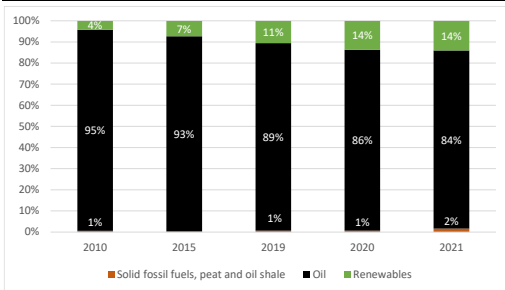


State of the Energy Union 2023 Cyprus

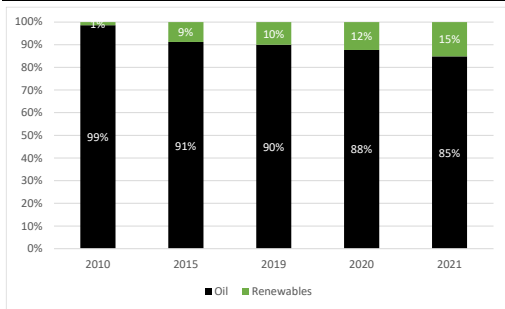
Key energy figures

Graph 1: Energy mix



Source: Eurostat

Graph 2: Electricity mix



Source: Eurostat

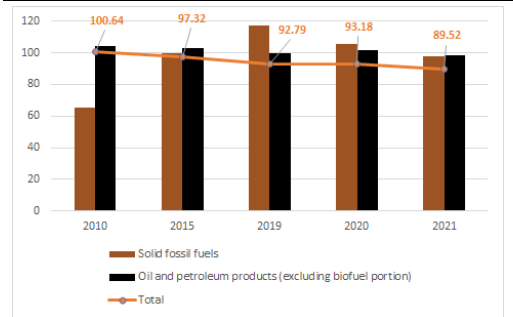
- Fossil fuels still make up **the bulk of Cyprus' energy mix and are set to remain with the future use of natural gas**. A more ambitious and faster rollout of renewables in energy production can help remedy this.
- Although in 2021, oil accounted for 84% of the energy mix, renewable energy sources play an important role in the energy mix of Cyprus, **especially in heating, due to the extensive use of solar thermal systems**.
- Cyprus **does not have natural gas** in its energy mix. However, it plans to integrate gas in its energy system by mid-2024, after the needed infrastructure (liquefied natural gas

terminal and pipes to bring the gas on shore) is completed.

Security, solidarity and trust

1. DIVERSIFICATION OF ENERGY SOURCES AND REDUCTION OF IMPORT DEPENDENCY

Graph 3: Import dependency on fossil fuels



- In percentages
- Combustible renewables and electricity are excluded
- The total amount takes into consideration the energy mix of the country

Source: Eurostat

- While Cyprus does not use gas in its energy mix, is highly dependent on imported fossil fuels, which can be mitigated by accelerating the clean energy transition.

2. FLEXIBILITY OF THE ENERGY SYSTEM

- Energy storage:** Cyprus has no underground gas storage facility.

Integrated internal energy market

1. ELECTRICITY INTERCONNECTIVITY

2023	2030 target
0%	At least 15%

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

2. MARKET INTEGRATION

- In Cyprus, index of concentration (HHI) reaches structurally 10 000 for the household market in electricity.⁽¹⁾

Rollout of electricity smart meters

- Data on the % of household consumers equipped with smart meters in 2022 is not available. 80% of consumers are planned to be equipped with smart meters later than 2024.⁽²⁾

3. ENERGY POVERTY AND JUST TRANSITION

Table 1: Energy poverty

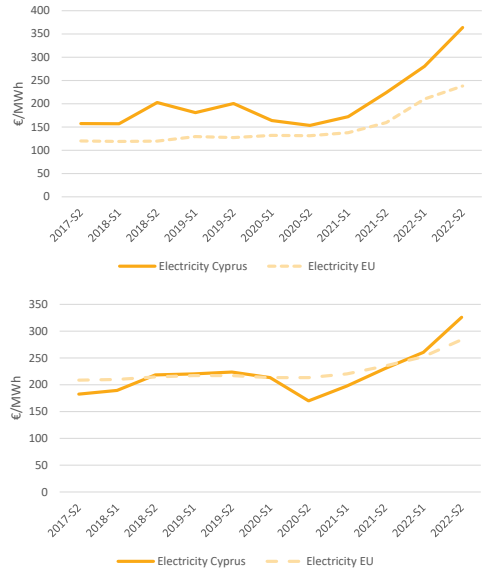
	Cyprus			EU		
	2020	2021	2022	2020	2021	2022
Arrears on utility bills (households %)	9.2%	9.1%	8.1%	6.5%	6.4%	6.9%
Inability to keep home adequately warm (household %)	20.9%	19.4%	19.2%	7.5%	6.9%	9.3%
Population living in dwelling with presence of lead, damp and rot (population %)	39.1%	:	:	14.8%	:	:

Source: Eurostat

- Just transition plan:** Cyprus' Just Transition Plan focuses on the transition away from carbon-intensive industries. For a total envelope of 101€ million, actions include strengthening the energy transmission and distribution system, support for SMEs to decarbonise their production processes and training for green skills.

4. ENERGY PRICES

Graph 4: Energy retail prices for industry (top) and households (bottom)



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

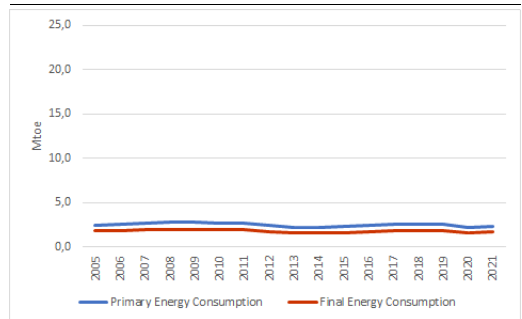
(2) On gas, the band consumption is D2 for households and I4 for industry

Source: Eurostat

Energy efficiency

1. ENERGY EFFICIENCY

Graph 5: Primary and final energy consumption



Source: Eurostat

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

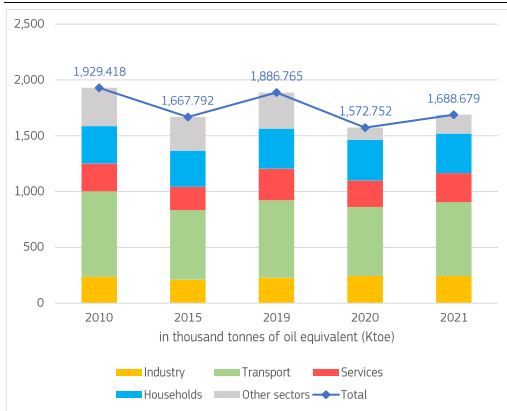
⁽²⁾ ACER, CEER. Energy Retail and Consumer Protection, 2023 Market Monitoring Report

- In 2021, Cyprus' **Primary Energy Consumption (PEC)** amounted to 2.31 Mtoe, 8.8% lower than in 2019, while its **Final Energy Consumption (FEC)** amounted to 1.69 Mtoe, 10.5% lower than in 2019, despite the COVID-19 crisis recovery.

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

Decarbonisation and climate action

Graph 6: **Final energy consumption per sector**

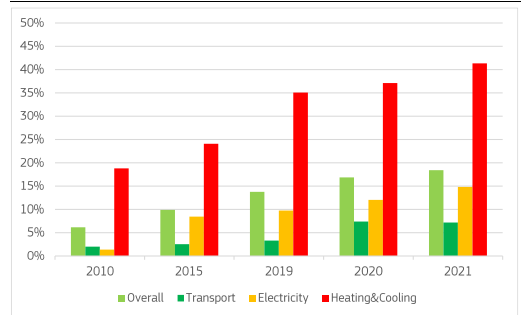


(1) Final energy consumption excludes consumption of the energy sector (including transformation and distribution losses) and non-energy use of energy carriers.

Source: Eurostat

1. SECTORAL SHARE OF RENEWABLE ENERGY

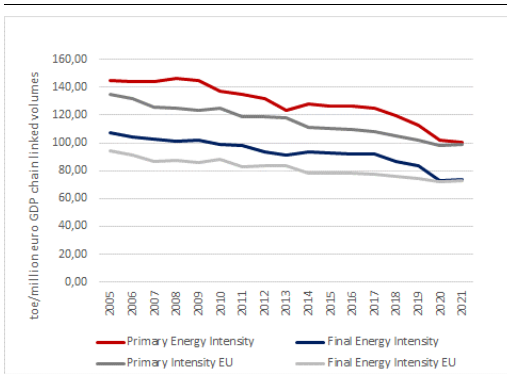
Graph 8: **Share of renewable energy sources**



(1) In % of gross final consumption of energy

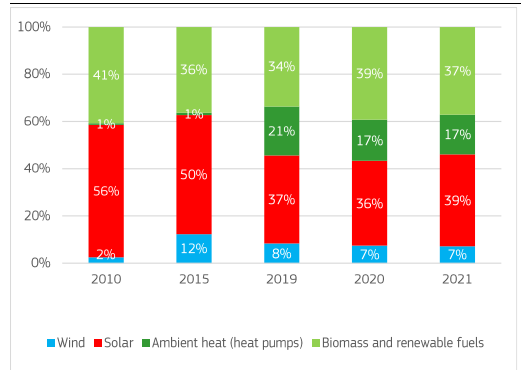
Source: Eurostat

Graph 7: **Primary and final energy intensity**



Source: Eurostat

Graph 9: **Renewable energy mix**



(1) In % of gross final consumption of energy

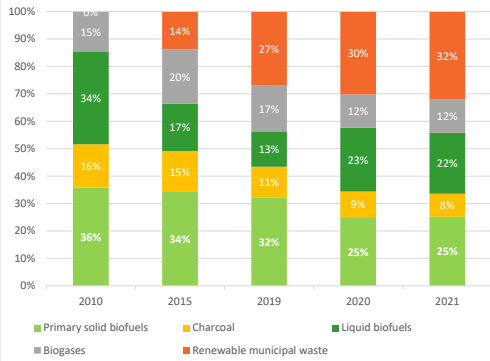
Source: Eurostat

2. ENERGY SAVINGS IN BUILDINGS

- In 2020 there were **431 thousand** of **residential buildings in Cyprus**.
- As per its 2020 Long Term Renovation Strategy (LTRS), **Cyprus** foresees that the energy consumed in the building sector **will increase 10% by 2030** compared to 2020.
- In 2021, the final energy consumption of residential buildings **increased by 12.21%** compared to 2019.

2. BIOENERGY DEMAND

Graph 10: Bioenergy mix

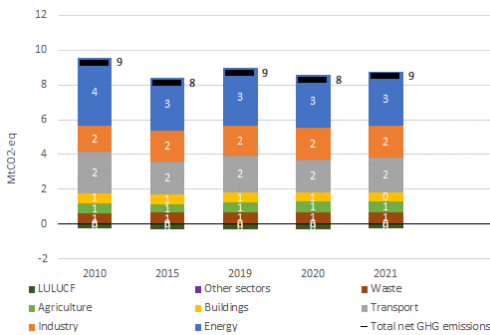


(1) Composition of bioenergy, in % of gross inland consumption of energy

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.

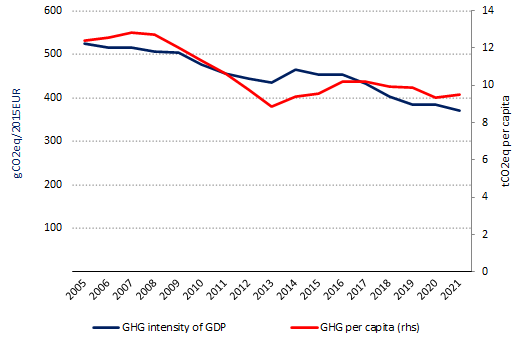
(3) Buildings include emissions from energy use in residential and tertiary buildings, and energy use in agriculture and fishery sectors.

(4) Total net GHG emission including LULUCF and excluding international aviation.

Source: EEA

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

Graph 12: GHG per capita and GHG intensity of GDP



(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).

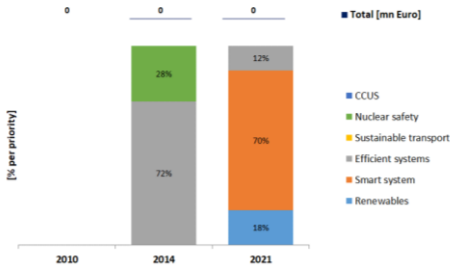
- With 370 gCO2eq/2015EUR, Cyprus lies above the EU average in terms of GHG intensity of GDP.
- With 9 tonnes of CO2 equivalent per capita, Cyprus is slightly above the EU average in terms of GHG emissions per capita.
- For more detailed information on country profiles see [Progress made in cutting emissions \(europa.eu\)](https://europea.eu).

Research, innovation and competitiveness

1. INVESTMENT IN R&I

- Public investment in research and innovation (R&I) in Energy Union priorities⁽³⁾ decreased from 0.043% in 2014 to 0.312% in 2021 (share of GDP).

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

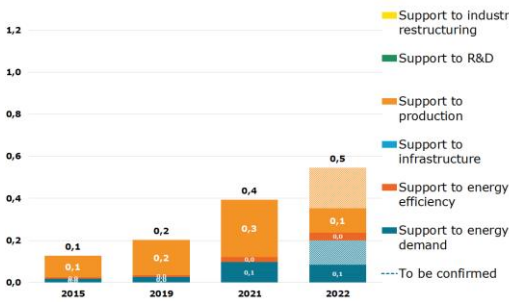


Source: JRC SETIS 2023

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

2. ENERGY SUBSIDIES

Graph 14: Energy subsidies by purpose

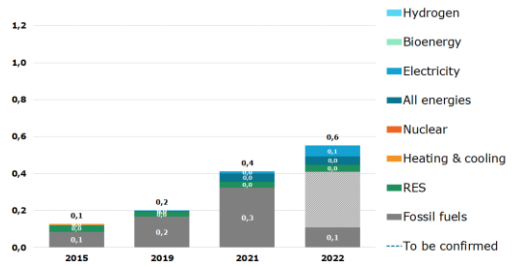


(1) Subsidies in EUR 2022 billion

(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

Graph 15: Energy subsidies by carrier



(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 and diversify the energy supply. To better exploit all untapped potential for renewable energy generation, accelerate renewables deployment by using suitable economic instruments and making further investments to upgrade and modernise the electricity grid, including energy storage facilities. Speed up the development of electricity interconnections. Extend and accelerate energy efficiency measures, also to address energy poverty, as well as the shift towards sustainable transport. Step up policy efforts aimed at the provision and acquisition of the skills needed for the green transition.⁽⁴⁾

For more information see the 2023 European Semester [Country Report](#) for Cyprus.

⁽⁴⁾ Council of the European Union 9838/1/23

National Energy and Climate Plan (NECP)

- **The draft updated NECP** was submitted to the European Commission in July 2023.
- For more information see the dedicated [webpage of the European Commission](#) on the NECPs.

Recovery and Resilience Plan (RRP) and REPowerEU chapter

- **The Cypriot RRP was approved by the Council on 28 July 2021.**
- The implementation of the measures proposed in the RRP would allow Cyprus to access **EUR 1 billion in grants** and **EUR 227 million in loans**.
- **41%** of these funds are **allocated** for measures contributing to **climate objectives**.
- **The Commission disbursed so far EUR 241.81 million to Cyprus.** A 1st payment request was disbursed on 2 December 2022.
- On 1 September 2023 Cyprus submitted a **request to revise its RRP**, adding a **REPowerEU chapter**.
- The amended RRP takes into account the **revised RRF grant allocation** for Cyprus decreased to EUR 0.92 billion. It includes also the EUR 52.5 million **REPowerEU grant allocation** and EUR 52 million **voluntary transfer from the Brexit Adjustment Reserve**. The **total amount available** is therefore EUR 1.22 billion.
- For more information visit the [Recovery and Resilience Scoreboard \(europa.eu\)](#).