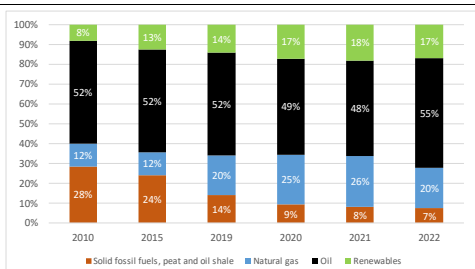


REPowerEU Two Years on Greece

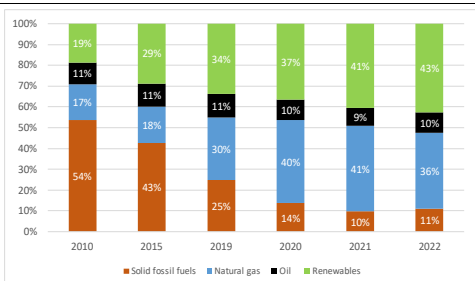
Key energy figures

Graph 1: Energy mix



Source: Eurostat

Graph 2: Electricity mix



Source: Eurostat

Save energy

1. KEY ENERGY SAVINGS MEASURES

Greece is implementing energy efficiency measures to contribute to energy security further, such as:

- Another call of the **Exoikonomo (Saving at home) residential building renovation program**, partially financed under the RRP,

(1) Joint Ministerial Decree published in December 2021. In its last versions, a subsidy rate ranging from 40-75% is allocated depending on household income and a jump of at least 3 energy performance classes is required. Information about the program is available at this link.

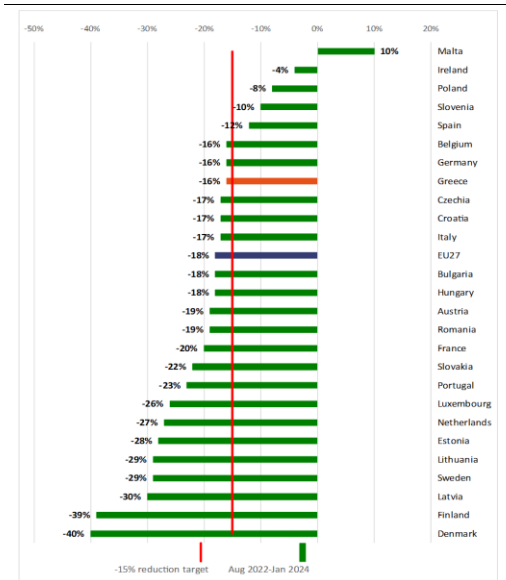
was launched⁽¹⁾. On 87,578 approved renovations under the call, the expected reduction of the primary energy consumption according to Energy Performance Certificates, reaches an average of 75.80%⁽²⁾.

- Greece has also confirmed that, at least, 150 **public sector buildings** will be renovated with a view to increasing their energy efficiency, through the involvement of energy savings companies (ESCOs).

2. GAS DEMAND REDUCTION

Greece has reduced its gas consumption by **16%** in the period **August 2022 – January 2024**, below the decrease achieved at EU level (18%) but surpassing the 15% voluntary gas demand reduction agreed at the EU level⁽³⁾.

Graph 3: Natural gas demand reduction (August 2022 – January 2024)



(1) Cyprus does not use natural gas

Source: Eurostat, DG ENER calculations

(2) Data provided by the Greek Ministry of Environment and Energy in a note to the European Commission regarding the Milestone 21 of Greece's RRP.

(3) Council Regulation (EU) 2023/706 of 30 March 2023, amending Regulation (EU) 2022/1369

Diversify energy supplies

1. KEY ACTIONS

Greece has taken significant steps to strengthen its security of supply and diversify its natural gas sources. Gas has been playing an increasing role in Greece's energy system over the last years covering 41% of electricity generation, 22% of industry energy demand and 10% of space heating demand⁽⁴⁾.

2. GAS INFRASTRUCTURE DEVELOPMENTS

Greece significantly boosted its natural gas exports with the opening of the IGB pipeline to Bulgaria. The planned expansion of the IGB pipeline between Greece and Bulgaria from 3 to 5 bcm/year will also increase security of supply for the region. In the context of the Central and SouthEastern Europe energy connectivity (CESEC) high level group, Greece has signed a Memorandum of Understanding with Bulgaria and Romania focusing on cooperation to tap their common renewable energy potential.

Moreover, on top of the already existing LNG infrastructure (Revythoussa), the Alexandroupolis FSRU (floating storage and regasification unit) will be commercially operational in 2024, positioning Greece at the epicentre of the energy diversification efforts of the broader region.

Greece doesn't have storage facilities apart from its LNG terminals and FSRUs. However, under the gas storage regulation, it has stored 100 mcm of gas, covering 2% of its annual demand, in Italy (via reverse flow in the TAP pipeline) and Bulgaria. Greece also dedicates a small share of its LNG storage capacity to support emergency operations by gas-fired power plants.

The development of a CCS facility in South Kavala and the construction of a H2 pipeline between Greece and Bulgaria are labelled as a Projects of Common Interest.

Map 1: Cross-border gas infrastructure



Source: European Commission map recreation (based on ENTSO-G)

3. GAS STORAGE

Greece does not operate any underground gas storage facility. The European Commission does not have additional information on arrangements between Greece and other Member States with existing facilities, in accordance with the burden-sharing mechanism.

Energy platform

- In the **four EU tenders** for joint gas purchase organised **under AggregateEU in 2023**, 113 companies across the EU expressed gas demand of over 54 bcm. 48 suppliers replied with bids of more than 61 bcm, resulting in **over 42 bcm of demand matched**.
- In the **first mid-term tender of 2024**, 19 companies expressed 34 bcm of gas demand for the next 5 years, with **97.4 bcm offered by suppliers**.
- According to the indicative data obtained through AggregateEU, companies from **Greece** aggregated gas demand of **6.15 bcm** in 2023 under the EU Energy Platform. This represents the equivalent of 118.90% of the country's yearly gas consumption.

⁽⁴⁾ [EU energy statistical pocketbook and country datasheets - European Commission \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&plugin=1)

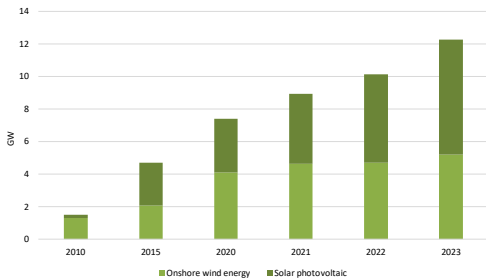
Produce clean energy

1. INSTALLED RENEWABLE ELECTRICITY CAPACITY, IN WIND AND SOLAR

In **2023**, Greece installed around 2.1 GW of renewable electricity capacity, bringing the total to **15.8 GW** (vs 12.5 GW in 2021).

In **2023**, the annual growth rate of installed renewables power capacity rose to **15.5%** compared to 14.1% in 2021⁽⁵⁾.

Graph 4: **Installed solar and wind power capacity (in GW)**



- (1) The renewable power capacity data reflects the capacity installed and connected at the end of the calendar year.
- (2) In 2023, Greece installed 0.5 GW of wind power capacity (vs. 0.5 GW in 2021).
- (3) In 2023, Greece installed 1.6 GW of solar photovoltaic capacity (vs. 1 GW in 2021).

Source: IRENA, Renewable capacity statistics, 2024

2. ELECTRICITY INFRASTRUCTURE DEPLOYMENT

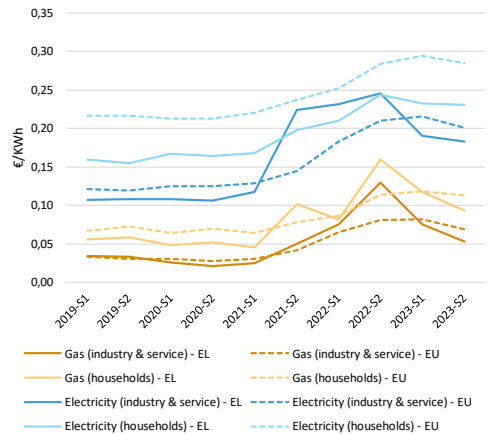
It is worth mentioning the project to interconnect the autonomous electricity systems of the Cyclades islands to the mainland grid and the Ariadne project (Crete-Attica), with a completion date planned for 2024. Moreover, in its REPowerEU Chapter, Greece included a reform on the grid capacity increase.

With respect to cross-border interconnections, a second overhead line of 400 Kv between Greece and Bulgaria was commissioned in 2023.

⁽⁵⁾ International Renewable Energy Agency (2024). Renewable capacity statistics 2024

Energy price developments

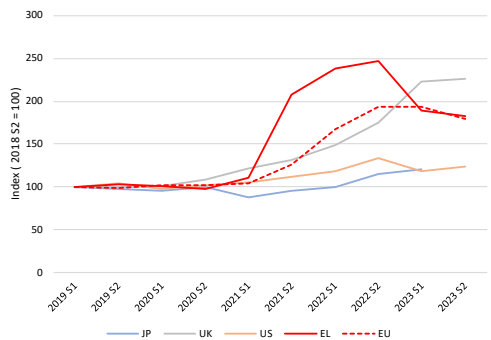
Graph 5: **Greece's energy retail prices for households and industry & service**



- (1) For industry, consumption bands are I3 for gas and IC for electricity, which refer to medium-sized consumers and provide an insight into affordability
- (2) For households, the consumption bands are D2 for gas and DC for electricity
- (3) Industry prices are shown without VAT and other recoverable taxes/levies/fees as non-household consumers are usually able to recover VAT and some other taxes

Source: Eurostat

Graph 6: **Trends in electricity prices for non-household consumers (EU and foreign partners)**



- (1) For Eurostat data (EU and EL), the band consumption is ID referring to large-sized consumers with an annual consumption of between 2 000 MWh and 20 000 MWh, such as in electricity intensive manufacturing sectors, and gives an insight into international competitiveness
- (2) JP = Japan

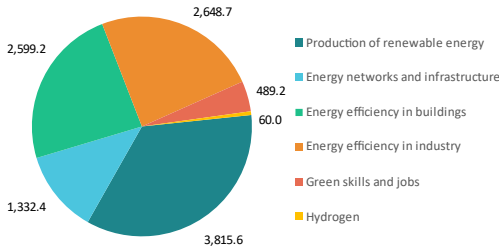
Source: Eurostat, IEA

Smartly combine investments and reforms in the RRP

Amended Recovery and Resilience Plan (RRP), including a REPowerEU chapter:

- Approved by Council: 8 December 2023
- Total amount: EUR 35.95 billion
- Amount allocated for energy: EUR 10.9 billion
- Climate tagging: RRP: 38.1%; REPowerEU chapter: 78.1 %

Graph 7: **Energy-related investments in the RRP (in EUR million)**



Source: European Commission

Tangible results: reforms & investments

- **Energy Efficiency:** Increase energy efficiency in businesses through the promotion of energy audits and energy management systems. Starting in 2024, almost 10,000 private sector entities are expected to benefit.
- **Renewables:** Introducing the first ever legal framework for offshore wind farms in Greece and a reform on the optimisation of land and sea space usage for the development of renewables.
- **Energy infrastructure:** Interventions for the electricity interconnection of islands and the upgrading of the electricity network.
- **Energy networks and infrastructure:** entering into operation of energy storage projects for up to 1 380 MW.
- **Hydrogen:** Putting in place a new legislative framework for the production of renewable hydrogen and including pilot projects supporting its production (at least 45 MW of new installed renewable hydrogen).

Highlights of the National Energy and Climate Plan

- The **draft updated NECP** was submitted to the European Commission in November 2023.
- Member States are due to submit their **final updated NECP by 30 June 2024**, taking into account the Commission recommendations.
- For more information see the dedicated [webpage of the European Commission on the NECPs](#).

Strengthening competitiveness with the Net Zero Industry Act

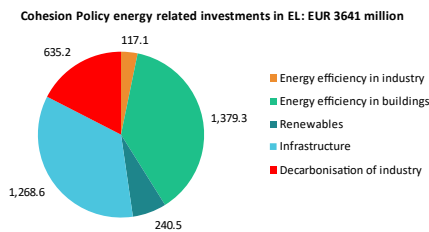
Greece's manufacturing landscape for clean technologies has historically leaned on imports to drive its renewable energy initiatives. However, recent years have witnessed the emergence of noteworthy initiatives notably in the wind rotor and battery manufacturing supply chain. In the wind energy domain, although critical components such as nacelles, blades and control systems are imported, local production exists for transformers, electrical switchgear and towers. Particularly noteworthy is a medium-sized steel manufacturing company producing specialised components essential for the construction of supporting structures for floating offshore wind turbines. Also worth mentioning is a vertical production plant manufacturing the EW16 wind rotor and a wind tower manufacturing plant with a maximum capacity of 450 sections annually. Recent market dynamics have taken a toll on established manufacturers of photovoltaic (PV) frames, leading to closures amid stiff competition from Chinese counterparts. In contrast, a Greek company specialising in the development, production, and distribution of cutting-edge lead-acid and lithium-ion batteries, along with energy storage systems and chargers, is currently the third largest manufacturer of batteries in the global motive power battery industry, with about EUR 1 billion of consolidated annual sales and a workforce of approximately 3 100 people.

Other EU initiatives

Cohesion Policy provides significant support to REPowerEU in all EU MS, with a total of EUR 89 billion worth of investments focusing on regions most in need in the energy transition.

Most resources concentrate on energy efficiency in the buildings sector (i.e. 720 000 dwellings across the EU will be renovated and public buildings will decrease their energy consumption by 6000 GWh/year) and on energy infrastructure (i.e. 4.9 GWh of additional electricity storage deployed), followed by renewables (e.g. 9.5 GW of additional renewable energy capacities installed).

Graph 8: **2021-2027 energy-related investments in the Cohesion Funds supporting REPowerEU**



Source: Cohesion Open Data⁽⁶⁾

⁽⁶⁾ <https://cohesiondata.ec.europa.eu/d/hgyj-gyin>