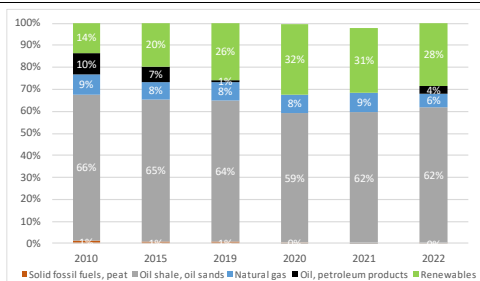


REPowerEU Two Years on Estonia

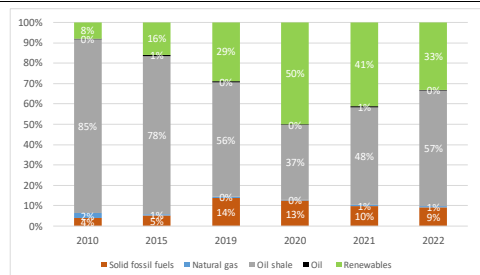
Key energy figures

Graph 1: Energy mix



Source: Eurostat

Graph 2: Electricity mix



Source: Eurostat

Save energy

1. KEY ENERGY SAVINGS MEASURES

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

- Implementing **fiscal and support measures in the transport sector** to reduce final energy consumption, improve public transport and fuel efficiency.
- Improving **monitoring of energy consumption**. As an immediate response to

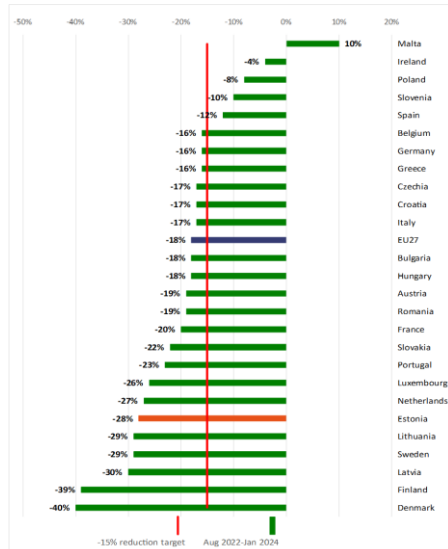
the energy crisis, energy providers were requested to facilitate consumption monitoring by the consumers, notably with the deployment of smart meters, and comparison of available solutions.

- Promoting **energy efficient renovations** while facilitating **access to information and data collection** on energy efficiency measures.
- Supporting enterprises and industries in implementing energy- and resource audits and in deploying **resource efficient green technologies, such as** connecting to efficient district heating systems.

2. GAS DEMAND REDUCTION

Estonia has reduced its gas consumption by **28%** in the period **August 2022 – January 2024**, above the decrease achieved at EU level (18%) and the 15% voluntary gas demand reduction agreed at the EU level ⁽¹⁾.

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



(1) Cyprus does not use natural gas
Source: Eurostat, DG ENER calculations

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

Diversify energy supplies

1. KEY ACTIONS

Estonia is one of the most energy self-sufficient Member States in the EU, and it managed to further decrease its energy dependency towards non-EU countries, from 13% in 2013 to 5% in 2022, the lowest in the EU. This is mainly thanks to domestic extraction of oil shale, carbon intensive energy generation from its use, production of shale oil and renewable energy generation. Estonia is fully dependent on imports for natural gas, but its role is relatively marginal in the Estonian energy system, as in 2022 it accounted only for 7% of the gross available energy and 0.6% of gross electricity production⁽²⁾.

2. GAS INFRASTRUCTURE DEVELOPMENTS

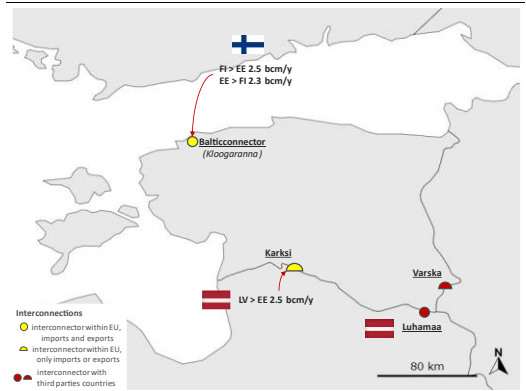
Estonia also managed to reduce its exposure to Russian gas imports, fully banning them since January 2023 while maintaining security of supply. This diversification has notably been allowed by the commissioning of the Balticconnector with Finland⁽³⁾ and access to the Klaipeda LNG terminal in Lithuania (via Latvia).

Further to this, the country has access to the Latvian Inčukalns storage facility, has commissioned an LNG terminal in Paldiski, and is jointly renting, with Finland, the Inkoo floating storage and regasification unit (FSRU). To continue to reduce its import dependence, the country is also aiming to boost domestic production of biomethane to 380 GWh per year by 2030 (against 161 GWh in 2022). Estonia can also count on a bilateral agreement for gas supply with both Finland and Latvia.

⁽²⁾ Eurostat

⁽³⁾ In early October 2023, the Balticconnector sustained damage putting it temporarily out of operation, with no immediate impact on the security of Estonia's gas supply. The Balticconnector was repaired and came back online as of the 22nd of April 2024.

Map 1: Cross-border gas infrastructure



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

3. GAS STORAGE

Estonia does not operate any gas storage facility but has access to the Latvian Inčukalns one. In accordance with the burden-sharing mechanism⁽⁴⁾, Estonia arranged the purchase of 1 TWh (30% of the annual consumption) as a national strategic reserve to be stored in Latvia⁽⁵⁾.

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 **Estonia** aggregated gas demand of **0.22 bcm** in 2023 under the EU Energy Platform. This represents the equivalent of 60.54% of the country's yearly gas consumption.

⁽⁴⁾ 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.

⁽⁵⁾ Report from the Commission to the European Parliament and the Council of 27 February 2024 on certain aspects concerning gas storage based on Regulation (EU) 2017/1938 of the European Parliament and of the Council.

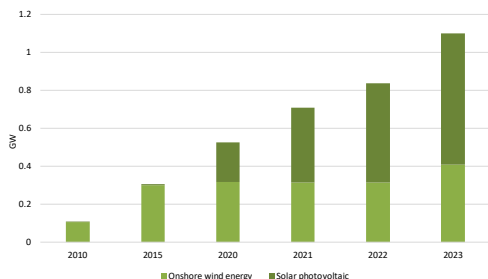
Produce clean energy

1. INSTALLED RENEWABLE ELECTRICITY CAPACITY, IN WIND AND SOLAR

In **2023**, Estonia installed 260 MW of renewable electricity capacity, bringing the total to **1.4 GW** (vs. 1 GW in 2021).

In **2023**, the annual growth rate of installed renewables power capacity rose to **22.8%** compared to 22.1% in 2021⁽⁶⁾.

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, Estonia installed 92 MW of wind power capacity (vs. a decrease of 0.2 MW in 2021).
- (3) In 2023, Estonia installed 170 MW of solar photovoltaic capacity (vs. 187 MW in 2021).

Source: IRENA, Renewable capacity statistics, 2024

2. ELECTRICITY INFRASTRUCTURE DEPLOYMENT

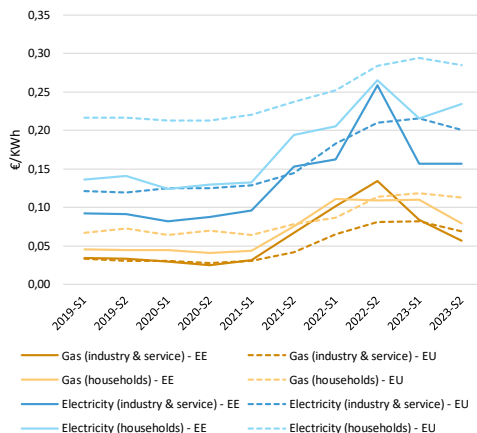
The country relies on electricity imports to cover its demand, with net imports of electricity representing 13.8% of the electricity available for final consumption in 2022 (-18pp compared to 2021)⁽⁷⁾. In the electricity sector, one of Estonia's main goals is its synchronisation with the continental European electricity network along with the other two Baltic States, by February 2025. Several key infrastructure projects are currently being implemented.

Estonia is pursuing a joint offshore grid project with Latvia under the BEMIP grids offshore corridor, having secured its first offshore hybrid interconnector on the 1st PCI/PMI list. The ELWIND project combines both transmission and generation assets, consisting of an interconnector and a joint offshore wind park with a capacity which could go up to 2 GW. Commissioning is expected by 2035. In addition, Estonia, together with Germany is planning a joint hybrid submarine cable project called Baltic WindConnector, connecting the two countries through the Baltic Sea.

⁽⁶⁾ International Renewable Energy Agency (2024). Renewable capacity statistics 2024

Energy price developments

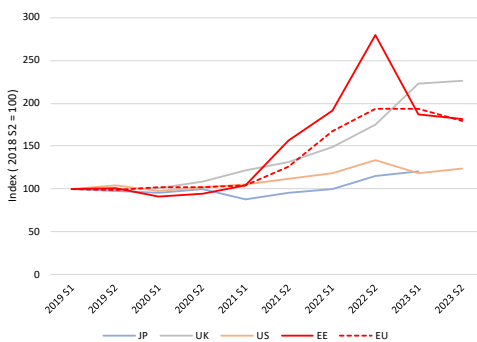
Graph 5: **Estonia's energy retail prices for households and industry & service**



- (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 EE), 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

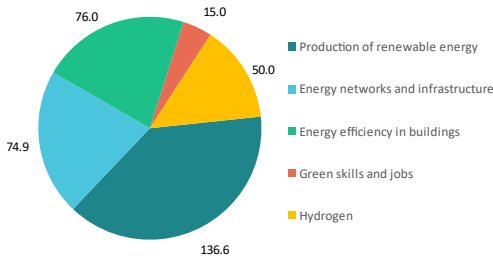
⁽⁷⁾ Eurostat

Smartly combine investments and reforms in the RRP

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

- Approved by Council: 16 June 2023
- Total amount: EUR 0.95 billion
- Amount allocated for energy: EUR 0.35 billion
- Climate tagging: RRP: 59.5 %; REPowerEU chapter: 77.6 %

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



Source: European Commission

Tangible results: reforms & investments

- **Energy Efficiency in buildings:** boost apartment and small residential buildings' deep renovations, impacting 2600 and 900 dwellings.
- **Renewables:** increase the distribution network capacity by 160 MW, upgrading radars in order to remove height restrictions in wind turbines.
- **Energy efficiency in industry:** at least EUR 90 million invested in enterprises to contribute to a climate-neutral economy.

Highlights of the National Energy and Climate Plan

- The **draft updated NECP** was submitted to the European Commission in August 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](https://cohesiondata.ec.europa.eu/d/hgvj-gvin).

(8) <https://cohesiondata.ec.europa.eu/d/hgvj-gvin>

Strengthening competitiveness with the Net Zero Industry Act

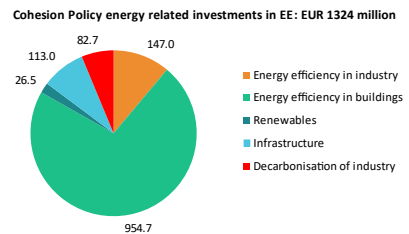
Estonia remains highly dependent on non-EU countries for clean energy technologies but is poised to become an EU leader in rare earth manufacturing and is developing its hydrogen industry. Supported by Just Transition Fund grants, the industrial-scale rare earth plan in Sillamäe will produce rare earth magnets, a critical element for green transition technologies such as electric cars and wind turbines. The country holds a small PV modules production capacity of less than 100 MW. Estonia also has electrolyser manufacturing capacity as well as R&D infrastructure in this domain, notably supported by its status as an Important Project of Common European Interest, and is aiming to develop further in that sector. Estonia also holds several elements of the on/offshore development ecosystem such as the main infrastructures, foundations and platforms.

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⁽⁸⁾