

## Increased renewable energy penetration latvia

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Central Statistical Bureau provisional data show that in 2023 gross energy consumption1 in Latvia totalled 185 petajoules (PJ), which is 1 % fewer than in 2022.

Hydropower, wind power and solar power plants generated 4 304 GWh of electricity in 2023, which is 44.3 % (1 323 GWh) more than in 2022. The amount of electricity generated in solar power plants went up 4.8 times (by 198 GWh), in wind power plants by 42.5 % (81 GWh), and in hydroelectric power plants, due to longer spring floods and higher water inflow, by 38 % (1 044 GWh).

Fuelwood (firewood, wood waste, wood chips, wood briquettes, pelleted wood) and hydro resources in Latvia are used the most commonly. Over the recent years, along with the declining use of natural gas, the proportion of renewables in gross energy consumption has been growing.

As the gross consumption of renewables is increasing, Latvia is getting closer to the renewable energy target set by the National Energy and Climate Plan for 2021-2030, i.e., reaching 44.3 % of renewable energy in gross final energy consumption until 2025. In terms of highest share of renewables in the final energy consumption Latvia ranks amongst the leading EU countries (in 2022 Latvia had 43.3 % and EU average was 23 %).

Over the past decade from 2014 to 2023, gross consumption of natural gas has gone down by 38.5 % (17.5 PJ) and its share by 9.3 percentage points. Gross consumption of natural gas has reduced by 3.9 % over the year and its share took 10.5 % (5 % fewer than a year ago). The share of renewables went up by 0.2 % and reached 43.5 % in 2023.

The proportion of oil and petroleum products made 37.7 % of the gross energy consumption and that of other energy resources 8.3 %. Fuelwood, in turn, took 33.8 % of this consumption. In 2023, compared to the year before, exports of wood products went up by 3.8 %. Upturn may be observed in the exports of all types of wood products, except for wood chips.

Transformation sector2 consumed 40.3 PJ of energy resources and produced 33.5 PJ of energy in 2023 (of which 25.8 PJ of heat and 7.5 PJ of electricity), which is 5 % fewer than in 2022. Heat and electricity in Latvia are mainly generated from natural gas the share whereof in the transformation sector was reducing gradually (64.3 % in 2014 and 36.6 % in 2022), whereas in 2023 the figure went up to 39 %. However, the sector still consumes more wood chips (53.3 %) than natural gas.

The share of renewables consumed in transformation sector has risen by 16.5 percentage points over the past five years reaching 58.4 % in 2023. It may be a positive trend, as renewables used in transformation sector, i.e., fuelwood, biogas, and other biomass, are local resources. Compared to 2022, transformation sector

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consumed significantly more liquefied petroleum gas (LPG) (up by 523 TJ) while consumption of diesel oil fell (by 487 TJ). The share of oil and petroleum products consumed in the sector dropped by 1.12 % over the year.

In 2023, final energy consumption totalled 170 PJ, which is 0.9 % fewer than in 2022. The figure has not changed significantly over the past decade. Last year, transport sector, which consumed 52 PJ (30.6 % of final consumption), was the largest energy consumer, followed by households with 45 PJ (26.4 %) and industry with 42 PJ (24.7 %). Transport and industry consumed more energy than a year ago while households less. Other economic activities generally consumed less energy resources, e.g., agriculture 2.4 % while fishing and aquaculture 15.8 % fewer.

Over the year fuel consumption in transport sector increased by 4.3 % while over the past five years decreased by 4.1 % (2.2 PJ). Fuel consumption in transport reached 52 PJ in 2023, compared to 49.9 PJ in 2022. Diesel oil is the main energy resource used in transport; consumption thereof has not changed over the year while over the past five years it has dropped by 0.7 % (232 TJ). Consumption of motor gasoline, in turn, has reduced by 19.6 % over the past five years and constituted 6.2 PJ in 2023, which is 4 % more than in 2022. Consumption of kerosene-type jet fuel keeps growing, however not as sharply as before (up by 32 % or 2 PJ over the year, compared to annual rise of 83.8 % in 2022).

In 2023, 387 TJ of electricity were consumed in transport, which is 6.0 % more than in 2022 (365 TJ) and 10 % more than in 2020 (351 TJ). Electricity consumption in pipeline transport kept reducing and was 3 TJ or 37.5 % lower than in 2022. In road transport it increased by 156 TJ or 17.3 % over the year while in rail transport by 2 TJ or 0.9 %.

Industry consumed 42 PJ of energy in 2023, which is 2.4 % more than in in 2022. Last year, the highest consumption of energy resources was recorded in manufacture of wood and of products of wood and cork - 24.1 PJ or 57.4 % of the energy consumed in industry. During the past five years, consumption of oil and petroleum products in industry has increased by 39.3 %. Significantly higher gross energy consumption compared to 2022 was registered in manufacture of basic metals - 70.5 %. Final energy consumption in construction totalled 4.2 PJ, which is 10.5 % more than in 2022 (3.8 PJ).

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