# Multiple Framework Contract for the Support to Structural Reforms in EU Member States

"Design and deployment for the growth and transformation strategy of the Greek Industry"

Deliverable 7: Final event and final report

**Technical Support Instrument** 

Supporting reforms in 27 Member States







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# Revision history

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# Abbreviations

The following table contains all key abbreviations encountered in the document.

Abbreviation	Definition
DG REFORM	Directorate-General for Structural Reform Support
GSI	General Secretariat for Industry
KPI	Key Performance Indicator
NIC	National Industry Committee
NSRF	National Strategic Reference Framework
PMs	Project Managers
RRF	Recovery and Resilience Facility

## Introduction

This Deliverable, «Final event and final report» regards the 7<sup>th</sup> Deliverable of the project "Design and deployment for the growth and transformation strategy of the Greek Industry".

This deliverable provides a summary of the activities as well as the main outcomes/results of this assignment and incorporates material that can be useful and relevant for implementing similar initiatives in other EU Member States.

The deliverable has the following structure:

- Introduction
- Chapter 1 Project's Outputs
- Chapter 2 Challenges and lessons learned
- Chapter 3 Recommendations and next steps
- Chapter 4 Final event
- Annex:
  - o I. Project's Deliverables: Detailed overview<sup>1</sup>
  - o II. National Industrial Strategy key takeaways (presentation)
  - o III. Project's factsheet
  - o IV. Project's Communication material

 $<sup>^{\</sup>rm 1}$  Complete versions of deliverables 1 to 6 that have been produced in Greek language, have been already submitted to DG REFORM and GSI

## 1 Project's Outputs

The project "Design and deployment for the growth and transformation strategy of the Greek Industry" regarded a cooperative reform effort, with the main objective of developing and implementing a modern and effective industrial policy. In this context, the following outputs were delivered:

- Adoption of a renewed National Industrial Strategy, including an Action Plan
- Enhanced capacity and strengthened coordination governance framework for designing and implementing effective industrial policy
- Implementation of specific measures of the National Industrial Strategy and Action Plan

## 1.1 National Strategy and Action Plan for Industry

In order to accomplish the above output, the Contractor in collaboration with GSI developed the following Deliverables:

Deliverable 1: Inception report

This Deliverable presented an in-depth analysis of the current situation of the Greek industry, identifying specific weaknesses and competitive advantages. In addition, the Deliverable incorporates an analytical record of European and national strategies, that shape the framework for the development of the National Industrial Strategy.

Deliverable 2: National Industrial Strategy and Action Plan

The National Industrial Strategy (NIS) was developed, as part of Deliverable 2. NIS is structured in seven (7) Strategic Axes and twenty-three (23) Strategic Objectives. In addition, the Action Plan for Industry was designed, as a set of forty-three (43) interventions (initiatives, flagship projects, programmes, actions) which will be the tool for the implementation of the Strategy. Moreover, Key Performance Indicators (KPIs) were developed, in order to monitor and evaluate the impact of the Strategy.

Deliverable 3: Dissemination Plan for the National Industrial Strategy and Action Plan

As part of Deliverable the Dissemination Plan for the National Industrial Strategy was designed. The aim of the Dissemination Plan is to communicate and promote the vision and objectives of the National Industrial Strategy, in a clear and comprehensive manner to all stakeholders.

The Annex includes an executive summary of the above-mentioned Deliverables

#### 1.2 Governance Mechanism

For the development and support of the Governance Mechanism, the Contractor, in collaboration with GSI, developed the following Deliverables:

Deliverable 4: Report on the support for the design and implementation of the National Industry Strategy and Action Plan

This Deliverable summarises the support actions provided by the Contractor throughout the duration of the project. More specifically, the support actions of the National Industry Committee are recorded, as well as the activities to strengthen the operational capacities of GSI, for effective design and implementation of industrial policy.

❖ Deliverable 5: Governance mechanism for effective industrial policy

This Deliverable outlines the proposed Governance Mechanism for coordinating the planning and implementation of the industrial policy. The proposed Governance Mechanism includes procedures aimed at ensuring efficient cooperation between the involved stakeholders (public authorities, industrial associations, etc.). In addition, the Deliverable incorporates tools and procedures that will be utilised by GIS for the effective monitoring, evaluation and update of the National Industrial Strategy.

The Annex includes an executive summary of the above-mentioned Deliverables

## 1.3 Preparatory work for the implementation of selected initiatives

In order to accomplish the above output, the Contractor in collaboration with GSI developed the following Deliverable:

Deliverable 6: Report on the implementation of specific measures of the National Industry Action Plan

As part of this Deliverable, the Contractor supported the GIS and the NIC for the prioritisation of five (5) interventions of the Action Plan for Industry and the final selection of three (3) of them for detailed design. In this context, this Deliverable incorporates three (3) detailed Application Guides prepared with the aim of implementing these interventions through funding from NSRF 2021-2027.

The Annex includes an executive summary of the above-mentioned Deliverables

## 2 Challenges and lessons learned

The deployment of this project took place in an ever-changing external environment, while the preparation of the first National Strategy for Industry required the achievement of wider interministerial coordination, as well as cooperation between the public and the private (industrial) sector.

In this context, the Project Team (Contractor, GSI and DG REFORM) aiming to address those challenges implemented specific actions, which generated lessons learned and useful conclusions, which are presented in the following table.

Table 1: Challenges and lessons learned

Number	Challenges	Actions	Lessons learned
1.	The development of an effective industrial policy requires the coordination and cooperation of seven (7) Ministries and a number of industrial associations  Establish NIC and a Network of institutional contact points for Industry (it includes one Project Manager in each competent Ministry)		The Governance Mechanism (NIC, ESYVIP, Working Groups) strengthened inter-ministerial coordination and cooperation at a high level. In addition, it promoted the cooperation of the public and private sector. Accordingly, the Network of institutional contact points for Industry promoted inter-ministerial coordination and cooperation at a lower operational level.
2.	Existence of a significant number of European and national strategic initiatives which shape the framework for the elaboration of the National Industrial Strategy. A key requirement was that the Strategy have to incorporate relevant directions and build upon the existing knowledge.	For the development of the Strategy an articulated structure was followed	Following this approach selected areas of interest were highlighted (industrial ecosystems, niche markets), while at the same time, with the use of multiple structural elements, the horizontal issues of Industry were sufficiently covered (Industrial SMEs, Society and Business Environment).  This approach was recognised as a good practice, at an EU level, from the European Commission and was utilised for the development of the new Technical Support Instrument (TSI) for industry.
3.	The war in Ukraine, which caused an energy and inflation crisis, deteriorated significantly the external environment for Industry and generated additional challenges that should be addressed by NIS  The war in Ukraine, which caused an energy and inflation crisis, deteriorated Incorporate into the Strategic Axis for Resilience Strategi		The war in Ukraine highlighted once again the importance of the resilience of Greek industry to crises and the need to achieve strategic autonomy at an EU level. In this context, the Strategic Axis for Resilience was integrated in the Strategy, followed by relevant objectives and interventions, in order to protect Greek industry from external crises and to take advantage of future opportunities.
4.	The implementation of the Strategy requires the investment, through European co-financed programs (NSRF, RRF), of significant financial resources	Promote close cooperation with competent Authorities that manage those co-financed programs	The timing during which the Strategy was developed turned out to be a particularly correct decision. More specifically, the project started at the beginning of the new Programming Period 2021-2027, giving the appropriate time for the cooperation of the co-competent authorities and the integration of the Strategy's directions into the co-financed programs, which can contribute to the optimal utilisation of financial resources.

# 3 Recommendations and next steps

Throughout the implementation phase of the National Industrial Strategy, some critical risks/challenges need to be considered, which may limit the success of the Strategy or create significant delays.

In this Chapter, critical risks/ challenges are presented, classified in the following categories according to the implementation phase that they might influence:

- I. Detailing of Initiatives,
- II. Monitoring,
- III. Implementation,

#### I. <u>Detailing of Initiatives</u>

- Many of the Action Plan's interventions have an extensive scope, which often exceeds the
  competences of GSI, with most of them being of significant budget, complexity and size,
  while also involving a large number of beneficiaries, which increases the need for wider
  collaboration and coordination between the competent authorities.
- Lack of sufficient financial resources for the implementation of the Action Plan.

#### **II.** Monitoring

- Increased workload, as public authorities have to plan, manage and simultaneously monitor projects in Operational Programs from two Programming Periods (NSRF 2014-2020 and NSRF 2021-2027), as well as from the Recovery and Resilience Fund (RRF) and from the National Development Program 2021-2025.
- Potential delay in the mobilization of the Governance Mechanism of the Strategy, may delay the implementation of the Action Plan.

#### III. Implementation

- The Strategy will be implemented in an ever-changing external environment, which is deteriorated by the energy and inflation crisis, associated with prolonged large-scale impacts on the economy, value chains and society.
- Lack of sufficient human resources and/ or relevant expertise in the competent authorities for the implementation and the monitoring of the Strategy.
- Limited participation/ mobilisation of the private (industrial) sector for the interventions of the Action Plan

The abovementioned risks/ challenges could be addressed by the application of the following **recommendations/ next steps**:

- ✓ Follow the proposed timeline, timely detailing of Action Plan's interventions based on the proposed timeline.
- ✓ Mobilisation and efficient operation of NIC and ESYVIP, in order to achieve the necessary coordination at a high level (political leadership).
- ✓ Strengthen the collaboration with the private (industrial) sector, through regular meetings of the Working Groups, which will allow the private sector to provide useful feedback regarding the implementation of the Action Plan.
- ✓ Efficient operation of the Network of institutional contact points for Industry, in order to achieve the necessary coordination at an operational level.
- ✓ Monitoring the implementation of the Strategy following the proposed processes (Deliverable 5) for monitoring, evaluation and updating of the Strategy, which will immediately allow the correction of any deviations from the planning.
- ✓ Continue to collaborate closely with the competent Authorities that manage co-financed programs, aiming to secure the required resources for the implementation of the Action Plan

## 4 Final event

The Contractor in collaboration with GSI and DG REFORM organised a final event to present the results of the project, as well as the next steps. This event was attended by representatives of the competent Ministries, the European Commission (DG REFORM), the industrial associations, as well as the mass media.

In this event the following key points were discussed:

- The implementation of the Action Plan has already initiated, commencing with 22 of the 43 interventions which have a high maturity status (implemented or under detailed design).
- GSI was designated as the competent authority for coordinating the implementation and monitoring the Strategy.
- An update of the Strategy and the Action Plan will be implemented, taking into account the most recent events, USA's Inflation Reduction Act (IRA), energy crisis, etc.

Detailed meeting minutes from the final event have been circulated in Greek language to all attendees on 10/02/2023.

### Annex

## I. Project's Deliverables: Detailed overview

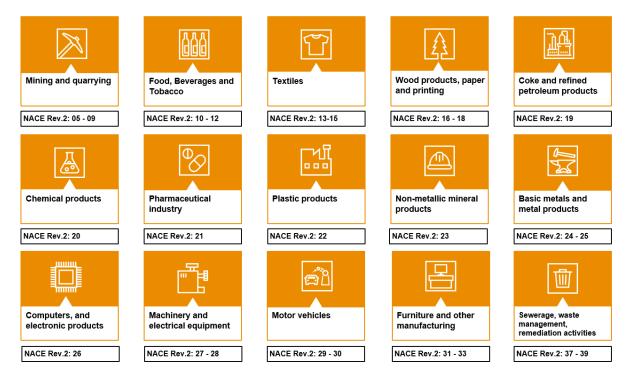
#### **Deliverable 1: Inception report**

#### **Mapping of the Greek Industry**

There are many different approaches to define the sectors and the economic activities that make up industry. Some of them equate Industry with Manufacturing, while others give much broader definitions including in the Industry sectors such as Energy, Construction and Infrastructure. In this study, the Industry consists of the following wider sectors, Mining - Quarrying, Manufacturing and Sewerage, waste management, remediation activities.

In the context of this study, 32 industrial sub-sectors were identified, using two-digit NACE codes, which were finally classified into 15 broader sectors. The classification concerns sub-sectors of similar economic activities both at the level of the production process and the final product. The 15 sectors that make up the Industry are presented in the graph below

Graph 1: 15 Industrial Sectors<sup>2</sup>



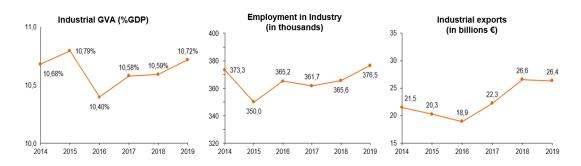
Source: PwC analysis, Data ELSTAT - Eurostat

#### The recent performance of the Greek Industrial sector

By reviewing the basic figures of the industrial sector, the Greek Industry's performance during the last five years and during the pandemic crisis is presented in this chapter.

<sup>&</sup>lt;sup>2</sup> It is noted that the data presented in this study correspond to the aforementioned definition of the industrial sector, incorporating the activities of a) Mining and quarrying (NACE Rev.2: 05 - 09), b) Manufacturing (NACE Rev.2: 10 - 33) and c) Sewerage, waste management, remediation activities (NACE Rev.2: 37 - 39)

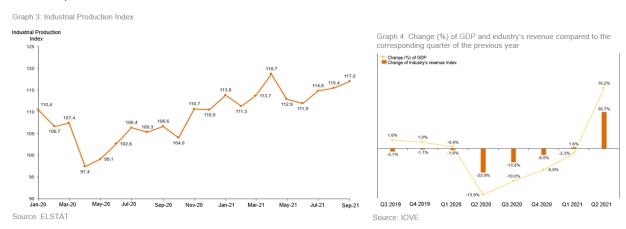
Graph 2: Recovery of the Industrial sector during 2014-2019



Source: Eurostat, National accounts

In the period 2014 - 2019, the industry grew cumulatively for all five years by 3.9%, a growth greater than the 3.5% of the Greek economy as a whole, increasing its contribution in the GDP from 10.68% in 2014 to 10.72 % in 2019. At the same time in the period 2015-2019, the industry created (cumulatively for all four years) more than 26 thousand new jobs. The significant increase of the industrial exports played a pivotal role in the accomplishment of the abovementioned performance, more specifically in the period 2014 - 2019 the industrial exports increased cumulatively by 20% and the industrial products constituted more than 70% of the total Greek exported products.

The recovery of the Greek Industry was interrupted by the pandemic crisis and its negative consequences (limited demand and disruption of the supply chain), with the industrial production recording a 9% decrease and the revenue of industrial enterprises shrinking by 24% in the second quarter of 2020.



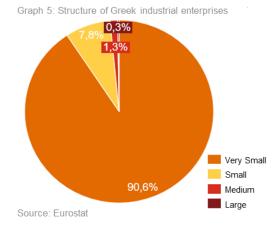
Despite the adverse business environment created by the pandemic, the Greek industry managed to adapt quickly and recover. More specifically, the industrial production index recovered gradually from January 2021 and then surpassed pre-pandemic levels. In addition, a significant increase was recorded in the revenue of the industry in the second quarter of 2021 (by 36.7% compared to the corresponding quarter of the previous year), thus contributing decisively to the faster recovery of the Greek economy, (increase of GDP by 16.2%), which was higher than the EU average<sup>3</sup> (13.8%) during the same period.

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<sup>&</sup>lt;sup>3</sup> Industry Development Bulletin, IOBE, September 2021

#### **Industrial SMEs**

The Industrial sector, as well as the whole of the Greek economy, is made up mostly of SMEs (99.7%), with the majority of them being classified as Very Small (90.6%). SMEs are the backbone of Greek Industry, generating 43% of the industry's revenue<sup>4</sup> and 48% of value added<sup>5</sup>, employing 75.4% of all industrial employees<sup>6</sup>.



#### Characteristics of Greek Industrial SMEs

Greek SMEs have specific particularities in comparison with the European SMEs which directly affect their growth prospects:

- ❖ Greek industrial enterprises are smaller<sup>7</sup> compared to their European counterparts. In particular, the average Greek industrial enterprise employs 6.2 employees, while correspondingly in Italy the average enterprise employs 12 employees, 11.6 in Portugal and 10.7 in Spain.
- ❖ According to the European Innovation Scoreboard<sup>8</sup>, Greek SMEs perform well in terms of innovation, as around 4 out of 10 SMEs innovate internally, compared to the EU average of 3 out of 10, that performance is continuously improving in the recent years.
- On the contrary, low performance is recorded in terms of digitalisation<sup>9</sup>, as only 1 out of 8 Greek SMEs is considered as digitally matured, while 50% of them are only at an initial stage of digital maturity, this score is among the lowest at an EU level.
- ❖ Significant room for improvement exists also in the field of internationalisation as only 5.3% of Greek SMEs maintain exporting activities.

#### Comparative analysis of Industrial sectors

The main objective of the comparative analysis of the 15 industrial sectors, as they were identified in the present study, is to highlight the growth dynamic of each sector, as well as to classify those sectors in broader groups, which present common opportunities and challenges. In this context, the performance of industrial sectors is evaluated based on specific qualitative characteristics, as well as their contribution to the Greek economy.

The qualitative characteristics based on which the assessment was carried out are the following:

- **Environmental Footprint,** highlighting activities with a significant environmental footprint, in need of green transformation
- ❖ Innovative capacity, pinpointing pioneering sectors with strong innovative capacities at an enterprise level in matters of research and innovation

 $<sup>^{4} \</sup> Eurostat, \underline{https://ec.europa.eu/eurostat/web/structural-business-statistics/small-and-medium-sized-enterprises}$ 

<sup>&</sup>lt;sup>5</sup> Eurostat, https://ec.europa.eu/eurostat/web/structural-business-statistics/small-and-medium-sized-enterprises

 $<sup>{}^{6}\</sup>text{ Eurostat}, \\ \underline{\text{https://ec.europa.eu/eurostat/web/structural-business-statistics/small-and-medium-sized-enterprises} \\$ 

<sup>&</sup>lt;sup>7</sup> Eurostat, National accounts employment data by industry,

https://ec.europa.eu/eurostat/databrowser/view/NAMA\_10\_A64\_E\_\_custom\_1590154/default/table?lang=en

<sup>&</sup>lt;sup>8</sup> European Commission (2020), European Innovation Scoreboard,

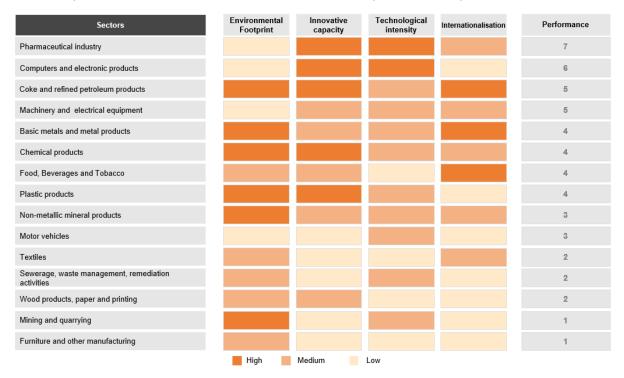
https://ec.europa.eu/growth/industry/policy/innovation/scoreboards\_en

<sup>&</sup>lt;sup>9</sup> Cosmote, Eltrun (2020), Digital readiness of small & medium enterprises in Greece. The effect of COVID-19 <a href="https://www.growyourbusiness.gr/news/i\_psifiaki\_etimotita\_ton\_mikron\_kai\_mirkomeseon\_epixiriseon\_sthn\_ellada\_i\_epidrasi\_tou\_co\_vid-19">https://www.growyourbusiness.gr/news/i\_psifiaki\_etimotita\_ton\_mikron\_kai\_mirkomeseon\_epixiriseon\_sthn\_ellada\_i\_epidrasi\_tou\_co\_vid-19</a>

- ❖ Technological intensity, sectors of high technological intensity, with the capacity of manufacturing products of high value added
- ♦ Internationalisation, assessment of each sector's extroversion and its participation in international value chains.

The results of the comparative analysis are summarized in the "heatmap" below.

Graph 6: Classification of industrial sectors based on their performance in qualitative characteristics



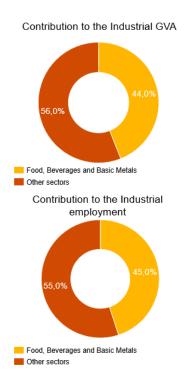
Source: Eurostat, PwC Analysis

Furthermore, in order to evaluate the contribution of industrial sectors to the economy, both their Gross Value Added (GVA) and their contribution to employment were analysed, as presented in the graph below.

<sup>&</sup>lt;sup>10</sup> It is noted that the high environmental footprint captures high negative impact of the sector on the natural environment and counts negatively in its overall performance. Conversely, high performance in the areas of Innovative capacity, Technological intensity and Internationalisation counts positively in the overall sector's performance.

Graph 7: Contribution of the Industrial sectors to the Greek economy

Sectors	GVA (millions €)	Employment (thousands employees)
Mining and quarrying	530 (3,3%)	10 (2,7%)
Food, Beverages and Tobacco	5.000 (31,5%)	121,5 (32,3%)
Textiles	482 (3%)	29,2 (7,8%)
Wood products, paper and printing	719 (4,5%)	26,8 (7,1%)
Coke and refined petroleum products	460 (2,9%)	3,8 (1%)
Chemical products	1.033 (6,5%)	12 (3,2%)
Pharmaceutical industry	928 (5,8%)	10,4 (2,8%)
Plastic products	636 (4%)	12,9 (3,4%)
Non-metallic mineral products	716 (4,5%)	16,4 (4,4%)
Basic metals and metal products	2.016 (12,7%)	45 (12%)
Computers and electronic products	301 (1,9%)	3,9 (1%)
Machinery and electrical equipment	777 (4,9%)	19,5 (5,2%)
Motor vehicles	310 (2,0%)	6,7 (1,8%)
Furniture and other manufacturing	728 (4,6%)	38,7 (10%)
Sewerage, waste management, remediation activities	1.259 (7,9%)	19,8 (5,3%)

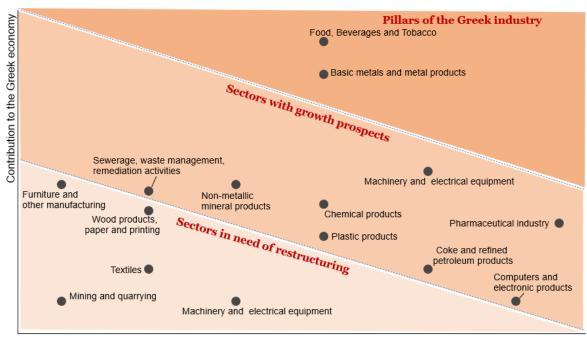


Source: Eurostat, National accounts

Taking into account the performance of the industrial sectors in the abovementioned parameters, a matrix was created, where the vertical axis reflects the contribution of the industrial sectors to the Greek economy and the horizontal axis their performance in the qualitative characteristics. The aim of the matrix is to group the sectors based on their size and the growth dynamics that they record.

As it is presented in the following matrix of comparative analysis of industrial sectors, three categories are identified in the Greek Industry as follows:

- **Pillars of the Greek industry:** sectors with a large contribution to the economy and strong performance in terms of their qualitative characteristics.
- Sectors with growth prospects: sectors with limited contribution to the economy and strong performance in terms of their qualitative characteristics.
- Sectors **in need of restructuring:** sectors with limited contribution to the economy and weak performance in terms of their qualitative characteristics.



Graph 8: Matrix of comparative analysis of industrial sectors

Performance in the qualitative characteristics

Source: PwC Analysis

#### Industry readiness for the green and digital transformation

The green and digital transformation of industry are two of the most significant pillars around which the EU's industrial policy is developed, as it is reflected on the new industrial strategy for Europe<sup>11</sup>, they will also have a fundamental role in the development of the Greek National Industrial Strategy. In this context, this chapter presents the Greek Industry's readiness for this dual transition (green and digital).

#### Green transformation

Industry as a sector is recognized by both the National Energy and Climate Plan (ESEK) and the National Action Plan for the Circular Economy as a catalyst for achieving the national objectives linked to the green transformation, namely:

- A 24% increase in natural gas consumption, followed by a 31% increase in bioenergy consumption by the industry by 2030 (ESEK)
- A 4.5% reduction of energy consumption by the industry by 2030 through the improvement of energy efficiency (ESEK)
- Sustainable production, transition to a more circular production model, that promotes deployment of green products and efficient use of resources (National Action Plan for the Circular Economy)
- Reduction and higher utilisation of waste (National Action Plan for the Circular Economy).

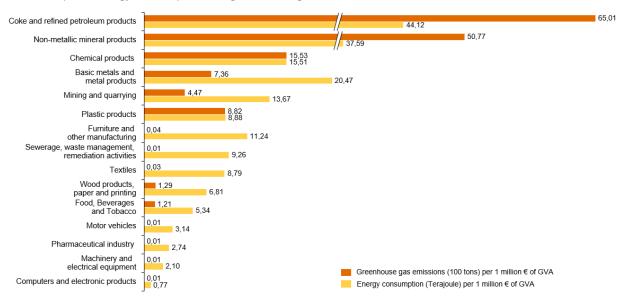
The achievement of the abovementioned objectives requires multidimensional interventions and large investments, with the Greek industry showing a low level of readiness in view of the green transformation.

<sup>&</sup>lt;sup>11</sup> European industrial strategy, <a href="https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy\_el">https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy\_el</a>

More specifically, Greek industrial enterprises lag behind<sup>12</sup> in terms of green transformation, as only 74% of them have taken actions for efficient use of resources, compared to the EU average of 89%.

In addition, regarding the circular material use rate<sup>13</sup> as a percentage (%) of the total material use, Greece maintains a particularly low performance, recording 4.2% circular use of resources against the EU-27 average of 11.8%. The rate of recycling in Municipal Solid Waste is also particularly low (18.9% compared to 46.5% of the EU), a factor that regards a significant barrier to the development of entrepreneurship in the field of green and circular economy.

With the aim of identifying activities with the greatest need for green transformation, the environmental footprint (energy consumption and greenhouse gas emissions) of each sector is presented in the graph below<sup>14</sup>.



Graph 9: Energy consumption and greenhouse gas emissions, data 2018

Source: Eurostat

According to that approach, the industrial sectors with the highest environmental footprint are the following:

- Coke and refined petroleum products,
- Non-metallic mineral products,
- Chemical products,
- Basic metals and metal products.

#### Digital Transformation

Digitalisation<sup>15</sup> is rapidly transforming the Industrial sector and the way business is conducted, bringing about the following significant changes:

<sup>&</sup>lt;sup>12</sup> European Commission (2017), Eurobarometer survey of SMEs and the environment, http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index\_en.htm

<sup>&</sup>lt;sup>13</sup>Eurostat, Circular material use rate, <a href="https://ec.europa.eu/eurostat/databrowser/view/env\_ac\_cur/default/table?lang=en">https://ec.europa.eu/eurostat/databrowser/view/env\_ac\_cur/default/table?lang=en</a>

<sup>&</sup>lt;sup>14</sup> It is noted that the analysis weighs the absolute values of the annual energy consumption and greenhouse gas emissions of each industrial sector with its annual GVA, which is a necessary condition in order to capture in the best possible way the environmental footprint of the production process of the industrial sectors, taking into account their size.

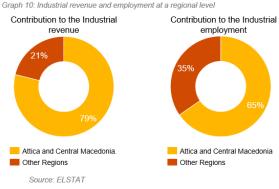
- Redefines industrial products,
- Reshapes the operational model of industrial enterprises and the work environment,
- Generates new business models (as-a-Service" or "pay-as-you go"),
- Regards a driving force that facilitates and accelerates the transition of industry towards a
  greener and circular economy.

In the field of digital transformation and despite the significant progress that was recorded recently, Greece continues to record low performance, based on the data of the DESI index (2021)<sup>16</sup>:

- Greece ranks 21st in the EU in terms of digital skills, recording a low percentage of employed ICT specialists (2%) compared to the EU (4.3%), while only 12% of Greek businesses offer training programmes in digital skills in their human resources compared to the EU average of 20%.
- Lack of ICT infrastructure, low performance in terms of connectivity, as Greece ranks 27th in the EU.
- Slow integration of digital technologies by businesses, as Greece ranks 22nd in the EU, with low performance especially in e-commerce and the integration of advanced technologies (e.g. cloud computing, artificial intelligence, etc.) by businesses.
- ❖ Slow adaptation to Industry 4.0<sup>17</sup>, as 20% of industrial enterprises have not made any investment in Industry 4.0 technologies with this percentage rising to 40% for very small enterprises.
- ❖ Despite the progress that recorded recently in the digitisation of the public administration, Greece ranks 26th in the EU in terms of digital public services, lagging behind significantly in terms of digital public services in enterprises, with a performance of 54 against the EU average of 84.

#### **Greek Industry at a regional level**

Moving forward the analysis at a regional level, industry is mainly developed around the country's largest urban centers (Athens and Thessaloniki). More specifically, 79% of the revenue and 65% of the employment of the Greek industry is generated from companies based in the Regions of Attica and Central Macedonia.



Afterwards aiming to map the industry at a regional level, the three largest industrial sectors are presented per region, based on their revenue.

<sup>&</sup>lt;sup>15</sup> National Strategy for Digital Transformation of the Greek Industry, <a href="https://www.ggb.gr/sites/default/files/press-releases-files/DG%20Reform\_Digital%20Transformation\_Deliverable%201\_Final%20Draft\_01022021.pdf">https://www.ggb.gr/sites/default/files/press-releases-files/DG%20Reform\_Digital%20Transformation\_Deliverable%201\_Final%20Draft\_01022021.pdf</a>

DESI Index (2021), <a href="https://digital-strategy.ec.europa.eu/en/policies/desi-greece">https://digital-strategy.ec.europa.eu/en/policies/desi-greece</a>

<sup>&</sup>lt;sup>17</sup> National Strategy for Digital Transformation of the Greek Industry, <a href="https://www.ggb.gr/sites/default/files/press-releases-files/DG%20Reform\_Digital%20Transformation\_Deliverable%201\_Final%20Draft\_01022021.pdf">https://www.ggb.gr/sites/default/files/press-releases-files/DG%20Reform\_Digital%20Transformation\_Deliverable%201\_Final%20Draft\_01022021.pdf</a>

Graph 11: Mapping the Greek Industry at a regional level

Regions	Sector 1	Sector 2	Sector 3
Region of Attica	Refined petroleum products 41%	Bas. metals and metal products 15,6%	Food, Beverages and Tobacco 13,3%
Region of Central Macedonia	Food, Beverages and Tobacco	Bas. metals and metal products 10,4%	Textiles 8,4%
Region of Thessaly	Food, Beverages and Tobacco 62%	Bas. metals and metal products 15%	Chemical products 5,3%
Region of Central Greece	Food, Beverages and Tobacco	Bas. metals and metal products 17%	Plastic products 14%
Region of Eastern Macedonia & Thrace	Food, Beverages and Tobacco 40%	Non-metallic mineral products 18%	Textiles 9,5%
Region of Crete	Food, Beverages and Tobacco 59,1%	Plastic products 14,1%	Non-metallic mineral products 6%
Region of Peloponnese	Food, Beverages and Tobacco 63%	Computers 11,3%	Wood products, paper and printing 5,7%
Region of Epirus	Food, Beverages and Tobacco 85%	Plastic products 4,2%	Bas. metals and metal products 2,1%
Region of Western Greece	Food, Beverages and Tobacco 67,7%	Bas. metals and metal products 9,5%	Plastic products 7,4%
Region of Western Macedonia	Food, Beverages and Tobacco 40%	Textiles 35,6%	Bas. metals and metal products 4%
Region of South Aegean	Food, Beverages and Tobacco 62,4%	Non-metallic mineral products 12,5%	Bas. metals and metal products 5%
Region of the North Aegean	Food, Beverages and Tobacco 81,2%	Non-metallic mineral products 3,8%	Bas. metals and metal products 3,6%
Region of Ionian Islands	Food, Beverages and Tobacco 43,2%	Bas. metals and metal products 17%	Plastic products 14%

Source: ELSTAT

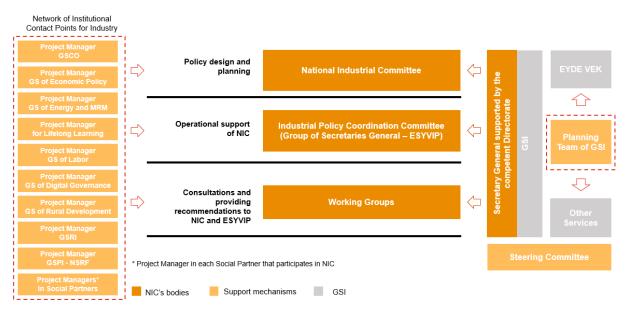
According to the above analysis, the following conclusions are drawn:

- At a regional level, the Food, Beverages and Tobacco sector emerges almost as the
  exclusive industrial activity as it constitutes over 60% of the local industry, in the majority of
  Regions.
- The Regions of Attica and Central Greece are the regions where a significant part of the industry is based in capital and technology intensive production processes (eg. Oil Refining, Basic Metals, Plastics, etc.).
- Despite its downward trend, Textiles are still an important sector especially for Northern Greece, with the most predominant example being that of the Region of Western Macedonia (35.6%).

#### **Governance Mechanism of the Industrial Strategy**

In this chapter the Governance Mechanism of the Industrial Strategy is briefly presented.

Graph 12: Governance Mechanism



More specifically, according to the Act of the Council of Ministers 35 of 17.8.2020, the involved bodies have the following responsibilities:

- National Industrial Committee (NIC): Development of a coherent National Industrial Strategy that will define the vision and strategic axes of the industrial policy.
- Industrial Policy Coordination Committee (ESYVIP): Operational support of NIC, with a recommendatory and executive role.
- General Secretariat of Industry (GSI): Participation in the design and the implementation of the National Industrial Strategy.
- Working Groups: Consultation, analysis, documentation and providing recommendations to NIC on a specific subject assigned to them.

Furthermore, in order to operationally support and strengthen the Governance Mechanism, it is suggested to form the following supportive bodies with the following responsibilities:

- Planning Team of GSI: Supports the Steering Committee regarding the Industrial Policy, having a recommendatory and executive role.
- Project Managers: Responsible for the internal coordination and implementation of actions concerning each General Secretariat and/or other body.
- Steering Committee: Effective coordination and monitoring of the project "Design and Deployment for the Growth and Transformation Strategy of the Greek Industry".

#### Project DG REFORM - PwC

Through the Technical Support Instrument and with the co-financing of the European Union, the project of DG REFORM "Design and Deployment for the Growth and Transformation Strategy of the Greek Industry" is currently being implemented with PwC as the contractor. The project started in August 2021 and is expected to be completed in February 2023.

The main objectives of this projects are:

- ❖ The development of a new National Industrial Strategy and its Action Plan
- The establishment of a governance mechanism for effective industrial policy design and implementation
- The implementation of selected actions of the National Industrial Strategy

The deliverables expected within the project are presented below:

#### Deliverable 1: Inception Report

Mapping of the Greek Industry and analysis of the current situation.

#### • Deliverable 2: National Industrial Strategy

Identification of the needs and challenges of Greek Industry, review of global industrial trends, development of a vision and action plan for the National Industrial Strategy.

#### • Deliverable 3: Dissemination Plan of the Industrial Strategy

Development of a plan and supporting material for the communication of the National Industrial Strategy.

# • Deliverable 4: Support for the design and implementation of the National Industrial Strategy

Support and capacity building are provided to the GSI for undertaking its role in view of NIC, as well as for the design and implementation of the National Industrial Strategy.

#### Deliverable 5: Governance Mechanism

Establishing a permanent and effective framework and a governance mechanism for effective industrial policy design and implementation.

#### Deliverable 6: Develop detailed implementation plans for specific actions

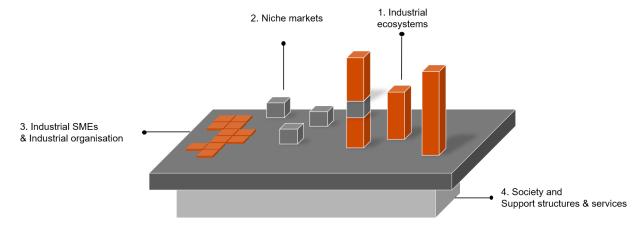
Develop detailed implementation plans for three actions of the Action Plan as those are prioritised by NIC and GIS.

#### Deliverable 7: Final event and final report

Organising a final event, in order to present the results of the project.

#### Deliverable 2: National Industrial Strategy and Action Plan

For the development of the Strategy an articulated structure was followed. Thus selected areas of interest are highlighted (industrial ecosystems, niche markets), while at the same time, with the use of multiple structural elements, the horizontal issues of the Industry are sufficiently covered (Industrial SMEs, Society and Business Environment).



Graph I: Articulated structure for the development of the National Industrial Strategy, Source: PwC analysis

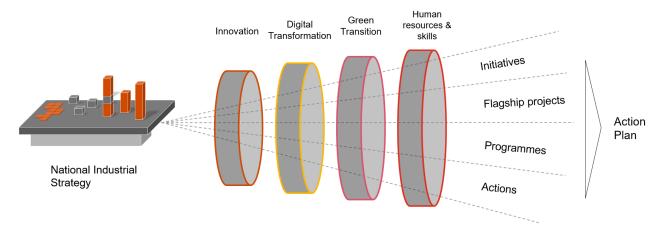
In this context, the following areas of interest of the Greek industrial sector were identified and analysed:

- ❖ Industrial ecosystems, as systems, which include all organisations operating at any stage of an industrial value chain, where the following ecosystems were analysed:
  - a) Agri-food,
  - b) Structural Materials,
  - c) Health,
  - d) Digital Technologies and Applications,
  - e) Green Technologies/ Circular Economy.
- ❖ **Niche markets,** as specialized segments of the market with a competitive advantage and high added value, where the following were analysed:
  - a) Food value for money,
  - b) New generation materials,
  - c) Health Technologies and Applications,
  - d) Robotics,
  - e) Electromobility,
  - f) Defense Industry,
  - g) Shipbuilding.
- ❖ Industrial SMEs & Industrial organisation, horizontal issues concerning industrial SMEs and the support and representation structures for industrial enterprises.
- Society and Support structures & services, that make up the business environment of the industry, focusing on the following factors:
  - a) Society & Human Resources

- b) Energy
- c) Supply Chain
- d) Infrastructure
- e) Funding
- f) National innovation system
- g) Public Administration

The areas of interest were analysed based on their performance in the four **Pillars of the Strategy** as following:

- a) Innovation, focusing on the innovative capacity of each sector.
- b) *Digital Transformation*, with an emphasis on digital maturity and digital technologies that have significant prospects for each sector.
- c) *Green Transformation*, environmental footprint, green technologies and applications that have significant prospects for each sector.
- d) *Human Resources and Skills*, specialties and skills that are necessary per sector, in view of the dual transition (digital and green).



Graph II: Strategic Pillars, Source: PwC analysis

#### **Vision**

The Greek industry, after a long recession (2008-2015), recorded a significant recovery in the period 2014-2019 which was even higher than that of the Greek economy as a whole<sup>18</sup>. The industry increased its contribution to the GDP from 10.68% in 2014 to 10.72% in 2019, creating (cumulatively for all four years) more than 26 thousand new jobs, while maintaining its significant contribution to the Greek economy<sup>19</sup>:

- producing more than 70% of the total products exported by the country,
- investing five times more per employee than the economy as a whole,
- and recording investment in R&D that was equivalent to 35% of all private investment in R&D.

<sup>&</sup>lt;sup>18</sup> Eurostat, National accounts aggregates by industry, <a href="https://ec.europa.eu/eurostat/databrowser/view/NAMA\_10\_A64\_custom\_1319810/default/table?lang=en">https://ec.europa.eu/eurostat/databrowser/view/NAMA\_10\_A64\_custom\_1319810/default/table?lang=en</a>
<sup>19</sup> Ibid.

The recovery of the Greek industry was interrupted by the pandemic crisis and its negative consequences (limited demand and disruption of the supply chain), with industrial production recording a 9% decrease in the second quarter of 2020.

Despite the adverse business environment created by the pandemic, the Greek industry managed to adapt quickly and recover. More specifically, the industrial production index recovered gradually from January 2021 and then surpassed pre-pandemic levels. In addition, a significant increase was recorded in the revenue of the industry in the second quarter of 2021 (by 36.7% compared to the corresponding quarter of the previous year), thus contributing decisively to the faster recovery of the Greek economy, (increase of GDP by 16.2%), which was higher than the EU average<sup>20</sup> (13.8%) during the same period.

In this context, the National Industrial Strategy aims to further strengthen the growth dynamics of the Greek Industry through the realisation of the following vision.



Industry transforms the country's production model, invests in innovation, synergies and human resources skills, attracts investments and actively participates in international value chains with competitive products, generating sustainable and inclusive results for the Greek society.

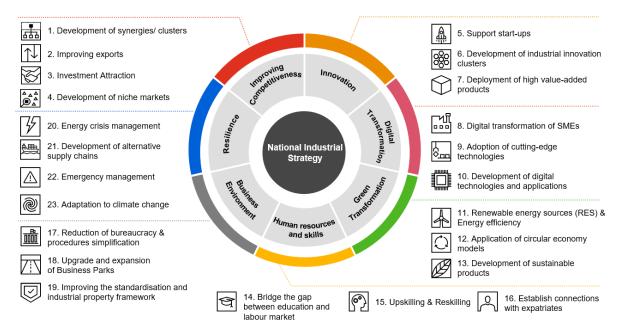


#### Strategic Axes and Objectives

In order to achieve the vision, the following Strategic Axes and Objectives were identified and are presented in detail below.

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<sup>&</sup>lt;sup>20</sup> Industry Development Bulletin, IOBE, September 2021



Graph IV: Strategic objectives for the Greek industry

**(SA1) Increasing Competitiveness,** through the promotion of scaling up and internationalisation of industrial enterprises, focusing on the following strategic objectives:

- Development of synergies/ clusters, allows industrial enterprises (especially SMEs) to become robust and more competitive by taking advantage of their shared resources through strategic partnerships.
- *Improving exports*, by providing incentives and developing support structures in order to promote business expansion into new markets.
- *Investment Attraction*, by providing incentives and formulating an appropriate institutional framework aiming to increase both domestic and foreign investments and fill the investment gap in Greece.
- Development of niche markets, to effectively promote product diversification and boost productivity and value added.

**(SA2) Innovation,** promotion of industrial research and innovation and integration of R&D results and new technologies into the industrial production process, focusing on the following strategic objectives:

- Support start-ups, by increasing funding and creating structures to support start-ups throughout their lifecycle.
- Development of industrial innovation clusters of enterprises, and improvement of the institutional framework enabling efficient collaboration with researchers and academia.
- Deployment of high value-added products, by increasing funding for emerging technologies and upgrading the national innovation system, by developing appropriate technology infrastructures providing services for mature technologies, to support SMEs on commercialising new ideas and research outcomes.

**(SA3) Digital Transformation,** this Strategic Axe is developed based on the National Strategy for Digital Transformation of the Greek Industry, aiming to promote the technological upgrade and digital transformation of industrial enterprises, according to their technological maturity, as follows:

- Digital transformation of SMEs, facilitating digital transformation of enterprises with limited digital maturity in low-tech sectors, through installing and upgrading of basic IT equipment, in the framework of implementing targeted business plans.
- Adoption of cutting-edge technologies (mainly Industry 4.0) for enterprises with high digital maturity.
- Development of digital technologies and applications, by supporting and strengthening the domestic production of digital technologies and applications.

**(SA4) Green Transformation**, the European Green Deal pinpoints industry as a significant sector for achieving climate neutrality by 2050. In this context, the following objectives are identified:

- Renewable energy sources (RES) & Energy efficiency, mobilisation of significant investments and reform of the institutional framework to support production and storage of energy from RES as well as taking measures aiming to improve active and passive energy efficiency of the Industry.
- Application of circular economy models mainly by promoting industrial symbiosis in order to capitalize the need to reduce environmental footprint.
- Development of sustainable products, by capitalising opportunities anticipated to be created by the application of circular economy models.

**(SA5) Human Resources and Skills**, skills development, emphasising on technical and STEM (Science, Technology, Engineering, and Mathematics) skills, as well as attracting suitable human resources, are key priorities for industrial enterprises, in order to adapt in the green and digital transition, in this context the following strategic objectives are identified:

- Bridge the gap between education and labour market, by reforming the educational system and improving connection with the labour market, to develop specialties and skills with high demand in the labour market, to reduce youth unemployment and prevent brain drain.
- *Upskilling & Reskilling* of human resources through vocational training in order to support both business transformation and smooth adaptation of human resources to emerging needs that arise in the labour market.
- Establish connections with expatriates, support enterprises to create high quality jobs aiming
  to repatriate Greeks working abroad and establish a network of contacts with expatriate
  professionals.

**(SK6) Business Environment,** improvement of the Business Environment based on the needs of industrial enterprises and the new challenges arising mainly due to green and digital transformation. In this context, the following strategic objectives are identified:

- Reduction of bureaucracy & procedures simplification (mainly for enterprises) through the digitalisation of public services and the simplification of procedures with high administrative cost.
- Upgrade and expansion of Business Parks, by emphasising in the consolidation of Informal Industrial Concentrations and the creation of new Business Parks as well as the reform of the institutional framework regulating their operations.
- Improving the standardisation and industrial property framework, in order to adapt to the needs of green and digital transformation and to effectively support of industrial innovation.

**(SA7) Resilience,** improve resilience of the Greek industrial sector, through the following strategic objectives:

- Energy crisis management, secure energy sufficiency and achieving competitive energy costs for industrial enterprises.
- Development of alternative supply chains, to strengthen the strategic autonomy of industrial production at European and national level.
- *Emergency management*, deployment of appropriate structures and mechanisms to deal with emergency situations.
- Adaptation to climate change, taking initiatives, for the rapid adaption of the industrial sector to the climate change and to deal with its consequences.

#### **KPIs for the Greek Industry**

In order to monitor and evaluate the implementation of the Strategy the following objectives were developed.

	Current Performance	after 5 years	2030	Comparison
Increase of Industry's Gross Value Added (% GDP)	10,7%	11% - 13%	up to 15%	EU – 18,1%
Increase of industrial exports (% GDP)	9,2%	up to 15%	up to 20%	38% (in countries with comparable population)
Increase employment in the Industry (% total employees)	8,2%	up to 12%	up to 14%	EU – 15,4%

<sup>\*</sup> Source: Eurostat

Graph V: KPIs for Greek Industry, Source: Eurostat

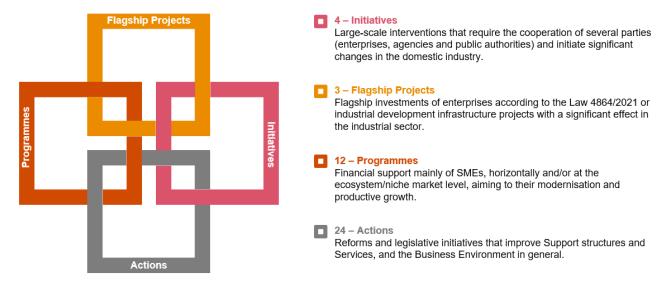
The above mentioned KPIs are connected horizontally to all of the Strategic Axes, as their accomplishment is related to actions and initiatives that can arise from all of the proposed Strategic Axes.

The development of the KPIs is done in two stages, in a five-year period from the start of the implementation of the Strategy and in the longer term until 2030, with the target of convergence of the Greek industry with the EU average and the overall increase of the contribution of the industrial sector in the Greek economy and society.

#### **Action Plan**

Based on the results of the previous analysis for the National Industrial Strategy, the Action Plan was prepared, as presented below.

Specifically, the Action Plan includes **43 interventions** which are divided into four (4) categories depending on the type (funding schemes, reforms, etc.) and the scope (collaborating agencies, intended changes, etc.) of each intervention. More specifically, the Action Plan includes:



Graph VI: Action Plan's Intervention Categories

The following table shows all the interventions of the Action Plan by Strategic Axe and type of intervention.

Table I: Action Plan of National Industrial Strategy

	SA1. Increasing C	ompetitiveness	SA2. Innovation	SA3. Digital Transformation
Interventions	Interventions		 	 
Flagship Projects			Int.5. Creation of a Pharmaceutical Innovation Fund	Int.6. Acceleration of smart manufacturing I
Programmes	Int. 8. Programme to support the internationalisation of industrial enterprises/products		Int. 12. Creation of a fund-of-funds on the basis of venture capitals for industrial SMEs	Int. 14. Digital Transformation of SMEs
Progr	Int. 11. Creation of an industrial entrepreneurship fund for providing loans and/or guarantees		Int. 13. Support industrial enterprises to develop innovative products, solutions and applications	
	Int. 20. Development of Regional Action Plans for Industry		1 	 
Actions	Int. 21. Development of an Action Plan for biopharmaceutical/ biotechnology		! !	
	Int. 22. Reduction of non-wage labour costs	Int. 23. Reform of the amortisation framework	Int. 27. Monitoring and evaluation of the intervention Competence Centers	Int. 28. Develop a dedicated national Industry 4.0 platform (Industry 4.0 Portal)
	Int. 24. Sector Deal - Defense Industry	Int. 25. Sector Deal – Shipbuilding Industry	1	
	Int. 26. Increase demand for Niche Markets products by incentivising end users			 

	SA4. Green Transformation	SA5. Human Resources and Skills	SK6. Business Environment	SA7. Resilience			
Interventions	Int. 1. Development of a National Industrial Symbiosis Action Plan	Int. 3. Development a Skills' Action Plan for the	 	Int. 4. Strengthening Greek industry in the context of European priorities to achieve strategic autonomy and competitiveness			
	Int. 2. Development of a National Strategy for *Green* Financing	Industrial sector					
Flagship Projects			Int. 7. Development of New Industrial Parks				
les	Int. 15. Green Development of SMEs	Int. 9. Programme to support the intra-company training/human resources certification	 	Int. 10. Programme for green development, resilience and adaptation of the Greek industry to the climate change			
Programmes		Int. 17. Development of an Industrial PhD	 				
lgo.	Int. 16. Energy and entrepreneurship	programme		Int. 19. Support business plans for Transformation and Reorganisation of enterprises in industrial sectors in need of restructuring			
<u>a</u>	int. 10. Energy and entrepreneurship	Int. 18. Development of an internship programme in the Industrial sector					
	Int. 29. Promote reforms to achieve competitive energy cost	Int. 32. Establishment of a National Industrial Youth Council	Int. 37. Actions for the simplification of the business environment				
	<b>3</b> ,	Int. 33. Support and expand the "Career Office" institution in Greek universities	Int. 38. Ease of doing business	I I I			
Actions	Int. 30. Reform of the institutional framework regarding the labeling of products in terms of	Int. 34. Enhancement of the National Vocational Education and Training System	Int. 39. Development of a digital system to support business decision making	Int. 42. Promoting investments in the			
	their environmental characteristics (eco-label)	Int 35. Development of a study on the employment of refugees and immigrants in the industry	Int. 40. Reform of the institutional framework for the establishment and operation of Industrial Parks	hydrogen value chain			
	Int. 31. Definition of specifications and requirements for secondary materials	Int. 36. Expansion of digital platform for connecting with Greek expatriates	Int. 41. Upgrading the National Intellectual and Industrial Property system				
	Int. 43. Technical Support						

The budget of the Action Plan is estimated at **€2.1 billion**, of which **€0.65** billion has already been committed through the Recovery and Resilience Fund (RRF).

The investment of €2.1 billion of public funding is estimated to leverage at least €2.4 billion of private investments, thus leading to total investments of €4.5 billion in the Greek Industry over the period 2022 – 2030.

Considering the strong multiplier effect of the industry in the Greek economy, it is estimated that the investment of €2.1 billion of **public funding**<sup>21</sup> in the industrial sector will contribute to a cumulative increase of GDP by approximately €2.7 billion during the period 2022-2030. In addition, the implementation of the Action Plan is estimated to bring along a significant number of additional public and private investments that are expected to contribute to the achievement of the Strategy's objectives.

#### Deliverable 3: Dissemination Plan for the National Industrial Strategy and **Action Plan**

The Greek industry, after a long recession (2008-2015), recorded a significant recovery in the period 2014-2019 which was even higher than that of the Greek economy as a whole<sup>22</sup>. The industry increased its contribution to the GDP from 10.68% in 2014 to 10.72% in 2019, creating (cumulatively for all four years) more than 26 thousand new jobs, while maintaining its significant contribution to the Greek economy:

- producing more than 70% of the total products exported by the country,
- investing five times more per employee than the economy as a whole,
- and recording investment in R&D that was equivalent to 35% of all private investment in R&D.

The recovery of the Greek industry was interrupted by the pandemic crisis and its negative consequences (limited demand and disruption of the supply chain), with industrial production recording a 9% decrease in the second quarter of 2020. Despite the adverse business environment created by the pandemic, the Greek industry managed to adapt quickly and recover. More specifically, the industrial production index recovered gradually from January 2021 and then surpassed pre-pandemic levels. In addition, a significant increase was recorded in the revenue of the industry in the second quarter of 2021 (by 36.7% compared to the corresponding quarter of the previous year), thus contributing decisively to the faster recovery of the Greek economy, (increase of GDP by 16.2%), which was higher than the EU average<sup>23</sup> (13.8%) during the same period. In this context, the National Industrial Strategy (NIS) specifies and promotes the accomplishement of the objectives of the "Development Plan for the Greek Economy" linked to the increase of productivity and employment, at the same time the NIS is integrated into the wider context of the European Industrial Strategy and the implementation of the European Green Deal. The main aim of the Strategy regarding the Greek industry and its role in the wider economy and society is reflected in the following vision.

https://ec.europa.eu/eurostat/databrowser/view/NAMA\_10\_A64\_\_custom\_1319810/default/table?lang=en\_23 Industry Development Bulletin, IOBE, September 2021

<sup>&</sup>lt;sup>21</sup> The above figures are derived from IOBE's etmimations, based on which €100 million of annual public funding in industry corresponds to an increase in annual GDP by €131.5

<sup>&</sup>lt;sup>22</sup> Eurostat, National accounts aggregates by industry,

Graph 1: Vision



Industry transforms the country's production model, invests in innovation, synergies and human resources skills, attracts investments and actively participates in international value chains with competitive products, generating sustainable and inclusive results for the Greek society.

The above-mentioned vision is a national objective until 2030 and highlights the role of the Greek Industry in the transformation of the country's production model. The Greek industrial sector maintains capacities such as resilience, growth dynamics and a multiplier effect to the Greek economy. Industry can lead the transformation of the country's production model by focusing on domestic value-added production and industrial autonomy. In the new transformed model of the Greek economy, Industrial Enterprises should have the critical size required to participate in European value chains and ensure their position in international competition.

Maintaining the leading role of Industry in the country's production model requires an increase in production capacity and, consequently, an increase in productive capital. This requires new domestic and foreign investments in Greece. Investments in Industry should be targeted at the development of innovation and competitiveness of production units and products. Investments and the development of new production lines are enhanced by the efficient cooperation of enterprises along the value chain and require effective cooperation of enterprises with the state and society. The development of synergies and economies of scale will strengthen the domestic industrial sector and support the industrial transition to cutting-edge sectors and technologies.

Strengthening the competitiveness of the Greek industrial production requires an increase in the size of the companies that currently form the country's industrial base. The increase in the size of small and medium enterprises should be combined with their organisational and technological transformation. This ensures that they are better connected to international value chains, as well as to the large and more mature domestic industrial enterprises.

The National Industrial Strategy, incorporating objectives of the National Smart Specialisation Strategy 2021-2027, focuses on the promotion of industrial innovation through the improvement of the business environment which will address the existing barriers of the national innovation system by facilitating and supporting collaboration between enterprises and research/academic institutions.

At the same time, the National Industrial Strategy fully integrates the objectives of the National Strategy for Digital Transformation of the Industry and promotes the digital and technological

**upgrade of the Greek industry**. The integration of new digital technologies brings significant changes to the production model by redefining industrial products, generating new business models (as-a-Service" or "pay-as-you go") and reshaping the work environment.

In that framework and recognizing the existence of different needs between Greek industrial enterprises, technological transition is promoted for enterprises with limited digital maturity and the use of cutting-edge technologies (Industry 4.0) for enterprises with high digital maturity. At the same time, the capitalisation of business opportunities arising through digital transformation for the development of "smart" products and digital systems and technologies is also promoted.

Accordingly, **the Green Transformation**, which has emerged as a key development policy of the EU, is fully adopted by the National Industrial Strategy. In this context, green entrepreneurship is promoted, taking advantage of opportunities arising through the green transformation for the development of new products and technologies. The Strategy by specifying the objectives of the National Energy and Climate Plan (ESEK) and the National Action Plan for the Circular Economy promotes the utilisation of RES and the improvement of the energy efficiency of industry with the aim of weaning off fossil fuels and the achievement of competitive energy costs, as well as the implementation of circular economy models through the promotion of industrial symbiosis.

The effective implementation of the National Industrial Strategy requires the development of new skills and the attraction of suitable and specialized human resources in new or traditional industrial sectors. The main objective of the Strategy is to promote the transformation of the domestic labor market, through the creation of new highly specialized jobs and the reduction of unemployment in professions related to industry. Emphasis is also placed on the upskilling & reskilling of the workforce, in order to develop appropriate skills to support the investment plans for the transformation of industrial enterprises and to reduce the risk of job loss. At the same time, the reform of the educational system and the improvement of its interconnection with the Industry are promoted, in order to support the development of appropriate specialties and skills for the young people and facilitate immediate integration in the labor market.

The National Industrial Strategy highlights the gaps and promotes **the improvement of the Business Environment** emphasising on the needs of the industrial enterprises. More specifically, the Strategy suggests the development of appropriate supporting structures and infrastructures, the reduction of bureaucracy and simplification of the institutional framework, in order to support the capitalisation of opportunities from the Greek Industry.

Taking into account the lessons learned and the special needs that arose during the pandemic and the energy crisis, the resilience of the Industry is promoted and the role of Greek Industry in achieving strategic autonomy at an EU level is highlighted, mainly through limiting Europe's dependencies on non-EU countries in critical value chains. In this context, the management of the current energy crisis is prioritized through achieving energy sufficiency and competitive energy costs. In addition, the Strategy promotes the development of appropriate mechanisms for the prevention and preparation of industrial enterprises to deal with future emergencies and crises.

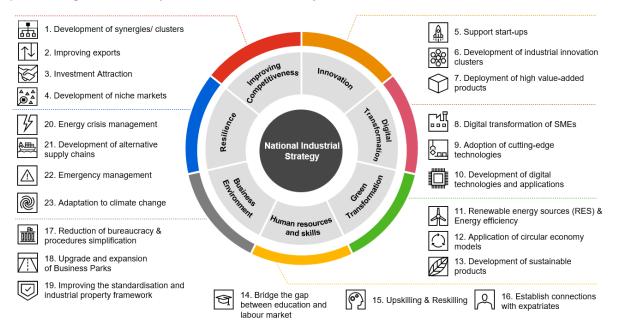
Finally, under the current conditions, the National Industrial Strategy as a coherent reform initiative is expected to contribute decisively to the following issues:

- Install of a permanent partnership between the Public Administration and the Greek industrial sector with the aim of implementing an effective industrial policy.
- Development an effective governance mechanism, facilitating coordination between the involved public authorities in the implementation of the industrial policy.
- Support the participation of Greek enterprises in international value chains and in particular in Important Projects of Common European Interest (IPCEI), promote transfer of technology/know-how and strengthen the innovative capacity of the Greek industrial ecosystem.
- Optimum utilisation of funding from the Recovery and Resilience Fund and the NSRF 2021–2027 to promote productive investments in sectors of high added value.

#### Strategic Axes and Objectives

In order to achieve the vision, the following Strategic Axes and Objectives were identified.

Graph 2: Strategic Axes and Objectives for the Greek industry



#### **Dissemination Plan for the National Industrial Strategy**

Aiming to effectively disseminate and promote the vision and objectives of the National Industrial Strategy in a clear and comprehensive manner to all stakeholders, the following Dissemination Plan was developed.

The Dissemination Plan utilizes knowledge multipliers to disseminate information through communication tools to the identified target groups in the three phases of implementation of the Plan. In addition, it sets guidelines for the immediate, accurate and coordinated transmission of information to the appropriate organisations. More specifically, as knowledge multipliers are defined the organisations that receive the information and relay it to the target groups. Knowledge multipliers have been divided into knowledge multipliers in the public sector and knowledge multipliers in the industrial sector based on the type of organisation and its field of activity. The selection of the organisations was based on the role that they possess in the formulation of the National Industrial Strategy and their interaction with the industrial sector. Specifically, the Network of Contact Points for Industry is identified as a multiplier of knowledge in the public

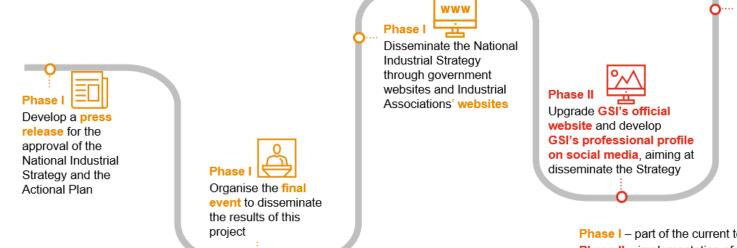
sector, accordingly as multipliers of knowledge in the industrial sector the Social Partners that participate in the National Industrial Committee (NIC) and the Working Groups, are selected.

Afterwards, as part of the Dissemination Plan specific target groups were selected, as the final recipients of the information. Target groups belong to the wider spectrum of Greek entrepreneurship and society and are directly or indirectly affected by the National Industrial Strategy. The target groups are Social Partners and enterprises, public authorities, academic and research institutions and finally the wider Greek society.

The effective implementation of the Dissemination Plan requires the development of a communication strategy, which includes an integrated set of activities and tools with general and specific strategic axes, aiming to achieve specific objectives. In order to achieve these objectives, the utilisation of communication tools is deemed necessary, given that they are the main means of connection with the target groups. The proposed communication tools combine all forms of communication both in printed and electronic form, as well as more interpersonal with direct interaction and participation. These tools concern printed and electronic material, informative actions and events, Social Media campaigns, official websites as well as mass media such as television and radio.

The selection of communication tools is configured, based on the implementation phase of the Dissemination Plan. The proposed Dissemination Plan is implemented in three distinct phases, with each phase being a continuation, integration and specialisation of the previous one. The first phase of implementation is marked by the official launch of the strategy and the third phase is completed with the completion of the National Industrial Strategy. All phases of the implementation of the Dissemination Plan include specific actions that require the use of corresponding communication tools, while specific KPIs are used to monitor and evaluate the actions. The phases of the dissemination plan and the recommended communication tools are presented in the following graph.

Graph 3: Phases of the dissemination plan and the communication tools



Phase II

- GSI will organise Info
   Days to promote
   initiatives that will be
   implemented as part of
   the Action Plan
- Also GSI will participate in relevant events organised by Industrial Associations

Phase III

Monitor the implementation of the Strategy and update the dissemination plan if necessary

Phase I – part of the current technical support project (until Q1 2023)

Phase II – implementation of the Strategy (between Q2 2023 and Q4 2026)

Phase III – upgrade of the Strategy, if necessary, (between Q1 2027 and Q4 2030)

# Deliverable 4: Report on the support for the design and implementation of the National Industry Strategy and Action Plan

The present Deliverable summarises the supporting actions provided by the Contractor throughout the duration of the project. In particular, the planning and implementation of industrial policy is a multidimensional activity, as the relevant responsibilities are divided among a number of Ministries and Authorities. In this direction, capacity building to General Secretariat for Industry and ensuring coordination and cooperation, through the governance mechanism of the National Industry Committee (NIC), are necessary conditions for the effective planning and implementation of the National Industrial Strategy.

The Contractor in cooperation with the General Secretariat for Industry (GSI) provided support to the NIC. More specifically, three (3) NIC meetings were supported, through the development of relevant supporting material and the discussion agenda, as well as keeping the meeting minutes to record the conclusions and decisions of each meeting. These meetings contributed significantly to the achievement of inter-ministerial coordination and the approval of the Strategy and the Action Plan for Industry.

In addition, the Contractor also provided support to the NIC Working Groups. In this context, a proposal was submitted regarding the establishment and the members of the Working Groups. Working Group meetings were also supported, with the participation of industrial associations and co-competent public authorities, in order to consult and finalise the National Strategy and the Action Plan for Industry.

At the request of NIC and GSI, three (3) position papers/briefing memos were developed with the aim of supporting the design of evidence based industrial policy. In particular, the following position papers/briefing memos were developed:

- National Industrial Strategy briefing memo, supporting material sent to the Prime Minister's Office, in view of his attendance at the Hellenic Federation of Enterprises (SEV) annual general meeting.
- Monitoring tool for the implementation of the Strategy.
- Proposal for the operational setup of the GSI in view of the implementation/monitoring of the National Industrial Strategy.

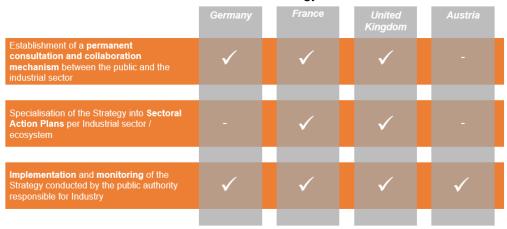
Also, throughout the duration of the project, the Contractor provided (remote and on-site) support and capacity building to GSI, with the aim of strengthening its operational capabilities for the design and implementation of industrial policy. These actions are recorded in nine (9) bi-monthly progress reports, which are presented in this Deliverable.

# Deliverable 5: Governance mechanism for effective industrial policy

For the development of the proposed Governance Mechanism, European good practices were analysed and taken into consideration, from countries that had successfully developed and implemented a National Industrial Strategy. In this context the following good practices were considered:

- Germany Industrial Strategy 2030
- France The new face of Industry in France
- United Kingdom Industrial Strategy Sector Deals
- Austria Development Strategy of Lower Austria

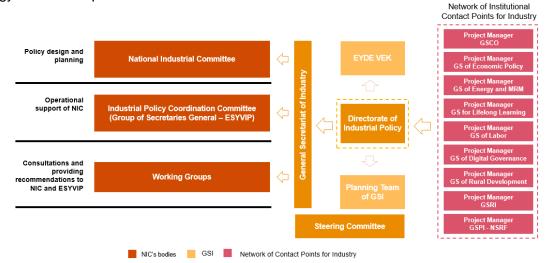
The analysis conducted, highlighted specific conclusions, which were incorporated in the Governance Mechanism of the National Industrial Strategy.



Graph 1: Conclusions – Lessons learnt of the good practices analysis

#### **Governance Mechanism**

Taking into account lessons learnt of the good practices analysis and the current institutional framework for Industrial policy, the proposed Governance Mechanism of the National Industrial Strategy was developed.



Graph 2: Involved bodies in the Governance Mechanism

More specifically, according to the Act of the Council of Ministers 35 of 17.8.2020, the involved bodies have the following responsibilities:

- National Industrial Committee (NIC): Development of a coherent National Industrial Strategy that will define the vision and strategic axes of the industrial policy.
- Industrial Policy Coordination Committee (ESYVIP): Operational support of NIC, with a recommendatory and executive role.
- **General Secretariat of Industry (GSI)**: Participation in the design and the implementation of the National Industrial Strategy.
- **Working Groups**: Consultation, analysis, documentation and providing recommendations to NIC on a specific subject assigned to them.

Furthermore, in order to operationally support and strengthen GSI, it is suggested to form the following supportive bodies with the following responsibilities:

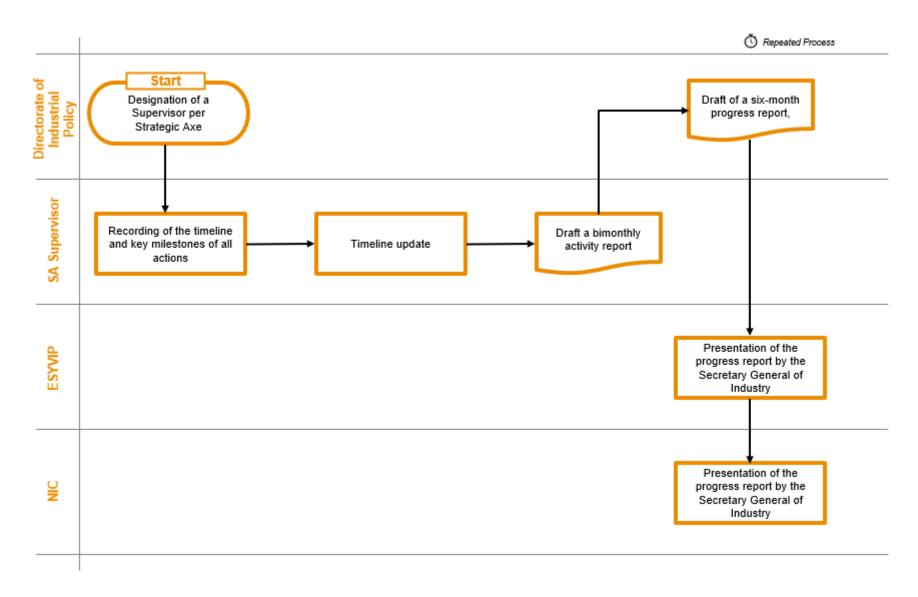
- Planning Team of GSI: Support the Steering Committee regarding the Industrial Policy, having a recommendatory and executive role.
- **Directorate of Industrial Policy**: Monitoring of implementation, evaluation and update of the Strategy.
- **Project Managers**: Responsible for the internal coordination and implementation of actions concerning each General Secretariat and/or other Body.
- **Steering Committee**: Effective coordination and monitoring of the project "Design and Deployment for the Growth and Transformation Strategy of the Greek Industry".

### **Workflow and Processes**

The effective implementation of the National Industrial Strategy requires continuous monitoring and evaluation, as well as the update of the Strategy, if necessary. For that purpose, specific procedures were outlined in order to facilitate the monitoring, evaluation and update of the Strategy.

# ❖ Monitoring Procedure

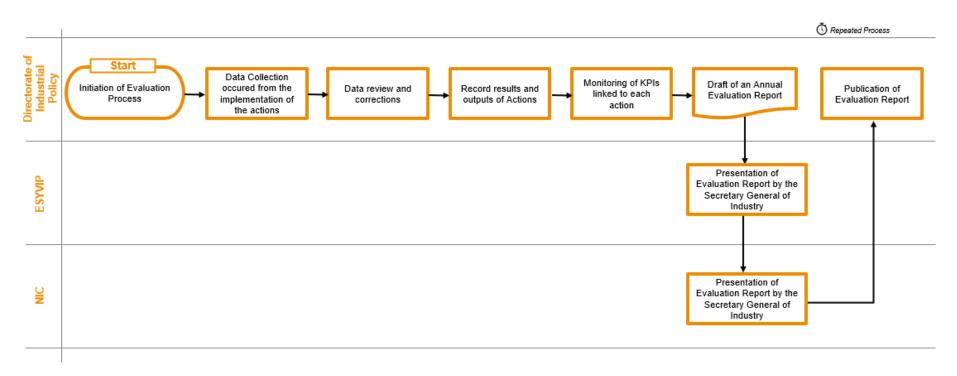
Process	Description	Responsible
Vertical Monitoring     of the Action Plan	The Directorate of Industrial Policy of GSI, is suggested to monitor the implementation of the Action Plan per Strategic Axe, by designating one of its employees as Supervisor for each Strategic Axe (SA).	Directorate of Industrial Policy
2. Monitoring Progress per Strategic Axe	The SA Supervisor records in a digital format the timeline and key milestones of all actions included in the Strategic Axe, for which he/she is responsible. In this context, dependencies between actions are taken into consideration, both within the same Strategic Axe and horizontally, as identified in the Action Plan. For the needs of vertical monitoring, it is recommended to use the table of <i>Annex I</i> .	SA Supervisor
3. Timeline Update	The SA Supervisor, contacts regularly with the competent bodies for the implementation of the actions, as specified in the Action Plan and updates regularly the timeline.	SA Supervisor
4. Drafting of an Activity Report per Strategic Axe	The SA Supervisor drafts a bimonthly activity report, summarising the following for each Strategic Axe:  a) Key milestones achieved b) Key milestones delayed c) Potential risks identified d) Mitigating actions depending on the severity of each risk For the draft of the bimonthly activity report, it is recommended to utilise the standard form of <i>Annex I</i> .	SA Supervisor
5. Horizontal Monitoring of the Action Plan	The Directorate of Industrial Policy, based on bimonthly activity reports, drafts a consolidated six-month progress report, summarising the following:  a) Key milestones achieved, b) Key milestones delayed c) Potential risks identified d) Mitigating actions depending on the severity of each risk For the draft of the six-month progress report, it is recommended to utilise the standard form of <i>Annex I</i> .	Directorate of Industrial Policy
6. Submission of Progress Report	The Secretary General of Industry submits the six-month progress report of the Strategy to NIC and ESYVIP.	Secretary General of Industry



Graph 3: Workflow of monitoring procedure

# Evaluation Procedure

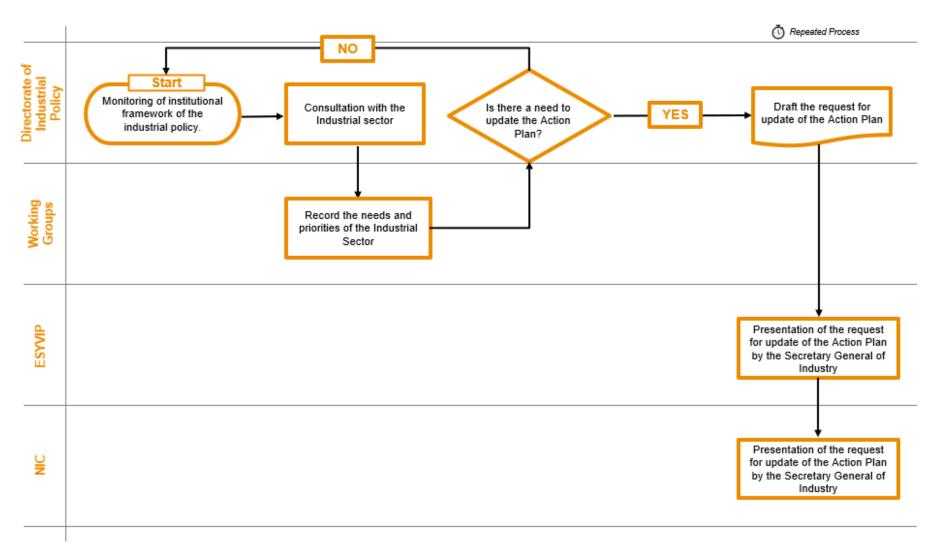
Process	Description	Responsible
1. Initiation of Evaluation Process	Following the second year of the Strategy's implementation, the Directorate of Industrial Policy initiates the Evaluation Process.	Directorate of Industrial Policy
2. Data Collection	The Directorate of Industrial Policy collects primary data per year that reflect the results and outputs from the implementation of the actions (# business plans funded, size of enterprises supported, amount of private investments leveraged, etc.). In this context, it collaborates with the competent public authorities for the monitoring of the actions, as well as with other authorities that maintain relevant databases.	Directorate of Industrial Policy
3. Data review	After the completion of the collection of primary data, the Directorate of Industrial Policy should review the data in order to identify potential deviations and omissions. Accordingly, the Directorate of Industrial Policy is responsible for the correction of the data in cooperation with the competent authorities (if necessary).	Directorate of Industrial Policy
4. Record results and outputs for each Action	For each action implemented, the Directorate of Industrial Policy records its results. More specifically, in case the action regards a funding scheme, the following are recorded: a) business plans funded, b) size of supported enterprises and c) amount of private investments leveraged. In case an action regards non-financial incentives or a reform, a brief description of the changes it brings to entrepreneurship is recorded.	Directorate of Industrial Policy
5. Monitoring KPIs of Actions	Collection of secondary data and monitoring KPIs, linked to each action (e.g., GVA of industry, exports, employment etc.)	Directorate of Industrial Policy
5. Draft of an annual Evaluation Report	The annual evaluation report is drafted based on the previous steps of the process, capturing the results and outputs of the actions and the change on the KPIs linked to them, providing (if possible) estimations for the impact of the actions to the economy. At the same time, the annual evaluation report includes suggestions for addressing potential risks and barriers. In order to draft this report, it is proposed to utilise the standard form in <i>Annex II</i> .	Directorate of Industrial Policy
6. Submission of Evaluation Report	The Secretary General of Industry presents the annual evaluation report of the Strategy to NIC and ESYVIP.	Secretary General of Industry
7. Publication of Evaluation Report	After the approval of the NIC, it is recommended that the annual evaluation report becomes publicly available on the official website of GSI.	Directorate of Industrial Policy



Graph 4: Workflow of Evaluation Procedure

# Update procedure

Process	Description	Responsible
1. Monitoring of the institutional framework and the business environment	The Directorate of Industrial Policy monitors the institutional framework and the business environment (national and European) in order to identify significant changes that may create a need to update the Action Plan.	Directorate of Industrial Policy
2. Monitoring of industrial sector's needs	The Directorate of Industrial Policy, through consultation with the Working Groups, records important changes on the needs/priorities of the Industrial sector which may create a need to update the Action Plan.  For consultation needs, it is recommended to utilise the standard form of <i>Annex III</i> .	Directorate of Industrial Policy
3. Evaluation of new trends	The Directorate of Industrial Policy evaluates the new trends arising, either from changes in the institutional framework of the industrial policy or from the new needs of the Industrial sector and decides upon the need to update the Action Plan informing the Secretary General of Industry accordingly.	Directorate of Industrial Policy
4. Request for update	The Secretary General of Industry submits to ESYVIP and NIC a request for update of the Action Plan. In this request, it is justified the feasibility of the update, as well as the recommended actions.  In this process, it is recommended to utilise the standard form of <i>Annex III</i> .	Secretary General of Industry



Graph 5: Workflow of update procedure

# Deliverable 6: Report on the implementation of specific measures of the National Industry Action Plan

The aim of this Deliverable is to support the detailed design, through the development of Implementation Guides, of three (3) interventions of the Action Plan for Industry, which were prioritised by the GSI based on the guidelines of the NIC. In this context, an executive summary of the three (3) Implementation Guides is presented below.

### P8. Programme to support the internationalisation of industrial enterprises/products

### Title

Programme to support the internationalisation of industrial enterprises/products

### Summary

Strengthening the internationalisation of industrial enterprises is a key strategic objective of the National Industrial Strategy. In particular, the Strategy aims to gradually increase exports of industrial products from 9.2% of GDP in 2019 to 20% by 2030, in order for Greece to approach the performance of European countries with comparable population, which is estimated at around 38% of GDP<sup>24</sup>.

During the past eight years there has been a significant increase in the extroversion of the industrial sector, with exports increasing by 20% and industrial products consistently accounting for more than 70% of the total products exported by the country, although the distance from international competition remains significant. Mainly for SMEs, there is much room for improvement in the area of internationalisation, as only 5.3% of SMEs maintain export activity.

In this context, this programme aims to strengthen industrial SMEs in order to achieve a holistic upgrade of their structures (organisational, operational, technological and productive) and to effectively support their expansion to target markets abroad as well as to promote their participation in clusters that will facilitate their access to international value chains.

### Eligible expenditures

Indicatively, the programme supports the following actions:

- Purchase and installation of relevant mechanical and laboratory equipment Specific facilities to support internationalisation process
- Purchase and installation of information and communication technologies (ICT)
- Design and standardisation of products/services and packaging/labelling/, quality/ standardisation of management and operational systems, specialised standardisation accreditation for target markets
- Marketing, promotion & communication actions in target markets
- Technical and advisory support actions
- Actions to register and use patents, intellectual property and transfer of know-how
- Recruitment of new staff

### **Funding source**

- NSRF Policy Objective 2021-2027: SP1 A smarter Europe by promoting innovative and smart economic transformation
- Competitiveness Program 2021-2027 (Priority 2: Strengthening Entrepreneurship and Competitiveness Intervention Category: 2.3.2 Clusters Extroversion)

<sup>&</sup>lt;sup>24</sup> Hellenic Statistical Authority

- Specific Objective NSRF 2021-2027:
  - o RSO1.2. Harnessing the benefits of digitisation for citizens, companies, research organisations and public authorities (ERDF)
  - RSO1.3. Strengthening the sustainable growth and competitiveness of SMEs and creating jobs in SMEs, through value-added investments (ERDF)

### **Stakeholders**

The GSI is proposed to be the responsible authority for the design of this programme, and EYDE-VEK is proposed to be the implementation agency.

### **Indicative Beneficiaries**

Industrial SMEs operating in the following NACE Rev. 2:

- Mines Quarries (05 09),
- Manufacturing (10 33),
- Sewerage, waste management, remediation activities (38 39)
- Constructions (41-43)
- ICT services (62)

#### Timeline

The deadline for completion of the supported business plans should not exceed twenty-four (24) months from the date of their final approval.

### **Budget**

The total budget of the programme is estimated at € 187.5 million, as follows:

- Public expenditure: € 75 million (40%)
- Private investment: € 112.5 million (60%)

### Legal framework

- 1. The project will be implemented through the de minimis rule, EU Regulation 1407/2013.
- 2. The subsidised budget per business plan will not exceed two hundred thousand euros (€ 200,000).

### P9. Programme to support the intra-company training/human resources certification

### Title

Programme to support the intra-company training/human resources certification

### **Summary**

The fundamental changes caused by the green and digital transformation have important implications to the employment and the required skills for work. The adaptation of enterprises to the new production model requires professionals who are highly skilled, flexible, maintain managerial skills and have the emotional and social intelligence and capacity to solve and address the challenges of the present and the future.

Companies are looking for talented professionals and at the same time they invest in upskilling and reskilling of their human resources. Indicative<sup>25</sup> skills that are related to the human resources of industry are presented below:

- Digital Technologies: exploiting cloud computing technologies, databases, digital infrastructure, cybersecurity, server and data storage technologies, software and application development, etc.
- Green Technologies: harnessing technologies for clean energy, energy efficiency, clean air and water, sustainable transport, recycling and reuse of materials and products, healthy and sustainable food, etc.
- Interdisciplinary and transferable skills: analytical and systematic thinking, problem-solving, communication skills, adaptability, leadership, teamwork, etc.
- Business management: data analysis, design and development of business plans, project management, process management, etc.
- Medium-level technical skills (e.g., operation of modern mechanical equipment, maintenance of mechanical equipment, use of new materials in the production, etc.)

In this context, the aim of this programme is to support businesses to identify their skills gaps and create appropriate Upskilling and Reskilling schemes based on the prospective demand for the occupations that the business employs and its future needs.

### Eligible expenditures

Indicatively, the programme supports the following actions:

- Costs related to the trainers that implement the intra-company training.
- Operating costs directly related to the intra-company training project, such as travel costs, accommodation costs, materials, consumables and supplies, as well as depreciation of material and equipment.
- Expenditures on consultancy services related to intra-company training.
- Expenditures regarding the certification of skills that were developed as part of the intracompany training.
- General indirect costs such as administrative costs, rent, overheads.

### **Funding source**

- NSRF Policy Objective 2021-2027: SP4 A more social and inclusive Europe through the implementation of the European Pillar of Social Rights.
- Competitiveness Program 2021-2027 (Priority 4: Human Resources Development in the context of growth transformation Intervention Category: 4.d.3 Support for Structural Adjustment of Enterprises linked to planned changes in the organisation of each enterprise).

<sup>&</sup>lt;sup>25</sup> National Strategy for the Digital Transformation of Greek Industry, <a href="https://www.ggb.gr/sites/default/files/press-releases-files/DG%20Reform\_Digital%20Transformation\_Deliverable%201\_Final%20Draft\_01022021.pdf">https://www.ggb.gr/sites/default/files/press-releases-files/DG%20Reform\_Digital%20Transformation\_Deliverable%201\_Final%20Draft\_01022021.pdf</a>

• Specific objective ESF 2021-2027: ESO4.4 Promoting the adaptation of workers, enterprises and entrepreneurs to change, active and healthy ageing, and a healthy and well-adapted work environment that addresses health risks (ESF+)

### **Stakeholders**

The GSI is proposed to be the responsible authority for the design of this programme, and EYDE-VEK is proposed to be the implementation agency.

### **Indicative Beneficiaries**

Industrial SMEs operating in the following NACE Rev. 2:

- Mines Quarries (05 09),
- Manufacturing (10 33),
- Sewerage, waste management, remediation activities (38 39)

### **Timeline**

The deadline for completion of the supported business plans should not exceed twelve (12) months from the date of their final approval.

### **Budget**

The total budget of the programme is estimated at € 218 million, as follows:

- Public expenditure: € 87 million (40%)
- Private investment: € 131 million (60%)

### Legal framework

- 1. The project will be implemented through the de minimis rule, EU Regulation 1407/2013.
- 2. The subsidised budget per business plan will not exceed two hundred thousand euros (€ 200,000).

# P10. Programme for green development, resilience and adaptation of the Greek industry to the climate change

#### Title

Programme for green development, resilience and adaptation of the Greek industry to the climate change

## **Summary**

EU has adopted a series of initiatives to make its climate, energy, transport and tax policies fit for purpose to reduce net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels (Fit for 55). In addition, the EU prioritises the strengthening of business resilience to crises and climate change including crisis management and business continuity plans, security of facilities and information, etc.

In that context Greek economy has the following characteristics <sup>26</sup>:

- Greek businesses lag behind in the area of green transformation, as only 74% of them have taken measures for the efficient use of resources, compared to the EU average of 89%.
- There is a low cyclical rate of material use, as a percentage (%) of the total material use in Greece (4.2% compared to the EU-27 average of 11.8%).
- Low recycling rate of municipal solid waste (18.9% compared to 46.5% in the EU), which is
  particularly important for the development of entrepreneurship in the green and circular
  economy.

Taking into account the above, the aim of this programme is to reduce the environmental footprint of industrial enterprises during the production process (primary and secondary), through the following interventions:

- Integration of technologies and solutions aimed at:
  - o reducing the industrial waste generated (solid, liquid and air),
  - extending the management and recovery of waste from the production process so that it can be reused as raw materials,
  - o saving energy from their operation.
- Implementation of circular economy models through the introduction of processes, technologies and materials that serve to reduce the use of resources, promote the reuse and recycle of resources and redirection of production flows, as well as industrial symbiosis infrastructures for companies that cooperate for the utilisation of waste and by-products.
- Strengthening the resilience of businesses to cope with the conditions and factors related to climate change and its impact on business operations, crisis management through the establishment of continuity plans and the installation of security equipment and information.

### Eligible expenditure

Indicatively, the programme supports the following actions:

- Study and specification of business needs in the area of green and circular economy and/or crisis resilience investments and technical support to businesses
- Development of suitable buildings/spaces and specific facilities for the implementation of green and circular economy and/or crisis resilience investments and the development of industrial symbiosis infrastructure
- Purchase and installation of mechanical and electrical equipment to serve the objectives of green growth, resilience and adaptation of the industry to the climate change
- Expenditures for the procurement of software that exclusively serves the needs of businesses in green and circular economy and/or crisis resilience investments

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<sup>&</sup>lt;sup>26</sup> National Action Plan for the Circular Economy

• Costs related to the training of the human resources aiming to adapt on the needs that arise from green and circular economy and/or crisis resilience investments

### **Funding source**

- NSRF Policy Objective 2021-2027: SP1 A smarter Europe by promoting innovative and smart economic transformation
- Competitiveness Program 2021-2027 (Priority 2: Strengthening entrepreneurship and competitiveness - Intervention Category: 2.3.1 Adaptation / modernisation of the production process)
- Specific objective NSRF 2021-2027: Strengthening the sustainable growth and competitiveness of SMEs and creating jobs in SMEs, through value-added investments (ERDF)

### **Stakeholders**

The GSI is proposed to be the responsible authority for the design of this programme, and EYDE-VEK is proposed to be the implementation agency.

### **Indicative Beneficiaries**

Industrial SMEs operating in the following NACE Rev. 2:

- Mines Quarries (05 09),
- Manufacturing (10 33),
- Sewerage, waste management, remediation activities (38 39)

### Timeline

The deadline for completion of the supported business plans should not exceed twenty-four (24) months from the date of their final approval.

### **Budget**

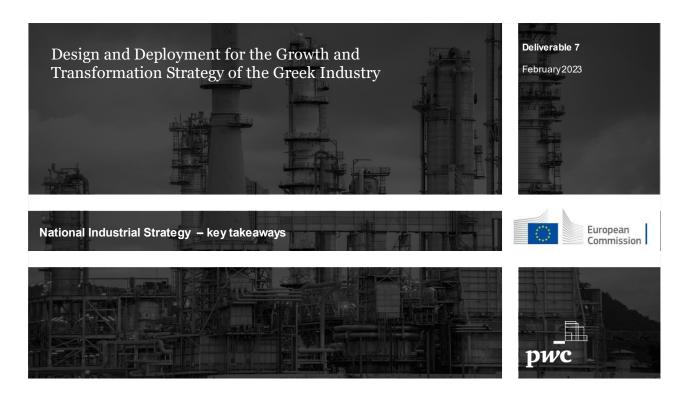
The total budget of the programme is estimated at € 100 million, as follows:

- Public expenditure: € 40 million (40%)
- Private investment: € 60 million (60%)

### Legal framework

- 1. The project will be implemented through the de minimis rule, EU Regulation 1407/2013.
- 2. The subsidised budget per business plan will not exceed two hundred thousand euros (€ 200,000).

# II. National Industrial Strategy – key takeaways (presentation)



# Content

- 1 Key takeaways
- 2 Key challenges and actions taken



# Key takeaways

### Key takeaway #1



Analysis of significant number of European and national strategic initiatives concluded in the development of an articulated strategy structure

- Following this approach selected areas of interest were highlighted (industrial ecosystems, niche markets), while at the same time, with the use of multiple structural elements, the horizontal issues of industry were sufficiently covered (industrial SMEs, Society and Business Environment)
- This approach was recognised as a good practice, at an EU level, from the European Commission and was utilised for the development of the new Technical Support instrument (TSI) for industry.

### Key takeaway #2



Establishing the NIC and the Network of institutional contact points proved crucial

- The Governance Mechanism (NiC, ESYVIP, Working Groups) strengthened inter-ministerial coordination and cooperation at a high level. In addition, it promoted the cooperation of the public and private sector.
- Accordingly, the Network of institutional contact points for industry promoted inter-ministerial coordination and cooperation at a lower operational level.

### Key takeaway #3



Recent challenges at international level required for the development and inclusion of a Strategic Axis for Resilience

- The war in Ukraine highlighted once again the importance of the resilience of Greek industry to crises and the need to achieve strategic autonomy at an FU level
- In this context, the Strategic Axis for Resilience was integrated in the Strategy, followed by relevant objectives and interventions, in order to protect Greek industry from external crises and to take advantage of future opportunities.

### Key takeaway #4



Timing is key for implementation through national and EU level financing instruments

The timing during which the Strategy was developed turned out to be a particularly correct decision. More specifically, the project started at the beginning of the new Programming Period 2021-2027, giving the appropriate time for the cooperation of the co-competent authorities and the integration of the Strategy's directions into the co-financed programs, which can contribute to the optimal utilisation of financial resources.

# Key challenges and actions taken

### Challenges

1

The development of an effective industrial policy requires the coordination and cooperation of seven (7) Ministries and a number of industrial associations

### Actions taken

- Established NIC and a Network of institutional contact points for Industry (it includes one Project Manager in each competent Ministry)
- Existence of a significant number of European and national strategic initiatives which shape the framework for the elaboration of the National Industrial Strategy. A key requirement was that the Strategy have to incorporate relevant directions and build upon the existing knowledge.
- · For the development of the Strategy an articulated structure was followed
- The war in Ukraine, which caused an energy and inflation crisis, deteriorated significantly the external environment for Industry and generated additional challenges that should be addressed by NIS
- Incorporated into the Strategy a 7<sup>th</sup> Strategic Axis for Resilience
- The implementation of the Strategy requires the investment, through European co-financed programs (NSRF, RRF), of significant financial resources
- Promoted close cooperation with competent Authorities that manage co-financed programs

2

# III. Project's factsheet

As part of this project the following deliverables were developed:

### • Deliverable 1: Inception Report

Map and analyse the current situation of the Greek Industry, identifying competitive advantages and weaknesses.

## • Deliverable 2: National Industrial Strategy

Design a National Industrial Strategy with a vision, strategic axes and objectives for the Greek Industry and an Action Plan with 43 initiatives in order to implement the Strategy.

### • Deliverable 3: Dissemination Plan of the Industrial Strategy

Identify relevant stakeholders and develop a plan and supporting material for the communication of the National Industrial Strategy.

## Deliverable 4: Support for the design and implementation of the National Industrial Strategy

Provide support and capacity building to the GSI for undertaking its role in view of the National Industrial Committee, as well as for the design and implementation of the National Industrial Strategy.

### • Deliverable 5: Governance Mechanism

Establish a permanent and efficient governance mechanism that will promote collaboration and coordination between the various involved stakeholders, for effective industrial policy design and implementation.

### Deliverable 6: Develop detailed implementation plans for specific actions

Develop detailed implementation plans for three actions of the Action Plan as those are prioritised by NIC and GIS.

### • Deliverable 7: Final event and final report

Organise a final event, in order to present the project's key takeaways and lessons learned.

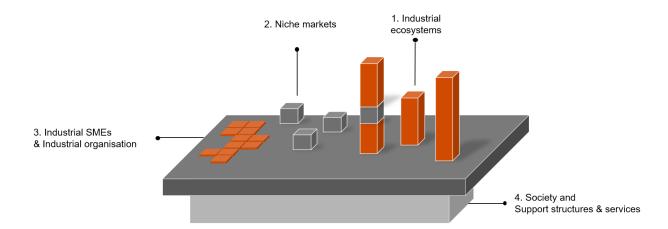
# The Vision of the Greek industry



Industry transforms the country's production model, invests in innovation, synergies and human resources skills, attracts investments and actively participates in international value chains with competitive products, generating sustainable and inclusive results for the Greek society.

# The National Industrial Strategy

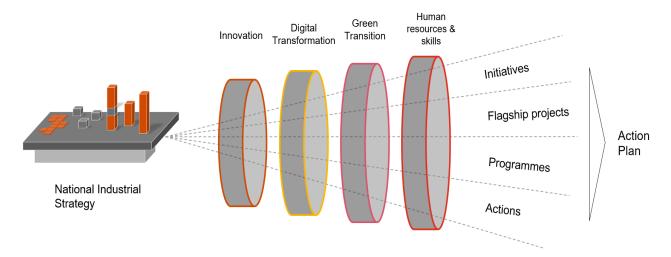
The development of the Industrial Strategy followed an articulated structure with **selected areas of interest** while at the same time, used multiple structural elements, ensuring that the lateral issues of the Industry are sufficiently covered.



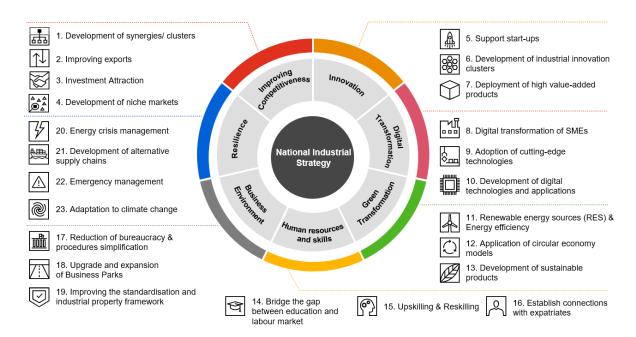
In this context, the following areas of interest of the Greek industrial sector were identified and analysed:

- Industrial ecosystems
- Niche markets
- Industrial SMEs & Industrial organisation
- Society and Support structures & services

The areas of interest were analysed based on their performance in the four **Pillars of the Strategy** 



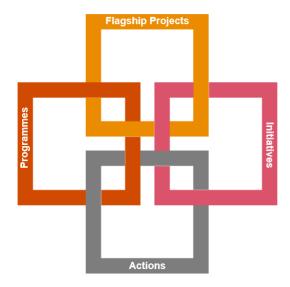
In order to achieve the vision, **Strategic Axes and Objectives** were identified:



- (SA1) Increasing Competitiveness, through the promotion of scaling up and internationalisation of industrial enterprises
- (SA2) Innovation, promotion of industrial research and innovation and integration of R&D results and new technologies into the industrial production process
- ❖ (SA3) Digital Transformation, this Strategic Axe is developed based on the National Strategy for Digital Transformation of the Greek Industry, aiming to promote the technological upgrade and digital transformation of industrial enterprises, according to their technological maturity
- (SA4) Green Transformation, the European Green Deal pinpoints industry as a significant sector for achieving climate neutrality by 2050
- (SA5) Human Resources and Skills, skills development, emphasising on technical and STEM (Science, Technology, Engineering, and Mathematics) skills, as well as attracting suitable human resources, are key priorities for industrial enterprises, in order to adapt in the green and digital transition
- (SK6) Business Environment, improvement of the Business Environment based on the needs of industrial enterprises and the new challenges arising mainly due to green and digital transformation
- **SA7)** Resilience, improve resilience of the Greek industrial sector

# The Action Plan

Based on the results of the previous analysis for the National Industrial Strategy, an Action Plan was prepared including **43 interventions** which are divided into four (4) categories depending on the type (funding schemes, reforms, etc.) and the scope (collaborating agencies, intended changes, etc.) of each intervention.



### 4 – Initiatives

Large-scale interventions that require the cooperation of several parties (enterprises, agencies and public authorities) and initiate significant changes in the domestic industry.

### 3 – Flagship Projects

Flagship investments of enterprises according to the Law 4864/2021 or industrial development infrastructure projects with a significant effect in the industrial sector.

### 12 – Programmes

Financial support mainly of SMEs, horizontally and/or at the ecosystem/niche market level, aiming to their modernisation and productive growth.

### 24 – Actions

Reforms and legislative initiatives that improve Support structures and Services, and the Business Environment in general.

# IV. Project's Communication material

### **Project description**

Title: Design and deployment of the National Strategy of the Greek Industry

**Summary:** The aim of this project is to support the National Industrial Committee (NIC) and provide capacity building activities to the General Secretariat of Industry (GIS) in order to develop the first National Industrial Strategy.

The Greek Industrial Strategy is integrated into the wider context of the European Industrial Strategy and the implementation of the European Green Deal. The Strategy highlights the role of Industry as a sector that can lead the transformation of Greece's production model by focusing on domestic value-added production and promoting industrial autonomy at an EU level.

As part of this project the following main results were delivered:

- Design and approve the first Industrial Strategy of Greece accompanied with an Action Plan (43 Initiatives) which set the framework for evidence-based industrial policy.
- Develop a plan for the dissemination of the National Industrial Strategy
- Establish a governance mechanism, with the participation of seven (7) competent Ministries and six (6) associations, that facilitates coordination between different entities and at different working levels
- Develop detailed implementation plans for three actions of the Action Plan as those were prioritised by NIC and GIS.

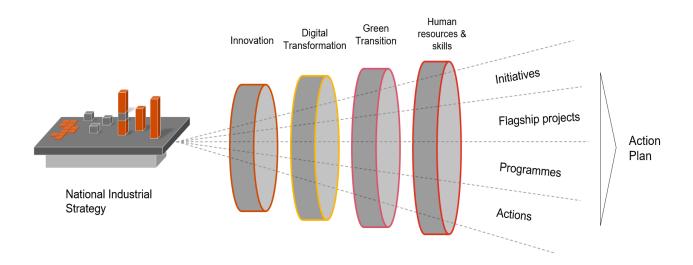
This project is funded by the European Union via the Technical Support Instrument and implemented by the contractor, in cooperation with the European Commission.

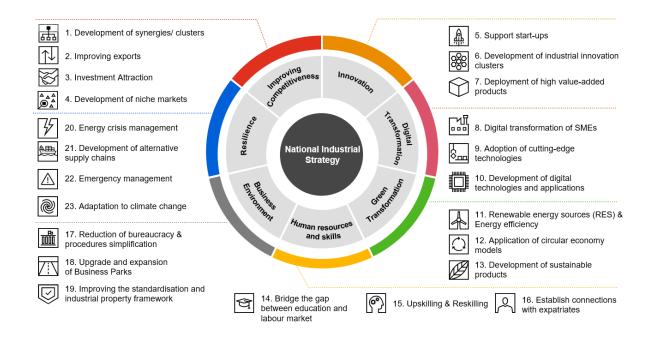
### Social media text

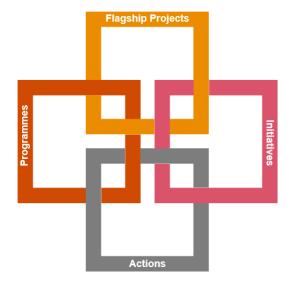
- The new vision of Greek Industry: Industry transforms the country's production model, invests in innovation, synergies and human resources skills, attracts investments and actively participates in international value chains with competitive products, generating sustainable and inclusive results for the Greek society.
- The National Industrial Strategy aims to further strengthen the growth dynamics of the Greek Industry, focusing on key interventions around (7) Strategic Axes and twenty-three (23) underlined Objectives

# Visual materials









#### 4 – Initiative

Large-scale interventions that require the cooperation of several parties (enterprises, agencies and public authorities) and initiate significant changes in the domestic industry.

### 3 – Flagship Projects

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### 12 – Programmes

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### 24 – Actions

Reforms and legislative initiatives that improve Support structures and Services, and the Business Environment in general.

The current version of the document represents the 2<sup>nd</sup> draft of Deliverable 7: "Final event and final report". This has been prepared in the context of the project "Design and deployment for the growth and transformation strategy of the Greek industry" for the purposes of the Deliverable 7 in accordance with the signed contract.

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