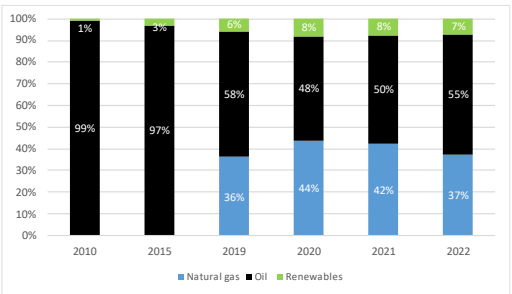
State of the Energy Union 2024: Malta

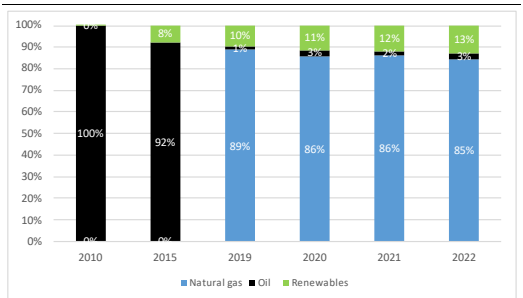
Key energy figures

Graph 1: **Energy mix**



(1) The 2022 gross inland energy consumption was 36 054 TJ. (0.1% of the total EU consumption).
Source: Eurostat

Graph 2: **Electricity mix**



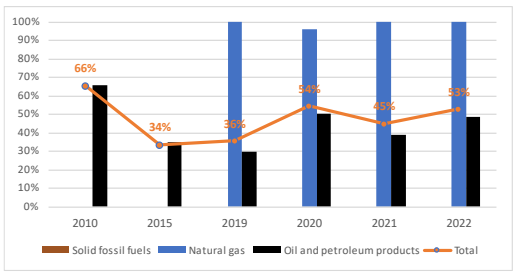
(1) The 2022 gross electricity production was 2.3 TWh. (0.1% of the total EU production).
Source: Eurostat

- Fossil fuels account for 92.7% of Malta´s **energy mix** (compared to 69% at EU level). The share of renewables was 7.3%.
- The **electricity mix** of Malta is dominated by fossil fuels with 87.1% (compared to 38.6% at EU level), with natural gas accounting alone for the 84.5% of the electricity mix. Renewable energy accounts for the remaining 12.9% (compared to 39.4% at EU level).

Security, solidarity and trust

1. DIVERSIFICATION OF ENERGY SOURCES AND REDUCTION OF IMPORT DEPENDENCY

Graph 3: **Import dependency on fossil fuels**



(1) The graph shows the Member States' import dependency on third countries by fuel type.
(2) Combustible renewables and electricity are excluded.
(3) The total amount takes into consideration the energy mix of the country.
Source: Eurostat

2. FLEXIBILITY OF THE ENERGY SYSTEM

- Malta does not operate any underground gas storage facility and is exempted from the regulation on gas storage[1].

[1] Regulation (EU) 2022/1032 of the European Parliament and of the Council of 29 June 2022 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage.

Integrated internal energy market

1. ELECTRICITY INTERCONNECTIVITY

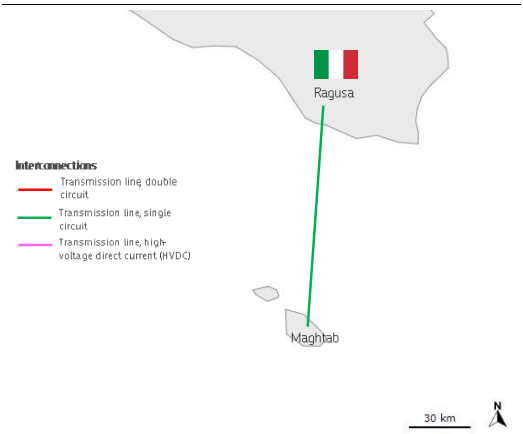
Table 1: **Electricity interconnectivity**

2024	2030 target
39.5 %	At least 15%

1) The electricity interconnectivity is a ratio of electricity import capacity of a given Member State (sum of net transfer capacities of interconnectors with neighbouring Member States) and its total power generation capacity. The 2030 level represents the general interconnectivity target of 15%.
Source: European Commission's own calculations based on the ENTSO-E Winter Outlook 2023-2024 data

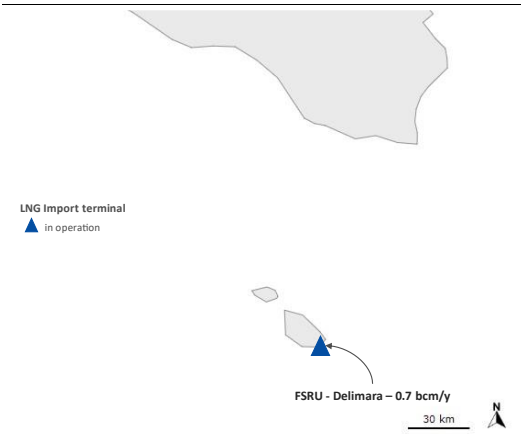
2. ENERGY TRANSMISSION INFRASTRUCTURE

Map 1: **Cross-border electricity infrastructure**



Source: DG ENER map recreation (based on ENTSO- E)

Map 2: **Cross-border gas infrastructure**



(1) The capacities are based on ENTSO-G 2024 capacity dataset (as of 11 January 2024) and the ENTSO-G Transparency Platform.
Source: DG ENER map recreation (based on ENTSO- G)

3. MARKET INTEGRATION

Rollout of electricity smart meters

- The latest ACER/CEER Market Monitoring Report indicates that Malta has a 94 % smart meter roll out with consumers having access to near real time consumption data possible at a 15-minutes interval. (2)

Diversification of gas supplies

- In 2023, Malta had 2 natural gas supply sources, the same as in 2021. Its two largest suppliers accounted for 100%, with the United States being the main supplier, holding a share of 65%. In 2021, Trinidad and Tobago with 67% and the United States (33%) were Malta's biggest natural gas supply sources. (3)

4. ENERGY POVERTY, SOCIAL CLIMATE PLAN AND JUST TRANSITION

Table 2: **Energy poverty**

Indicator	%	Evolution compared to		EU average
EED NECPs four main indicators	2023	2021	2017	
Inability to keep home adequately warm	6.8	- 1 pp	+ 0.5 pp	10.6
Arrears on utility bills	4.9	-2.3 pp	-0.7 pp	6.9
Share of pop. With leak, damp or rot in dwelling	7.2	+ 1.1 pp (2020)	- 1.2 pp	15.5
AROP (At risk of poverty)	16.6	- 0.3 pp	- 0.1 pp	16.2

Source: Eurostat

(2) ACER, 2024 Retail Market Monitoring Report, Energy retail and decarbonisation (forthcoming).

(3) ACER-CEER Annual Report Monitoring: the Internal Gas Market in 2022 and 2023.

Social Climate Plan

- Member States need to submit these plans to the European Commission by June 2025.
- Maximum financial allocation for Malta: EUR 5.1 million or 0.1 % of total SCF.

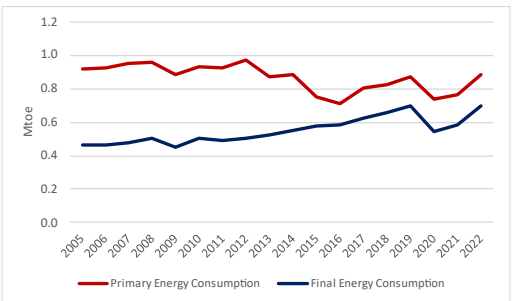
Just Transition Plan

- Malta's Territorial Just Transition Plan (TJTP) focuses on the transition to a low-carbon economy. The plan set outs the activities that the Just Transition Fund (TJF), with an allocation of EUR 23 million, will invest into renewable electricity supply to help decarbonise its economy, particularly the maritime sector.

Energy efficiency

1. ENERGY EFFICIENCY

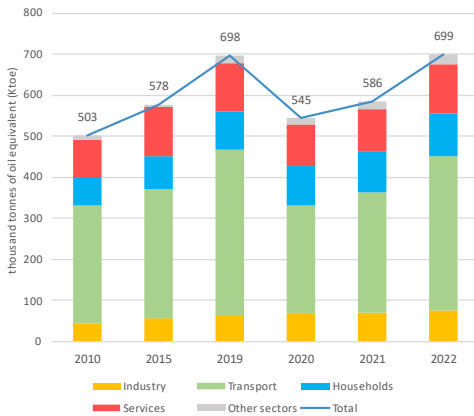
Graph 4: **Primary and final energy consumption**



Source: Eurostat

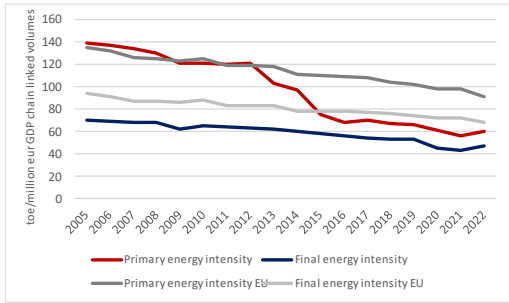
- In 2022, Malta's **Primary Energy Consumption (PEC)** amounted to 0.9 Mtoe, 15.5% higher than in 2021, while its **Final Energy Consumption (FEC)** amounted to 0.7 Mtoe, 19.3% higher than in 2021.

Graph 5: **Final energy consumption by sector**



(1) Final energy consumption excludes consumption of the energy sector (including transformation and distribution losses) and non-energy use of energy carriers.
Source: Eurostat

Graph 6: **Primary and final energy intensity**



Source: Eurostat

2. ENERGY PERFORMANCE OF BUILDINGS

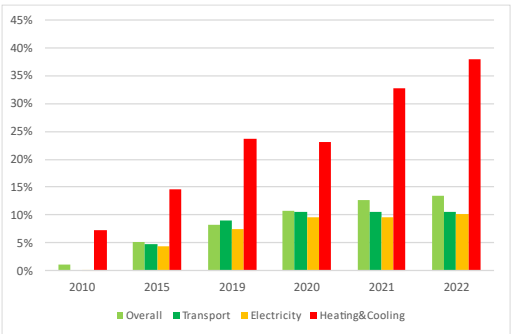
- In 2022, Final Energy Consumption (FEC) in the Maltese' **residential sector** was **0.1 Mtoe**, representing **an increase of 3.6%** compared to 2021. In the **services sector**, FEC was **0.1 Mtoe**, with an **13.9% increase** compared to 2021.
- Heating and cooling account for around **60%** of the country's residential final energy consumption, with renewables supplying approximately **38%** of the gross final energy consumption for heating and cooling. As per the European Heat Pump Association (EHPA), there are no data available for Malta.
- In 2023, **4.9%** of the total population was experiencing difficulties on paying their utility bills while **6.8%** was not able to keep their home adequately warm over the cold periods of the year (decreasing from 2021, when such figures were, respectively, 7.2% and 7.8%). This underlines the importance to increase

rate and depth of building renovation, specifically of worst-performing buildings.

Decarbonisation and climate action

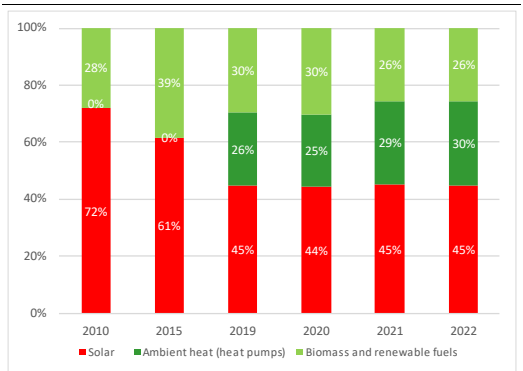
1. SECTORAL SHARE OF RENEWABLE ENERGY

Graph 7: **Share of renewable energy sources**



(1) In % of gross final consumption of energy.
Source: Eurostat

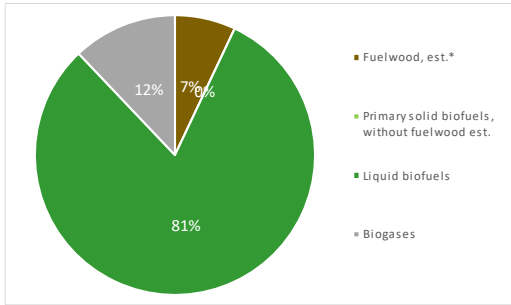
Graph 8: **Renewable energy mix**



(1) In % of gross final consumption of energy.
Source: Eurostat

2. BIOENERGY MIX

Graph 9: **Bioenergy mix**

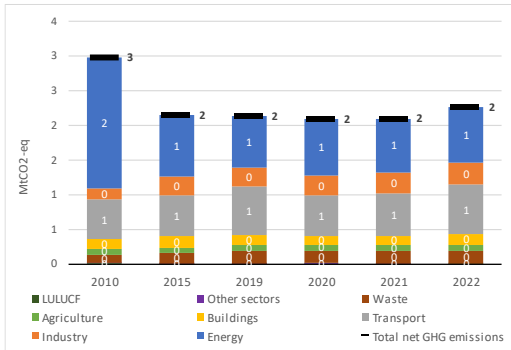


(1) In % of gross final consumption of energy (2022).
(2) * Fuelwood estimate, based on the Primary solid biofuels consumption in Other sectors, Eurostat and industry secondary data, DG ENER estimations.
Source: Eurostat and DG ENER

- For more information see the dedicated website on biomethane country fiches.

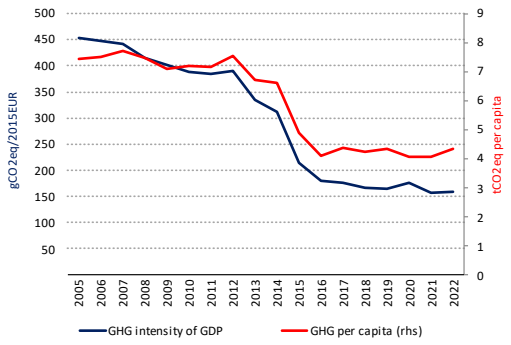
3. GREENHOUSE GAS EMISSIONS

Graph 10: **Greenhouse gas emissions by sector**



Based on UNFCC GHG Inventory reporting as per the IPCC categories: (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: Greenhouse gas inventory 1990-2022 (EEA)

Graph 11: **GHG per capita and GHG intensity of GDP**



(1) Total greenhouse gas emissions, including LULUCF and excluding international aviation.
Source: Greenhouse gas inventory 1990-2022 (EEA). Real GDP in 2015-prices (AMECO, European Commission). Population (Eurostat).

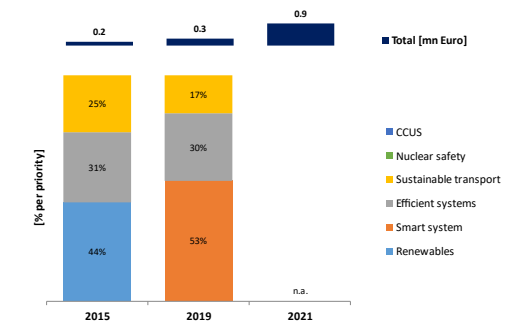
- With 159 gC02eq/2015EUR, Malta lies below the EU average in terms of GHG intensity of GDP.
- With 4 tonnes of C02 equivalent per capita, Malta is below the EU average in terms of GHG emissions per capita.
- For more detailed information on country profiles see Progress on climate action (europa.eu).

Research, innovation and competitiveness

1. INVESTMENT IN R&I

- Public investment in research and innovation (R&I) in Energy Union priorities [4] increased from 0.0016% in 2015 to 0.0062% in 2021 (share of GDP). [5]

Graph 12: **Public investment in Energy Union R&I priorities**



Source: JRC SETIS 2024

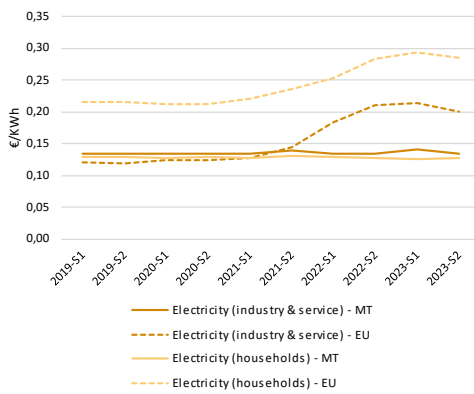
- No data available for venture capital investment in clean energy technology (start-ups and scale-ups).

2. NET-ZERO ENERGY TECHNOLOGIES

- Malta does not have a manufacturing capacity for clean technologies and remains dependent on imports for renewable energy deployment. However, Malta's National Strategy for R&I in Energy and Water 2021– 2030, as well as its first NECP, endeavour to support R&I initiatives related to renewable solutions for islands, integration of renewable electricity, and energy efficient solutions.

3. ENERGY PRICES DEVELOPMENT

Graph 13: **Malta's energy retail prices for households and industry & service**

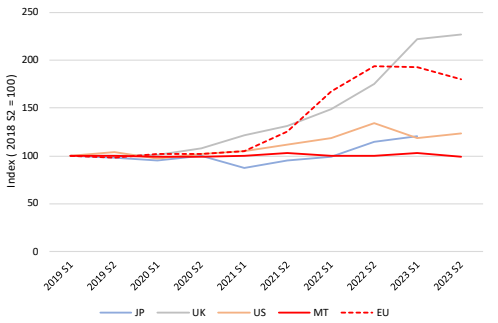


(1) For industry, consumption bands are I3 for gas and IC for electricity, which refer to medium-sized consumers and provide an insight into affordability.
(2) For households, the consumption bands are D2 for gas and DC for electricity.
(3) Industry prices are shown without VAT and other recoverable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

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

[5] Source: JRC SETIS 2024

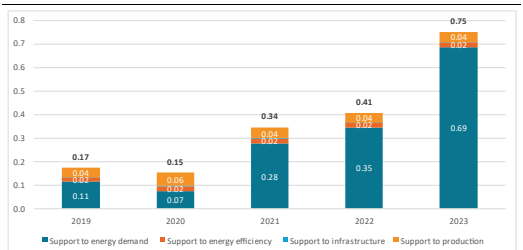
Graph 14: **Trends in electricity prices for non-household consumers (EU and foreign partners)**



(1) For Eurostat data (EU and MT), 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

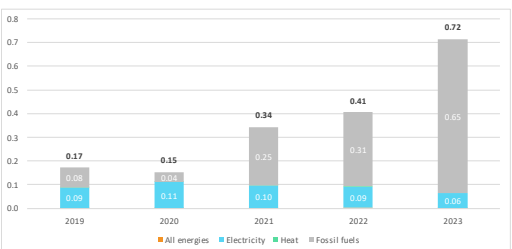
4. ENERGY SUBSIDIES

Graph 15: **Energy subsidies by purpose**



(1) Subsidies in EUR 2023 billion
(2) Some 2023 data were not fully available or validated at the time the study was completed (August 2024). For missing 2023 values, 2022 data were taken as a basis for an estimate.
Source: Enerdata. Inventory of energy subsidies in the EU27 – 2024 edition

Graph 16: **Energy subsidies by carrier**



(1) Subsidies in EUR 2023 billion
(2) Some 2023 data were not fully available or validated at the time the study was completed (August 2024). For missing 2023 values, 2022 data were taken as a basis for an estimate.
Source: Enerdata. Inventory of energy subsidies in the EU27 – 2024 edition

European Semester 2024

- **Country Specific Recommendation (Energy):** Accelerate the deployment of renewable energy through large-scale projects as well as small-scale investments in direct energy production and consumption. Address traffic congestion by improved quality and efficiency of public transport and step up investments in 'soft mobility' infrastructure.[6]
- For more information see the 2024 European Semester Country Report.

National Energy and Climate Plan (NECP)

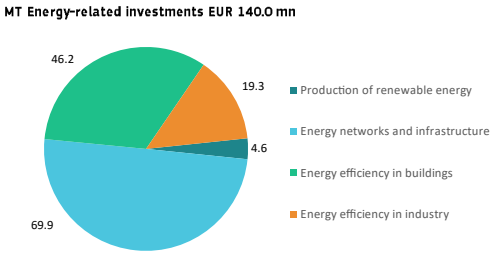
- The **draft updated NECP** was submitted to the European Commission in September 2023.
- Member States were due to submit their **final updated NECP by 30 June 2024**, taking into account the Commission recommendations.
- **The final updated NECP** was not submitted yet to the European Commission.
- For documents and information see the dedicated webpage of the European Commission on the NECPs.

Recovery and Resilience Plan (RRP and REPowerEU chapter)

- The Maltese RRP has a total allocation of EUR 328 million (only grants), with 69% of available funds supporting climate objectives.
- **EUR 140 million are allocated to energy-related measures,** with the largest amount for **energy networks and infrastructure** [EUR 69.9 million]:
  - **Strengthening and widening the electricity distribution network**, through investments in the grid, distribution services and battery storage.
- The Commission disbursed the 2nd payment of EUR 58.9 million to Malta in May 2024.

[6] Council of the European Union 11710/24.

Graph 17: **Energy-related investments in the RRP (in EUR million)**



Source: European Commission

EU Funds supporting energy related investments

Graph 18: **Energy-related investments across EU funds (in EUR million) (*)**

(*) European Regional Development Fund (ERDF) + Cohesion Fund (CF): comprise EU grants & national cofinancing; RRF: comprise grants & loans. Investment categories can also differ across funds.
Source: European Commission