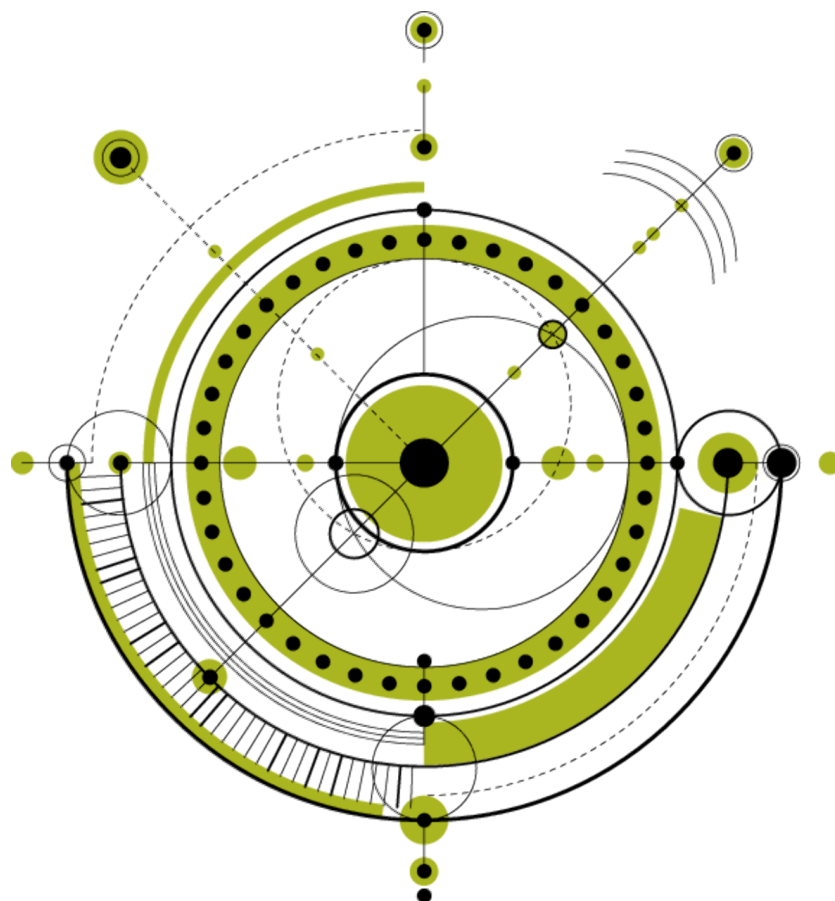




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TSIC-RoC-19008- Industrial Ecosystems - Supporting the implementation of the Greek National Industrial Strategy

Deliverable 8: Final Report

Prepared by Deloitte

TSIC-RoC-19008

Deliverable 8: Final Report

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This Report has been drafted by Deloitte Business Solutions S.A. (hereafter referred to as the Consultant or Deloitte). This Report was based on information and analysis of published data and other sources referred herein. Deloitte expresses no opinion or provide any other form of assurance regarding the accuracy and completeness of the data, or other information, assumptions or opinions contained herein and does not assume any responsibility or liability of any kind with respect thereto. The Consultant considered the information provided as accurate and carries no responsibility for any assumptions or estimates provided herein.

Executive summary

This project was designed to provide targeted technical support to the General Secretariat for Industry / Ministry of Development in advancing the implementation of Greece's National Industrial Strategy (NIS). It addressed three interlinked priorities that are critical for strengthening the competitiveness, resilience, and sustainability of the country's industrial base, as identified in the NIS:

1. Reinforcing key industrial ecosystems (with a focus on the food, health, and structural materials sectors)
2. Modernising the intellectual and industrial property (IP) framework
3. Designing a national skills strategy for the evolving industrial workforce

In a context of accelerating green and digital transitions, the project aimed to equip national authorities with the strategic and operational tools needed to adapt industrial policy to emerging challenges and to enhance long-term value creation, along the three afore-mentioned pillars.

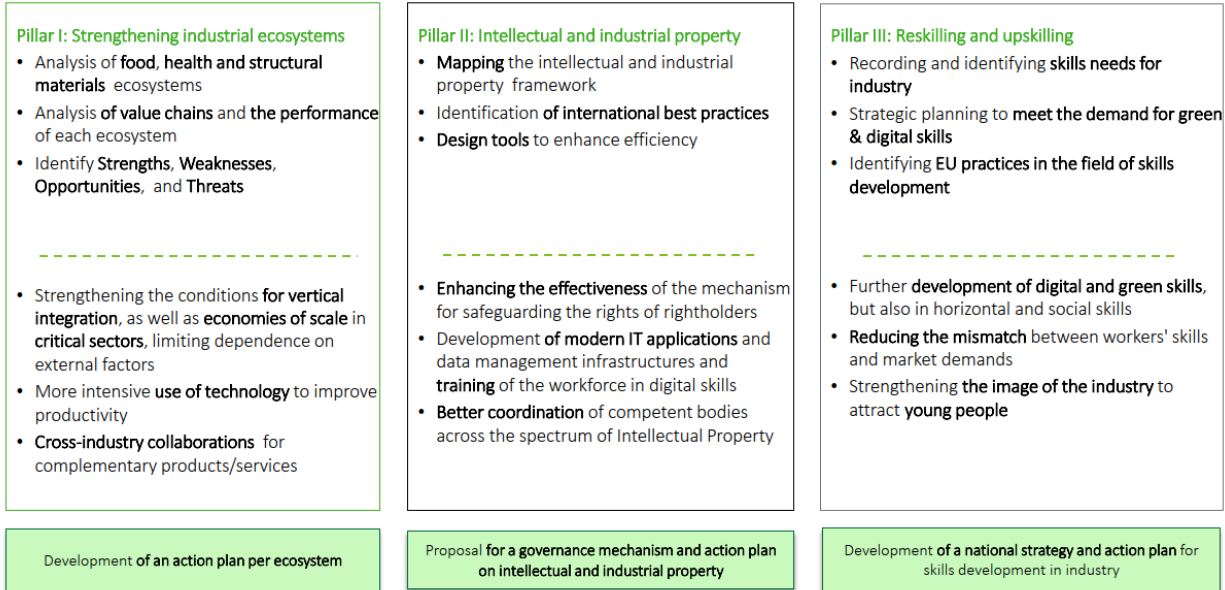
The project's implementation was structured around eight targeted deliverables, each addressing a critical component of the policy agenda: following the inception phase, an analytical mapping of the three key industrial ecosystems took place, leading to the development of sectoral draft action plans. In the second pillar on IP, following an analysis of the current framework, a comprehensive reform for the intellectual property framework has been proposed, as well as a governance mechanism to support effective implementation. Regarding the third pillar, the project delivered in-depth assessments of workforce training needs and formulated a national strategy for skills development tailored to the evolving demands of the industrial sector. The final report and concluding event consolidated these outputs, providing a practical roadmap for advancing Greece's industrial transformation in the identified areas.

The project ultimately contributed to building a more coherent foundation for industrial policy in Greece and created tangible momentum for future reforms. The results of this project include the development of key policy tools to enable the implementation of Greece's National Industrial Strategy. The main outcomes include:

1. Draft action plans for each of the 3 selected industrial ecosystems (food, materials, health), tailoring the NIS to sector-specific needs
2. A proposed governance mechanism and draft action plan for the national system of intellectual and industrial property (IIP)
3. A draft national strategy and action plan to align workforce skills and competences with current and future industrial sector needs

Project outputs and key directions are schematically summarized in the graph below.

Project overview | Project outputs and key directions



1. Outline of the context of the project

The European Commission, through the Technical Support Instrument (TSI), has committed to aiding Greece in the development and execution of its National Industrial Strategy (NIS). This support is crucial given the challenges posed by recent global crises, including the financial downturn, the COVID-19 pandemic, and geopolitical tensions such as the war in Ukraine. These events have exposed vulnerabilities within the Single Market, necessitating a robust response to ensure the resilience and competitiveness of EU industries.

The project “Industrial Ecosystems - Supporting the Implementation of the Greek National Industrial Strategy” is a follow-up initiative that aims to strengthen Greece’s industrial sector by providing technical support in areas identified during the development of the NIS, in the framework of former TSI project.

The primary goal of this project is to facilitate structural reforms that enhance Greece’s industrial capabilities, thereby contributing to a competitive and sustainable economy. Specific objectives include strengthening industrial ecosystems, improving intellectual and industrial property frameworks, and advancing workforce skills for the green and digital transitions.

The key areas of focus of this technical support project were:

- **Strengthening Industrial Ecosystems:** The project identifies three priority sectors, food, structural materials, and health (including biotechnology and biopharmaceuticals), which collectively represent over half of Greece’s industrial output. These sectors are pivotal for economic growth, attracting significant investments and fostering innovation.
- **Intellectual and Industrial Property (IP):** The project seeks to streamline Greece’s complex IP framework, promoting innovation and aligning with EU standards. This involves creating a national platform for patent consolidation, which is essential for research and development.

- **Upskilling and Reskilling:** Addressing skill shortages is critical for the dual green and digital transitions. The project aims to enhance vocational education and training, ensuring the workforce is equipped with necessary competencies.

By focusing on these strategic areas, the project seeks to strengthen the role of Greece's industrial sector in enhancing economic resilience and fostering innovation, thereby supporting its ability to respond to future challenges and contribute to the EU's overarching objectives of sustainability and competitiveness.

The project is structured in three pillars to achieve respective primary outcomes that are pivotal for the transformation and modernisation of Greece's industrial sector.

Pillar / Outcome 1 focuses on the adoption of at least three sectoral draft action plans tailored to the guidelines of the National Industrial Strategy (NIS) for the food, structural materials, and health sectors.

Pillar / Outcome 2 involves the establishment of a governance mechanism and an draft action plan for the national system of Intellectual and Industrial Property (IP), aiming to streamline and harmonise the IP framework with EU standards.

Pillar / Outcome 3 targets the development of a draft national strategy and action plan to facilitate the upskilling and reskilling of the workforce, ensuring that industry-related skills and competencies are developed in a coordinated and homogenous manner.

These outcomes are designed to contribute to the long-term goals of boosting competitiveness and strategic autonomy of the Greek industry, supporting growth and innovation and enhancing vocational education and training.

2. Brief presentation of the beneficiary authorities

The main beneficiary of this project is the **Ministry of Development and Investments of Greece** and more specifically the **General Secretariat for Industry**, which also acted as the principal and coordinating competent authority. The Ministry of Development is responsible for formulating and implementing Greece's economic and industrial policy, with a focus on enhancing competitiveness, attracting investment, and supporting sustainable growth. Its core activities include fostering industrial development, promoting R&D and innovation, coordinating strategic investments and managing public funding instruments to drive the green and digital transition. The General Secretariat of Industry is responsible for the restructuring, growth and diversification of Greece's productive base in manufacturing and related services. Its mission includes fostering a business-friendly regulatory environment, supporting SMEs and promoting industrial competitiveness, employment, sustainability and environmental protection.

Some of the most important additional beneficiaries of this project with regard to each of the three pillars include:

Pillar 1:

- The **Ministry of Health** – which is responsible for the planning and implementation of public health policy, the organization of healthcare services and also oversees the regulatory framework the development of the domestic health-related manufacturing sector.
- The **Ministry of Agriculture (Rural Development) and Food** – which is responsible for shaping and implementing agricultural and rural policy in Greece, with a focus on sustainability, food security, and the competitiveness of the agri-food sector, supporting rural development, promoting innovation and sustainable use of natural resources.

Pillar 2:

- The **Hellenic Industrial Property Organisation (OBI)** – which is Greece’s legally mandated authority for the protection of inventions, industrial designs, and trademarks. It administers the national patent and design registers, provides technological information and patent database services, and supports innovation through regional offices and professional training, reinforcing Greece’s IP framework and enhancing industry competitiveness.
- **The Hellenic Intellectual Property Organization (OPI)** – which is a legal entity with a core mandate to protect authors and holders of related rights, oversee the implementation of copyright legislation, supervise collective management organizations and support legislative work in the field of intellectual property.
- The **Hellenic Accreditation System (ESYD)** – which is the national body responsible for accrediting laboratories, certification and inspection bodies in Greece, ensuring compliance with European and international standards and supporting quality and competitiveness across key sectors
- The **Hellenic Organisation for Standardisation (ELOT)** – which is the country’s national standards body, tasked with developing, approving and disseminating national standards and is supporting industry ensuring quality, safety, compliance with EU regulations promoting innovation and competitiveness through alignment with international standardization frameworks.

Pillar 3:

- The **Ministry of Labour and Social Affairs - General Secretariat for Employment** – which is responsible for employment policy, labour relations, social security and workplace health and safety in Greece. It designs and implements measures to support job creation, workforce skills and social inclusion. The General Secretariat for Employment focuses on promoting active labour market policies and improving access to employment, aiming to enhance skills development suitable for the needs of the labour market.
- The **Ministry of Education, Religious Affairs and Sports - General Secretariat for Vocational Education, Training, Lifelong Learning and Youth** – which oversees national policy in education, research and lifelong learning, supporting skills development and social cohesion. The General Secretariat for Vocational Education, Training, Lifelong Learning and Youth promotes VET and lifelong learning to better align education with labour market needs.
- **The Public Employment Service (DYPA)** – which is Greece’s national agency for employment, offering job placement, vocational training, and unemployment support. It also manages vocational schools and implements active labour market policies to strengthen workforce inclusion and skills development.

During the project, a wide range of stakeholders were contacted, including the afore mentioned additional beneficiaries, to gain a deeper understanding of their needs and ensure that these were effectively addressed through targeted and practical solutions.

3. Description of what needs were addressed

The project "TSIC-RoC-19008 - Industrial Ecosystems - Supporting the Implementation of the Greek National Industrial Strategy" identified and addressed critical needs within Greece's Industrial Sector, through the respective deliverables. These needs are presented hereafter separately for each pillar.

3.1 Pillar I

The project specifically addressed the need to strengthen three critical industrial ecosystems in Greece: food, health and structural materials. These sectors were chosen due to their significant contribution to Greece's industrial output and their potential for driving economic growth and innovation. The focus was on enhancing resilience, competitiveness, and sustainability within these ecosystems, aligning with the strategic directions of the National Industrial Strategy (NIS).

Food Ecosystem: The food sector is vital to Greece's economy, leveraging the country's agricultural strengths and expertise in food production. However, the sector faces challenges such as supply chain disruptions, energy crises and the need for technological advancements. The project aimed to strengthen the food ecosystem by proposing measures improving supply chain resilience, fostering innovation in food manufacturing and promoting sustainable practices. Addressing these needs involved enhancing product quality, supporting research and development initiatives and facilitating access to new markets, thereby ensuring the sector's long-term viability and competitiveness.

Health Ecosystem: The health sector, including biotechnology and biopharmaceuticals, is crucial for Greece's industrial advancement. The project focused on overcoming regulatory barriers, closing innovation gaps and strengthening supply chain resilience. The health ecosystem requires streamlined regulatory processes to facilitate innovation, collaborative research efforts to drive technological advancements and robust crisis preparedness strategies to ensure the availability of essential medicines during emergencies. By addressing these needs through the proposal of adequate measures, the project aimed to enhance the sector's capacity to innovate, adapt and contribute significantly to Greece's industrial growth.

Structural Materials Ecosystem: The structural materials sector is foundational to various industries, including construction, energy production, etc. The project identified the need to address challenges related to the cost and availability of sustainable materials, as well as the necessity for innovation in materials science. Enhancing this ecosystem involved measures for promoting research and development in sustainable materials, fostering partnerships between industry stakeholders and research institutions and advancing environmentally friendly manufacturing practices. By addressing these needs, the project sought to ensure the sector's competitiveness and sustainability, positioning it as a key driver of economic growth.

Cross-Ecosystem Needs: Across all three ecosystems, there was a common need to embrace innovation, facilitate the green and digital transitions, enhance the overall business environment and bridge identified skill-gaps of the workforce. The project aimed to address these cross-cutting needs by promoting strategic alliances, supporting technological diffusion and encouraging the adoption of sustainable practices. These efforts were designed to create a more resilient and competitive industrial sector, capable of adapting to future challenges and contributing to Greece's economic prosperity.

3.2 Pillar II

Pillar II focused on addressing the necessity for the simplification of the intellectual property framework in Greece aiming to render it easily accessible to the IP rights holders, with particular focus on the entrepreneurial community and the SMEs. Furthermore, the need to raise awareness regarding the essential importance of the IP rights protection was also fundamental in achieving the objective of enhancing business innovation.

IP rights protection plays a pivotal role, functioning as a catalyst for economic growth, innovation, and the bolstering of entrepreneurial competitiveness. It is important that the Greek rights holders comprehend

the financial value of their IP rights as business assets and therefore that they affirm the shielding of their inventive ideas from unauthorized use.

This Pillar's main outcome was the adoption of a governance mechanism and an action plan for the national system of Intellectual and Industrial Property. Through the process of the elaboration of the requested deliverables, the scientific experts underlined that the necessity for eliminating the administrative and legislative fragmentation of the Greek IP competent authorities was very demanding.

Administrative and legislative fragmentation lead consistently to data fragmentation and inefficiencies in IP registration and examination processes. Lack of coordination between the competent IP Authorities leads to duplication of efforts, inconsistencies in processes, and difficulties in accessing centralized information. This fragmentation does hinder the overall effectiveness of the Greek IP ecosystem, making it challenging for entrepreneurs, SMEs and innovators to navigate the system smoothly and obtain timely protection for their IP assets.

Furthermore, the vast number of laws, by-laws and regulations on IP create a complicated, conflicting and sometimes inconsistent framework in the Greek juristition. This results in providing grave difficulties to the IP rights holders in awareness and comprehension. It is important that the legislation is simplified and in the parallel it is important that the informational and educative initiatives are systematically organized to support the interested parties.

Moreover, the need to address the shortage of staff capacities was also imperative since it constitutes a grave factor that causes delays in IP registration, insufficient examination of IP applications and it also compromises quality. The competent authorities face capacity issues due to a shortage of trained examiners and employees.

The final outcome of Pillar II provided an draft action plan with suggestions on concrete initiatives and actions, the proposal on an effective governance mechanism for this draft action plan, the proposal for the restructuring and reformulation of the National Council of Industrial Property, and the provision of technical specifications for the development of an informational platform on the whole wider IP spectrum in Greece. All the above outputs were concisely targeted to respond to the current needs of the Greek state of play in the IP domain taking into consideration mainly the facilitation of the entrepreneurial community (SMEs).

3.3 Pillar III

The third pillar focuses on skill development to support the National Industrial Strategy. Deliverables 6 and 7 work in tandem to provide a comprehensive strategy for enhancing the skills and competencies of the workforce, ensuring alignment with national objectives for industry growth and competitiveness.

Deliverable 6 begins with a thorough mapping of the current state of skills in the industrial sector, identifying existing gaps and barriers. The report highlights several key needs and challenges:

- **Skills mismatch:** There is a significant mismatch in skills, both vertical (over-specialisation or under-education) and horizontal (alignment between field of study and job position), negatively impacting productivity and employment. Additionally, traditional skill education seems to not meet the demands for new technologies (e.g., automation).
- **Brain Drain:** The migration of skilled personnel, especially young professionals, to other EU markets due to high STEM graduate production from Greek universities and low domestic absorption rates and high unemployment.
- **Lack of Digital Skills:** The deficiency in digital skills hinders the digital transformation of the country, with manufacturing businesses offering limited training for digital skill enhancement.

- Low attractiveness of Vocational Education and Training (VET): Despite increased participation in apprenticeship programmes, there is variability in the quality and relevance of educational programmes, with a high percentage of inactive youth among graduates.
- Lack of innovation – Research and Development: Limited emphasis on innovation and R&D, with inadequate protection of intellectual property rights and a need for greater flexibility in labour markets.
- Cultural Perceptions: People’s perception about the Industrial Sector seem to be outdated. This - in combination with the perception that industrial jobs are less desirable affects the recruitment of talented individuals.
- Disruptions in Value Chains: Global disruptions in value chains necessitate strategies for resilience, such as high value-added product production and supply chain management skill development.

Deliverable 6 also maps the current state of vocational education and training, and the key challenges and needs that need to be addressed. There is a reported decline and ageing of the population, with a large number of small and medium-sized enterprises. Most job positions require mid-level qualifications. Greece performs poorly on the European Skills Index (ESI), particularly in skill matching. There is a need for skills supporting the green and digital transition.

In addition, Deliverable 6 and 7 also identify systemic issues within the governance ecosystem:

- Complex and Time-consuming Processes: The diagnosis and fulfilment of labour market skill needs are hindered by slow collaboration between stakeholders and businesses.
- Inadequate Communication Channels and Overlapping Responsibilities: Lack of coordination between ministries delays responses and solutions to industry needs.
- Fragmented Approach: The lack of collaboration complicates the connection between education and industrial needs.
- Incomplete Skill Ecosystem Governance: In Greece there is not a unified coordination, such as a committee, targeting the development and amelioration of skills in the Industrial Sector.
- Fragmented communication in the accreditation and certification processes: The absence of a unified training and certification system impedes immediate responses to industry needs.
- Need for Unified Responsibilities: Strengthening collaboration between the public and private sectors will improve competitiveness.

Deliverable 7 builds on the insights from Deliverable 6, proposing a strategic draft action plan to develop the skills of the workforce in the Industrial Sector. It outlines targeted upskilling and reskilling initiatives, emphasising lifelong learning and vocational education. The strategic draft action plan is organized into three (3) levels: strategic pillars, strategic goals, and actions, forming the foundation of the plan and guiding its architecture. Section 5 “Key deliverables and activities that were undertaken” provides a closer insight on the strategic draft action plan.

4. Methodology and approach used to produce the final deliverables

4.1 Pillar I

The analysis and outcomes of Pillar I are presented in Deliverables 2 and 3, following a comprehensive, multi-step methodology structured around the three identified key industrial ecosystems: food, health/pharmaceuticals and construction materials. Deliverable 2 focuses on three core analytical phases i) a value chain mapping, ii) a multidimensional assessment of the current situation and iii) ecosystem-level

SWOT analysis, aimed at capturing each ecosystem's structure, dynamics and development challenges. These formed the basis for the strategic directions and support measures developed in Deliverable 3.

The methodology and approach used for Deliverable 2 was:

1. Value Chain Analysis

This phase involves mapping the value chain of each ecosystem, including:

- Recording the ecosystem's value chain components
- Analysing macroeconomic data relevant to the ecosystem
- Visualising and analysing the key elements within each sector of the ecosystem

2. Analysis of the Current Situation

A detailed, multi-dimensional analysis is conducted, focusing on:

- Internal and external factors, including regulatory, institutional and framework conditions
- Performance metrics such as investments, exports, productivity, demand, R&D, innovation, digital and green maturity and resilience, including benchmarking against international trends
- Cross-sectoral synergies within the value chain

3. Ecosystem SWOT Analysis

- Identification of intervention points (issue resolution and development)
- Identification of key support directions and actions

The methodology and approach used for Deliverable 3 was:

Development of Draft action plans for the three ecosystems

Building on the findings of the value chain mapping, current state assessment and SWOT analysis, Deliverable 3 focused on identifying key strategic directions and concrete support measures for each ecosystem. This process involved aligning ecosystem-specific needs with the Greek National Industry strategic priorities, such as competitiveness, innovation, digital and green transition and business environment improvement. Tailored draft action plans were developed through a combination of desk research, stakeholder input and cross-sectoral analysis, aiming to enhance the resilience and long-term viability of each ecosystem, while also addressing horizontal challenges and opportunities. The proposed measures have been discussed with the market stakeholders (SEV, sectoral associations and firms), while the consultation results were adequately incorporated in the respective draft action plans.

4.2 Pillar II

Deliverable 4 requested the provision of a proposed Draft action plan for the unification and simplification of the national regulatory framework for the protection of Intellectual Property Rights, in line with the European legislation. For that purpose, a methodological structure of actions was followed. More specifically, there was an extensive mapping of the current institutional and legislative European, national and international framework, while there was thorough research and a list of international and European initiatives to raise awareness on IPR issues, with an emphasis on the protection of rights and their exploitation by the SMEs.

The development process of the deliverable then continued to the stage of consultations with the relevant public authorities and institutions, in order to analyze the recommendations and data received for the preparation of this Draft action plan. All the participating bodies in the stage of the consultation received targeted questionnaires that were assessed by the scientific team, in order to assimilate the inputs in a suitable manner in the draft action plan. At this stage, the bodies involved were the following: the Hellenic Copyright Organization, the PDO-PGI-GTSP Department of the Ministry of Rural Development and Food, the Directorate of Phytogenetic Resources of the Ministry of Agriculture, Rural Development and Food, the

Interagency for Market Control, the Small Enterprises' Institute of GSEVEE, the National Accreditation System and the Hellenic Industrial Property Organization.

Following the findings of the research and for dissemination purposes a webinar was carried out with the participation of a Senior IP Expert from WIPO. The webinar was addressed to the officers of the stakeholders that participated in the consultations and it provided information on the Identification of international good practices in IP. The assessment of the above extensive research and relevant consultations led to the development of an Draft action plan which includes a variety of interventions, divided into six (6) initiatives and nineteen (19) actions.

Deliverable 5 requested the provision for a proposal regarding a governance mechanism and related tools for the effective design and implementation of industrial and intellectual property (IP) policies. For that purpose the scientific team conducted a wide research at EU level to identify the organizational practices that are followed by other national EU IP offices. IP offices are instrumental in shaping policy and providing policy makers with valuable data and information on innovation trends, emerging technologies and sectors of the national economy that rely heavily on IP, which can influence the direction of government strategies and policies. The next step of the research was focused on the established EU coordination mechanisms to support the IP rights commercial exploitation. These mechanisms aim to help innovative companies and research institutions to effectively exploit IP rights to create commercial value. Based on the outcome of that extensive research, the scientific team then proceeded with extensive consultations with the Beneficiary authority in order to receive necessary feedback on the current state of the operationalization of the National Council for Industrial Property and on the needs that must be addressed to ensure its efficiency. Following the conclusion of the above steps, the scientific team proceeded with issuing a set of proposals regarding the establishment of an effective supervisory mechanism for the implementation of the Draft action plan (Del. 4), for the transformation of the National Council for Industrial Property to the National Council for Entrepreneurship and Innovation (NCEI) focusing on entrepreneurship, innovation and IP commercialization.

4.3 Pillar III

The methodology employed for the third pillar was comprehensive and multifaceted, ensuring a thorough analysis and reliable conclusions. The approach combined desk research, legislative review, stakeholder consultations, and best practice analysis to address the critical needs of skill development within Greece's Industrial Sector.

Initially, the Project Team conducted an in-depth analysis of the existing legislative and regulatory framework surrounding skills coordination, management and development in Greece. This involved examining laws and regulations that govern vocational education, skill upgrading, training, and certification, including Law 4763/2020, Law 5082/2024, Law 4921/2022, and Law 4115/2013. Additionally, the team reviewed critical national strategies related to knowledge and skill enhancement, vocational education, lifelong learning, and industrial development, such as the National Strategy for Industry, the Strategic Plan for Vocational Education, Training, Lifelong Learning, and Youth, the Digital Transformation Bible 2020-2025, and the Strategy for Workforce Upgrading and Connection with the Labour Market.

To ensure the methodology was robust and comprehensive, the Project Team examined best practices in for the aforementioned issues from both Greece and other EU countries. This included, among others, studying vocational education and training programmes in Sweden, Germany, the Netherlands, and Italy. In terms of skills governance, the team investigated the roles of France Compétences in France and the National Agency for Qualification and Vocational Education (ANQEP) in Portugal.

A critical component of the methodology was engaging with key stakeholders to clarify gaps and challenges faced by the Industrial Sector in terms of skills. The Project Team conducted interviews with the General Secretariat for Industry (GGB) of the Ministry of Development, the Hellenic Federation of Enterprises (SEV), and the Ministry of Education, Religious Affairs, and Sports through the General Secretariat for Vocational Education, Training, and Lifelong Learning. These interviews provided valuable insights into the current state of skills and the specific needs of the Industrial Sector.

The Project Team carried out thorough desk research to study reported skills gaps and relevant trends within the Industrial Sector. This review included perspectives from all key stakeholders, incorporating policy papers related to skills and employment from the three (3) involved ministries (Ministry of Labour, Ministry of Education, Ministry of Development). Additionally, the team reviewed surveys and papers issued in recent years by employment-related organisations, such as CEDEFOP, the Labor Market Diagnosis Needs Mechanism, the Hellenic Federation for Enterprises, the Statistics Office (ELSTAT), the Greek employment Office (DYPA), the National Revenue Office (AADE), Eurostat, and ESCO.

Throughout the project, continuous consultations with stakeholders were conducted to gather feedback and ensure the studies were progressing in alignment with the needs of the Industrial Sector. This iterative process allowed for adjustments and refinements to the methodology, ensuring the final deliverables were comprehensive and actionable.

To conclude, the methodology for Deliverables 6 and 7 was designed to provide a holistic understanding of the current landscape of skills within Greece's Industrial Sector and to propose a strategic draft action plan for skill development. By combining legislative review, best practice analysis, stakeholder consultations, and desk research, the Project Team ensured a thorough and reliable approach to addressing the critical needs of the sector. This comprehensive methodology laid the foundation for developing targeted initiatives to enhance workforce capabilities, aligning with national objectives for industry growth and competitiveness.

5. Key deliverables and activities that were undertaken

5.1 Pillar I

Under Pillar I, the project delivered a comprehensive analytical and strategic planning framework aimed at strengthening three priority industrial ecosystems: food, health, and structural materials. This effort was structured through two major deliverables, Deliverable 2 and Deliverable 3, which served distinct yet interlinked purposes.

Deliverable 2 provided a robust evidence base through a structured three-phase analysis. First, detailed value chain mappings were developed for each ecosystem, identifying the core components, interdependencies and sectoral linkages that define each value chain. This included primary production, intermediate processing, final goods manufacturing, logistics and distribution. Macroeconomic indicators were compiled to offer quantitative context, including turnover, employment, export performance and investment levels.

Second, the deliverable conducted an in-depth assessment of the current situation for each ecosystem. This multidimensional analysis covered a wide range of performance areas including R&D activity, innovation capacity, productivity, sustainability, resilience, and the external regulatory environment. International benchmarking and analysis of global trends provided critical insights into how each Greek ecosystem aligns with or diverges from broader EU or global patterns.

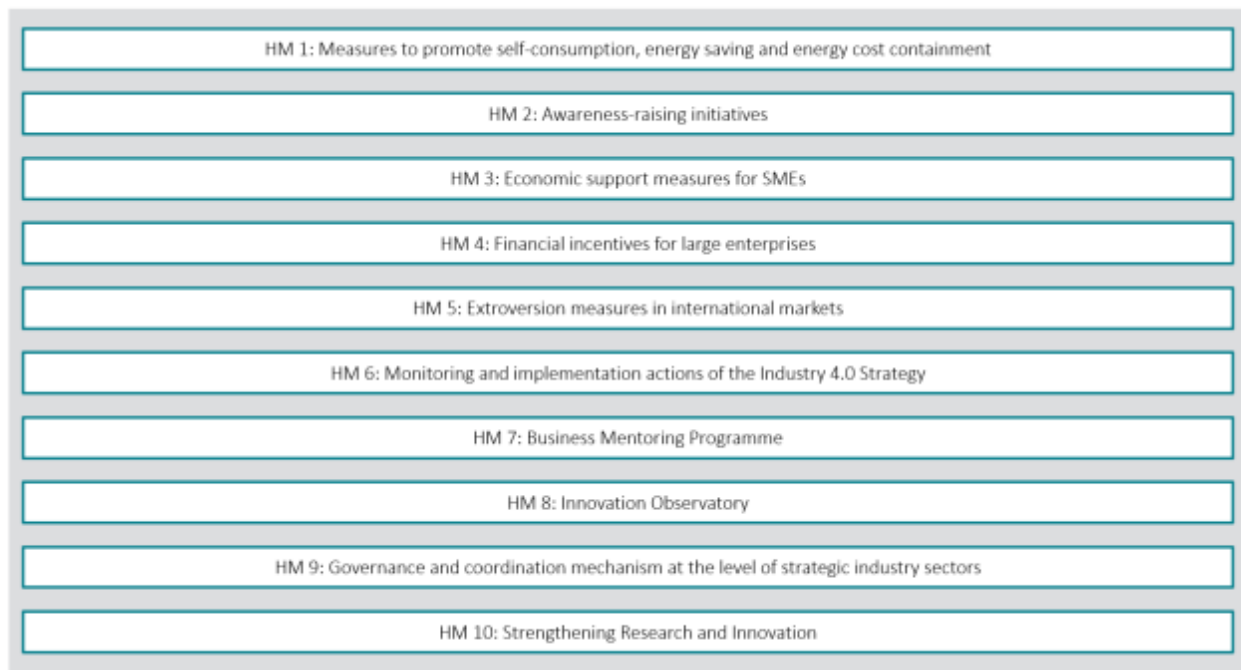
Third, a SWOT analysis was completed for each ecosystem, identifying core strengths and structural limitations, as well as emerging opportunities and external threats. This served as a strategic diagnostic tool, helping to prioritize policy directions and set the foundation for targeted interventions.

Deliverable 3 translated the analytical insights from deliverable 2 into tailored draft action plans for each of the three ecosystems. The plans were structured around specific intervention areas aligned with the National Industrial Strategy (NIS), focusing on competitiveness enhancement, innovation support, digital and green transformation, and business environment improvement. Each draft action plan outlines concrete policy measures, timelines, and anticipated outcomes, ensuring that implementation is both actionable and aligned with national priorities.

The deliverable also proposed horizontal measures applicable across all ecosystems, such as promoting energy efficiency, expanding access to financial support, improving international market positioning, and fostering cross-sectoral innovation through governance tools like innovation observatories and business mentoring schemes.

Following is the list of horizontal and ecosystem-specific measures proposed in Deliverable 3.

Horizontal measures



HM 1: Measures to promote self-consumption, energy saving and energy cost containment
HM 2: Awareness-raising initiatives
HM 3: Economic support measures for SMEs
HM 4: Financial incentives for large enterprises
HM 5: Extroversion measures in international markets
HM 6: Monitoring and implementation actions of the Industry 4.0 Strategy
HM 7: Business Mentoring Programme
HM 8: Innovation Observatory
HM 9: Governance and coordination mechanism at the level of strategic industry sectors
HM 10: Strengthening Research and Innovation

Figure 1: List of Horizontal measures proposed in Deliverable 3

Food Ecosystem measures

Strategic Direction: Resilience
FE 1: Establish partnerships for bulk imports of raw materials for more favourable trade terms
Strategic Direction: Increasing Competitiveness
FE 2: Measures to promote linkages with the health ecosystem
FE 3: Further strengthen synergies with the tourism sector by promoting the production of high value organic products
FE 4: Creation of a cooperative innovation network (CoIN) for local agro-processing/cooperative network
Strategic Direction: business environment
FE 5: Maintain and extend incentives for long-term contracts between farmers and buyers
Strategic Direction: Innovation
FE 6: Biotechnology Accelerator Programme to promote growth and innovation in the biotechnology sector
FE 7: Establishment of a Biotechnology Innovation Fund
Strategic Direction: green transformation
FE 8: Improving Waste Infrastructure and Implementing Ecosystem Circular Economy Actions
FE 9: Designing incentives to improve the waste collection and transport value chain in biogas plants
FE 10: Designing incentives to promote carbon farming, regenerative agriculture, urban agriculture and the use of organic or environmentally friendly pesticides
Strategic Direction: digital transformation
FE 11: Developing Supply Chain Capabilities for Traceability and ESG Indicators through AI and IoT

Figure 2: List of Food Ecosystem measures proposed in Deliverable 3

Health Ecosystem measures

Strategic Direction: Resilience
HE 1: Preparation of a National Strategic Plan for the development of domestic production for Active Pharmaceutical Ingredients
HE 2: Establishment of a 3PL Development Framework in the Pharmaceutical Value Chain
HE 3: Active participation in the drafting of the EU Critical Medicine Act
HE 4: Interministerial Pharmaceutical Demand Forecasting and Supply Management Mechanism
Strategic Direction: Increasing Competitiveness
HE 5: Extending & specifying investment clawback
HE 6: Establishment of a Centre of Excellence for Quality of Production, Biotechnology and Sustainability
Strategic Direction: business environment
HE 7: Creating a National Health Data Space
HE 8: Study for simplification and improvement of HTA (Health Technology Assessment) procedures
HE 9: Streamlining and accelerating access to biotechnology products
Strategic Direction: Innovation
HE 10: Establishment of a pilot regulatory framework for re-purposing of medicines
HE 11: Creating a Health Data Lab for Precision Medicine Applications
Strategic Direction: green transformation
HE 12: Implementation of the European ePI Directive
HE 13: Establishment of Green Clawback Offset

Figure 3: List of Health Ecosystem measures proposed in Deliverable 3

Structural Materials Ecosystem

Strategic Direction: Resilience
SM 1: Implementation of actions and monitoring of the Critical Raw Materials Act
SM 2: Establish a programme/action plan to optimise the domestic supply chain
Strategic Direction: Increasing Competitiveness
SM 3: Implementation and monitoring of the Net Zero Industry Act
Strategic Direction: business environment
<i>The Strategic Direction is addressed through Horizontal Measures</i>
Strategic Direction: Innovation
<i>The Strategic Direction is addressed through Horizontal Measures</i>
Strategic Direction: green transformation
SM 4: Establishing Sustainable Production and Packaging Standards: measures, certifications and other arrangements
SM 5: Targeting carbon emissions from energy-intensive industries and identifying the green transition investment and financing gap
Strategic Direction: digital transformation
<i>The Strategic Direction is addressed through Horizontal Measures</i>

Figure 4: List of Structural Materials Ecosystem measures proposed in Deliverable 3

The development of these deliverables was based on desk research, analysis of macroeconomic and sectoral data and iterative refinement of proposed measures to ensure alignment with broader industrial policy goals. Valuable feedback was gained through individual discussions with relevant stakeholders for each ecosystem. At the end of the process, the proposed action plans were presented and discussed in the context of three separate dedicated workshop with market actors (companies included in the ecosystems and relevant associations), which took place on 10/12 (food ecosystem) and 20/12 (structural materials ecosystem & pharma ecosystem), as foreseen in Deliverable 3. Moreover, the relevant communication material for these three workshops is attached to this report.

These draft action plans and related finding were further presented and disseminated to a wider audience, in the framework of the final event of 17 July 2025, under Deliverable 8.

Together, these outputs provide a structured analysis and strategic framework to support the long-term development of Greece’s industrial base.

5.2 Pillar II

For Deliverable 4, there was an extensive mapping of the current institutional and legislative EU, national and international framework, while there was thorough research and a list of international and EU initiatives to raise awareness on IP issues, with an emphasis on the protection of rights and their exploitation by the SMEs.

The development process of the deliverable then continued to the stage of consultation with the relevant Public Authorities, institutions and competent stakeholders. All the participating bodies in the stage of the consultation received targeted questionnaires that were assessed by the scientific team in order to assimilate the inputs in a suitable manner in the draft action plan. At this stage, the bodies involved were the following: the Hellenic Copyright Organization, the PDO-PGI-GTSP Department of the Ministry of Rural Development and Food, the Directorate of Phytogenetic Resources of the Ministry of Agriculture, Rural

Development and Food, the Interagency for Market Control, the Small Enterprises' Institute of GSEVEE, the National Accreditation System and the Hellenic Industrial Property Organization.

Following all the above steps, the required **Draft action plan** was delivered including a variety of interventions, which are divided into **six (6) initiatives** and **nineteen (19) actions**.

❖ Initiative 1

The proposed actions under this initiative can be summarized as follows:

- ⇒ **Joining the International Union for the Protection of New Varieties of Plants (UPOV)**
- ⇒ **Implementation of the new provisions of the EU acquis in various areas of IPR.**
 - a) Ratification of the Agreement on the Establishment of a Unitary Patent Court
 - b) Establishing measures for the implementation of the Unitary Patent (based on the EPO Guide)
 - c) Incorporation of Directive 2024/2823 on the legal protection of designs and models and d) Completion of the preparation for the implementation of Regulation 2024/2822 regarding the amendment of Regulation (EC) No. 6/2002 of the Council on Community designs and models and the repeal of Regulation (EC) No 2246/2002 of the Commission as of May 1st, 2025, e) Completion of the preparation for the full implementation of the system provided for by the new Regulation (EU) 2023/2411 of the European Parliament and of the Council of 18 October 2023 on the protection of geographical indications for craft and industrial products and amending Regulations (EU) 2017/1001 and (EU) 2019/1753 on geographical indications and industrial products on December 1st, 2025.
- ⇒ Activation of the national system for the protection of plant varieties, accompanied by the development of a national strategy for the protection of plant varieties.
- ⇒ Development of a national strategy for the protection of genetic resources, folk knowledge and expressions of folk traditions and creation of national databases and a code of conduct for the use of genetic resources.
- ⇒ Development of a national strategy to strengthen the semiconductor ecosystem, as well as the semiconductor product topographies.
- ⇒ Special training seminars for Judges on Patent issues, with an emphasis on the area of medicines and Creation of special Patent departments, including special departments for medicines.

❖ Initiative 2

The proposed actions under this initiative can be summarized as follows:

- ⇒ Creation of a comprehensive guide for the business sector with practical guidance on file submission and applying for Industrial Property entitlement.
- ⇒ Shortening the pendency period for the examination of IPRs registered in the Register, by solving the problem of understaffing of the competent offices and by using AI tools.

❖ Initiative 3

The proposed actions under this initiative can be summarized as follows:

- ⇒ Establishment of a Valuation Service for IPRs, aiming to make businesses aware of their value as a financial asset.
- ⇒ A financial support system, through the extension of existing tax incentives and IP voucher subsidies for SMEs to finance IPR registration and provision of strategic advice on IP matters (including plant varieties and GI).
- ⇒ Establishment of IP Information Centers, exclusively addressed to SMEs, with the possibility of live meetings and discussions, as well as online appointments.
- ⇒ Training on IP issues adapted to the needs of SMEs (seminars with the possibility of hybrid participation) and a mentoring program.

❖ Initiative 4

The proposed action under this activity is the following:

- ⇒ Establishment of a national Mediation and Arbitration Center specifically designed to meet the needs of the parties involved in all types of intellectual property disputes. the Center will be able to resolve disputes concerning trademarks, industrial designs, geographical indications for craft and industrial products, copyrights, domain names, patents or any other IP dispute between the parties

❖ Initiative 5

The proposed actions under this initiative can be summarized as follows:

- ⇒ Development of modern IT applications and data management infrastructures capable of efficiently storing, transmitting and processing large volumes of data held by the competent services relating to IPRs.
- ⇒ Investing in the technical knowledge and digital skills of the relevant workforce through the provision of targeted regular training initiatives.
- ⇒ Development and/or use of AI systems to combat counterfeit and pirated goods and strengthen enforcement measures.

❖ Initiative 6

The proposed actions under this initiative can be summarized as follows:

- ⇒ Staffing OBI's Innovation Support Agency and drafting of a strategic plan for its actions in support of technological innovation. Functioning of the Directorate as a monitoring centre for the implementation of cutting-edge technologies.
- ⇒ Organising IP Rights awareness campaigns and regional IP Fair/Technology Marketplace events either annually or bi-annually.
- ⇒ Availability and accessibility of educational materials, programs and training for innovation and IP.

For Deliverable 5, the following set of proposals was delivered:

- i) the proposal for the establishment of a supervisory mechanism aimed at overseeing the IP Draft action plan prepared under Deliverable 4
- ii) the proposal for the optimization and modernization of the functioning of the National Council Industrial Property (NCIP) through the recommendation of its restructuring and transformation into the National Council for Research and Innovation; and
- iii) the technical specifications for the development of a digital one-stop service for IP as a whole.

For the successful implementation of the Draft action plan developed with the aim of simplifying and unifying the existing national regulatory framework for IP, **it is proposed to establish a supervisory mechanism** that will undertake the control, guidance and coordination of the implementation of the Draft action plan. This mechanism will take the form of a committee composed of representatives of the bodies involved in the Draft action plan and will submit progress reports to the relevant ministers and the heads of the bodies involved regarding the progress and implementation of the Draft action plan.

The Committee will be chaired by the Secretary General for Industry and will be responsible for convening and guiding its work on the implementation of the Draft action plan.

Where appropriate, *ad hoc* members from other bodies or Ministries relevant to the subject matter of the meetings or with responsibility for the implementation of the Draft action plan may be invited.

The Committee's term of office is annual, renewable until the implementation of the Draft action plan is completed. The Committee shall be unpaid, unless specific expenses are incurred for its operation.

Furthermore, taking into account the need to modernize the objective of the National Council for Industrial Property, it is proposed to **transform it into a National Council for Entrepreneurship and Innovation (NCEI)** in the IP sector to promote the effective commercialisation of IPRs and enhance entrepreneurship and innovation. The NCEI will operate under the supervision of the General Secretariat for Industry (Ministry of Development and Investments).

The composition of the NCEI should ensure that the principle of multi-representation is respected, with the participation of representatives of all relevant stakeholders. In particular, the participation of the relevant Secretaries General, as well as the members of the Financial and Economic Crime Unit (SDOE) and the HCO, as provided for under Law No. 4605/2019, but with the addition of new members to the structure of the Council. At the same time, the establishment of working groups is foreseen, which will be responsible for the analysis, dissemination and management of IPRs in specific sectors depending on the areas of entrepreneurship (Environment and Energy, Rural Development, Patents and Trademarks, Creative Technologies, Manufacturing, etc.).

Finally, the creation of a 'comprehensive' one-stop digital service for all fields of Intellectual Property, is an important and essential step to make knowledge in this area more accessible, especially to the Greek business community and Greek citizens, allowing for a broader information for:

- ensuring the protection of rights, and
- assistance in matters relating to violations of these rights.

This service will operate as a model of an Informational website, providing information for the completion of procedures related to the field of Intellectual Property, always aiming at compliance with the relevant regulatory framework.

The afore-mentioned main proposals for the governance mechanism and the related tools, as well as the draft IP action plan were presented and discussed in the framework of a dedicated workshop which took place in 30/5/2025, as foreseen in Deliverable 5. Moreover, the relevant communication material for this workshop is attached to this report.

The draft action plan and related governance mechanism were further presented and disseminated to a wider audience, in the framework of the final event of 17 July 2025, under Deliverable 8.

5.3 Pillar III

The Pillar III is comprised by two (2) critical deliverables that work in tandem to achieve the overarching goals of the pillar. Given the sequential nature of the project's implementation, these deliverables build upon each other to provide a comprehensive draft strategy for enhancing the skills and competencies of the workforce in Greece's Industrial Sector. The two (2) deliverables under Pillar III are:

1. Deliverable 6: "Report on the training and education needs of workers and businesses in the Industrial Sector and identification of barriers"
2. Deliverable 7: "Draft national strategy and action plan to facilitate the development of industry-related skills and competences of the workforce"

These deliverables are designed to complement each other, with Deliverable 6 laying the foundation for the strategic initiatives proposed in Deliverable 7. The journey of these deliverables can be summarised as follows: Deliverable 6 begins with a thorough mapping of the current state of skills in the Industrial Sector, identifying existing gaps and barriers. It then proceeds to forecast future skill needs, giving an emphasis on Twin Transition and considering trends in digital and green transitions. This deliverable also documents the challenges faced in skill development within the Industrial Sector in Greece, providing a detailed analysis of the current vocational education and training programs. Deliverable 7 builds on the insights from Deliverable 6, proposing a strategic draft action plan to develop the skills of the workforce in the Industrial

Sector. It outlines targeted upskilling and reskilling initiatives, emphasising lifelong learning and vocational education. Additionally, it includes recommendations for the governance structure necessary to implement the strategic draft action plan effectively. Together, these deliverables provide a comprehensive roadmap for enhancing the skills and competencies of Greece's industrial workforce, aligning with the National Industrial Strategy and addressing the evolving needs of the sector. They highlight the importance of modern, adaptable skills in driving industrial growth and competitiveness, ensuring that Greece's workforce is well-equipped to meet future challenges and opportunities. In the section below both deliverables will be shortly presented to better understand how they achieve the goal of elevating the skills of the Human Capital of the Industrial Sector.

To begin with, Deliverable 6 is a comprehensive analysis aimed at understanding the current landscape of skills within Greece's Industrial Sector. It serves as a foundational piece for developing strategic initiatives to enhance workforce capabilities, aligning with national objectives for industry growth and competitiveness. The primary goal of Deliverable 6 is to map existing skill gaps among workers in key industrial sector (Food, Health, and Construction materials sectors), document the skills currently offered in the labour market, and summarize the educational and training programs available in Greece that support skill development. This deliverable is integral to the National Industry Strategy, providing insights necessary for crafting policies that address workforce challenges and opportunities.

Deliverable 6 employs a structured two-phase methodology to ensure thorough analysis and reliable conclusions. During Phase One: "Current State Assessment" the legislative and regulatory framework that comprise the Greek ecosystem of skills in the Industrial Sector. This phase involves a detailed examination of the laws and regulations governing vocational education, skill upgrading, training, and certification in Greece (e.g., L. 4763/2020, L. 5082/2024, L. 4921/2022, L. 4115/2013). It highlights the alignment of national frameworks with European standards, ensuring consistency and relevance. For Instance, it examines the National Strategy for Industry, the Strategic Plan for Vocational Education, Training, Lifelong Learning and Youth, the study 'Digital Transformation of the Greek Industry 2021, Report on the Current Situation – Digitalization in Greek Industry and International Trends', the Digital Transformation Bible 2020-2025, as well as the Strategy for Workforce Upgrading and Connection with the Labour Market. In addition, Deliverable 6 identifies current and emerging skill needs, focusing on digital and green skills crucial for modern industry demands. This includes an analysis of existing vocational education and training programs to pinpoint gaps and areas for improvement. During Phase Two: "Desired Skill Levels", the Project Team gathered data on the desired skill levels necessary for industry competitiveness, setting the stage for the proposal of strategic draft action plan in Deliverable 7.

Deliverable 6 offers a detailed exploration of the current skill frameworks within Greece's Industrial Sector, providing a comprehensive mapping that identifies both strengths and weaknesses in existing systems. It forecasts future skill demands, with a particular focus on digital and green sectors, which are crucial for the twin transition towards sustainability and technological advancement. The deliverable scrutinizes existing vocational education and training programs, revealing key deficiencies in integrating modern skills and recommending necessary enhancements. Through thorough research, it documents findings and analyses best practices from European and international contexts, offering valuable insights into effective skill development strategies.

In addition to this broad analysis, Deliverable 6 delves into specific industrial sectors, including Construction Materials, Health, and Food, to understand unique skill requirements and challenges. This sectoral analysis informs targeted strategies for skill development, ensuring that the approaches are both relevant and impactful. The deliverable is strategically important for shaping the National Strategy for Industry and the Workforce Reskilling Strategy. It provides actionable insights that guide policy formulation, focusing on upskilling and reskilling initiatives that emphasize lifelong learning and vocational education.

Ultimately, Deliverable 6 lays the groundwork for Deliverable 7, which proposes a comprehensive draft national strategy and roadmap for skill development. It underscores the need for a modern, innovative workforce equipped with high-quality digital and green skills, essential for Greece's industrial growth and global competitiveness. By addressing existing skill gaps and aligning educational outcomes with market needs, Deliverable 6 sets the stage for transformative change in Greece's workforce development strategy.

With the completion of Deliverable 6, Deliverable 7 took up the baton. Deliverable 7 presents a comprehensive strategic draft action plan aimed at enhancing skill development within the Industrial Sector. This plan is the culmination of findings and recommendations from previous deliverables, structured into a concrete draft strategy and implementation framework. The project began by mapping the current governance scheme for skills in the Industrial Sector, identifying key players involved. Extensive consultations were conducted with stakeholders, including ministries, employment agencies, educational institutions, and other relevant entities, to ensure the plan's alignment with existing frameworks and policies.

The strategic draft action plan is organised into three (3) levels: strategic pillars, strategic goals, and actions, as illustrated in Figure 1. These levels form the foundation of the strategic draft action plan and guide its architecture as follows:

- Strategic Pillars: The plan is built upon three (3) main strategic pillars:
 1. Attracting New Talent: Initiatives to draw more young people into industry-related professions, including after-school programmes.
 2. Enhancing Lifelong Learning and Vocational Education: Establishing an accredited vocational education and training (VET) system aligned with national accreditation and quality standards.
 3. Cultivating Partnerships: Fostering collaboration between public and private sectors, educational institutions, and training organisations.
- Strategic Goals: The goals define the long-term direction of the strategic draft action plan, aligning with the organisation's mission, vision, and values. Each pillar is accompanied by specific goals that direct strategy within each area.
- Actions: Detailed and specific actions are outlined for successful implementation. These include steps to be followed, indicative timelines, necessary resources, success criteria, responsible owners, and potential collaborators.

Proposed Skills Coordination Committee		
STRATEGIC PILLARS		
Strategic Pillar 1: "Attracting young people to the Industrial Sector"	Strategic Pillar 2: "Strengthening Lifelong Learning and Vocational Education and Training"	Strategic Pillar 3: "Cultivating partnerships"
STRATEGIC GOALS		
1.1 Improving the public image of the industrial professions 1.2 Providing incentives for young people 1.3 Connecting schools with established professionals in the Industrial Sector	2.1 Upgrading existing VET programs 2.2 Incentives for businesses 2.3 Upgrading educational curricula	3.1 Upgrading industrial hubs in the Region 3.2 Upgrading the Mechanism of Labor Market Diagnosis
ACTIONS		
1.1.1 Design of a strategic communication plan 1.1.2 Survey of young people's opinions: "Working in the Industrial Sector" 1.1.3 Organization of conferences, workshops, and visits to industrial facilities for practical familiarization with the Industrial Sector 1.2.1 Establishing partnerships with universities, educational institutions, and innovation centers 1.2.2 Strengthening internship programs 1.2.3 Strengthening apprenticeships 1.3.1 Strengthening career guidance in primary and secondary education 1.3.2 Organization of career orientation with companies and interactive stands 1.3.3 Educational field trips 1.3.4 Lectures by successful professionals in the Industrial Sector	2.1.1 Needs assessment of the current state of infrastructure in vocational education and training 2.1.2 Study of staffing needs for participation in vocational training 2.1.3 Study on the Economic Impact of Investments in VET 2.1.4 Updating professional profiles and upgrading the certification process 2.1.5 Strengthening VET evaluation systems 2.1.6 Upgrading VET programs by introducing modern teaching methods 2.2.1 Liaison with universities and educational centres to create specialised training programmes 2.2.2 Providing tax incentives to businesses for upskilling and reskilling, with an emphasis on digital and green skills 2.3.1 Consultation with industry professionals to understand requirements 2.3.2 Adaptation of teaching materials and introduction of modern teaching methods 2.3.3 Assessment of existing curricula and identification of weaknesses	3.1.1 Establishing strategic partnerships to finance and support industrial hubs 3.1.3 Organization of seminars, workshops, and events to support innovation 3.2.1 Research to understand new labor market needs 3.2.2 Promotion of a Mechanism of Labor Market Diagnosis

Figure 5: Overview of the structure of the proposed strategic draft action plan.

The plan is organised by the Project Team using a methodology centred around the creation of a National Skills Coordination Committee. This committee has a crucial role in implementing the strategic plan, monitoring progress, evaluating results, and updating strategies to ensure effective skill development in the industrial sector. It also ensures collaboration between public and private entities, educational institutions, and training organisations to meet the evolving needs of the industry. The strategic plan aims to align with skill development policies at both European and national levels, seeking connections with funding programmes related to industry, innovation, and vocational training. The approach focuses on developing skills across technical and technological fields that span the entire Industrial Sector, addressing common challenges, such as digitisation, advanced technologies, and sustainable production. Deliverable 7 concludes with an analysis of funding needs, information on the dissemination design, implementation timeline, and presentation of critical success factors. This comprehensive strategic approach supports the transition of Greek industry towards a more competitive and technologically advanced model, offering flexibility and adaptability to the workforce across various sectors.

The afore-mentioned draft national strategy and action plan were presented and discussed in the framework of a dedicated workshop beneficiary authorities and relevant stakeholders, which took place in 29/5/2025, as foreseen in Deliverable 7. Moreover, the relevant communication material for this workshop is attached to this report.

The draft national strategy and action plan were further presented and disseminated to a wider audience, in the framework of the final event of 17 July 2025, under Deliverable 8.

6. Consultation with stakeholders and/or workshops

6.1 Pillar I

As part of the project's participatory approach, targeted consultations were held in December 2024 with market actors (one on 10/12 for the food ecosystem and two on 20/12 for the structural materials ecosystem & the pharma ecosystem), including businesses operating within the identified industrial ecosystems and relevant sectoral associations. These sessions focused on presenting and discussing the draft sectoral draft action plans, ensuring that the proposed measures reflect the realities, priorities and insights of the industrial community, as foreseen in Deliverable 3.

In the food ecosystem, the consultation highlighted a strong need for structural interventions to enhance productivity and competitiveness. For the health ecosystem, discussions centred on strengthening national pharmaceutical governance and boosting investment in research and development. The consultation with stakeholders from the structural materials ecosystem identified a range of pressing challenges and opportunities, among which the burden of high energy costs, which disproportionately affects energy-intensive industries, especially in the context of the green transition.

These consultations enriched the development of the draft action plans, providing practical insights that reinforced the relevance and implementation potential of the proposed interventions across all three ecosystems.

6.2 Pillar II

In the context of the development of Deliverable 4 there was a stage of consultations with the relevant public authorities and institutions, in order to analyze the recommendations and data received for the preparation of this Draft action plan. All the participating bodies in the stage of the consultation received targeted questionnaires that were assessed by the scientific team, in order to assimilate the inputs in a suitable manner in the draft action plan. At this stage, the bodies involved were the following:

- ❖ the Hellenic Copyright Organization
- ❖ the PDO-PGI-GTSP Department of the Ministry of Rural Development and Food
- ❖ the Directorate of Phytogenetic Resources of the Ministry of Agriculture, Rural Development and Food, the Interagency for Market Control
- ❖ the Small Enterprises' Institute of GSEVEE
- ❖ the National Accreditation System and
- ❖ The Hellenic Industrial Property Organization.

Furhermore, in the context of the development of Deliverable 5, an extensive consultation with the main Beneficiary Authority, the General Secretariat of Industry of the Ministry of Development and Investments took place. The scientific team presented the research outputs after further assessment of the adopted models of IP Offices and IPR Commercial Exploitation Mechanisms in EU Member States. The purpose of the consultations was to ensure that the suggested interventions by the scientific team would be targeted and appropriate in accordance with the capacity of the Beneficiary.

Finally, the afore-mentioned main proposals for the governance mechanism and the related tools, as well as the draft IP action plan were presented and discussed in the framework of a dedicated workshop which took place in 30/5/2025, as foreseen in Deliverable 5.

6.3 Pillar III

A critical component of the methodology for Deliverables 6 and 7 was the essential consultations with key stakeholders and the organisation of workshops to ensure the quality and relevance of the project outcomes. These engagements were designed to clarify gaps and challenges faced by the Industrial Sector in terms of skills and to gather valuable insights that would inform the strategic draft action plan.

Throughout the duration of the project, from Spring 2024 until July 2025, the Project Team maintained consistent communication with key stakeholders. This ongoing dialogue was essential for sharing feedback and incorporating it into the final deliverables. The stakeholders involved in these consultations included the General Secretariat for Vocational Education, Training, and Lifelong Learning (Ministry of Education, Religious Affairs and Sports), the General Secretariat of Industry (GSI) of the Ministry of Development, the Hellenic Federation of Enterprises (SEV), and DG Reform.

The consultations began with targeted interviews with these stakeholders to understand the specific needs and challenges within the Industrial Sector. These interviews provided a foundation for identifying existing skill gaps and barriers, as well as opportunities for improvement in vocational education and training.

In addition to these interviews, the Project Team organised several workshops to enhance the quality of the results. One notable workshop was conducted with the General Secretariat of Industry (GSI) of the Ministry of Development. This workshop focused on refining the strategic initiatives proposed in Deliverable 7, ensuring they were aligned with the needs of the industry and the objectives of the National Industrial Strategy.

Moreover, a final workshop was held on 29th May 2025 at Deloitte's office in Athens (there was also a link for the participants that wanted to join online), bringing together all key stakeholders, as foreseen in Deliverable 7. During this workshop, the Project Team presented the results of the research and collected final points of improvement. This event served as a crucial platform for validating the findings and recommendations, ensuring that the strategic draft action plan was comprehensive and actionable.

The final dissemination event also played a significant role in sharing the project's outcomes with a broader audience, facilitating the exchange of ideas and fostering collaboration among stakeholders. This event underscored the importance of stakeholder engagement in the successful implementation of the strategic draft action plan.

Overall, the consultations and workshops were integral to the methodology, providing a robust framework for stakeholder involvement and feedback. By engaging with key stakeholders throughout the project, the Project Team ensured that the deliverables were well-informed, relevant, and aligned with the needs of the industrial sector. This collaborative approach was essential for developing targeted initiatives to enhance workforce capabilities, supporting the transition of Greece's industrial sector towards a more competitive and technologically advanced model.

7. Final Event

The final event of the project “Industrial Ecosystems – Supporting the Implementation of the Greek National Industrial Strategy” was held on 17 July 2025 at the premises of the European Public Law Organization (EPLO) in Athens, marking the successful conclusion of an ambitious technical support initiative, co-funded by the European Commission (DG REFORM) and implemented on behalf of the General Secretariat for Industry of the Ministry of Development. The event highlighted the project’s contributions in three critical policy areas: strengthening key industrial ecosystems (food, health and structural materials), modernising the national framework for intellectual and industrial property and formulating a skills draft strategy tailored to the evolving needs of the industrial workforce.

The agenda featured high-level interventions and focused thematic sessions, beginning with introductory remarks by institutional stakeholders. Opening remarks were delivered by the Deputy Minister of Development, who noted that the proposed measures will be thoroughly assessed to identify those best aligned with the National Industrial Strategy's objectives. The EC officer, representing DG REFORM, and the responsible Deloitte Strategy Partner and engagement leader also addressed the audience. The latter emphasised the importance of embedding the project outcomes within broader national policy frameworks, including financing strategies and implementation governance.

This was followed by detailed presentations and discussions on the main project pillars. The session on Pillar I showcased the proposed strategic directions and draft action plans developed for the three industrial ecosystems, and highlighted key opportunities and challenges related to competitiveness, innovation, and sustainable growth. Pillar II focused on enhancing the governance and operational effectiveness of the intellectual and industrial property system, while the Pillar III session presented a roadmap for re-skilling and up-skilling initiatives aligned with industry needs and future labour market demands. Each thematic session included targeted discussion rounds, allowing for feedback and reflections on implementation priorities.

The event concluded with a synthesis of key takeaways, reinforcing the project's alignment with national policy priorities and underlining the importance of translating its proposals into actionable, long-term reforms. It marked the formal conclusion of the project while also offering a useful basis for continued dialogue and future policy planning to support Greece's industrial development.

8. Key findings and lessons learned

8.1 Pillar I

The analysis conducted under Pillar I generated useful insights into the current status, structural features, and transformation potential of Greece's priority industrial ecosystems. While the three ecosystems: food, health and structural materials, each display distinct sectoral characteristics, a number of cross-cutting patterns and ecosystem-specific findings emerged.

A central finding was the strategic importance and economic weight of the three ecosystems, which collectively account for over half of the industrial GVA and employment in Greece. Their role extends beyond the industrial domain, given their interconnections with critical sectors such as tourism, health care, energy and infrastructure. Despite their importance, the ecosystems show asymmetries in maturity and resilience. All face productivity challenges, limited digitalisation and supply chain vulnerabilities, while innovation output remains uneven and concentrated. Fragmentation, particularly among SMEs, limits economies of scale and constrains the diffusion of technological progress. There is also a common gap in circular economy performance, alongside underexploited potential for renewable energy integration and green innovation. In parallel, horizontal bottlenecks, from labour and skills shortages to regulatory inefficiencies, impact all ecosystems and require coordinated policy responses.

Food ecosystem

The food ecosystem demonstrates strong export capacity and high brand equity, especially in selected high-quality and organic product categories, which align with growing global demand. There is notable potential for further integration with tourism and for deploying technologies such as traceability systems to enhance value-added. However, the sector remains highly fragmented, with limited vertical integration, low productivity and minimal collaborative business models. Investment levels are stagnant and the sector suffers from a persistent trade deficit. Labour market imbalances are also evident, with skill mismatches in food processing and acute workforce shortages in primary production. Furthermore, the ecosystem

performs poorly on circular economy indicators, although renewable energy applications could be scaled up to improve environmental performance.

Health Ecosystem

The health ecosystem benefits from a strong manufacturing base, particularly in high-specification and complex production processes, supported by skilled human capital and competitive labour costs. There is strategic potential in APIs, generics, biotech niches and contract manufacturing (CMO/CDMO). The sector demonstrates healthy R&D intensity, though patent output remains low and radical innovation is limited. Structural challenges include a lack of domestic production in medical consumables, low productivity and underutilisation of digital technologies and renewable energy. Additionally, rebate and clawback mechanisms act as disincentives to scaling and investment. Addressing these constraints is critical to unlocking the ecosystem's full innovation and export potential.

Structural Materials Ecosystem

This ecosystem is characterised by well-developed value chains across segments, a strong export orientation and rising investment trends, especially in energy-intensive industries and critical raw materials (e.g., aluminium, gallium, nickel). Demand conditions, both domestic and global are favourable, but price competition from non-EU countries presents risks. Operational constraints include underdeveloped processing capacity relative to mining output, logistics bottlenecks and high energy costs. There is significant scope for digital transformation and green upskilling, as well as for developing industrial clusters in emerging sub-sectors such as batteries and photovoltaics. Infrastructure gaps, particularly in circular economy systems, also remain a binding constraint on sustainability performance.

Lessons learned from this analytical process include:

1. Tailored strategies are essential. Ecosystem-specific realities, from global positioning to resource endowments and institutional constraints, require differentiated policy responses. Generic instruments are often insufficient.
2. System-level transformation depends on coordination. Fragmentation, lack of clustering and incoherent policy implementation reduce effectiveness. Coordinated governance and support mechanisms are needed to align incentives and investments across the value chain.
3. Innovation must be broadened. While some firms show high performance, innovation is not diffused across SMEs. Bridging this gap requires demand-side policy tools, improved research-commercialisation linkages and targeted capacity building.
4. Integrating sustainability into productivity strategies. Achieving international competitiveness requires upgrading production systems through both digitalisation and environmental performance improvements, especially in resource- and energy-intensive sectors.
5. Skills and labour shortages are structural bottlenecks. All ecosystems face skill mismatches and human capital constraints. Without targeted reskilling and upskilling, the pace of industrial transformation will be constrained.

These findings and lessons provide the rationale for the targeted interventions outlined in the ecosystem-specific draft action plans and highlight the broader policy shifts needed to strengthen Greece's industrial base.

8.2 Pillar II

In the context of Deliverable 4, the recommended initiatives are large-scale interventions that require the partnership of several parties (businesses, bodies and public authorities) and bring about significant

changes in the field of intellectual property for SMEs. The actions correspond to mainly reforms and legislative interventions that improve support structures and services where necessary and generally help entrepreneurs and businesses make the most of their intangible assets. Furthermore, the Initiatives envisaged and the resulting actions correspond to the Strategic Direction on Innovation (SD2) of the National Industrial Strategy and the Action Plan on strengthening efforts (in particular of SMEs) to commercialize new ideas and research results, to the Strategic Direction on Human Resources and Competencies (SD5) and the promotion of Continuing Vocational Education and Training, to the Strategic Direction on Improving the Business Environment (SD6) and to the Initiative 41 (I41) on upgrading the National Intellectual and Industrial Property System.

The Greek framework for intellectual property is in full alignment with the EU legal and institutional framework, although certain gaps and deficiencies are being identified and require amendments and reforms in certain areas. Thus, strengthening its advantages and addressing any weaknesses through legislative interventions, is necessary, especially through the adoption of well-weighted policies in selected areas of IP. Ensuring that SMEs have access to information on IP issues and to fast, effective and affordable protection tools should be a priority. It must be ensured that intangible assets, in particular inventions, trademarks and creations, serve in general the economy and society and respond to the needs and challenges of the global competitive reality. Furthermore, it is important to provide timely, reliable and efficient IP to applicants and beneficiaries, to make use of technology, and to improve the practices, policies and working rules of the public services involved. It is desirable to continue to provide quality services with the maximum use of the human resources of public institutions and the benefit of all stakeholders.

Unfortunately, it should be noted that during the aforementioned consultations with the bodies concerned, it was found that a common problem is the inability of businesses to submit the required supporting documents correctly, resulting on the mass rejection of applications on the grounds of formal errors before they are even examined in substance. Also, the operators mostly stated that business representatives approach them (e.g. at the PDO-PGI_GPPE_IPIPP Department, FHW, OBI, METEX) seeking technical support on the submission of the dossier.

All of the relevant public stakeholders on the IP protection spectrum reported serious understaffing problem which turns out to have a multilevel negative impact and implications on the prompt enforcement of the IP regulatory framework (investigations and monitoring) and on the timely registration and subsequent protection of IP rights. For the effectiveness of the national IP system, it is important to develop modern IT applications, secure and accessible digital and data infrastructures capable of efficiently storing, transmitting and processing large volumes of data. In addition, it is required to secure sufficient manpower, able to provide top notch, exemplary services. With ongoing training on best management practices, the workforce will be equipped with the tools and knowledge they need to be successful in their careers.

Greek enterprises are reluctant to adequately exploit the benefits of intellectual property rights. In particular, SMEs need help to manage their IP-based assets more actively and gain better access to equity and finance. Although intangible assets are often among the most valuable assets of a company, many SMEs do not take advantage of their intellectual property when trying to access finance. Given the reluctance of banks and venture capital funds to provide financing backed by IPR as an asset, action is needed to enhance the use of IPR in the valuation of companies by investors. In order to ensure that start-ups and SMEs receive the finance they need for IP investments, it is vital to free themselves from the status quo, in which tangible assets are essentially the main form of collateral, and to create an environment where the value of the enterprise as a whole - including intellectual property as intangible assets and the ways in which it is used - is properly assessed, thereby making it easier for investors and financial institutions to assess the overall value of the business.

Furthermore, the effective operation of a well-functioning IPR system rests on the effective enforcement of rights. With regard to counterfeiting and piracy, there is a clear need to intensify efforts to protect IPR holders from fraud, theft and abuse by those who intend to steal their ideas, their designs, their brand identity and their livelihoods. By strengthening the protection of IP and preventing fraudulent practices, confidence in the Greek IP ecosystem is enhanced. IP disputes are becoming more and more prevalent in the globalized economy. Alternative dispute resolution (ADR) mechanisms, such as mediation, arbitration and negotiation, have emerged as a cost-effective and efficient alternative to traditional litigation. These mechanisms offer customized solutions that are sensitive to the technical details and nuances of IP disputes, making them an attractive option for resolving complex technical disputes.

8.3 Pillar III

The third pillar of the project "TSIC-RoC-19008 - Industrial Ecosystems - Supporting the Implementation of the Greek National Industrial Strategy" has provided critical insights into the current landscape of skills within Greece's industrial sector and has highlighted several key findings and lessons learned that are essential for informing future strategic initiatives. The analysis revealed a significant mismatch in skills within the Industrial Sector, both vertically and horizontally. This mismatch negatively impacts productivity and employment, underscoring the need for targeted upskilling and reskilling initiatives. Furthermore, there is a notable deficiency in digital and green skills, which are crucial for supporting the twin transition towards sustainability and technological advancement. This gap highlights the importance of aligning vocational education and training (VET) with market demands to enhance productivity and reduce unemployment. The phenomenon of brain drain remains a critical challenge, with skilled personnel migrating to foreign markets due to high STEM graduate production and low domestic absorption rates. Addressing this issue requires strategies to retain talent and enhance employment opportunities within Greece. Additionally, the project identified complex and time-consuming processes in diagnosing and fulfilling labour market skill needs, exacerbated by inadequate communication channels and overlapping responsibilities among stakeholders. A unified governance framework is necessary to streamline these processes and ensure effective skill development.

Continuous consultations with stakeholders revealed the importance of collaboration between public and private sectors, educational institutions, and training organisations. Engaging stakeholders throughout the project was instrumental in gathering feedback and refining the deliverables. This engagement is vital for ensuring the relevance and effectiveness of skill development initiatives. The multifaceted approach combining legislative review, best practice analysis, stakeholder consultations, and desk research proved effective in providing a holistic understanding of the skill landscape. This comprehensive methodology should be replicated in future projects to ensure thorough analysis and reliable conclusions.

The evolving nature of the Industrial Sector requires adaptive strategies that can respond to changing skill demands. Emphasising lifelong learning and vocational education will be crucial for maintaining workforce competitiveness. Incorporating digital and green skills into vocational education and training programmes is essential for addressing current deficiencies and supporting industry growth. This integration should be a key focus of future skill development strategies.

Addressing the brain drain phenomenon requires creating attractive employment opportunities and fostering a culture that values industrial careers. Strategies to retain talent should be central to the National Industrial Strategy. Overall, the project highlighted the critical need for modern, adaptable skills in driving industrial growth and competitiveness. By addressing existing skill gaps, aligning educational outcomes with market needs, and enhancing the accreditation and certification processes, Greece's workforce can be better equipped to meet future challenges and opportunities.

These key findings and lessons learned provide valuable insights for shaping future policies and initiatives aimed at enhancing the skills and competencies of the industrial workforce. The project underscored the importance of stakeholder collaboration, adaptive strategies, and the integration of modern skills in vocational education and training programmes. These elements are essential for supporting the transition of Greece's industrial sector towards a more competitive and technologically advanced model.

Furthermore, several further actions are recommended to ensure continued progress and adaptability in skill development within Greece's Industrial Sector.

Continuous monitoring and evaluation should be established to ensure that skill development initiatives remain relevant and effective in addressing evolving industry needs. Regular assessments will help identify emerging skill gaps and opportunities for improvement, allowing for timely adjustments to the strategic action plan. Strengthening stakeholder collaboration is essential, enhancing partnerships between public and private sectors, educational institutions, and training organisations. Fostering a culture of continuous dialogue and partnership will ensure that all stakeholders are actively engaged in the development and implementation of skill initiatives, facilitating the sharing of best practices and innovative solutions.

Expanding digital and green skills training remains a priority. Specialised training modules and certification programmes should be developed to address specific industry needs related to sustainability and technological advancement. Industry participation in designing and delivering these programmes will ensure alignment with market demands. Addressing the brain drain phenomenon requires targeted strategies to retain skilled personnel within Greece. Creating attractive career pathways, offering competitive salaries, and providing opportunities for professional development and advancement are crucial. Promoting the value of industrial careers through awareness campaigns and partnerships with educational institutions will also be beneficial.

Enhancing governance frameworks will improve the efficiency of diagnosing and fulfilling labour market skill needs. Simplifying communication channels and reducing overlapping responsibilities among stakeholders will establish clear roles and responsibilities, ensuring timely and coordinated responses to industry requirements. Promoting lifelong learning within the industrial workforce is vital. Initiatives that support continuous skill development and professional growth, such as online learning platforms, workshops, and mentorship programmes, should be developed. Ensuring that workers have access to resources and opportunities to upgrade their skills throughout their careers is essential.

Leveraging funding opportunities by seeking connections with programmes related to industry, innovation, and vocational training at both European and national levels will secure financial support to sustain and expand skill development initiatives, ensuring accessibility to a broader segment of the workforce. By implementing these recommendations, Greece's Industrial Sector can continue to enhance workforce capabilities, drive innovation, and maintain competitiveness in the global market. These actions will provide a solid foundation for sustaining the progress made through the project and ensuring that the workforce is well-equipped to meet future challenges and opportunities.

9. Expected results

9.1 Pillar I

The implementation of the proposed ecosystem-specific action plans is expected to generate a series of tangible results over the medium term, directly contributing to the goals of the National Industrial Strategy.

Food Ecosystem

For the food ecosystem, expected results include enhanced value chain integration, improved export performance, greater adoption of sustainable agricultural and food processing practices and increased innovation activity in areas such as biotechnology and precision agriculture.

Health Ecosystem

In the health ecosystem, outcomes are expected in the form of stronger R&D collaboration networks, increased domestic manufacturing capacity, improved regulatory efficiency and a more robust pharmaceutical and biotechnology base capable of attracting investment and responding to crises with greater agility.

Structural Materials Ecosystem

For the structural materials ecosystem, key results involve the promotion of circular economy models, improved productivity through the use of modern manufacturing technologies and stronger domestic supply chains capable of reducing external dependencies, especially in critical raw materials.

Across all ecosystems, the action plans implementation is expected to facilitate:

- Increased gross capital formation and R&D investment
- Improved integration of SMEs into domestic and international value chains
- Expanded access to financial instruments and support mechanisms
- Higher rates of digital and green technology adoption
- Stronger alignment between industrial policy measures and enterprise needs

Collectively, these results are expected to strengthen the foundations for a more competitive, sustainable, and innovation-driven industrial sector in Greece.

9.2 Pillar II

The actions suggested through the deliverables 4 and 5 are designed to produce concrete results.

More specifically, it is important to underline that Greece's suggested participation in the International Union for the Protection of New Varieties of Plants (UPOV), Participation in UPOV will enable plant variety breeders to protect their varieties in other member countries and improve their access to protected foreign varieties produced in all UPOV member regions. The territoriality of rights implies that protection is only valid in the Member State where protection is requested, however, this request can serve as a basis for claiming priority when the request is also submitted in another UPOV member state. Membership of UPOV is expected to increase the number of applications for plant variety protection from foreign producers (applications from non-residents of the country in which protection is sought) filers, enhancing the global competitiveness of producers.

Furthermore, the proposal for the establishment in Greece of a national system for the protection of geographical indications for non-agricultural products will boost the protection of products of the handicrafts and artistic crafts sector and will facilitate and accelerate significantly their protection in the EU. Today, it is estimated that about 11,000 enterprises are active in the handicrafts sector throughout the country, with the largest percentage of them being located in the Region of Attica, followed by the Region of Central Macedonia.

The Development of a national strategy to strengthen the semiconductor ecosystem, as well as the semiconductor product topographies could enable Greece to play a pivotal role in various stages of this market, such as raw material sourcing, research and industrial design. The role of start-ups is important at national, international and European level. Semiconductor technologies are a key prerequisite for the

digital and green transition, as it is well known that semiconductors are essential components of digital goods used by businesses, citizens and the state in the fields of communication, defence, industry, energy, data storage (e.g. phones, cars) etc.

Moreover, by shortening the pendency period for the examination of IP rights and by solving the problem of understaffing of the competent offices and by using AI tools, innovation is fostered. The swift processing of applications under examination so that beneficiaries can adequately protect their industrial property rights would reassure the rights holders, urge them and make them confident to seek the IP protection framework for the innovative ideas.

In continuation, the implementation of a modern IT infrastructure will increase the accessibility and quality of patent and trademark services for employees, applicants and rights holders, among other stakeholder groups, while mature data analytics capabilities and optimised financial management practices will allow ensuring sufficient resources to achieve strategic objectives and deliver excellent services with organisational excellence. The development of modern IT applications and data management infrastructures in the relevant organisation is crucial for the efficient storage, transmission and processing of large volumes of data relating to IPR. These technological solutions contribute to the rational management of rights, allowing easy access, interconnection and analysis of data between different competent Services, which is particularly important when the protection of different categories of IP rights is fragmented between several Services (OBI, IPO, Ministry of Rural Development and Food).

Also, the suggested initiative in investing in the technical knowledge and digital skills of the relevant workforce through the provision of targeted regular training initiatives in in alignment with the new European institutional framework around digitization. It is proposed to set up a training plan for the workforce on IT applications and digital tools (cloud, online platforms) and on the provisions of the AI ACT and the Digital Services Act. This Action will facilitate the promotion of continuous Vocational Education and Training (Reskilling) of human resources to adapt to the new needs arising in view of the digital transformation.

Furthermore, the suggestion on the support of the Innovation Agency of the Hellenic Industrial Property Organization is expected to provide concrete results. The Unit is expected to be instrumental in linking Research and Innovation to economic growth and employment promotion in emerging sectors and its role is intertwined with: a) understanding the capabilities of the research community by business, b) understanding the needs of industry by the research community, c) encouraging and facilitating investment in Industrial and Business Innovation, minimising disincentives and conditions, as well as ensuring the availability of the necessary resources to support the development of research and innovation in the emerging sectors.

Also, the provided set of proposals under Deliverable 5 is expected to respond to the problem of administrative and legislative fragmentation that is constitutes a grave deficiency for the IP sector in Greece. The proposed supervisory mechanism that will undertake the control of the implementation and of the guidance and coordination of the implementation of the proposed Action Plan is designed to operate effectively. This mechanism will take the form of a committee composed of representatives of the bodies involved in the proposed Action Plan and will submit progress reports to the relevant ministers and the heads of the bodies involved regarding the progress and implementation of the Action Plan.

The suggested National Council for Entrepreneurship and Innovation (NCEI) in the IP sector is designed to promote the effective commercialisation of IPRs and enhance entrepreneurship and innovation. The composition of the NCEI will ensure that the principle of multi-representation is respected, with the participation of representatives of all relevant stakeholders. In particular, the participation of the relevant Secretaries General, as well as the members of the Financial and Economic Crime Unit (SDOE) and the HCO,

with the addition of new members to the structure of the Council. At the same time, the establishment of working groups which will be responsible for the analysis, dissemination and management of IPRs in specific sectors depending on the areas of entrepreneurship is also a step in the right direction regarding the promotion of innovation.

Finally, the creation of a 'comprehensive' one-stop digital informational service for all fields of Intellectual Property, is an important and essential step to make knowledge in this area more accessible, especially to the Greek business community and Greek citizens, allowing for a broader information with a purpose to ensuring the protection of rights, and assistance in matters relating to violations of these rights.

9.3 Pillar III

The Pillar is poised to deliver transformative outcomes for Greece's Industrial Sector by addressing critical skill gaps and aligning workforce capabilities with national objectives for growth and competitiveness. The expected results are multifaceted, reflecting the comprehensive approach taken in Deliverables 6 and 7.

One of the primary anticipated outcomes is the reduction of skill mismatches within the industrial workforce. By implementing targeted upskilling and reskilling initiatives, the project aims to enhance productivity and employment rates, ensuring that workers possess the necessary competencies to meet the demands of modern industry. This alignment of skills with market needs is expected to contribute significantly to the overall competitiveness of Greece's Industrial Sector.

The integration of digital and green skills into vocational education and training programmes is another key result expected from the project. By addressing deficiencies in these areas, the project will support the twin transition towards sustainability and technological advancement, equipping the workforce with the skills needed to thrive in a rapidly evolving industrial landscape. This focus on modern skills is anticipated to drive innovation and growth within the sector.

Furthermore, the project aims to mitigate the brain drain phenomenon by creating attractive employment opportunities and to foster a culture that values industrial careers. By retaining talent within Greece, the project is expected to strengthen the domestic labour market and enhance the country's capacity for industrial development.

The establishment of a unified governance framework for skill development is also an expected result, streamlining processes and improving communication channels among stakeholders. This framework will facilitate more efficient diagnosis and fulfilment of labour market skill needs, ensuring that educational outcomes are closely aligned with industry requirements.

The project is expected to foster stronger collaboration between public and private sectors, educational institutions, and training organisations. This enhanced cooperation will be instrumental in developing relevant and effective skill development initiatives, ultimately supporting the transition of Greece's industrial sector towards a more competitive and technologically advanced model.

Overall, the expected results of the project reflect its comprehensive approach to addressing skill gaps and aligning workforce capabilities with national objectives. By enhancing the skills and competencies of Greece's industrial workforce, the project is poised to drive industrial growth and competitiveness, ensuring that the sector is well-equipped to meet future challenges and opportunities. These outcomes will provide a solid foundation for shaping future policies and initiatives aimed at sustaining and advancing Greece's industrial development.

10. Expected impact

10.1 Pillar I

The longer-term impact of the interventions under Pillar I is anticipated to be transformative for Greece's industrial sector. Effective implementation of the proposed strategies can support the ongoing effort to improve the resilience and competitiveness of the Greek industrial sector.

At the macro level, the proposed action plans are expected to support the structural transformation of the economy by increasing the contribution of industry to GDP / GVA, strengthening strategic autonomy and enabling Greece to better navigate global disruptions.

At the sectoral level, the interventions will drive productivity growth, technological upgrading and greater value-added generation, particularly in segments where Greece already exhibits competitive advantages, such as agri-food exports, complex pharmaceutical manufacturing, and resource-based materials production.

Moreover, by promoting innovation, competitiveness and long-term resilience across key industrial ecosystems, the project supports the alignment of Greek industry with the objectives of the green and digital transition, while laying the groundwork for a more modern and sustainable industrial sector. The impact will also be institutional. The strengthened analytical and strategic frameworks introduced under this project will enable more coherent, evidence-based policy formulation in the future, while the emphasis on cross-sectoral collaboration and innovation governance is expected to have systemic benefits for the broader industrial ecosystem.

10.2 Pillar II

The Initiatives envisaged and the resulting actions correspond to the Strategic Direction on Innovation (SD2) of the National Industrial Strategy and the Action Plan on strengthening efforts (in particular of SMEs) to commercialize new ideas and research results, to the Strategic Direction on Human Resources and Competencies (SD5) and the promotion of Continuing Vocational Education and Training, to the Strategic Direction on Improving the Business Environment (SD6) and to the Initiative 41 (I41) on upgrading the National Intellectual and Industrial Property System.

Moreover, the outputs of the requested Deliverables are targeted towards the support of the entrepreneurial community and are designed to enhance the IP awareness and to facilitate the access to the protection of IP rights in a more simplified and practical regulatory and institutional framework. Eliminating the existing complexities constitutes the main aim of all the suggested interventions and administrative recommendations.

10.3 Pillar III

The expected impact spans several key areas, reflecting the project's comprehensive approach and strategic initiatives outlined in Deliverables 6 and 7. One of the most significant impacts will be the enhancement of workforce productivity and employment rates. By addressing skill mismatches and implementing targeted upskilling and reskilling initiatives, the project will ensure that workers possess the competencies required to meet the demands of modern industry. This alignment of skills with market needs is expected to lead to increased efficiency and output within the Industrial Sector, contributing to economic growth and stability.

The integration of digital and green skills into vocational education and training programmes will support the twin transition towards sustainability and technological advancement. This focus on modern skills is anticipated to drive innovation and foster a culture of continuous improvement within the sector. As a result, Greece's industrial workforce will be better equipped to adapt to emerging technologies and environmental challenges, positioning the country as a leader in sustainable industrial practices.

The project is also expected to mitigate the brain drain phenomenon by creating attractive employment opportunities and fostering a culture that values industrial careers. Retaining skilled personnel within Greece will strengthen the domestic labour market and enhance the country's capacity for industrial development. This impact will be crucial for sustaining long-term growth and competitiveness in the global market.

The establishment of a unified governance framework for skill development will streamline processes and improve communication channels among stakeholders. This framework will facilitate more efficient diagnosis and fulfilment of labour market skill needs, ensuring that educational outcomes are closely aligned with industry requirements. The improved coordination and collaboration among public and private sectors, educational institutions, and training organisations will lead to more relevant and effective skill development initiatives.

Furthermore, the project is expected to foster stronger partnerships between key stakeholders, enhancing cooperation and knowledge sharing. This collaborative approach will be instrumental in developing innovative solutions to address skill gaps and support the transition of Greece's industrial sector towards a more competitive and technologically advanced model.

Overall, the expected impact of the project reflects its comprehensive approach to enhancing workforce capabilities and driving industrial growth. By addressing existing skill gaps and aligning educational outcomes with market needs, the project will contribute to the overall competitiveness and sustainability of Greece's Industrial Sector. These impacts will provide a solid foundation for shaping future policies and initiatives aimed at advancing Greece's industrial development and ensuring that the workforce is well-equipped to meet future challenges and opportunities.

11. Conclusions

The implementation of the project "TSIC-RoC-19008 - Industrial Ecosystems - Supporting the Implementation of the Greek National Industrial Strategy" resulted in overall policy measure proposals for all three pillars, which are expected to provide a significant boost to the strengthening of the industrial sector in Greece.

The policy measure proposals are accompanied by the necessary analysis and documentation, which will allow for the detailed planning of the actions, proposed here at a more general level, when the relevant choice is made by the competent policy actors.

Enhancing governance mechanisms is crucial to ensure proper implementation of the proposed actions, while continuous monitoring and evaluation thereof will optimise their effectiveness.

12. Annex – Communication Material

12.1 Communication Material for the workshops on draft sectoral action plans for the selected industrial ecosystems (10 & 12/12/2025 - D3)

12.2 Communication Material for the workshops on a proposal of a governance mechanism and related tools for effective policy design and implementation in Industrial and Intellectual Property (30/5/2025 - D5)

12.3 Communication Material for the workshops on Draft national strategy and action plan to facilitate the development of industry-related skills and competences of the workforce (29/5/2025 - D7)
