total								
TOTAL Energy		81,303,039	773,039	78,280,000	40,000	-	1,450,000	800,000
Total Energy (%)			0.95%	96.28%			1.78%	0.98%
Priority : Agriculture and Food Safety		Estimated budget needed (euro)	Source of funding					
			State Budget (euro)	State Budget foreseen (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donors (euro)	Gap (euro)
Transform the Agriculture Sector to deliver	Specific objective 1.1 Sustainable Farming and Certification Increasing the economic sustainability of farms to tackle current and future challenges (i.e. Climate change) thorough cost reduction, sustainable production and certification	254,340,000	125,580,000	10,760,000	27,268,000	88,500,000	27,300,000	2,200,000

<i>healthy food by focusing on the development of sustainable food chain based on tradition and foster value addition and competitiveness in the market.</i>	Specific objective 1.2 Food Processing and Value-Added Products	84,430,000	35,830,000	-	7,166,000	28,300,000	20,300,000	-
	Specific objective 1.3 Sustainable Fisheries and Aquaculture	1,900,000	1,800,000	-	360,000	100,000	-	-
	Specific objective 1.4 Medicinal aromatic plants, oils and extracts production	5,450,000	2,210,000	40,000	450,000	3,050,000	-	150,000
	Specific objective 1.5 Strengthening agritourism and business development in rural areas	50,750,000	12,050,000	-	2,410,000	38,700,000	-	-
	TOTAL Agriculture and Food Safety	396,870,000	177,470,000	10,800,000	37,654,000	158,650,000	47,600,000	2,350,000
Total Agriculture and Food Safety (%)		44.72%	2.72%		39.98%	11.99%	0.59%	
Priority : Digital Connectivity	Estimated budget needed (euro)					Source of funding		
		State Budget (euro)	State Budget foreseen (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donors (euro)	Gap (euro)	
<i>Optimize Digital and Connectivity to Boost Economic Efficiency</i>	Specific objective 1.1 Advancing Infrastructure Development and Enhancing Connectivity through Strategic Investments and Technological Upgrades	4,670,000	310,000	3,425,000	415,000	0	0	935,000
	Specific Objective 1.2 Reducing processing times for transporters, maritime agencies, freight forwarders, and logistic companies to streamline operations and increase efficiency.	2,700,000	0	2,150,000	300,000	0	0	550,000
TOTAL Digital Connectivity	7,370,000	310,000	5,575,000	715,000	-	-	1,485,000	
Total Digital Connectivity (%)		4.21%	75.64%		0.00%	0.00%	20.15%	
Priority : Raw Materials	Estimated budget needed (euro)					Source of funding		
		State Budget (euro)	State Budget foreseen (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donors (euro)	Gap (euro)	
<i>ORIENTATION OF MINING SECTOR OF ALBANIA TO BECOME EU STRATEGIC PARTNER AND A VALUABLE CONTRIBUTOR TO THE EU'S CRITICAL RAW MATERIALS SUPPLY CHAIN</i>	Specific Objective 1: Orientation of mining g sector of Albania to become EU strategic partner and a valuable contributor to the EU's critical raw material supply chain	3,045,000	1,795,000	20,000	74,500	340,000	0	890,000
	Specific Objective 2 The enlargement of existing mineral deposits and exploring new deposits of CRM/SRM minerals	24,550,000	1,000,000	0	200,000	3,550,000	0	20,000,000
	Specific objective 3: Strengthening of mineral processing, increasing the efficiency of non-renewable resources by adopting new waste-free technologies, trying to approach the green and circular economy model	18,110,000	11,800,000	3,830,000	2,850,000	0	0	2,480,000
	Specific Objective 4 : Empowering of infrastructure, scientific and human research capacities	9,288,500	3,947,500	50,000	749,500	2,921,000	0	2,370,000
TOTAL Raw Materials	54,993,500	18,542,500	3,900,000	3,874,000	6,811,000	-	25,740,000	
Total Raw Materials (%)		33.72%	7.09%		12.39%	0.00%	46.81%	
Priority : Tourism / Environment / Blue Economy	Estimated budget needed (euro)					Source of funding		
		State Budget (euro)	State Budget foreseen (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donors (euro)	Gap (euro)	
<i>Strategic Objective: Develop a dynamic, diverse, country-wide, all year tourism sector that contributes to the socio-economic development of the country while promoting responsible practices and preserving our natural and cultural treasures for future generations.</i>	Specific objective 1. Preserve and promote Albania's historical and cultural sites, museums, and traditions to attract heritage enthusiasts, ensuring that Albania's cultural heritage, will be preserved, restored, and promoted	6,620,000	2,710,000	1,510,000	0	0	710,000	1,690,000
	Specific objective 2. Development of Health and Wellness subsector of Tourism by tapping into Albania's natural and therapeutic resources	4,362,000	2,982,000	950,000	0	0	0	430,000
	Specific objective 3. Natural, adventure and rural tourism	3,593,300	220,000	1,040,000	0	1,200,000	389,300	744,000
	Specific objective 4: Promote rural tourism by connecting visitors with local farms and agritourist activities, emphasizing sustainable food production	125,856,923	97,316,923	9,390,000	0	1,700,000	0	17,450,000

	Specific objective 5: Development of niche touristic products and services with focus on culinary	8,210,000	6,650,000	635,000	0	0	0	925,000
	Specific objective 6: Development of skills in tourism and collaboration	18,280,000	10,000,000	465,000	0	1,400,000	0	6,415,000
<i>Development of Blue Economy and sustainable Coastal Tourism</i>		1,436,923	1,366,923	0	0	0	0	70,000
TOTAL Tourism		168,359,146	121,245,846	13,990,000	-	4,300,000	1,099,300	27,724,000
<i>Strategic Objective: Improve the Quality of Urban Air</i>	Specific objective 1. Updating of National Air Quality Management Plan	1,606,600	489,600	297,000	-	-	-	820,000
	Strategic Objective 2. Monitoring of Water Bodies	7,055,000	2,055,000	-	-	5,000,000	-	-
	Specific objective 3. Boost Innovative Industries	83,715	45,255	-	-	-	38,460	-
	Specific objective 4. Improve inspection	430,000	130,000	130,000	-	-	-	170,000
TOTAL Environment		9,175,315	2,719,855	427,000	-	5,000,000	38,460	990,000
TOTAL Tourism and Environment		177,534,461	123,965,701	14,417,000	-	9,300,000	1,137,760	28,714,000
Total Tourism and Environment(%)			69.83%	8.12%		5.24%	0.64%	16.17%
Priority : Education		Estimated budget needed (euro)	Source of funding					
			State Budget (euro)	State Budget foreseen (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donors (euro)	Gap (euro)
<i>Transforming Education and Workforce Development to Support Albania's Digital and Green Transitions</i>	Specific Objective 1. Strengthen collaboration among academia, business, government and civil society (QUADRUPLE HELIX) to enhance innovation and workforce readiness	610,000	35,000	525,000	97,000	30,000	0	20,000
	Specific Objective 2. Enhance lifelong learning program to foster a resilient and agile workforce through reskilling and upskilling of workers, taking into account the challenges posed by circular economy and artificial intelligence	50,000	0	50,000	10,000	0	0	0
	Specific Objective 3. Curriculum modernization at all levels to better equip Albania for the digital and green transitions, and for strengthening the specialization of the national economy in the S3 priority areas and increasing scientific and technological skills across all levels	5,650,000	5,000	4,590,000	414,000	0	0	1,055,000
	Specific Objective 4. Reversing the trend towards emigration and abandonment of the rural areas from young people, making it attractive for young people to stay in rural areas and engage in rural development	5,550,000	0	2,400,000	430,000	0	250,000	2,900,000
TOTAL Education		11,860,000	40,000	7,565,000	951,000	30,000	250,000	3,975,000
Total Education (%)			0.34%	63.79%		0.25%	2.11%	33.52%
Priority : Talent Retention		Estimated budget needed (euro)	Source of funding					
			State Budget (euro)	State Budget foreseen (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donors (euro)	Gap (euro)
<i>Develop youth capacities and retain human capital to promote growth in Albania</i>	Specific objective 1.1 Reverse youth trends towards emigration and abandonment of the rural areas by increasing quality of public services offered and making it attractive for youth to remain in Albania and engage in rural development	16,857,853	350,650	14,427,203	2,955,571	180,000	100,000	1,800,000
	Specific objective 1.2 Advance talent development and holistic development of youth, with a particular emphasis on young girls, by supporting and implementing a comprehensive array of amateur sports, arts, arts and crafts programs, and extracurricular activities	14,937,043	-	4,530,613	906,123	2,710,000	6,800,000	896,430

TOTAL Talent Retention		31,794,896	350,650	18,957,816	3,861,693	2,890,000	6,900,000	2,696,430
Total Talent Retention (%)			1.10%	59.63%		9.09%	21.70%	8.48%
Priority : Research and Innovation		Estimated budget needed (euro)	Source of funding					
			State Budget (euro)	State Budget foreseen (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donors (euro)	Gap (euro)
<i>Ensure the transformation of the Research and Innovation through Digital innovation and technological advancement and ensure excellence in scientific research and innovation outcomes.</i>	Specific objective 1.1 Leverage the collective expertise, resources, and perspectives of all government, industry, academia, and society stakeholders within the quadruple helix, promoting a synergistic approach creating a dynamic and effective innovation ecosystem resulting in sustained and impactful advancements	1,250,000	0	490,000	12,000	200,000	0	560,000
	Specific objective 1.2 Define a specific support framework for technology transfer processes (vertical and horizontal) by "strengthening of linkages between technology supply side, technology adopters and the intermediary support service provider"	107,790,000	100,000	19,850,000	3,610,000	64,000,000	40,000	23,800,000
	Specific objective 1.3 Define a sound industrial/innovation policy framework with the aim of creating a favourable business climate for companies to develop research and innovation	10,645,000	220,000	6,845,000	1,144,000	0	0	3,111,000
	Specific Objective 1.4 Leverage advanced technologies, including AI, satellite imagery, and UAV data, to drive innovation, enhance decision-making processes, and assess scientific and innovation potential, while integrating high-quality statistical data to monitor and refine Smart Specialization Strategy (S3) priorities effectively	32,770,000	0	7,460,000	632,000	500,000	20,395,000	4,415,000
	Specific objective 1.5 Artificial intelligence, digitalization and cybersecurity for smart growth	207,490,000	116,100,000	3,906,500	1,951,300	20,230,000	66,060,000	1,193,500
TOTAL Research and Innovation		359,945,000	116,420,000	38,551,500	7,349,300	84,930,000	86,495,000	33,079,500
Total Research and Innovation (%)			32.34%	10.71%		23.60%	24.03%	9.19%
Priority : Diaspora		Estimated budget needed (euro)	Source of funding					
			State Budget (euro)	State Budget foreseen (euro)	Foreseen for 2025 (euro)	EU funds (euro)	Donors (euro)	Gap (euro)
<i>Harnessing Diaspora Expertise and Technological Advancement for Sustainable Development</i>	Specific objective 1.1 Diaspora expertise provides effective contribution in generating human capital development especially in rural Albania	28,800,000	2,000,000	26,600,000	5,720,000	0	150,000	50,000
	Specific objective 1.2 Diaspora expertise provides effective contribution in generating human capital development especially in rural Albania	21,720,000	3,620,000	11,440,000	3,012,000	5,000,000	0	1,660,000
	Specific objective 1.3 Enhance Technological and Entrepreneurial Capacities through Diaspora Engagement	8,210,000	10,000	6,700,000	1,342,000	6,700,000	0	1,000,000
TOTAL Diaspora		58,730,000	5,630,000	44,740,000	10,074,000	11,700,000	150,000	2,710,000
Total Diaspora (%)			9.59%	76.18%		19.92%	0.26%	4.61%
S3 Communication		3,285,000						3,285,000
TOTAL		1,183,685,896	443,501,890	222,786,316	64,518,993	274,311,000	143,982,760	104,834,930
in % of total			37.47	50.23		23.17	12.16	8.86

Priority	% of total S3 financing	Estimated budget needed (euro)	Source of funding									
			Total foreseen in actual State Budget (euro)		Foreseen additional State Budget (euro)		EU funds (euro)		Donor Contributions (euro)		Gap (euro)	
			Value	%	Value	%	Value	%	Value	%	Gap (euro)	%
Renewable Energy	6.9	81,303,039	773,039	0.95%	78,280,000	96.28%	-		1,450,000	1.78%	800,000	0.98%
Raw Materials	4.6	54,993,500	18,542,500	33.72%	3,900,000	7.09%	6,811,000	12%	-	0.00%	25,740,000	46.81%
Healthy and Sustainable Food Chain	33.5	396,870,000	177,470,000	44.72%	10,800,000	2.72%	158,650,000	40%	47,600,000	11.99%	2,350,000	0.59%
Sustainable and diversified tourism	15.0	177,534,461	123,965,701	69.83%	14,417,000	8.12%	9,300,000	5%	1,137,760	0.64%	28,714,000	16.17%
Education	1.0	11,860,000	40,000	0.34%	7,565,000	63.79%	30,000	0%	250,000	2.11%	3,975,000	33.52%
Talent Retention	2.7	31,794,896	350,650	1.10%	18,957,816	59.63%	2,890,000	9%	6,900,000	21.70%	2,696,430	8.48%
Research and Innovation	30.4	359,945,000	116,420,000	32.34%	38,551,500	10.71%	84,930,000	24%	86,495,000	24.03%	33,079,500	9.19%
Diaspora Engagement	5.0	58,730,000	5,630,000	9.59%	44,740,000	76.18%	11,700,000	20%	150,000	0.26%	2,710,000	4.61%
Digital/Connectivity	0.6	7,370,000	310,000	4.21%	5,575,000	75.64%	-	0%	-	0.00%	1,485,000	20.15%
S3 Communication	0.3	3,285,000									3,285,000	100%
Total S3		1,183,685,896	443,501,890	37.5%	222,786,316	18.8%	274,311,000	23.2%	143,982,760	12.2%	104,834,930	8.9%

Annex 6. Communication Plan of S3 Albania

The communication plan outlines the objectives and methodologies to effectively promote the S3 strategy, ensuring a broad understanding and support across multiple sectors. The focus is on ensuring that the strategy's core messages and achievements are effectively conveyed to all relevant stakeholders, both domestically and internationally.

Objectives and Goals

To ensure that our communication efforts are strategic and impactful, we have outlined specific objectives and goals that will guide our approach. These objectives and goals are designed to increase awareness, foster engagement, and promote the success of the S3 strategy among various stakeholders.

Communication Objectives:

- Increase awareness of the S3 strategy among all stakeholders.
- Foster engagement and participation in S3 initiatives.
- Promote the benefits and successes of the S3 strategy to the public and international partners.
- Promote S3 Action Plan activities by actively communicating the various activities and initiatives undertaken as part of the S3..

This communication plan is based on three main pillars:

1. Audience Analysis

To effectively communicate the S3 strategy, it is crucial to understand and address the needs of different audience groups. Each group requires tailored messaging to convey and understand the strategy's objectives. Our audience analysis focuses on identifying the primary and secondary audiences and their specific interests and roles in the S3 strategy.

Primary Audiences:

- **Government Bodies:** Key policymakers and regulatory authorities who play a crucial role in implementing and supporting the S3 strategy.
- **Private Sector Businesses:** Companies and entrepreneurs who can benefit from the innovative opportunities and economic growth promoted by the S3 strategy.
- **Academia and Research Institutions:** Universities, research centers, and educational institutions that drive research and innovation and provide the necessary human capital for S3 initiatives.
- **Civil Society:** Civil society organizations and NGOs operating in the s3 priority domains

Secondary Audiences:

- General public
- International partners and organizations
- Media outlets

By identifying and understanding these primary audiences, we can craft specific messages and use appropriate communication channels to effectively engage each group and ensure the success of the S3 strategy.

2. Key Messages

Effective communication about Albania's Smart Specialization Strategy (S3) will begin with the development of targeted messaging. Crafting messages that resonate with specific population segments will be crucial for illustrating the direct benefits of S3, such as enhanced economic opportunities, innovation, and sector-specific growth. Tailored communications that appeal to stakeholders' unique interests—business owners, community and educators, or policymakers—will ensure that the strategy's objectives are clearly understood and appreciated. This approach will increase the message's relevance for different audiences and boost the likelihood of active engagement and support for S3 initiatives.

The foundation of our communication efforts will be built upon a **core message** that encapsulates the essence of the S3 strategy. We will develop tailored messages from this core message to address different stakeholder groups' specific interests and needs.

Core Message: "Albania's Smart Specialization Strategy: Driving Innovation, Sustainability, and Economic Growth."

To effectively reach and engage our diverse audiences, we have crafted tailored messages that speak directly to the unique concerns and interests of each group of the quadruple helix:

Tailored Messages:

- **Businesses:** "Discover new opportunities for innovation and growth through S3 initiatives."
- **Public Institutions:** "Discover how S3 is driving sustainable growth and prosperity for Albania through innovative public sector initiatives."
- **Academia:** "Collaborate on cutting-edge research and development projects within the S3 framework in close partnership with Business sector."
- **Civil Society:** "Engage with S3 initiatives to drive community-based sustainable development and innovation."

To make our communication more engaging and impactful, we will also create innovative and compelling messages for the key sectors within the S3 strategy. These messages will highlight each sector's unique contribution to the strategy's overall goals.

Innovative and Engaging Messages:

- **Renewable Energy and Natural Resources:**
 - "Harness the power of innovation to create a sustainable energy future for Albania."

- Advancing Albania's Raw Materials Sector with Green Innovations."
- "Embrace sustainable forest management practices that balance economic growth with environmental preservation through responsible reforestation and sustainable timber harvesting."
- **Sustainable and Diversified Tourism:** "Experience the unique blend of tradition and innovation in Albania's diverse tourism sector."
- **Healthy and Sustainable Food Chain:** "Discover how innovative practices in agriculture are transforming Albania's food industry."

Cross-Cutting Domains:

- **Human capital development:** "Building Skills, Talent and Knowledge for a Thriving Workforce for National Progress."
- **Digital Connectivity:** "Pioneering Digital Services with Advanced Infrastructure and Streamlined Processes for a Connected Tomorrow"
- **Blue and Green economy for green transition:** "Green Innovations: Driving Environmental Sustainability and Economic Growth."
- **Diaspora Engagement:** "Harnessing the Power of Our Global Community for National Development and Innovation."
- **Talent Retention:** "Creating Opportunities and an Enabling Environment to Keep Our Best and Brightest at Home."
- **Competitiveness, Innovation, and Research:** "Fostering a Culture of Innovation and Excellence to Drive National Competitiveness and Research Advancements."

By combining a strong core message with tailored and innovative messages, we will effectively communicate the benefits and opportunities of the S3 strategy to a wide range of stakeholders, fostering greater understanding, engagement, and support for Albania's path towards sustainable growth and development.

3. Communication Tools and Channels

Adopting a multi-channel distribution plan will be a crucial approach to ensure that the benefits of S3 are comprehensively communicated. This will involve leveraging traditional and modern media, such as television and radio, online media, and significant inclusions of social media platforms and instruments to disseminate information widely. The plan will guarantee extensive reach across different demographics and geographic locations by employing a diverse selection of communication channels. Interactive elements such as webinars and live Q&A sessions will further enrich communication, providing a platform for direct dialogue and engagement and making the S3 initiatives more accessible and understandable to the public.

Traditional Media:

- Press releases and media briefings
- TV and radio interviews
- Print advertisements in major newspapers

Digital Media:

- Social Media: Regular updates on Facebook, Instagram, LinkedIn, and newly launched YouTube and TikTok channels.
- Website: Enhanced user experience and bilingual content delivery. A dedicated website for S3 has been established at <https://s3albania.org/>, available in Albanian and English. This website offers comprehensive information regarding the S3 process, including details on all conducted meetings, news, S3-focused events, and relevant documents of interest to stakeholders. Additionally, each institution affiliated with the S3 Inter-ministerial Committee has incorporated a window for S3 on their respective websites, linked to the dedicated S3 website.
- Email Newsletters: Monthly updates on S3 activities and progress.
- International Outreach: Explore opportunities for feature articles in the European Commission's newsletter and collaborations with platforms like EurActiv.

Events and Engagement:

- Annual S3 Conferences: Highlighting key achievements and plans.
- Regional Workshops: Engaging local stakeholders in discussions about S3 initiatives.
- Online Webinars: Interactive sessions with experts and stakeholders.

Media Programs:

- **Television and Radio:**
 - Three episodes in the "Auditor Arsimi" program on National Albanian Radio Television (RTSH).
 - One TV transmission on A2Biznes (Ora News TV).
 - A series of news broadcasts across various television networks, accessible through links on the "News" page of the S3 website.
- **Weekly TV Program:** Starting from January 2024, a TV program on Albanian Public Radio Television (RTSH) titled "Smart Albania: My Country, My Success," aired weekly in prime time on RTSH1. This program, organized in collaboration with the S3 national team, aims to inform the public about successful professionals in Albania and discuss opportunities for entrepreneurship and professional growth, involving experts from quadruple helix actors. It also addresses the retention of human capital and talent within the country. This program is planned to continue during the implementation period of S3 Strategy by expanding in various areas related to S3 priority domains.

Gadgets and Promotional Materials:

- Branded merchandise (e.g., pens, tote bags, notebooks, USB drives) distributed at events.
- Informative brochures and flyers.
- Digital content (e.g., infographics, videos) shared through online platforms.

Timeline

This entire cycle of events for promoting Albania's Smart Specialization Strategy (S3) is planned accordingly with all stakeholders involved during 2024-2030.

These proposed targeted events and communication products are designed to engage various stakeholders from government, industry, civil society, and the public, fostering a deeper understanding and more substantial commitment to Albania's S3 objectives.

- **Q3 2024:** Enhance and improve website and social media channels.
- **Q4 2024:** First annual S3 conference (back-to-back with a donors' conference) and regional workshops.
- **2025-2030:** Ongoing monthly newsletters, quarterly press releases, and annual conferences.

Proposed Events

The communication plan for the Smart Specialization Strategy (S3) in Albania includes a series of targeted events and interventions aimed at promoting the strategy's activities and objectives across various priority domains. The plan involves a combination of forums, campaigns, hackathons, conferences, and workshops designed to engage stakeholders, enhance knowledge, and foster innovation.

The proposed public events listed below are based on priority domains of Albania's S3 strategy.

- **Domain 1: Renewable Energy and Natural Resources**

Green Albania through Renewable Energy Transition Forum

Objective: Present the evolution and initiatives implemented in the green energy transition in Albania and explore new opportunities.

Climate resilience and green energy – The future?

Objective: National Information Campaign with schools and teachers aiming to increase knowledge of the adverse effects, the role of schools in managing the consequences, and enhancing youth engagement in the case/issue.

Innovation into Waste-to-Energy Hackathon

Objective: To inspire and mobilize innovative solutions for converting waste into energy by bringing together creative minds, industry experts, and stakeholders in a collaborative hackathon, aiming to develop sustainable technologies and practices that address waste management challenges and promote environmental sustainability.

Sustainable Mining and Raw Materials Conference

Objective: Promote responsible extraction and processing practices and integrate Albania into the EU supply chain.

Environmental Preservation Symposium

Objective: Educate on the importance of biodiversity and ecosystems in economic planning and development—impact assessments.

Innovation into Waste-to-Energy Hackathon

Objective: Future generations and business-oriented stakeholders will enhance the waste management market for clean energy by generating new ideas and approaches to transforming waste into clean energy.

- **Domain 2: Sustainable and Diversified Tourism**

Albanian Cultural Heritage Festival

Objective: Highlight Albania's rich cultural heritage and traditions to attract tourists and preserve cultural assets.

Mapping the Agrotourism Sector of Albania (publication/mobile application/web platform development)

Objective: To promote and facilitate the sector, aiming to increase interest domestically and internationally.

"Farm-to-Table Experiences" - 3 National Conferences

Objective: Increased interest in tourists to Albania and the use of local culinary potential have surfaced the need to build a new approach to increase the potential of local production from farmers while also guaranteeing their selling of the food supply for the tourism offer and addressing the needs of local farmers and agro-tourism businesses.

- **Domain 3: Healthy and Sustainable Food Chain**

Food Processing and Innovation Summit

Objective: Foster innovation in food processing and value addition and highlight cross-cutting investments.

Addressing climate change effects in agriculture through innovation (regional exchange visits in WB and Europe)

Objective: Technology can protect agriculture's private investments of farmers by including new technologies in the work process and exploring these opportunities through networking and exchange.

Sustainable Fisheries and Aquaculture Fair

Objective: Inform and educate on sustainable practices in fisheries and aquaculture—vision 2030.

Cross-Cutting Domains - Human Capital / Research & Innovation / Competitiveness, Digital Connectivity and Blue and Green Economy

As part of this Communication Strategy, it is planned to integrate promotional activities for the strategy overall and specific promotional and informative initiatives targeting human capital, research & innovation, competitiveness, digital connectivity, and blue economy.

Workshops and Seminars

Objective: Enhance skills, spread knowledge, and foster a deeper understanding of topics relevant to Human Capital and R&I, promote engagement of the diaspora through various TV Shows, as well as foster competitiveness of Made in Albania Products through Fairs.

Networking, Hackathons and Collaboration Events

Objective: Industry Meetups that connect researchers with business leaders. Cross-sector Networking Events to initiate a collaborative approach.

“Do it for your country” - Storytelling event.

Objective: This storytelling event will present human capital capabilities and bring role model stories of individual success stories abroad.

Engagement Initiatives:

- **Public Events:** Hosting 3-5 public events annually to discuss S3 benefits and gather feedback.
- **Online Sessions:** Regular online sessions to keep stakeholders informed and involved.
- **Stakeholder Articles and Case Studies:** Encouraging stakeholders to share their experiences and insights.

Enhancement of Communication Channels and Tools:

- **Website Redesign:** Enhancing the S3 Albania website for improved user experience and bilingual capabilities.
- **Social Media Expansion:** Optimizing and expanding social media channels.
- **Media Collaborations:** Using traditional and online media to disseminate news and success stories.
- **Content Development:** Creating digital banners, infographics, podcasts, and video testimonials to showcase S3 achievements.

Collaborations and Partnerships:

- **Local Media Engagement:** Engaging local media in public debates about the S3 strategy.
- **International Outreach:** Exploring opportunities for international features and collaborations.

Closing Event:

- **Expo on Key S3 Sectors:** A large-scale event to highlight key sectors, foster collaboration, and promote Albania's Smart Specialization Strategy.

A high-level overview of budget categories and events is included in the Action Plan, detailing estimated budgets, responsible institutions, implementation periods, and specific objectives of each proposed event and initiative. This provides a comprehensive breakdown to support the effective planning and execution of the communication strategy.

Monitoring and Evaluation

The communication plan for promoting S3 will also include a robust feedback mechanism to encourage active community involvement. Providing opportunities for feedback will allow stakeholders to voice concerns, suggest improvements, and feel involved in the developmental process, building trust and fostering a sense of ownership over local projects. This participatory approach will help refine and improve the plan based on reality input and deepen the community's commitment to the successful implementation of S3.

Key Performance Indicators (KPIs):

- Social media engagement rates
- Website traffic and user metrics
- Media coverage and press mentions
- Stakeholder feedback and participation rates

Feedback Mechanisms:

- Regular surveys and feedback forms at events and online platforms.
- Direct feedback sessions with key stakeholders.

Conclusion

This communication plan provides a clear and structured approach to promoting Albania's S3 strategy. The plan aims to build widespread support and ensure the successful implementation of S3 initiatives by engaging stakeholders and the public through targeted messages and multiple channels.

ANNEX 7 – List of Abbreviations

AIE - Agency of Innovation and Excellence
AARD - Agency of Agriculture and Rural Development
ADF – Albanian Development Fund
AEE – Energy Efficiency Agency
AEEI - Albanian Excellence Energy Institute
AGS – Albanian Geological Service
AI - Artificial Intelligence
AIC – Albanian Investment Corporation
AIDA – Albanian Investment Development Agency
AKCESK – National Authority for Cybersecurity
AKEP – Authority of Electronic and Postal Communications
ALPEX – Albanian Power Exchange
AMA – Albanian Media Authority
APP – Public Procurement Agency
AR - Augmented Reality
ASCAL – Agency of Quality Assurance in Higher Education
AQAPE – Agency for Quality Assurance in Preuniversity Education
AQF/EQF – Albanian Qualification Framework/European Qualification Framework
ASHK- State Agency of Cadaster Register
ASIG – State Authority for Geospatial Information
CAP - Common Agricultural Policy
CES – Center for Educational Services
CERT – Computer Emergency Response Team
CResCCo - Economic Clusters for Climate Resilience
CH - Cultural Heritage
CHT – Cultural Heritage Tourism
CRI - Counter Ransomware Initiative
CRM – Critical Raw Material
CRM AP – Common Regional Market Action Plan
CSIRT - Computer Security Incident Response Team
CSOs – Civil Society Organizations
CT - Cultural Tourism
CVD - Cybersecurity Vulnerability Disclosure
DAP – Department of Public Administration
DCM – Decision of the Council of Ministers
DMS - Destination Management Systems
DPMO – Deputy Prime Minister's Office
DSO – Distributor System Operator
EAFRD - European Agricultural Fund for Rural Development
EAGF - European Agricultural Guarantee Fund
ECZ - Economic and Cultural Zone
EDP - Entrepreneurial Discovery Process
EIS – European Innovation Scoreboard
EIT – European Institute of Innovation and Technology

EIT KIC – EIT Knowledge and Innovation Communities
EIT raw materials – European Institute of Innovation and Technology for raw materials
EnCS – Energy Community Secretariat
EPC – Engineering, Procurement and Construction
ERDF - European Regional Development Fund
ERE – Energy Regulatory Authority
ERMA - European Raw Material Alliances
ERT - EuroCluster Rural Tourism
ESCO – European Skills Competencies and Occupations
ESF+ - European Social Fund Plus
ESG – Environmental, Social, and Governance
ESIA - Environmental and Social Impact Assessment
ETF – European Training Foundation
ETS – Emission Trading System
EU – European Union
FIRST - Forum of Incident Response and Security Teams
GAEP - Good Agricultural and Environmental Practices
GDIP - General Directorate for Industrial Property
GEOINT – Geospatial Intelligence
GHG – Greenhouse Gases
GIS – Geographical Information System
GO – Guarantee of Origin
GPs Applications - Global Positioning Systems Applications
HACPP – Hazard Analyses and Critical Control Points
HEI - Higher Education Institution
HT - Health Tourism
ICT – Information and Communication Technology
IHS – Integrated Health Centers
INSPIRE - Infrastructure for Spatial Information in Europe
INSTAT – Institute of Statistics of Albania
IOM – International Organization for Migration
IoT - Internet of Things
IOM – International Organization of Migration
IPSIS - Integrated Planning System Information System
ITS – Intelligent Transportation Systems
KESH – Albanian Power Corporation
KIBS - Knowledge Intensive Business Services
LEADER – Links between actions for the development of the rural economy
LGA – Legal Gap Analyses
LGU - Local Governance Units
LLL – Lifelong Learning
MAP – Medicinal and Aromatic Plants
MAP REA - Multi-annual Action Plan for a Regional Economic Area in the Western Balkans
MARD – Ministry of Agriculture and Rural Development
MBZHR – Ministry of Agriculture and Rural Development
MECI – Ministry of Economy, Culture and Innovation
MEFA – Ministry for Europe and Foreign Affairs
MES – Ministry of Education and Sports

MF – Ministry of Finance
MI – Ministry of Interior
MIE – Ministry of Infrastructure and Energy
MD – Ministry of Defense
MF – Ministry of Finance
MoHSP – Ministry of Health and Social Protection
MoSEBC - Minister of State for Entrepreneurship and Business Climate
MoSYC – Minister of State for Youth and Children
MoSLG – Minister of State for the Local Governance
MoSPAAC - Minister of State for Public Administration and Anti-Corruption
MTBP – Medium Term Budget Program
MTE – Ministry of Tourism and Environment
NAES – National Agency for Employment and Skills
NAF - National Agency of Forests
NAIS – National Authority for Information Society
NANR – National Agency of Natural Resources
NASRI – National Agency for Scientific Research and Innovation
NAY – National Agency for Youth
NAVETQ – National Agency of Vocational Education and Training Evaluation and Qualifications
NBC – National Business Center
NCP – National Contact Point
NCPA – National Civil Protection Agency
NEA – National Environmental Agency
NEC – National Economic Council
NIS2 - Directive on Security of Network and Information Systems 2
NRRPs - National Recovery and Resilience Plans
NRT - Natural and Rural Tourism
OSHEE – Distribution of Electrical Energy Operator
OST – Transmission System Operator
PMS - Property Management Systems
PPP – Public Privat Partnership
QA – Quality Assurance
R&D - Research and Development
PUT – Polytechnic University of Tirana
REE – Rare Earth Elements
RES – Renewable Energy Sources
RM - Raw Materials
RRF - Recovery and Resilience Facility
RT - Rural Tourism
RTSH – National Radio and Television Broadcaster of Albania
SAR – Syntetic Aperture Radar
SASPAC - State Agency for Strategic Programming and Assistance Coordination
SDIC - Security and Defense Innovation Centre
SDT - Sustainable and Diversified Tourism
SOC - Security Operations Center
SOE - State Owned Enterprises
SQNA – Skills and Qualification Needs Analysis
ST – Sustainable Tourism

TF-CSIRT - Task Force - Computer Security Incident Response Teams

TIS - The Tourism International Summit

TUMO – Center for Educational Technologies for Youth

UAS - Unmanned Aerial Systems

UAV – Unmanned Aerial Vehicles

UMIP – Union of Mining Industry Producers

UN - United Nations

UNESCO - United Nations Educational, Scientific and Cultural Organization

UNFC – United Nations Framework for Classification of Resources

VET - Vocational Education and Training

VPP – Virtual Power Plant

VR - Virtual Reality

WB – Western Balkans