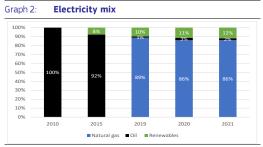


State of the Energy Union 2023 Malta

Key energy figures

Graph 1: **Energy mix** 90% 80% 50% 60% 50% 40% 30% 20% 10% 2010 2020 2021 2015 2019 ■ Gas ■ Oil ■ Renewables

Source: Eurostat



Source: Eurostat

- Fossil fuels still play a strong role in Malta's energy mix. In 2021, fossil fuels provided 92% of the energy mix, of which natural gas provided 42% and 50% came from oil and petroleum products. Fossil fuels also made up the bulk of Malta's electricity mix in 2021.
- Malta has potential to accelerate the rollout of renewables, especially since the share of renewables in energy consumption is one of the lowest in the EU.

Security, solidarity and trust

1. DIVERSIFICATION OF ENERGY SOURCES AND REDUCTION OF IMPORT DEPENDENCY

Graph 3: Import dependency on fossil fuels

120
99.04
97.30
97.27
97.56

97.06

97.06

97.07

97.06

97.06

100
2010
2015
2019
2020
2021

Naturalgas

Oil and petroleum products (excluding biofuel portion)

Total

- (1) In percentages (%)
- (2) Combustible renewables and electricity are excluded
- (3) The total amount takes into consideration the energy mix of the country

Source: Eurostat

Before Russia invaded Ukraine, Malta had very limited exposure to Russian gas. However, it is highly dependent on imported fossil fuels in general. It uses more gas in electricity production (86%) than any other Member State. This makes Malta's economy particularly sensitive to global price developments. In addition, it imports approximately 20% of its electricity from Italy, in turn dependent on Russia for 43% of its gas.

2. FLEXIBILITY OF THE ENERGY SYSTEM

 Energy storage: Malta, besides its LNG facility consisting of an LNG floating storage unit and an onshore regasification unit on the Delimara site, does not have underground gas storage facilities and it does not have any interconnector to the EU gas network

Integrated internal energy market

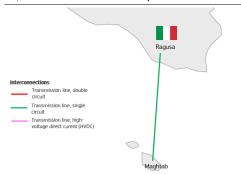
1. ELECTRICITY INTERCONNECTIVITY

2023	2030 target
40.90%	At least 15%

Source: DG ENER's own calculation based on ENTSO-E

2. ENERGY TRANSMISSION INFRASTRUCTURE

Map 1: Cross-border electricity interconnections





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

Map 2: Cross-border gas interconnections LNGImport terminal ▲ in operation Interconnector within EU, imports and exports ● interconnector within EU, only imports or exports • interconnector with the third parties countries FSRU - Delimara - 0.7 bcm/y

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

30 km

3. MARKET INTEGRATION

- Malta's index of concentration (HHI) reaches structurally 10 000 for the household market in electricity.
- No data is available regarding concentration for natural gas market.⁽¹⁾

Rollout of electricity smart meters

 Malta has a high electricity smart meter rollout, with 92% of household consumers being equipped with smart meters in 2022.

4. ENERGY POVERTY AND JUST TRANSITION

Table 1: Energy poverty

	Malta			EU		
	2020	2021	2022	2020	2021	2022
Arrears on utility bills (households %)	6.3%	7.2%	5.6%	6.5%	6.4%	6.9%
Inability to keep home adequately warm (household %)	7.2%	7.8%	7.6%	7.5%	6.9%	9.3%
Population living in dwelling with presence of lead, damp and rot (population %)	6.1%	:	:	14.8%	:	:

Source: Eurostat

 Just transition plan Malta's Territorial Just Transition Plan focuses on the transition to a low-carbon economy. The plan sets out the activities that the Just Transition Fund with an allocation of 23€ million will invest into

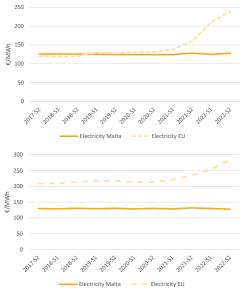
⁽¹⁾ CEER 2023 out of ACER's Energy Retail and Consumer Protection 2023 Market Monitoring Report.

⁽²⁾ ACER, CEER. Energy Retail and Consumer Protection, 2023 Market Monitoring Report.

renewable electricity supply to help decarbonise its economy, particularly the maritime sector.

5. ENERGY PRICES



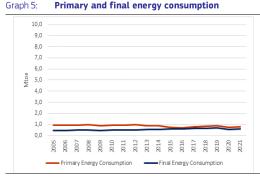


(1) On electricity, the band consumption is for DC households and ID for industry

Source: Eurostat

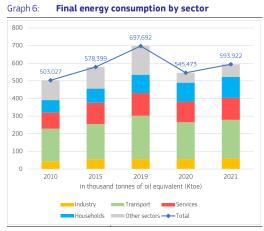
Energy efficiency

1. ENERGY EFFICIENCY



Source: Eurostat

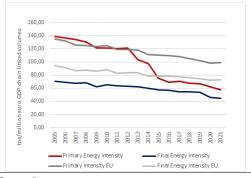
 In 2021, Malta's Primary Energy Consumption (PEC) amounted to 0.77 Mtoe, 12% lower than in 2019, while its Final Energy Consumption (FEC) amounted to 0.59 Mtoe, 14.9% lower than in 2019, despite the COVID-19 crisis recovery.



 Final energy consumption excludes consumption of the energy sector (including transformation and distribution losses) and nonenergy use of energy carriers.

Source: Eurostat

Graph 7: Primary and final energy intensity



Source: Eurostat

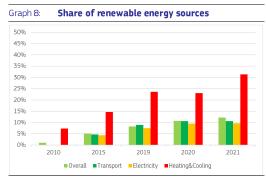
2. ENERGY SAVINGS IN BUILDINGS

- In 2020 there were 181 thousand dwellings in Malta.
- As per its 2020 Long Term Renovation Strategy (LTRS), Malta targets to achieve -18% of energy savings by 2030 compared to year 2018 in the building sector.
- In 2021, the final energy consumption of residential buildings increased by 26.11% compared to 2019.

 As per the European Heat Pump Association (EHPA), there are no data available for Malta.

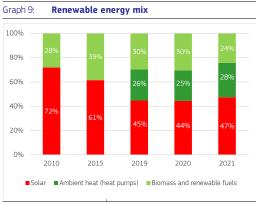
Decarbonisation and climate action

SECTORAL SHARE OF RENEWABLE ENERGY



(1) In % of gross final consumption of energy

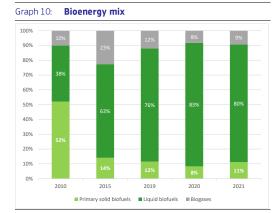
Source: Eurostat



(1) In % of gross final consumption of energy

Source: Eurostat

2. BIOENERGY DEMAND

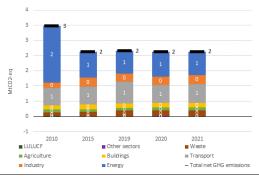


(1) Composition of bioenergy, in % of gross inland consumption of energy

Source: Eurostat

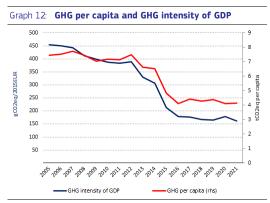
3. GREENHOUSE GAS EMISSIONS

Graph 11: Greenhouse gas emissions by sector



- (1) Energy sector refers to electricity and heat production and petroleum refining.
- (2) Industry includes fuel combustion in manufacturing and construction and emissions in industrial processes and product use. (3) Buildings include emissions from energy use in residential and tertiary buildings, and energy use in agriculture and fishery sectors. (4) Total net GHG emission including LULUCF and excluding international aviation.

Source: EEA



(1) Total greenhouse gas emissions, including LULUCF and excluding international aviation.

Source: Greenhouse gas inventory 1990-2021 (EEA). Real GDP in 2015-prices (AMECO, European Commission). Population (Eurostat).

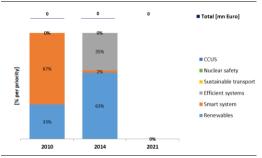
- With 160 gCO2eq/2015EUR, Malta lies below the EU average in terms of GHG intensity of GDP.
- With 4 tonnes of CO2 equivalent per capita, Malta is below the EU average in terms of GHG emissions per capita.
- For more detailed information on country profiles see <u>Progress made in cutting emissions</u> (europa.eu).

Research, innovation and competitiveness

INVESTMENT IN R&I

 Public investment in research and innovation (R&I) in Energy Union priorities⁽³⁾ increased from 0.002% in 2014 to 0.006% in 2021 (share of GDP).

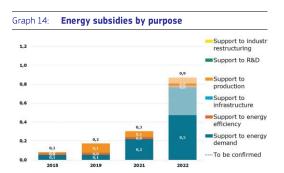
Graph 13: Public investment in Energy Union R&I priorities (4)



Source: JRC SETIS (2023)

 No data available for Venture Capital investment in Clean Energy Technology (startups and scale-ups).

2. ENERGY SUBSIDIES



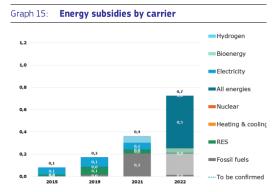
(1) Subsidies in EUR 2022 billion

(2) Some 2022 data were not fully available or validated at the time the study was completed (August 2023). For missing 2022 values, 2021 data were taken as a basis for an estimate. The estimated data are referred to as 'to be confirmed' in the graphs and indicated by hatching.

Source: Enerdata. Inventory of energy subsidies in the EU27 2023 edition.

⁽³⁾ Renewables, smart system, efficient systems, sustainable transport, CCUS and nuclear safety, COM(2015) 80 final ('Energy Union Package').

⁽⁴⁾ For 2021, there is no breakdown in Energy Union priorities available.



- (1) Subsidies in EUR 2022 billion
- (2) Some 2022 data were not fully available or validated at the time the study was completed (August 2023). For missing 2022 values, 2021 data were taken as a basis for an estimate. The estimated data are referred to as 'to be confirmed' in the graphs and indicated by hatching.

Source: Enerdata. Inventory of energy subsidies in the EU27 - 2023 edition

European Semester 2023

Country Specific Recommendation (Energy):

Reduce reliance on fossil fuels by accelerating the deployment of renewables, including offshore wind and solar energy, and upgrade and expand the capacity of the electricity grid system, including transmission, distribution and battery storage. Reduce energy demand through improved energy efficiency, particularly in residential buildings. Reduce emissions from road transport by addressing traffic congestion through improved service quality in public transport, intelligent transport systems and investing in 'soft mobility' infrastructure. Step up policy efforts aimed at the provision and acquisition of the skills needed for the green transition. (5)

For more information see the <u>2023 European</u> Semester Country Reports.

National Energy and Climate Plan (NECP)

- The draft updated NECP was submitted to the European Commission in October 2023.
- For more information see the dedicated webpage of the European Commission on the NECPs.

Recovery and Resilience Plan (RRP) and REPowerEU chapter

- The Maltese RRP was approved by the Council on 5 October 2021.
- The implementation of the measures proposed in the RRP would allow Malta to access EUR 316.4 million in grants.
- The Commission disbursed so far EUR 93.43 million to Malta. A 1st payment request was disbursed on 8 March 2023.
- On 26 April 2023 Malta submitted a request to revise its RRP, adding a REPowerEU chapter.
- The amended RRP takes into account the revised RRF grant allocation for Malta – decreased to EUR 258 million. It includes also the EUR 30 million REPowerEU grant allocation and EUR 40 million voluntary transfer from the Brexit Adjustment Reserve. The total amount available for Malta is therefore EUR 328 million.
- **68.8%** of these funds are **allocated** for measures contributing **to climate objectives**, up from the 53.8% of the original plan.
- The amended RRP, including the REPowerEU chapter, was approved by the Council on 14 July 2023.
- The REPowerEU chapter proposed by Malta includes one new reform, and one new investment.
- For more information visit the <u>Recovery and</u> <u>Resilience Scoreboard (europa.eu)</u>.

⁽⁵⁾ Council of the European Union 9844/1/23.