

Electricity Generation and Supply in Latvia



Electricity Generation

The Daugava hydropower plants (HPPs) are the biggest hydropower plants in Latvia, providing a large share of renewable energy produced here. Also, they are among the biggest HPP of their type in Europe. All three plant are owned and managed by “Latvenergo” AS.

In 2020, the Daugava HPPs generated 2.5 terawatt-hours (TWh) of electricity, which constituted 59% of “Latvenergo” total electricity output and was a 23% increase compared to the previous year. The higher output of the Daugava HPPs was determined by the normalization of the Daugava inflow compared to the atypically low inflow in 2019.

Two of Latvia’s biggest CHPPs: Riga CHPP-1 and I Riga CHPP-2, also owned and operated by “Latvenergo”, in 2020, the CHPPs generated 1.7 TWh of electricity, which constitutes 40% of “Latvenergo” total electricity output. Compared to previous years, the decrease in output was influenced by electricity market conditions and lower thermal energy demand.

The amount of thermal energy generated by CHPP-1 and CHPP-2 in 2020 was 1.5 TWh, an 8% decrease compared to the previous year. The decrease was influenced by warmer weather. The thermal energy generated is sold to “Rīgas Siltums” AS at regulated tariffs.

Currently, CHPP-2 is the most efficient and advanced combined-cycle power plant in the Baltics. Two combined-cycle gas turbine units and five water boilers are operated at the plant. In 2019, the construction of the largest heat storage system in the Baltics started at CHPP-2 and it was commissioned in 2021.

Electricity Market

Back in 2007, in accordance with the Electricity Market Law, the Latvian electricity market was opened to companies with high electricity consumption. In April, 2012, it was opened to companies with medium electricity consumption, but in November, 2012, the electricity market in Latvia was opened to all companies. The electricity market opening to households followed in 2015. All these actions and innovations linked to them created a wider electricity supply in Latvia, and also strengthened the European Union's single electricity market.

Although Latvia only became involved in the European single electricity market in 2013, over the course of these 7 years many changes took place and improvements have been made, new participants in the Latvian electricity market, new services, alternative ways of generating electricity have appeared. The electricity market in Latvia is developing every year, providing consumers with the opportunity to choose the most suitable type of service and its provider.

Today, the electricity market consists of many representatives, each with its own pros and cons, as is customary in the free market. There are differences in prices, quality and quantity of services between service providers.

On "Latvenergo Group"

"Latvenergo Group" (the Group) is the biggest energy company group in Latvia and one of the largest in the Baltic countries. It consists of parent company "Latvenergo" AS and six subsidiaries. "Latvenergo" AS ensures generation and trade of electricity and thermal energy as well as trade of the natural gas. "Latvijas elektriskie tīkli" AS manages transmission system assets, while "Sadales tīkls" AS ensures electricity distribution to each customer. "Elektrum Eesti" OÜ and "Elektrum Lietuva" UAB conduct electricity trade in Estonia and Lithuania respectively. "Enerģijas publiskais tirgotājs" AS carries out administration of electricity mandatory procurement.

"Liepājas enerģija" SIA (51% of shares) ensures generation, transmission, distribution and supply of thermal energy in the city of Liepāja as well as generation of electricity in cogeneration mode. "Latvenergo" AS also holds 46.3% of the shares in the closed pension fund "Pirmais Slēgtais Pensiju Fonds" AS, as well as 0.005% of the shares in "Rīgas Siltums" AS.

"Latvenergo Group" is one of the largest electricity traders in the Baltic states; it trades electricity and natural gas as well as an extensive range of related products and services under the *Elektrum* brand.

In 2020, the Group's market share accounted for 23% of the Baltic electricity market, where the total consumption is around 27.4 TWh, a decrease of approximately 2.4% compared to 2019. This was mainly affected by warmer weather conditions, as well as COVID-19 restriction measures and their impact on the Baltic economy.

6.4 TWh of electricity were sold to retail customers in the Baltics in the reporting year. The Group has strengthened its position in the Baltic household and micro-business customer segment and prepared for the partial opening of the Lithuanian household market to free competition in early 2021. By the end of the reporting year, more than 13,000 trade agreements were concluded in this segment. The Group has 743.7 thousand electricity customers in the Baltics, of which 5% are business segment customers and 95% are households. The number of customers outside Latvia amounts to almost 50 thousand.

In 2020, 516 GWh of natural gas was sold to customers, which is almost twice as much as in 2019. The Group has 13.5 thousand natural gas customers in the Baltics, of which 10% are business segment customers and 90% are households. In Lithuania and Estonia, natural gas is sold only to business customers, and approximately 1/3 of customers in this segment are outside Latvia.

- More than 600 new solar panel sales contracts were signed in the Baltics, which is almost twice as many as in 2019. The total capacity of solar panels installed for customers reached 6.3 MW, which makes “Latvenergo” one of the leading providers of this service in the Baltics. 79% of the total capacity is installed for customers outside Latvia.
- The construction of two *Elektrum* solar panel parks with a total capacity of 1.75 MW started in Lithuania and Estonia. Approximately 4400 solar panels will be installed in Klaipeda district, Lithuania, and 1000 panels will be installed in Marjamaa municipality, Estonia. Lithuanian household customers will be able to purchase the capacity installed at the Lithuanian solar park within the remote net payment system. The customer will be able to purchase a part of this capacity and attribute the amount of electricity it produces to consumption on their own property on the same terms as if the solar panels were actually installed there. Both parks are expected to be commissioned in early 2021.
- The product range of the online shop elektrumveikals.lv has been expanded – the shop now offers electric bicycles, electric car charging systems, solar garden lighting, and robotic lawn mowers and vacuum cleaners.
- Development of the electric car charging network continued as well. With 36 charging ports at the end of 2020, *Elektrum* is one of the largest electric car charging networks in Latvia. Some charging ports have been installed together with cooperation partners. Since the launch of the network in August 2019, *Elektrum* mobile app customers have made more than 8000 charges at public charging stations in the amount of approximately 120 MWh, providing for kilometrage of more than half a million km.

Source: elenger.lv, AS “Latvenergo”

Detailed information on the electricity supply in Latvia is available at:

[AS “Latvenergo”](#)

[AS “Augstsprieguma tīkls”](#)

[AS “Sadales tīkls”](#)