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Bridging Horizons: Strengthening Cooperation, Resilience and Cohesion in the Adriatic-Ionian Region

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Energy Transition Frameworks and Projects in the Adriatic–Ionian Region: Policies, Priorities, and Climate Action Pathways

EUSAIR Greek Presidency 2024 - 2025

EU Strategy for the Adriatic and Ionian Region EUSAIR

10 YEARS #EUSAIR10

MINISTRY OF ENVIRONMENT & ENERGY

HELLENIC REPUBLIC Ministry of Economy and Finance

EUROPEAN UNION

1. The Scope of the Energy Session: Laying the Groundwork

🔍 Our objective today is multifaceted:

- To **develop energy transition policies** for EUSAIR countries, aligned with the EU's long-term climate goals.
- To assess how this transformation will impact **energy security, affordability, and competitiveness** — all essential pillars of a resilient energy system.
- To foster **policy harmonization** across the region. EUSAIR must evolve into a **platform of coordination**, addressing disparities and avoiding fragmented pathways.

1. The Scope of the Energy Session: Laying the Groundwork

- To confront the core challenges:
  - **investment (securitization/lower cost)**,
  - **emerging stranded costs**,
  - **limited market integration**,
  - **barriers to technological adoption**.

- To initiate a dialogue on the **governance, priorities, and timing** of each country's energy policies, with transparency and cooperation at the heart of our effort.

2. Greek Presidency: Vision, Flagship Initiatives, and Priorities

The Greek Presidency recognizes the complexity of this transition and is committed to tackling these challenges head-on through:

- The **National Energy and Climate Plan (NECP)** and **Long-Term Strategy for 2050**
- The **National Climate Law**, enshrining legally binding decarbonization targets
- Major projects like the **National Offshore Wind Programme**, and Greece's leadership role in the **Clean Energy for EU Islands** initiative
- Promotion of **cross-border PCI/PMI**, **IPCEIs**, and **CESEC priority projects**
- Active engagement with the **EU Action Plan for Electricity Grids** to modernize and expand infrastructure

2. Greek Presidency: Vision, Flagship Initiatives, and Priorities

Under the Ministry of Environment and Energy (ΥΠΕΝ), Greece is focusing on **three strategic axes**:

➤ a) Expanding International Energy Interconnections

Accelerating projects like **GRITA 2** and exploring **offshore wind farms in the Ionian and Adriatic Seas**. These are vital for energy security and decarbonization and reflect key goals of the EUSAIR Action Plan (Actions 2.4.1 & 2.5.1).

➤ b) Building the Hydrogen Economy

Greece is advancing its role as a regional hub for **green hydrogen** through initiatives like **H2DRIA** and the proposed **H2Poseidon pipeline**, connecting Southeastern Europe to Central and Western Europe. These are transformative investments in clean energy and industrial innovation. H2 Backbone, H2 ready pipelines, North macedonia

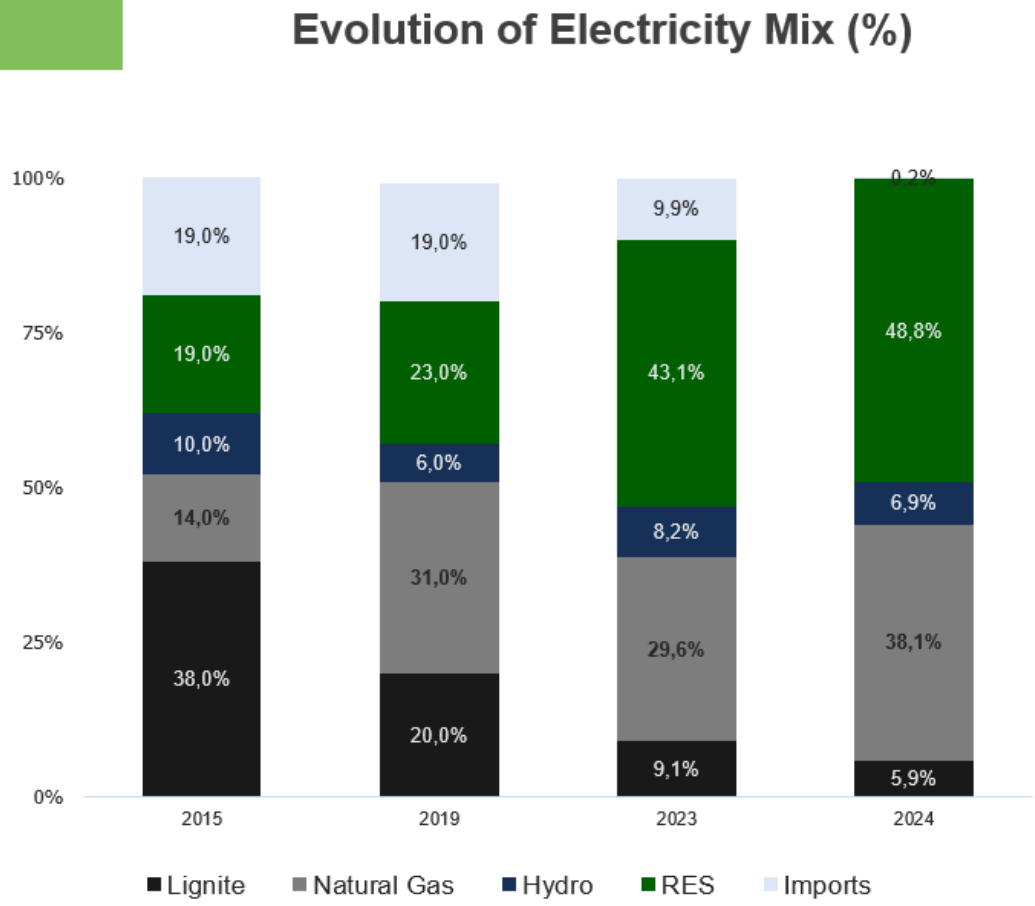
➤ c) Strengthening Cross-Border Cooperation in RES & Efficiency

We must move toward **joint RES projects, shared permitting zones**, and **cross-national energy efficiency programs**, in line with Action 2.5.1 of the revised EUSAIR Action Plan.

Energy Transition in Greece

Electricity Energy Mix

Greece has made remarkable progress in transitioning from fossil fuels to clean energy sources

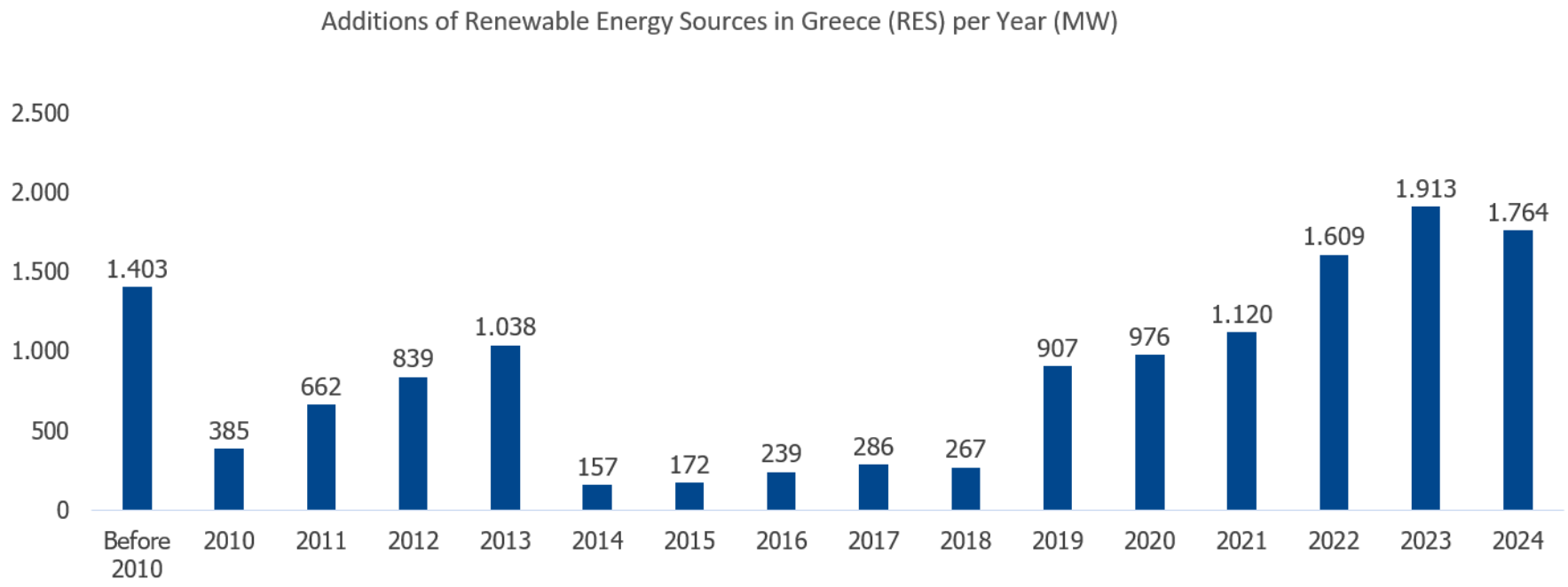


Source: IPTO

Energy Transition in Greece

Rapid Deployment of Renewables

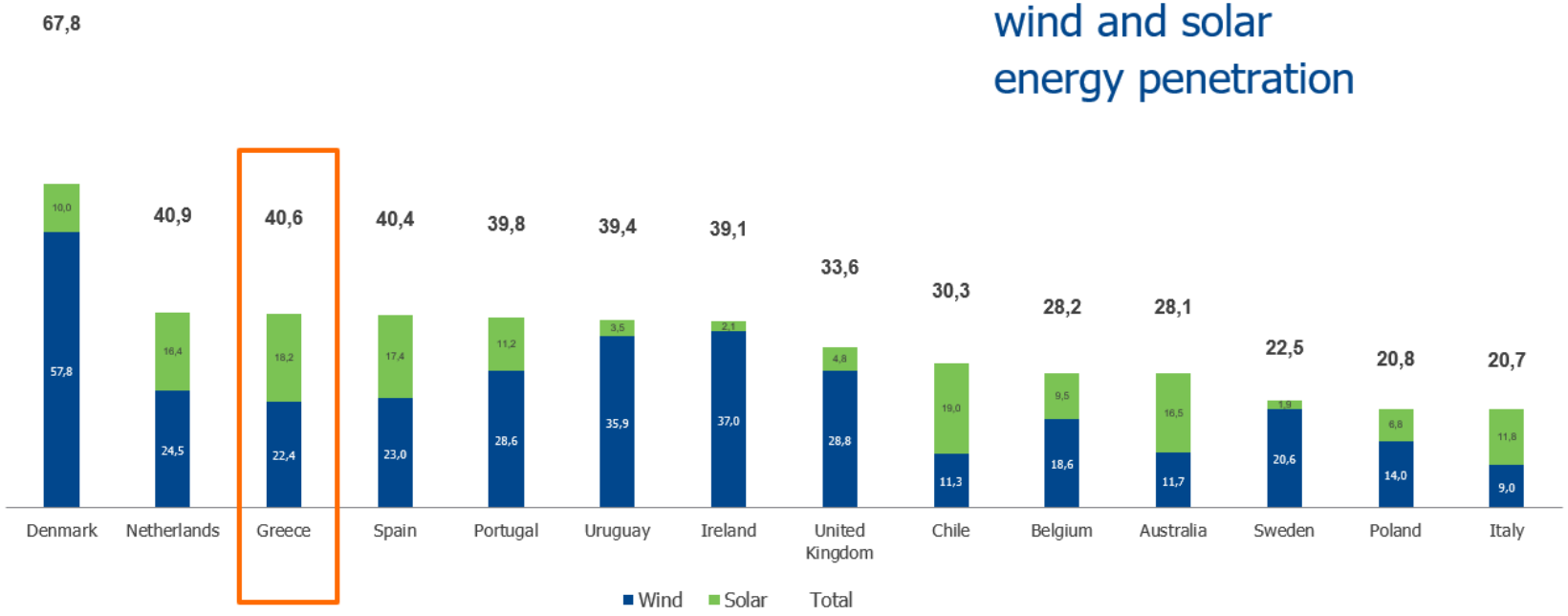
Energy Transition in Greece



Top Countries for Wind and Solar Penetration % (2023)

Energy Transition in Greece

Greece is ranked among the leading countries globally in wind and solar energy penetration

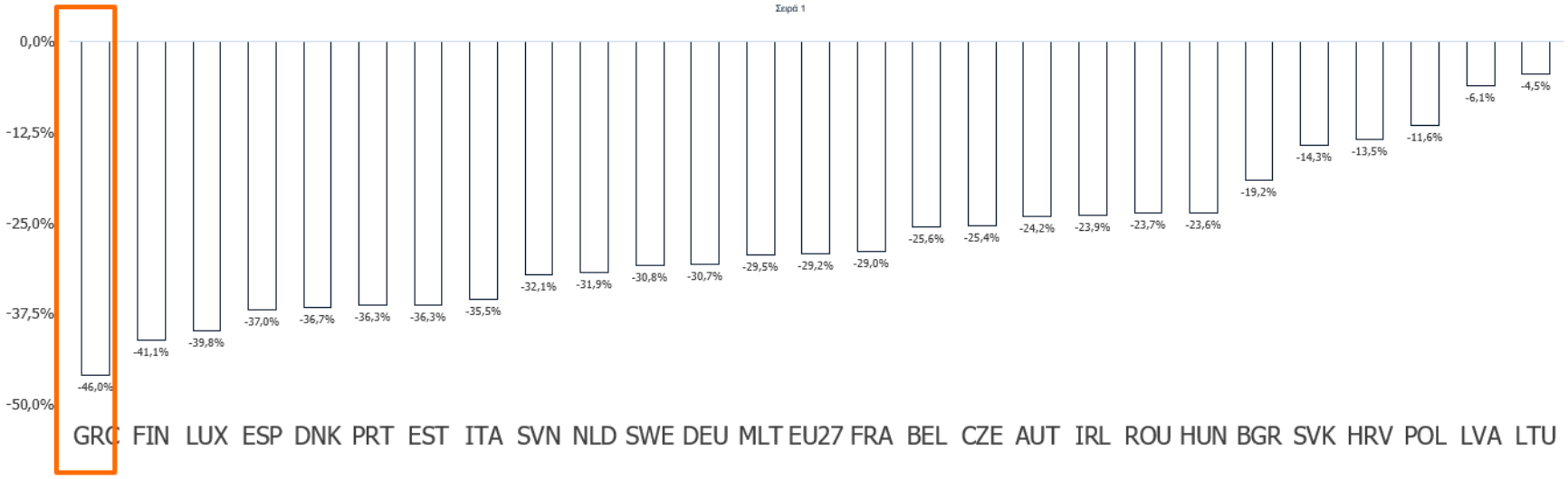


Gas Emissions Reduction in Europe

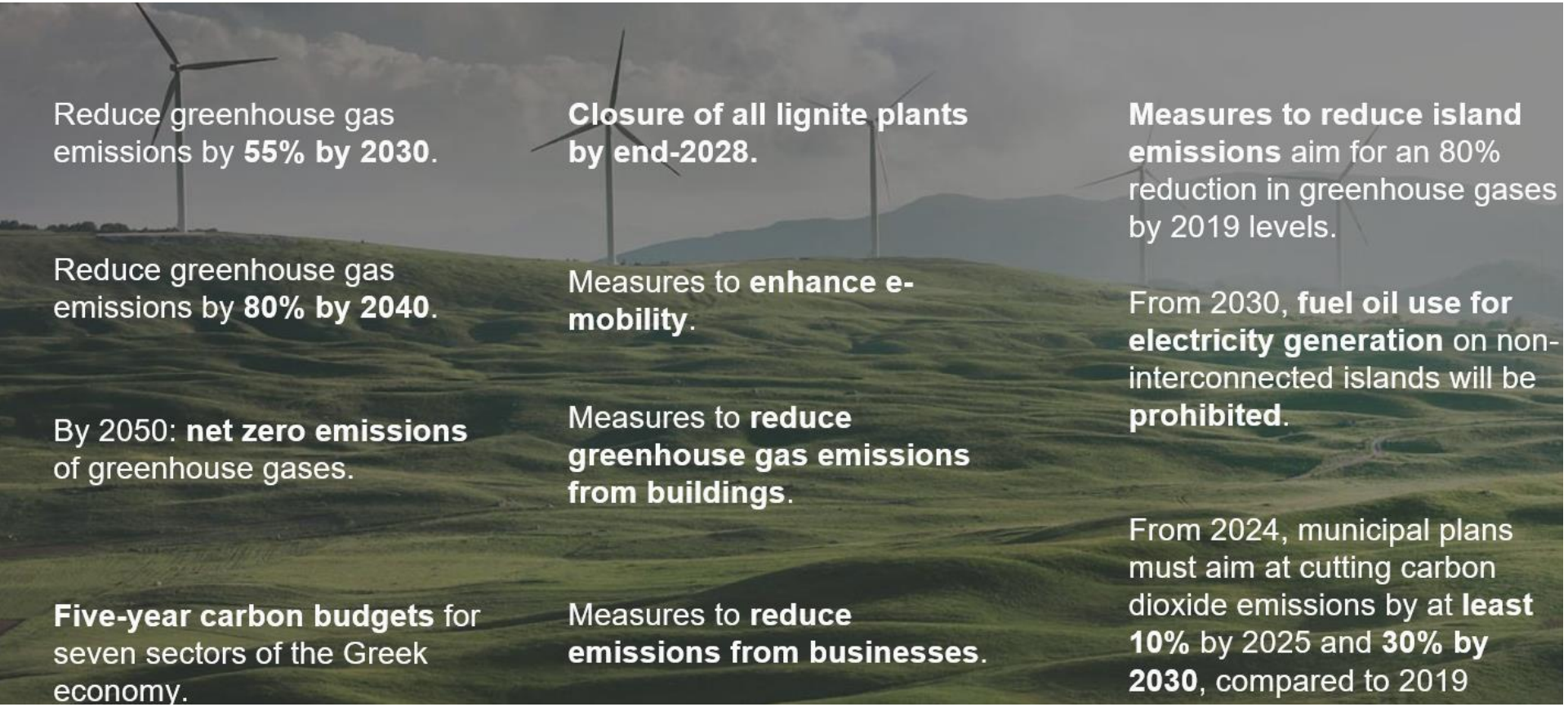
Energy Transition in Greece

Greece has achieved the greatest greenhouse gas emissions reduction in Europe

Percentage reduction in greenhouse gas emissions in 2023 compared to 2005



The **National Climate Law** sets a long-term goal to ensure the gradual transition of the country to climate neutrality by 2050



We are aiming for an energy transition with the optimal cost-benefit ratio

As captured in Greece's updated NECP

Cost of electricity: A key factor for a smooth energy transition.

1 **Period 2025-2030**

Rapid penetration of RES in electricity generation and laying the foundations for new technologies.

2 **Period 2030-2040**

Electrification of end-use sectors.

3 **Period 2040-2050**

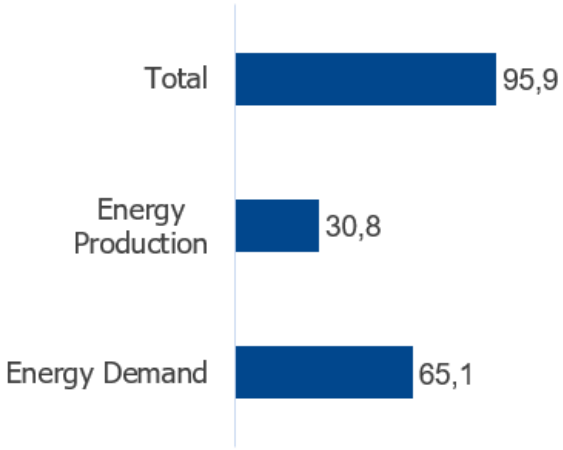
Decarbonization of "hard-to-abate sectors."

Energy Transition in Greece

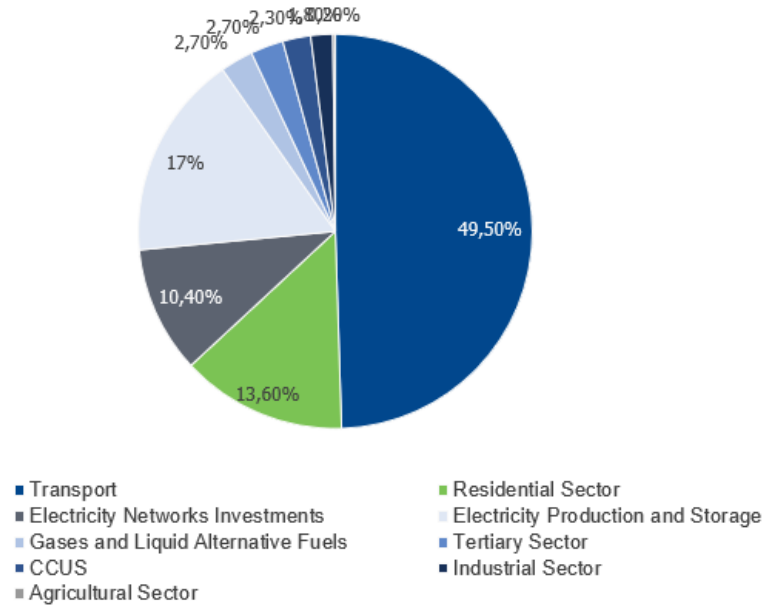
Estimated Investments for the Period **2025-2030**

Energy Transition in Greece

Total Estimated Investments for the Period 2025-2030 (billion €)



Allocation of Estimated Investments Across Key Sectors of the Revised NECP for the Period 2025-2030



Energy Transition in Greece

- Electricity Generation by RES
- Energy Storage
- Transport electrification
- CO2 Capture and Utilization
- Renewable Gases

- ✓ IPTO's International Interconnections Plans
- ✓ Natural Gas Pipelines (H2 ready)
- ✓ Hydrocarbon Explorations and production

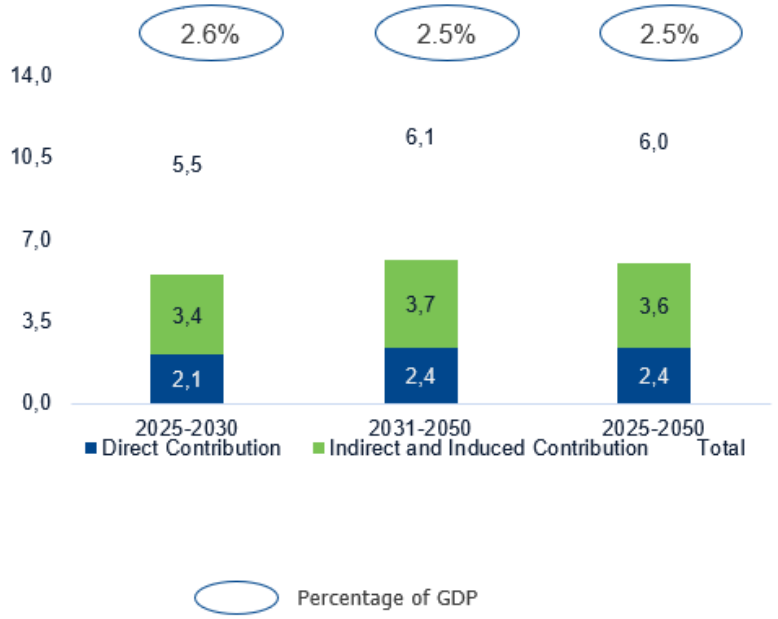
Social & Economic Impact

Energy Transition in Greece

NECP contribution to the economy: approximately €6.0 billion annually until 2050

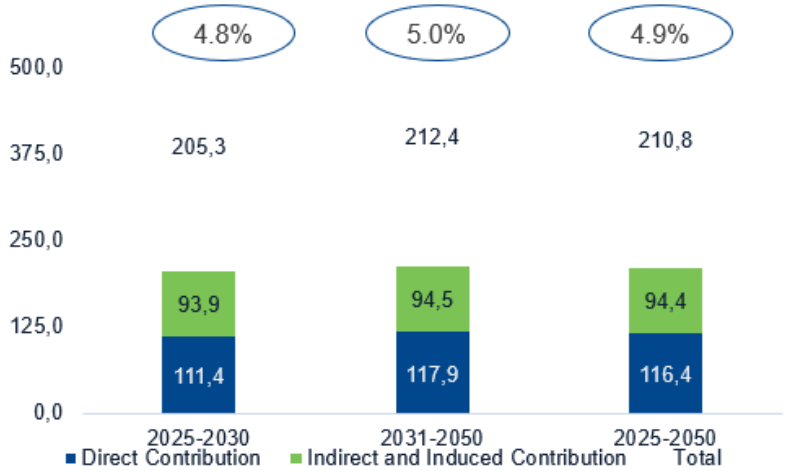
NECP contribution in jobs: approximately new 210,000 jobs maintained until 2050

Average Annual Contribution to Gross Value Added
Billion Euros, at Constant Prices



Percentage of GDP

Average Annual Contribution to Employment
(In thousands of Jobs)

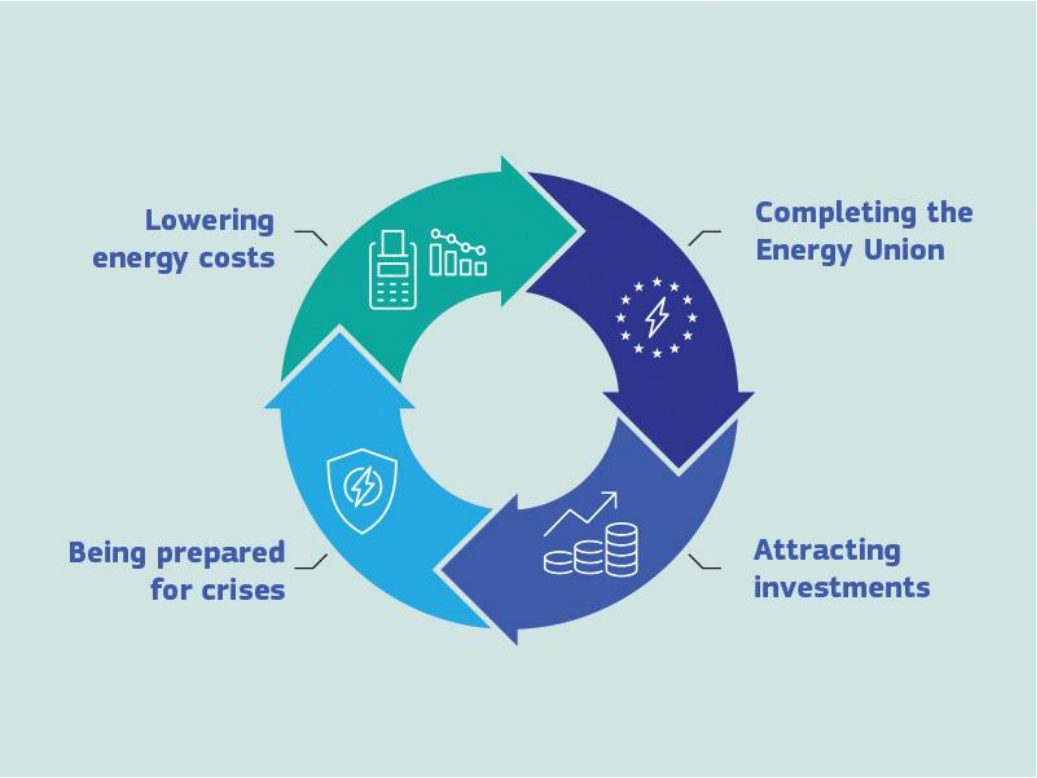


Percentage of the Workforce

Energy Transition in Greece

PRESS RELEASE | Feb 26, 2025 | Brussels

Commission brings relief to European consumers and businesses with Action Plan to save €260 billion annually by 2040



3. Key Topics in Energy Transition Strategy

We must define clear **timelines and steps** toward climate neutrality while protecting affordability and reliability.

Immediate focus is needed on:

- **Renewable Energy, Storage and Energy Efficiency** as cost-effective, secure solutions
- **Digitalisation and Artificial Intelligence**, which can enhance forecasting, demand management, and grid flexibility
- **Cyber Security**

Technology alone won't deliver the transition:

- We must **invest in:**

  STEM education,

  train professionals, green and digital skills reskilling and upskilling and foster innovation
- Let us **identify roadblocks early** and **coordinate regional responses** to overcome them

4. Cooperation and Integration: Turning Divergence into Strength

Diverse national approaches must not divide us.

Cross-border cooperation must:

- Enable **shared infrastructure and innovation platforms**
- Establish **common research hubs** for new technologies
- Consider emerging technologies like **carbon removal** and **advanced storage,** like pump storage etc as part of the mix, in line with **technological neutrality**

4. Cooperation and Integration: Turning Divergence into Strength

We must also:

- Encourage **regional energy players**

- Evaluate the lessons of past crises, including digital disruptions like the **blackout in Spain**, and build AI-powered resilience

5. Transition Challenges: Acknowledging Complexity, Designing Solutions

We face structural and operational hurdles:

- Economic impacts of **phasing out fossil fuels**
- **Permitting delays**, **grid constraints**, and **investment gaps**
- Disconnected policy frameworks

To bridge these, we must fully utilize:

- **Connecting Europe Facility – Energy**
- **European Structural and Investment Funds**
- **Interreg and IPA III programmes**

And importantly, we must ensure no region or community is left behind.

6. Closing Remarks: Towards a Just, Inclusive, and Effective Transition

A few reflections:

- The path to decarbonized systems must be **smooth and fair**, avoiding **competitive asymmetries** and managing **stranded costs**

- **Electrification will double** — driven by **EVs**, **data centers**, **heat pumps** — requiring robust infrastructure and grid flexibility

- We must remain open to **technology-neutral solutions**, including **natural gas** as a potential **transition enabler**, and **hydrogen** as a long-term pillar, even though it's not yet fully mature

6. Closing Remarks: Towards a Just, Inclusive, and Effective Transition

A new model of **governance and cooperation** is needed:

- With **shared NECP development**
- **Structured information exchange**
- And robust public engagement to foster **trust and social license**

The transition must be **just, inclusive, and participatory** — putting **people, communities, and workers** at the center.

Final Call to Action

Our region has the potential not just to follow the energy transition — but to lead it.

With the leadership of the Greek Presidency, and the enabling framework of EUSAIR, let us commit to a clean, competitive, and united energy future.

Together, we can power a **resilient Adriatic–Ionian region** — and a **greener Europe** for generations to come.

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