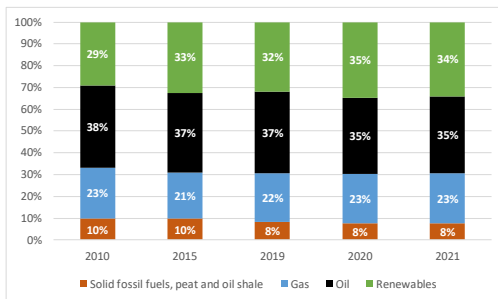


# State of the Energy Union 2023 Austria

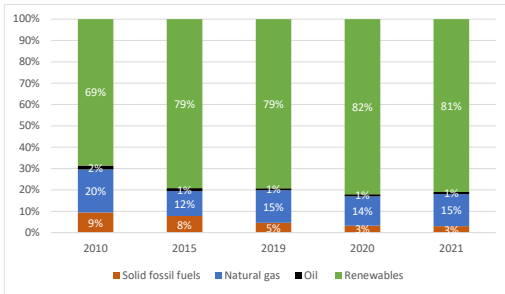
## Key energy figures

Graph 1: Energy mix



Source: Eurostat

Graph 2: Electricity mix



Source: Eurostat

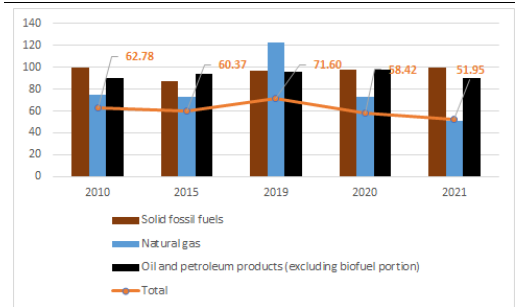
- In 2021, the **share of renewables** in Austria's energy mix remained stable, second to fossil fuels such as oil.
- Austria is **a leader** in terms of the renewables' share of the electricity mix, but still needs to **streamline and speed up permitting procedures**.

(<sup>1</sup>) Eurostat (2020), share of Russian imports over total imports of natural gas. For the EU-27 average, the total imports are based on extra-EU-27.

## Security, solidarity and trust

### 1. DIVERSIFICATION OF ENERGY SOURCES AND REDUCTION OF IMPORT DEPENDENCY

Graph 3: Import dependency on fossil fuels



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

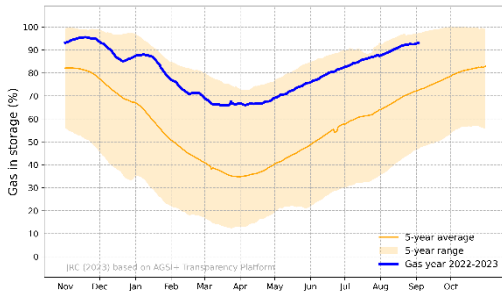
Source: Eurostat

- **Before Russia invaded Ukraine, Austria's exposure to Russian gas was very high** (roughly 80% in 2020, well above the EU average of 44%). (<sup>1</sup>)
- **Austria still imports gas from Russia** and its dependency throughout 2022 fluctuated substantially (<sup>2</sup>) based on factors such as availability from other non-Russian sources, consumption of neighbouring countries, etc.

(<sup>2</sup>) <https://energie.gv.at/>

## 2. FLEXIBILITY OF THE ENERGY SYSTEM

Graph 4: Gas storage levels



Source: JRC calculation based on AGSI+ Transparency Platform, 2023

- Austria has **nine underground gas storage facilities** with a total capacity amounting to around 8.4 bcm.
- On 16 October, the country's storage capacity was filled to **97.77%**.

## Integrated internal energy market

### 1. ELECTRICITY INTERCONNECTIVITY

2023	2030 target
30.27%	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)

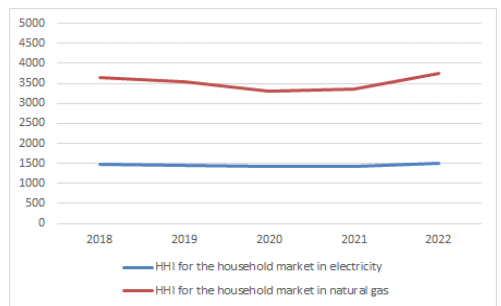
Map 2: Cross-border gas interconnections



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

## 3. MARKET INTEGRATION

Graph 5: Index of concentration (HHI) for the household markets in electricity and natural gas



Source: CEER 2023 out of ACER's Energy Retail and Consumer Protection 2023 Market Monitoring Report.

- In 2022 in Austria, the market share of the three largest suppliers reached 50% for electricity, and 72% for natural gas.

### Rollout of electricity smart meters

- Austria had a 68.4% share of household consumers being equipped with smart meters

in 2022. 80% of consumers are planned to be equipped with smart meters in 2024. <sup>(3)</sup>

#### 4. ENERGY POVERTY AND JUST TRANSITION

Table 1: Energy poverty

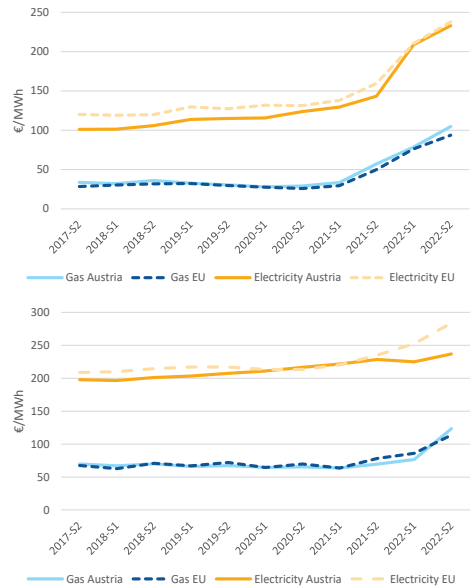
	Austria			EU		
	2020	2021	2022	2020	2021	2022
Arrears on utility bills (households %)	3.1%	2.4%	2.6%	6.5%	6.4%	6.9%
Inability to keep home adequately warm (household %)	1.5%	1.7%	2.7%	7.5%	6.9%	9.3%
Population living in dwelling with presence of lead, damp and rot (population %)	9.1%	:	:	14.8%	:	:

Source: Eurostat

- Just transition plan:** The Austrian Territorial Just Transition Plans (TJTP) outline the transition towards climate neutrality in the carbon-intensive regions of Upper Austria, Carinthia, Lower Austria, and Styria. The plans set out how the Just Transition Fund (JTF), with a national allocation of 135€ million, will support the development of greener and sustainable business models, proactively accompanying companies in their transition process.

#### 5. ENERGY PRICES

Graph 6: Energy retail prices for industry (top) and households (bottom)



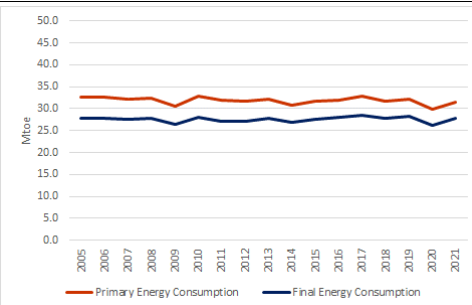
- On electricity, the band consumption is for DC households and ID for industry
- On gas, the band consumption is D2 for households and I4 for industry

Source: Eurostat

### Energy efficiency

#### 1. ENERGY EFFICIENCY

Graph 7: Primary and final energy consumption



Source: Eurostat

<sup>(3)</sup> ACER, CEER. Energy Retail and Consumer Protection, 2023 Market Monitoring Report.

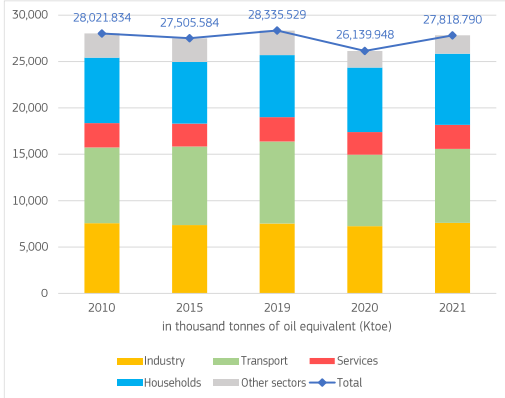
- In 2021, Austria's **Primary Energy Consumption (PEC)** amounted to 31.55 Mtoe, 2.2% lower than in 2019, while its **Final Energy Consumption (FEC)** amounted to 27.82 Mtoe, 1.8% lower than in 2019, despite the COVID-19 crisis recovery.

- The sales of heat pumps amounted to **60.357 units** in 2022 representing an increase of **59%** compared to 2021, as per the European Heat Pump Association (EHPA).

## Decarbonisation and climate action

### 1. SECTORAL SHARE OF RENEWABLE ENERGY

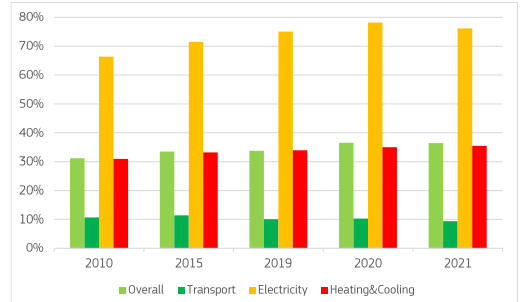
Graph 8: **Final energy consumption per sector**



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

Source: Eurostat

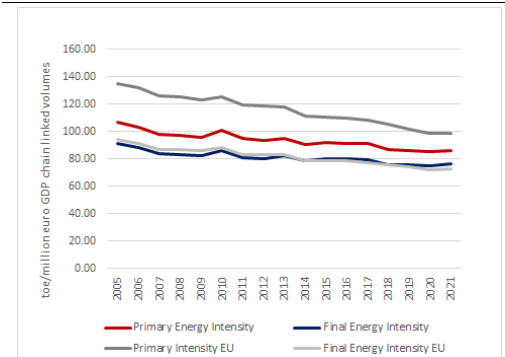
Graph 10: **Share of renewable energy sources**



(1) In % of gross final consumption of energy

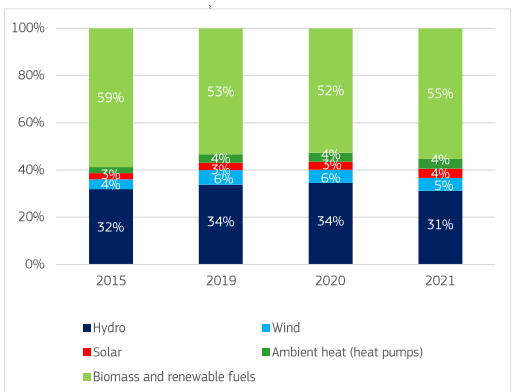
Source: Eurostat

Graph 9: **Primary and final energy intensity**



Source: Eurostat

Graph 11: **Renewable energy mix**



(1) In % of gross final consumption of energy

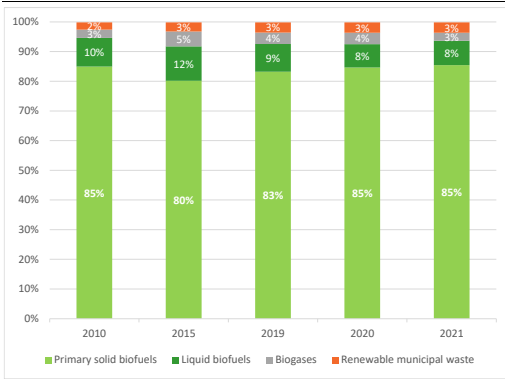
Source: Eurostat

## 2. ENERGY SAVINGS IN BUILDINGS

- In 2020 there were **1.97 million** of **residential buildings in Austria**.
- As per its 2020 Long Term Renovation Strategy (LTRS), **Austria** targets to achieve **no additional** energy savings by **2030** compared to **2017** in the building sector.
- In 2021, the final energy consumption of residential buildings **increased by 3.48%** compared to 2019.

## 2. BIOENERGY DEMAND

Graph 12: Bioenergy mix

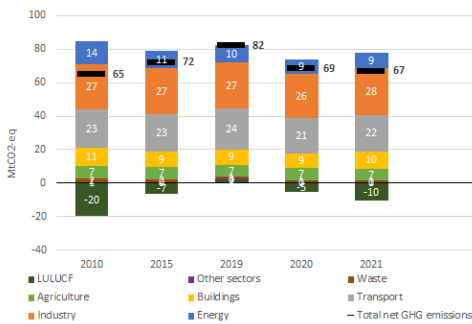


(1) Composition of bioenergy, in % of gross inland consumption of energy.

Source: Eurostat

## 3. GREENHOUSE GAS EMISSIONS

Graph 13: 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.

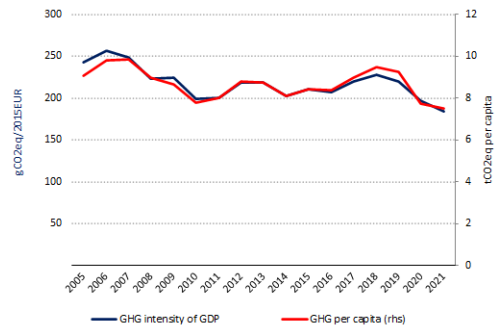
(3) Buildings include emissions from energy use in residential and tertiary buildings, and energy use in agriculture and fishery sectors.

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

Source: EEA

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

Graph 14: 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).

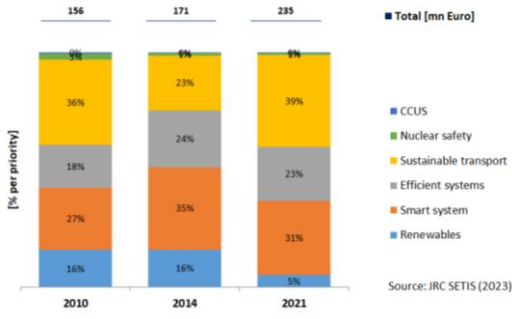
- With 184 gCO<sub>2</sub>eq/2015EUR, Austria lies below the EU average in terms of GHG intensity per GDP.
- With 8 tonnes of CO<sub>2</sub> equivalent per capita, Austria is slightly above the EU average in terms of GHG emissions per capita.
- For more detailed information on country profiles see [Progress made in cutting emissions \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&plugin=1).

## Research, innovation and competitiveness

### 1. INVESTMENT IN R&I

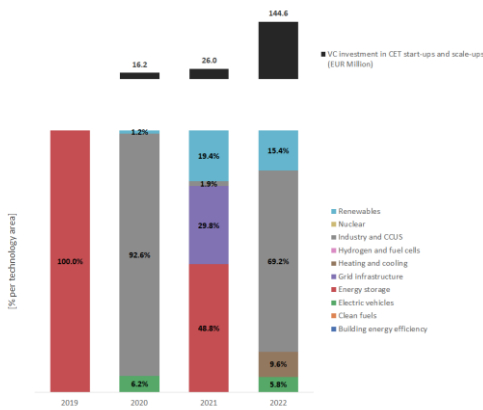
- Public investment in research and innovation (R&I) in Energy Union priorities<sup>(4)</sup> increased from 0.051% in 2014 to 0.058% in 2021 (share of GDP).

Graph 15: Public investment in Energy Union R&I priorities



Source: JRC SETIS (2023)

Graph 16: Venture capital investment in clean energy technology (start-ups and scale-ups)

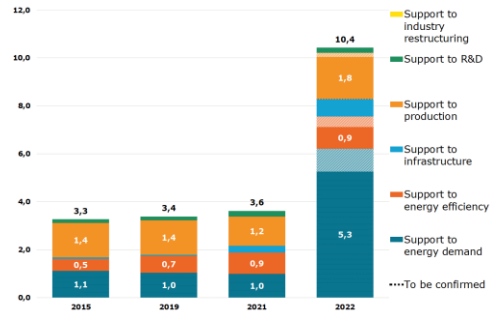


(1) Firms typically use venture capital to expand, break into new markets, and grow faster. Venture capital is essential for the growth of innovative firms and it is key to foster the EU's competitiveness and to strengthen the EU's technology sovereignty in the clean energy sector.

Source: JRC SETIS (2023)

## 2. ENERGY SUBSIDIES

Graph 17: Energy subsidies by purpose

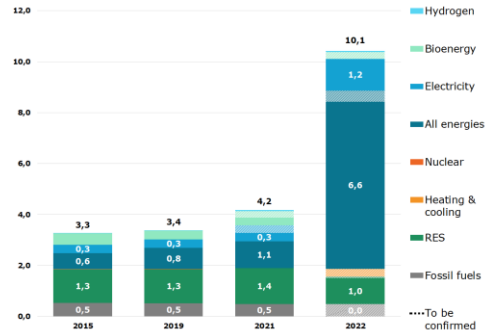


(1) Subsidies in EUR 2022 billion

(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 18: 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 overall reliance on fossil fuels and diversify gas supply sources to significantly decrease dependence on Russia. Accelerate the deployment of renewable energy and the necessary infrastructure, in particular by simplifying permitting procedures and putting in place dedicated acceleration areas. Improve energy efficiency. Reduce emissions, in particular in the transport sector. Step up policy efforts aimed at the provision and acquisition of skills and competences needed for the green transition.<sup>(5)</sup>

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

## National Energy and Climate Plan (NECP)

- **The draft updated NECP** was not submitted yet to the European Commission.
- For more information see the dedicated [webpage of the European Commission on the NECPs](#).

## Recovery and Resilience Plan (RRP) and REPowerEU chapter

- **The Austrian RRP was approved by the Council on 13 July 2021.**
- The implementation of the measures proposed in the RRP would allow Austria to access **EUR 3.5 billion in grants**.
- **59%** of these funds are **allocated** for measures contributing **to climate objectives**.
- The Commission **disbursed so far EUR 1.15 billion to Austria**. A 1<sup>st</sup> payment request was disbursed on 20 April 2023.
- On 14 July 2023 Austria submitted a **request to revise its RRP**, adding a **REPowerEU chapter**.

- The amended RRP takes into account the **revised RRF grant allocation** for Austria increased to EUR 3.751 billion. It includes also the EUR 210 million **REPowerEU grant allocation**. The **total amount available** is therefore EUR 3.96 billion.
- For more information visit the [Recovery and Resilience Scoreboard](#).

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<sup>(5)</sup> Council of the European Union 9846/1/23