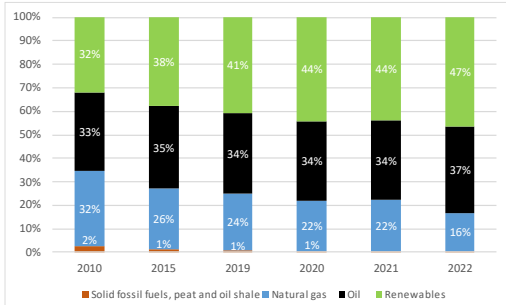


State of the Energy Union 2024: Latvia

Key energy figures

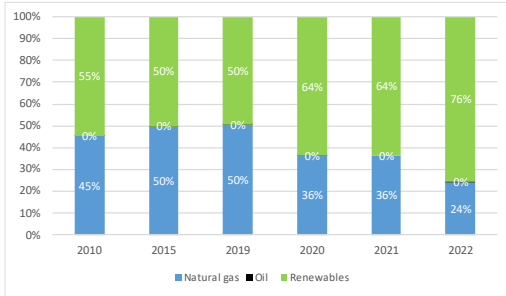
Graph 1: **Energy mix**



(1) The 2022 gross inland energy consumption was 176 012 TJ. (0.3% of the total EU consumption).

Source: Eurostat

Graph 2: **Electricity mix**



(1) The 2022 gross electricity production was 5 TWh. (0.2% of the total EU production).

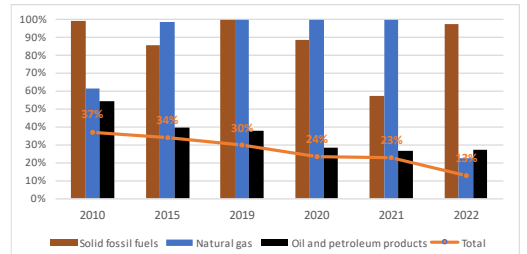
Source: Eurostat

- Fossil fuels account for more than a half (53.4%) of Latvia's **energy mix** (compared to 69% at EU level), with renewable energy accounting for the remaining 46.6%.
- Renewable energy accounts for three quarters (75.7%) of Latvia's **electricity mix** (compared to 39.4% at EU level). Fossil fuels accounted for 24.3% (compared to 38.6% at EU level), with natural gas accounting alone for 24.2%.

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.

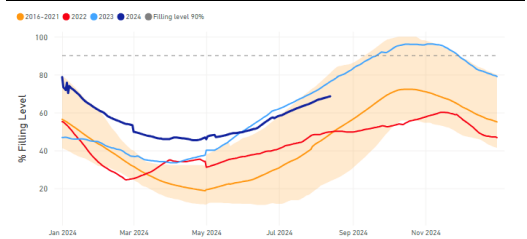
(2) Combustible renewables and electricity are excluded.

(3) The total amount takes into consideration the energy mix of the country.

Source: Eurostat

2. FLEXIBILITY OF THE ENERGY SYSTEM

Graph 4: **Storage levels in Latvia**



Source: JRC calculation based on AGSI+ Transparency Platform, 2024

- Latvia has **one underground gas storage facilities** with a total capacity of **2.3 bcm**, representing 272% of its annual gas consumption in 2022. It is the only facility in the Baltics and has a key role in ensuring the regions security of supply.
- On 17 August 2024, the country's storage capacity was filled to 68.96%.

Integrated internal energy market

1. ELECTRICITY INTERCONNECTIVITY

Table 1: Electricity interconnectivity

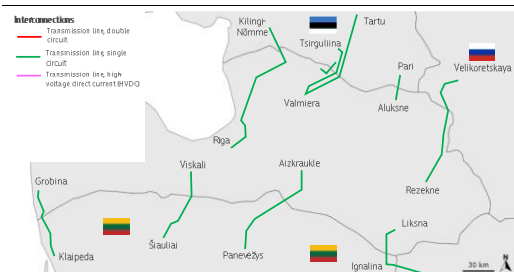
2024	2030 target
67.0 %	At least 15%

(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

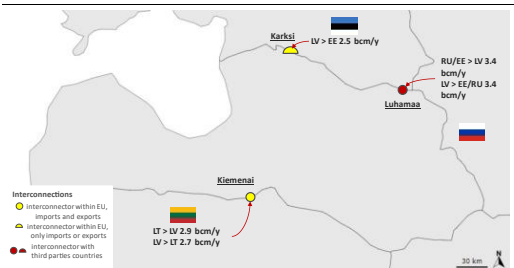
2. ENERGY TRANSMISSION INFRASTRUCTURE

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

- Latvia has achieved 99% coverage for the rollout of smart meters, with a near real-time access to consumption data based on a 60-minute interval.⁽¹⁾

⁽¹⁾ ACER, 2024 Retail Market Monitoring Report, Energy retail and decarbonisation (forthcoming).

Diversification of gas supplies

- In 2023, Latvia had 4 natural gas supply sources, compared to 3 in 2021. Its three largest suppliers accounted for 98%, with the United States being the main supplier, holding a share of 63%. In 2021, Russia with 91%, Lithuania with 7%, and Estonia (2%) were Latvia's biggest natural gas supply sources.⁽²⁾

4. ENERGY POVERTY, SOCIAL CLIMATE PLAN AND JUST TRANSITION

Table 2: Energy poverty

Indicator	Evolution compared to			EU average
	2023	2021	2017	
EED NECPs four main indicators				
Inability to keep home adequately warm	6.6	+1.7 pp	-3.1 pp	10.6
Arrears on utility bills	7	+2.2 pp	-4.3 pp	6.9
Share of pop. With leak, damp or rot in dwelling	18.8	+1.3 pp (2020)	-4 pp	15.5
AROP (At risk of poverty)	22.5	-0.9 pp	+0.4 pp	16.2

Source: Eurostat

Social Climate Plan

- Member States need to submit these plans to the European Commission by June 2025.
- Maximum financial allocation for Latvia: EUR 515 million or 0.71 % of total SCF.

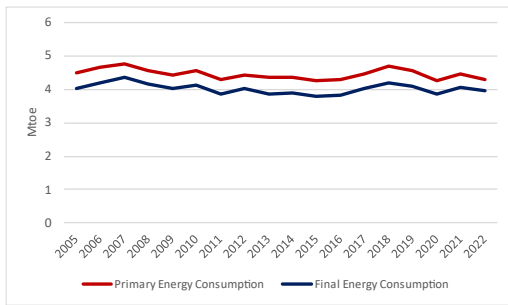
Just Transition Plan

- Latvia's Territorial Just Transition Plans (TJTP) outline the transition away from peat in the Kurzeme, Latgale, Vidzeme and Zemgale regions. The plan sets out how the Just Transition Fund (JTF), with a national allocation of EUR 192 million will support the sustainable use of natural resources, and away from peat, regional business development and upskilling and training of the workforce. The commitment to phase out coal is set for 2030 in the final 2024 NECP.

Energy efficiency

1. ENERGY EFFICIENCY

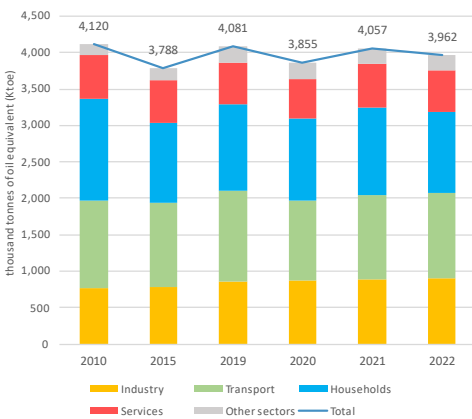
Graph 5: Primary and final energy consumption



Source: Eurostat

- In 2022, Latvia's **Primary Energy Consumption (PEC)** amounted to 4.3 Mtoe, 3.6% lower than in 2021, while its **Final Energy Consumption (FEC)** amounted to 4 Mtoe, 2.3% lower than in 2021.

Graph 6: Final energy consumption by sector

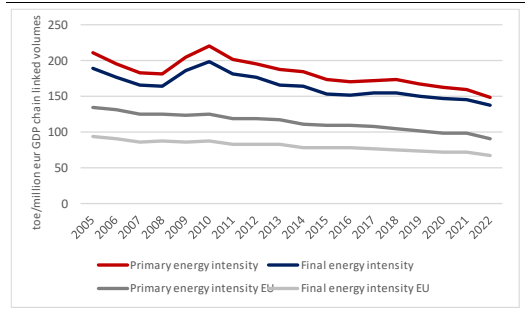


(1) Final energy consumption excludes consumption of the energy sector (including transformation and distribution losses) and non-energy use of energy carriers.

Source: Eurostat

(3) Following JRC's methodology (see for reference "Energy Consumption and Energy Efficiency trends in the EU, 2000 – 2020).

Graph 7: Primary and final energy intensity



Source: Eurostat

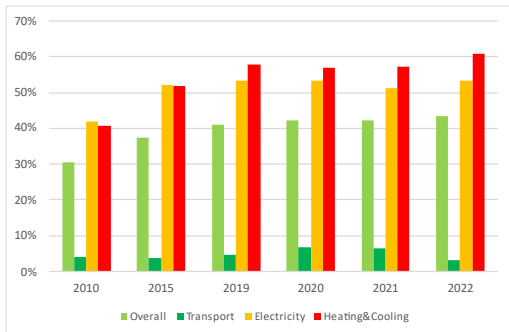
2. ENERGY PERFORMANCE OF BUILDINGS

- In 2022, Final Energy Consumption (FEC) in the Latvian **residential sector** was **1.1 Mtoe**, representing a **reduction of 7.5%** compared to 2021. In the **services sector**, FEC was **0.6 Mtoe**, with an **4.7% decrease** compared to 2021. However, climate corrected data⁽³⁾ show a **residential FEC decrease of 4.8%** from 2021 to 2022, indicating that the above reduction is partially climate-related (e.g. milder winter) rather than linked with an improvement of the building stock.
- Heating and cooling account for around **83%** of the country's residential final energy consumption, with renewables supplying approximately **61%** of the gross final energy consumption for heating and cooling. As per the European Heat Pump Association (EHPA), there are no data available for Latvia.
- In 2023, **7.0%** of the total population was experiencing difficulties on paying their utility bills while **6.6%** was not able to keep their home adequately warm over the cold periods of the year (growing from 2021, when such figures were, respectively, 4.8% and 4.9%). 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

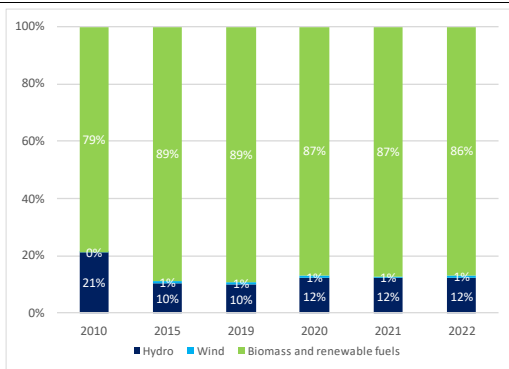
Graph 8: Share of renewable energy sources



(1) In % of gross final consumption of energy.

Source: Eurostat

Graph 9: Renewable energy mix

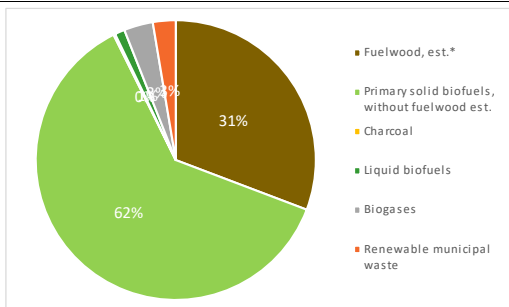


(1) In % of gross final consumption of energy.

Source: Eurostat

2. BIOENERGY MIX

Graph 10: Bioenergy mix



(1) In % of gross final consumption of energy (2022).

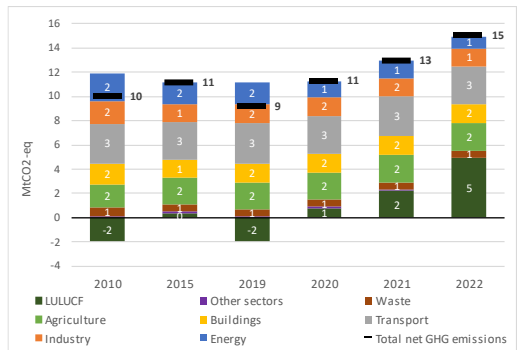
(2) * Fuelwood estimate, based on the Primary solid biofuels consumption in Other sectors, Eurostat and industry secondary data, DG ENER estimations.

Source: Eurostat and DG ENER

- For more information see the dedicated [website on biomethane country fiches](#).

3. GREENHOUSE GAS EMISSIONS

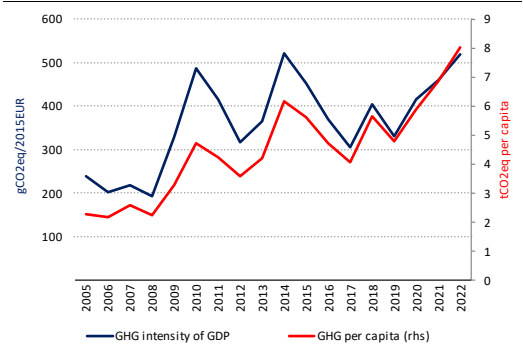
Graph 11: Greenhouse gas emissions by sector



Based on UNFCCC 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 12: GHG per capita and GHG intensity of GDP



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

Source: Greenhouse gas inventory 1990-2022 (EEA). Real GDP in 2015-prices (AMECO, European Commission). Population (Eurostat).

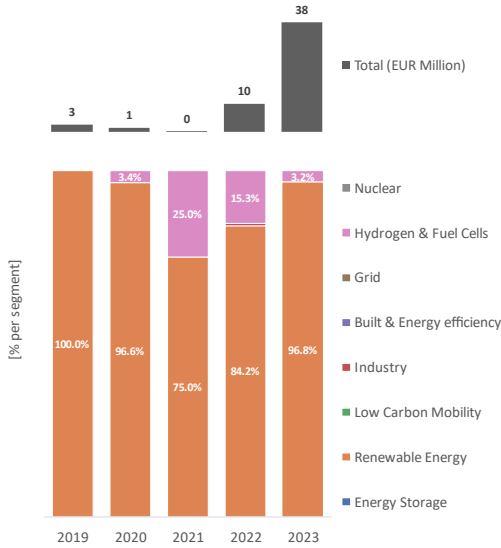
- With 519 gCO2eq/2015EUR, Latvia lies above the EU average in terms of GHG intensity of GDP.
- With 8 tonnes of CO2 equivalent per capita, Latvia is above the EU average in terms of GHG emissions per capita.
- For more detailed information on country profiles see [Progress on climate action \(europa.eu\)](#).

Research, innovation and competitiveness

1. INVESTMENT IN R&I

- Data related to public investment in Energy Union R&I priorities⁽⁴⁾ are not available⁽⁵⁾.

Graph 13: **Venture capital investment in net-zero 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 net-zero energy sector.
Source: JRC elaboration based on PitchBook data (08/2024)

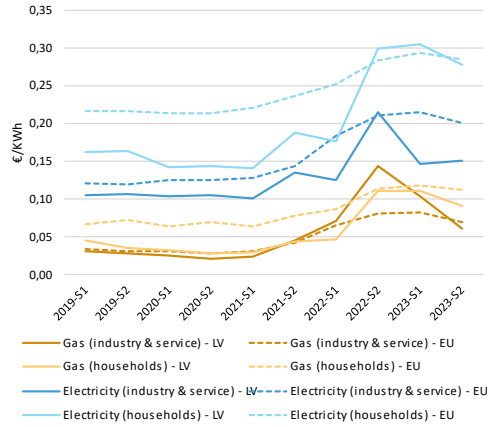
2. NET-ZERO ENERGY TECHNOLOGIES

- Latvia remains dependent on imports for clean energy technologies. Some private initiatives are emerging that might propel the manufacturing and utilisation of hydrogen in Latvia. For example, a Riga-based startup is at the forefront of designing innovative nanocoating solutions and essential materials to support the production of electrolysers and fuel cells.

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

3. ENERGY PRICES DEVELOPMENT

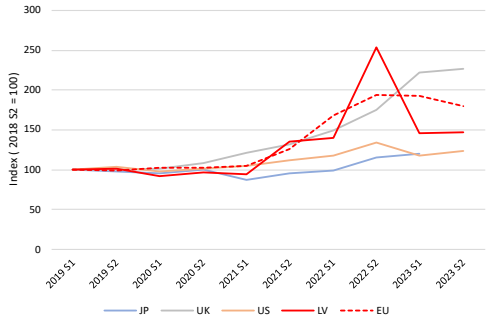
Graph 14: **Latvia's energy retail prices for households and industry & service**



- For industry, consumption bands are I3 for gas and IC for electricity, which refer to medium-sized consumers and provide an insight into affordability.
- For households, the consumption bands are D2 for gas and DC for electricity.
- 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 15: **Trends in electricity prices for non-household consumers (EU and foreign partners)**



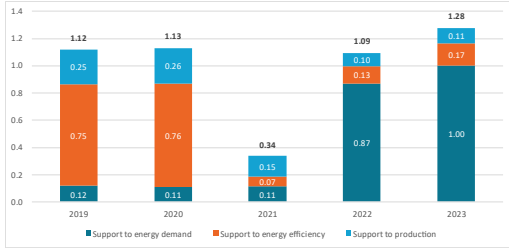
- For Eurostat data (EU and LV), the band consumption is ID referring to large-sized consumers with an annual consumption of between 2 000 MWh and 20 000 MWh, such as in electricity intensive manufacturing sectors, and gives an insight into international competitiveness.
- JP = Japan

Source: Eurostat, IEA

⁽⁵⁾ Source: JRC SETIS 2024

4. ENERGY SUBSIDIES

Graph 16: Energy subsidies by purpose

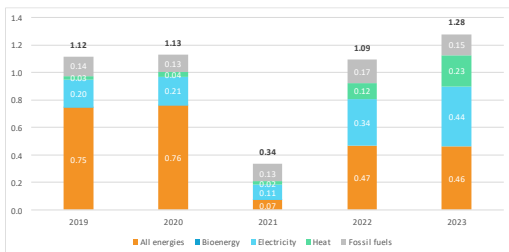


(1) Subsidies in EUR 2023 billion

(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 17: 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 wind and solar energy by improving permit-granting procedures and promoting demand-side flexibility. Foster the transition to a circular economy through eco-innovation and sustainable resource management practices.⁽⁶⁾
- For more information see the [2024 European Semester Country Report](#).

⁽⁶⁾ Council of the European Union 11706/24.

National Energy and Climate Plan (NECP)

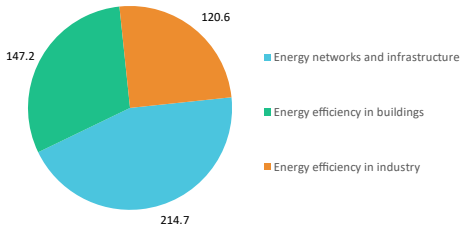
- Member States were due to submit their **final updated NECP by 30 June 2024**, taking into account the Commission recommendations.
- **The final updated NECP** was submitted to the European Commission in July 2024.
- For documents and information see the dedicated [webpage of the European Commission on the NECPs](#).

Recovery and Resilience Plan (RRP and REPowerEU chapter)

- The Latvian RRP has a total allocation of EUR 1.97 billion (only grants), with 42% of available funds supporting climate objectives.
- **EUR 482.5 million are allocated to energy-related measures**, with the largest amount for **energy networks and infrastructure** [EUR 214.7 million]:
 - The main part will be in a **60 MW battery energy storage system** to ensure the timely synchronisation with the Continental European Network, alongside funding provided through the Connecting Europe Facility for Energy;
 - The investments will also enable **upgrading the electricity grid**, developing IT solutions to increase the flexibility and security of the transmission system and distribution system, additionally to a regulatory framework aiming to facilitate the deployment of onshore wind energy in state forest land, reducing legal uncertainty.
 - **Renovation and construction of substations to increase the grid capacity by 70 MW**, construction of two new digital substations, replacement of 150 km of medium voltage OHL lines with cable lines, implementation of an ADMS system, purchase and installation of at least 285 remotely controlled medium voltage circuit breakers, as well as three studies.
- The Commission disbursed the 2nd payment of EUR 336 million to Latvia in May 2024.

Graph 18: **Energy-related investments in the RRP (in EUR million)**

LV Energy-related investments EUR 482.5 mn



Source: European Commission

EU Funds supporting energy related investments

Graph 19: **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

- **Innovation Fund: EUR 4.4 million.** For more information see the webpage innovation-fund-projects-country.eu.
- **Modernisation Fund: EUR 31.8 million** (approved and/or confirmed Investments from 2021-2024). For more information see the webpage modernisationfund.eu.
- **CEF-Energy: EUR 42.3 million** (2.2% of total EU contribution, for 2021-2027). For more information see [CINEA's Project Portfolio dashboard](#).