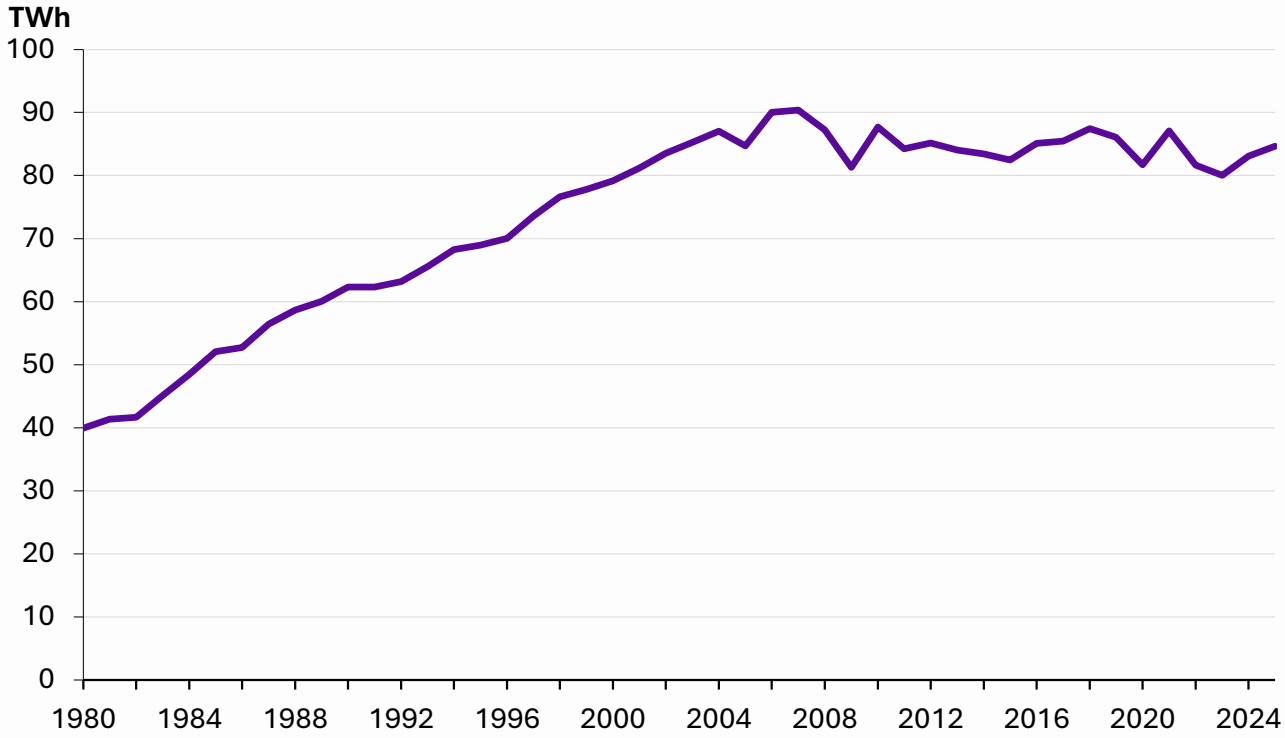
Finnish Energy

Energy Year 2025
Electricity

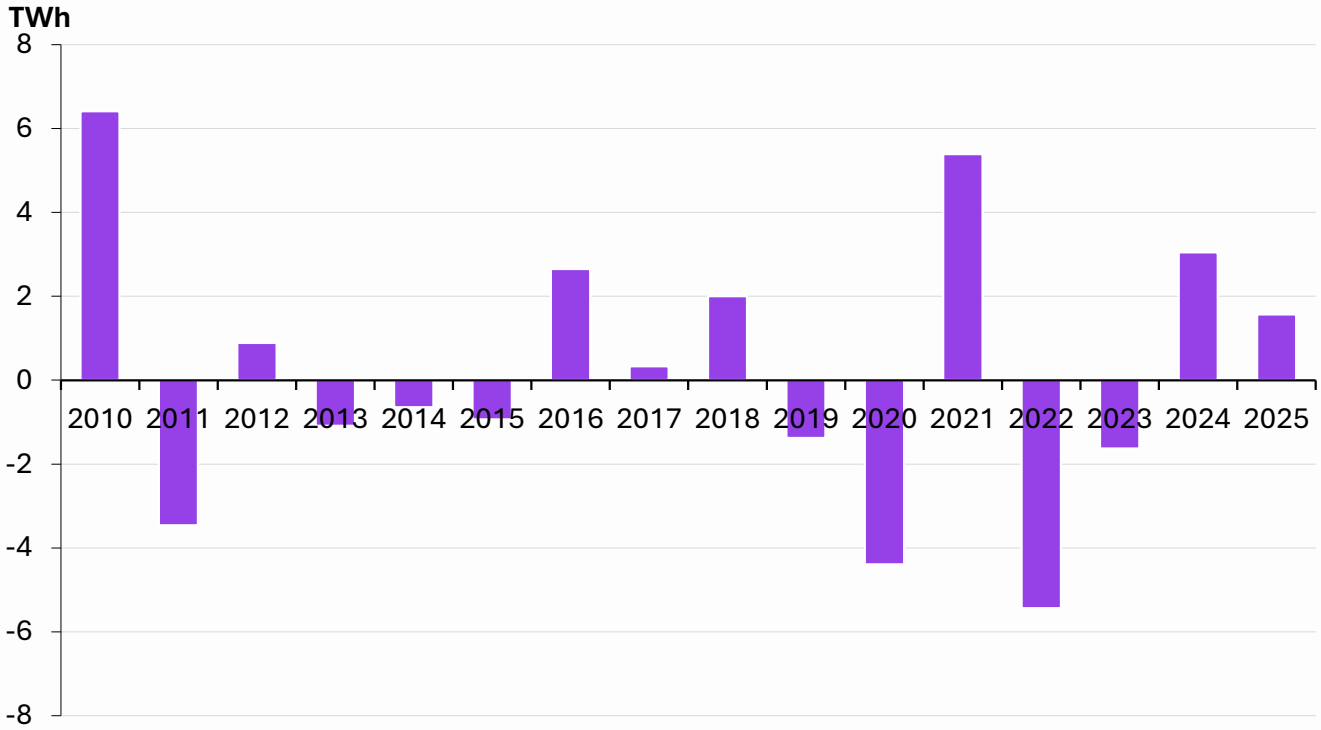
21.1.2026

Preliminary data of electricity 2025

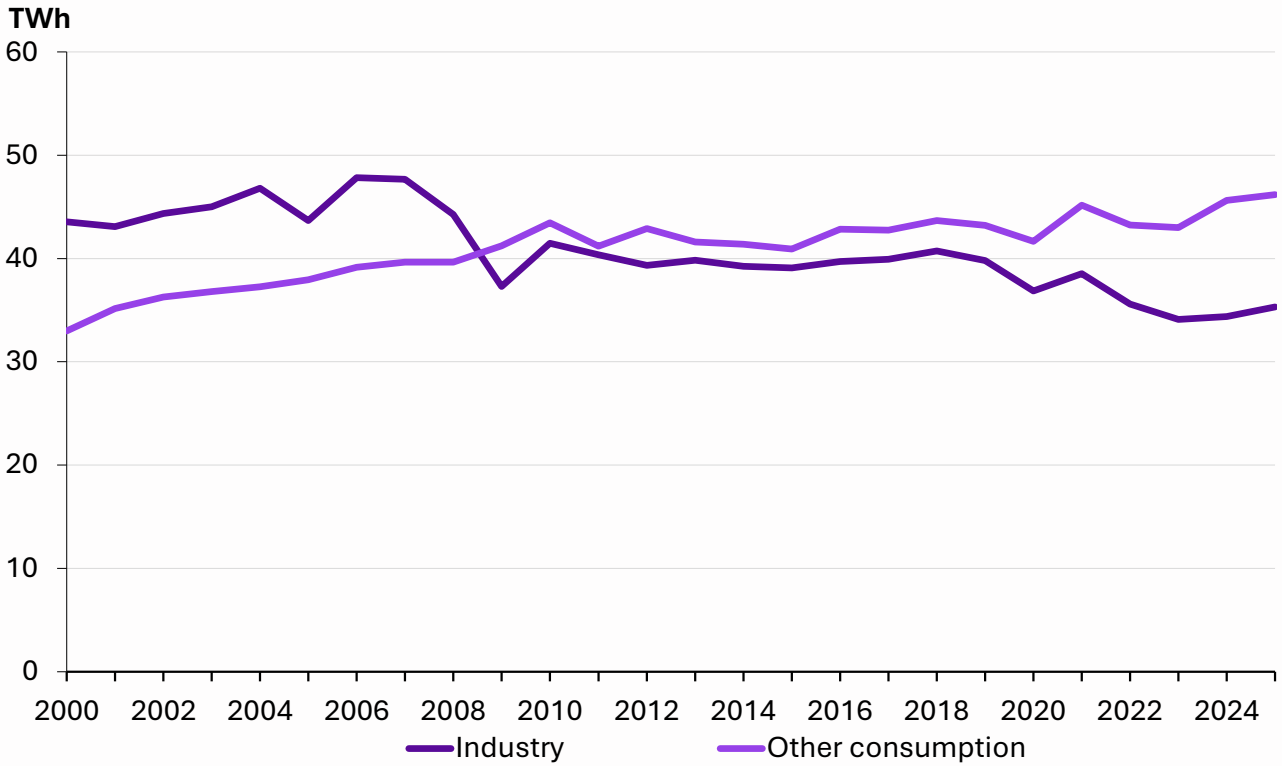
Electricity total consumption 85 TWh, 2 percent increase compared to 2024



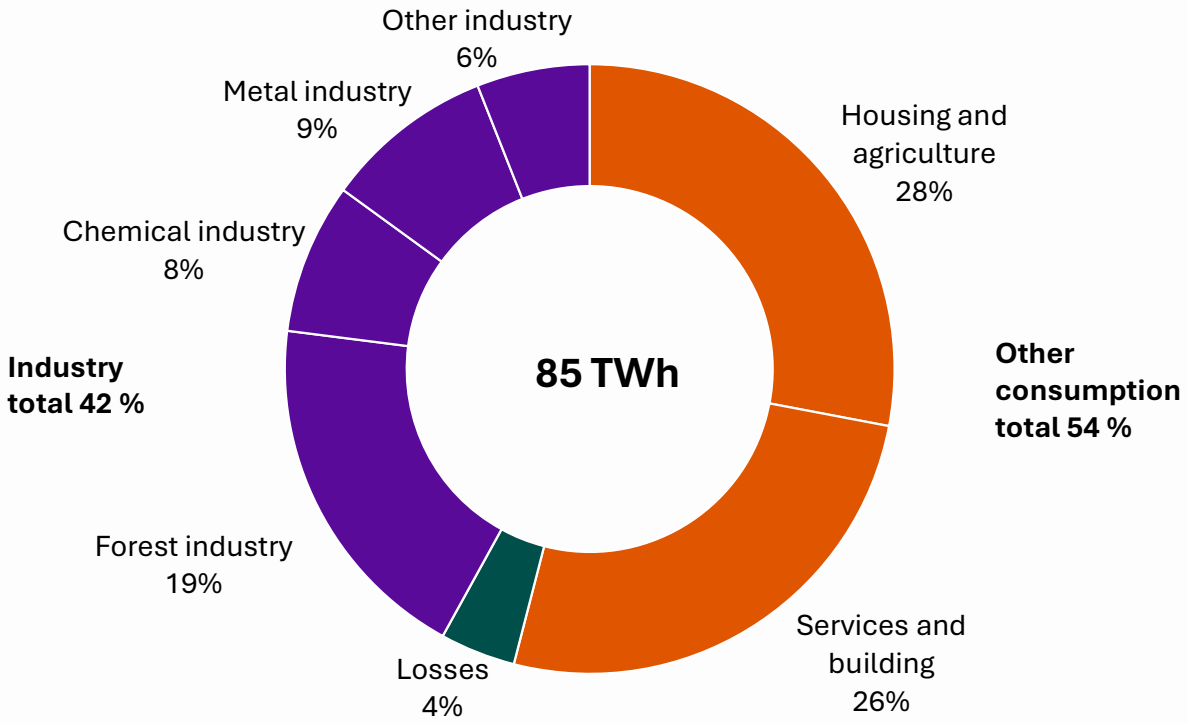
Electricity consumption increased from the previous year, 1.6 TWh change 2024-2025



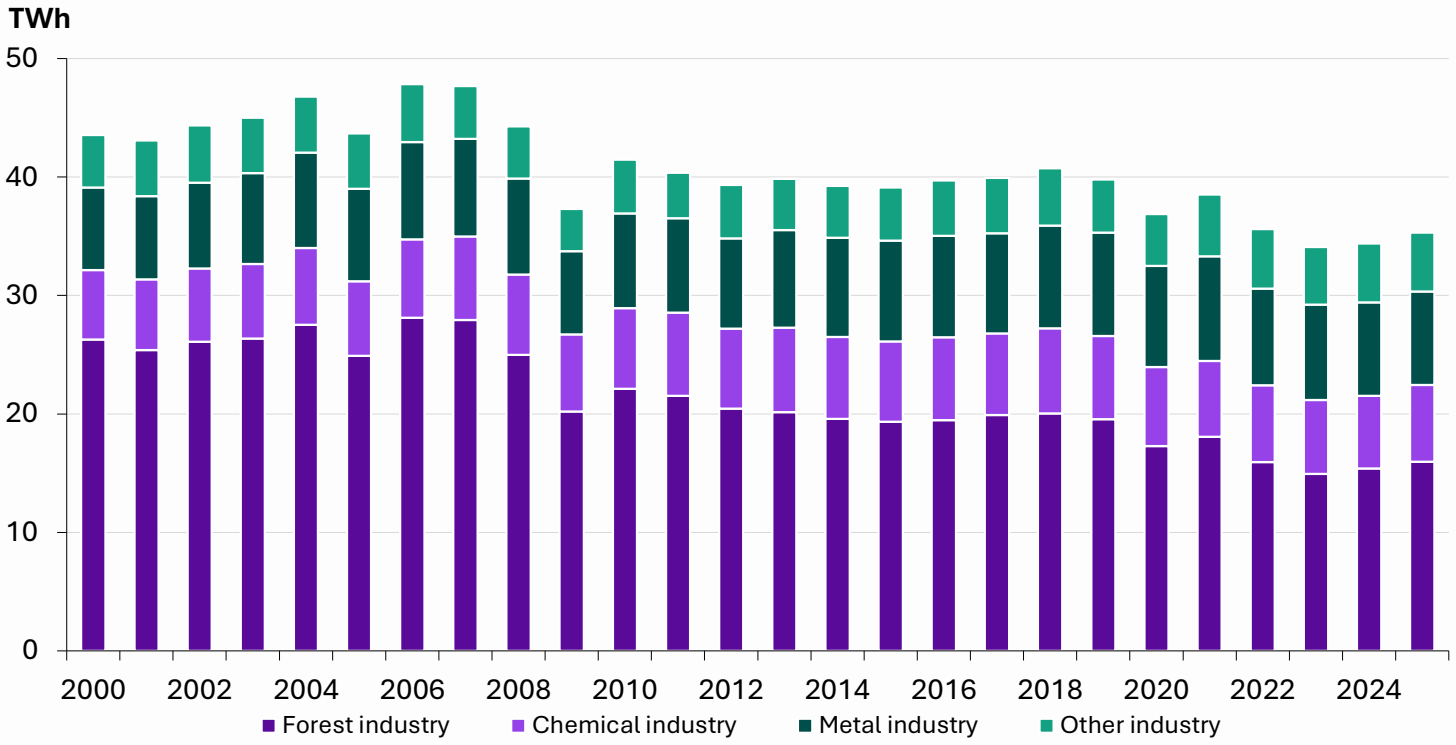
Development of industry and other electricity consumption



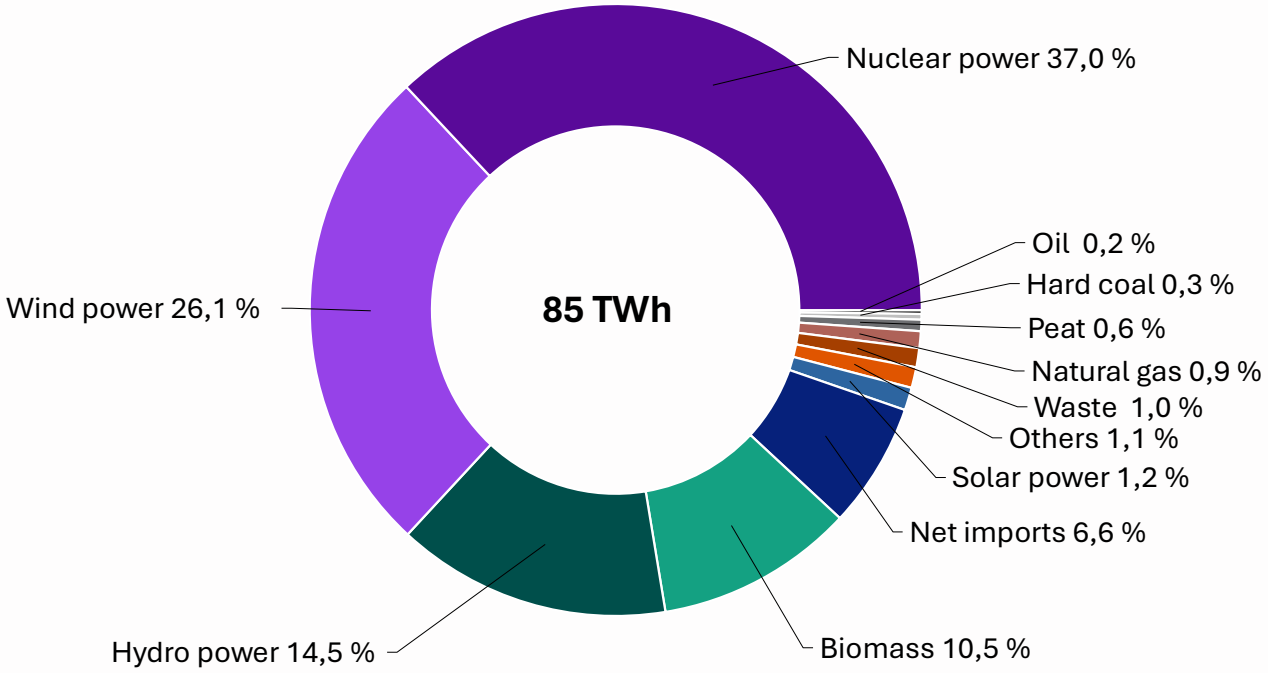
Electricity consumption 2025



Electricity consumption of industry increased 2.6 percent
Consumption total 35 TWh



Electricity by energy source and net imports 2025

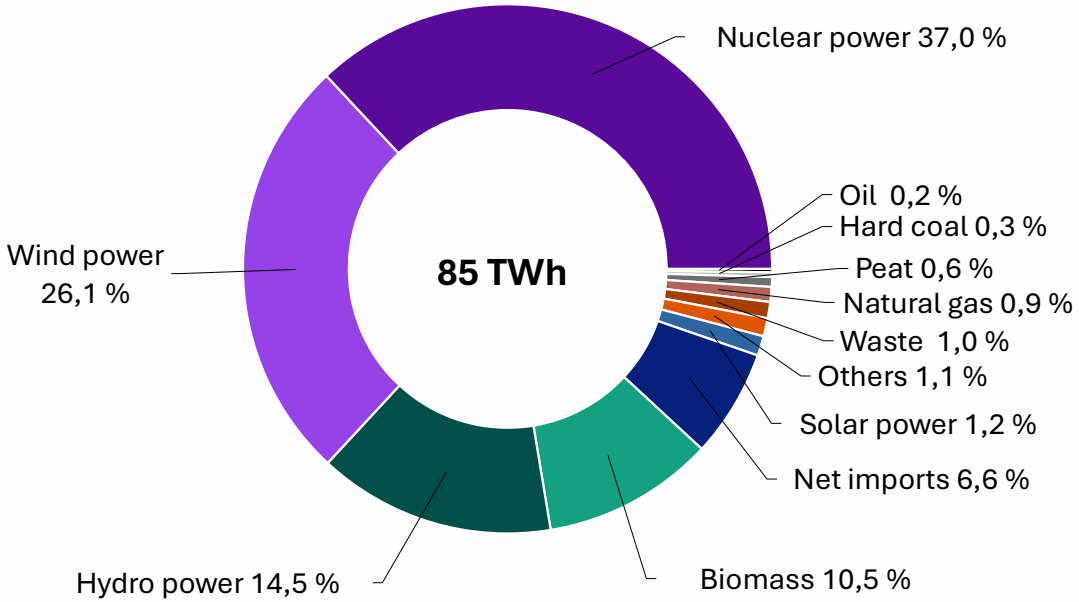


Waste: municipal waste, recovered fuels, demolition wood, impregnated wood, plastic waste and hazardous waste.

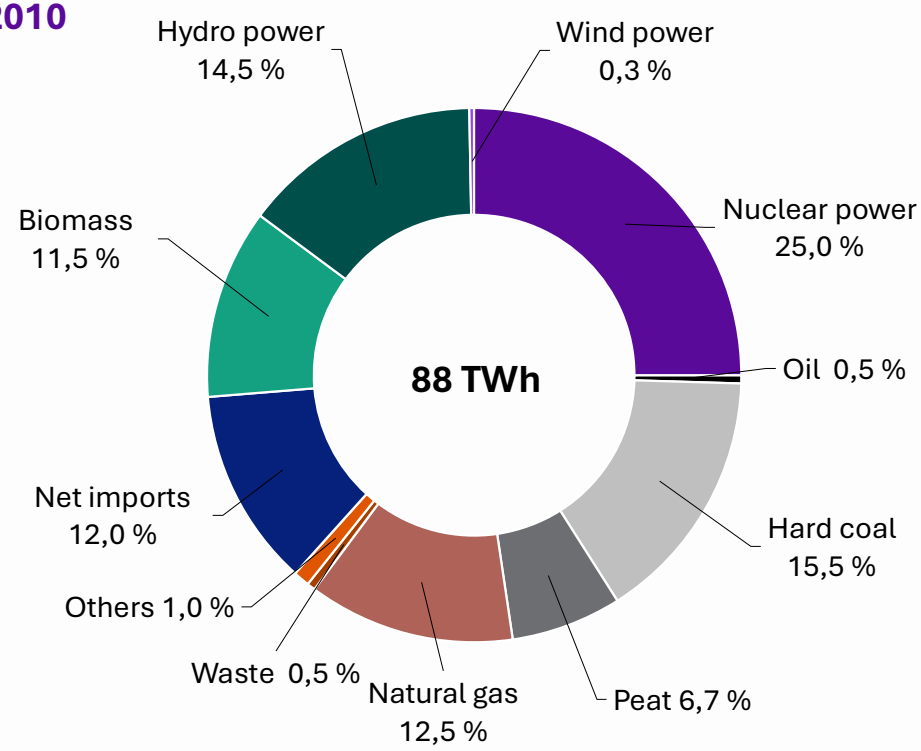
Others: blast furnace, coke oven and CO-gases, sulphur, hydrogen, steam, heat recovered from industrial processes, electricity used in electric boilers and heat pumps, other fuels

Electricity by energy source and net imports

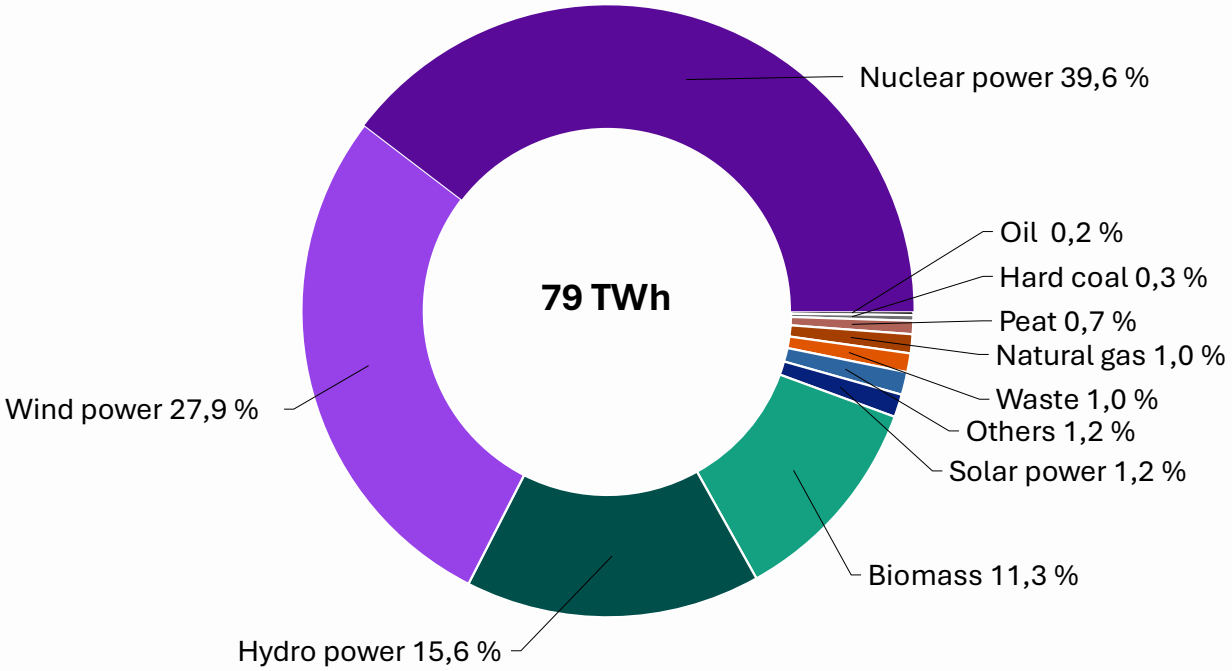
2025



2010



The share of CO2-neutral electricity 96 percent

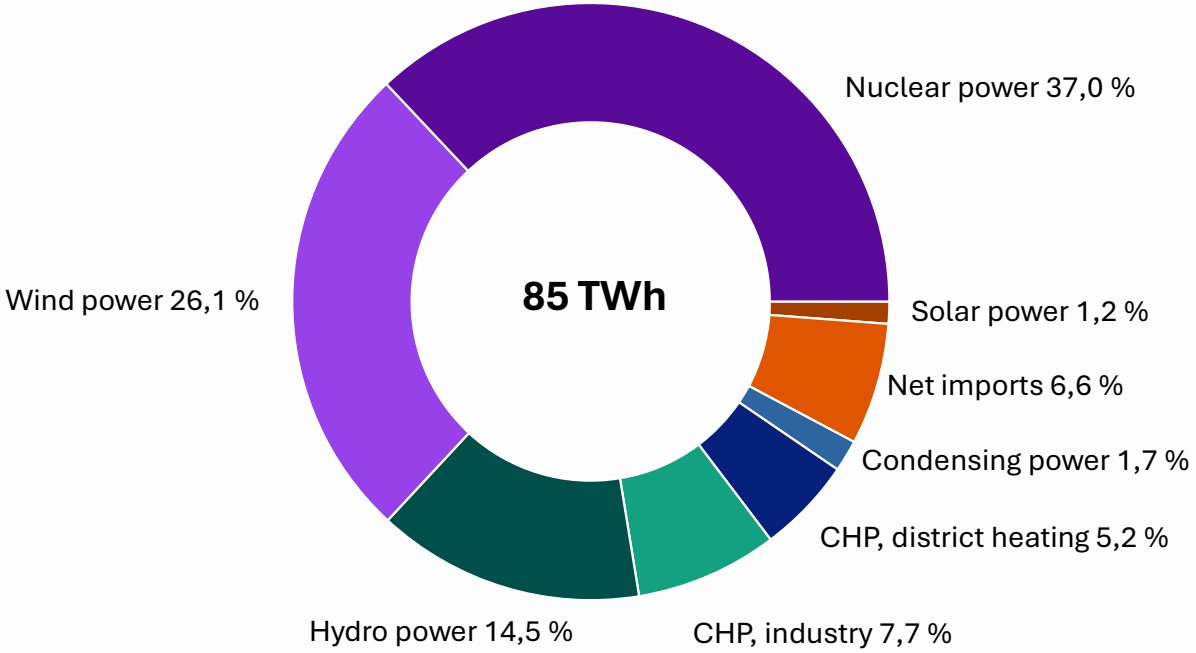


- Renewable: 57 % (56 % in year 2024)
  - Biogenic share of waste is about 52 % and fossil share 48 %.
- CO2-neutral*: 96 % (95 % in year 2024)

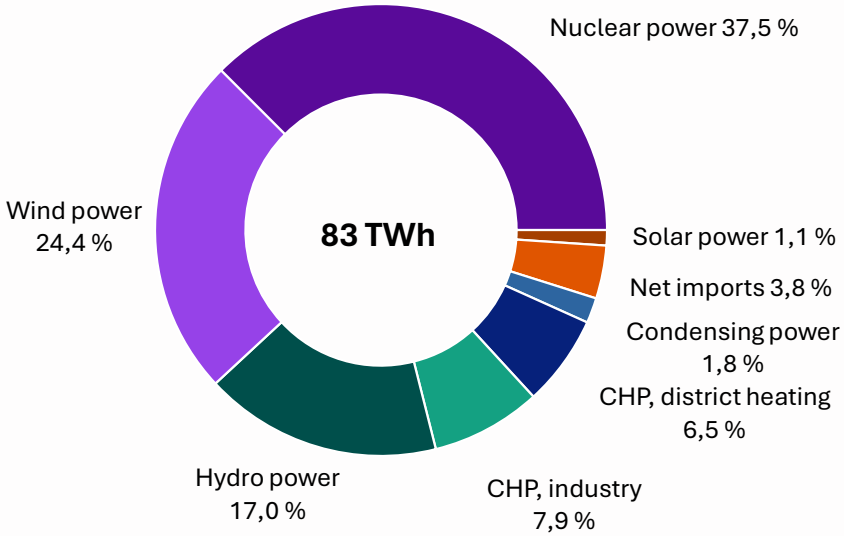
*CO2-neutral energy sources are energy sources whose carbon dioxide impact is not reported in electricity production. The climate impact of biomass is calculated in the land use sector.

Electricity production in Finland and net imports

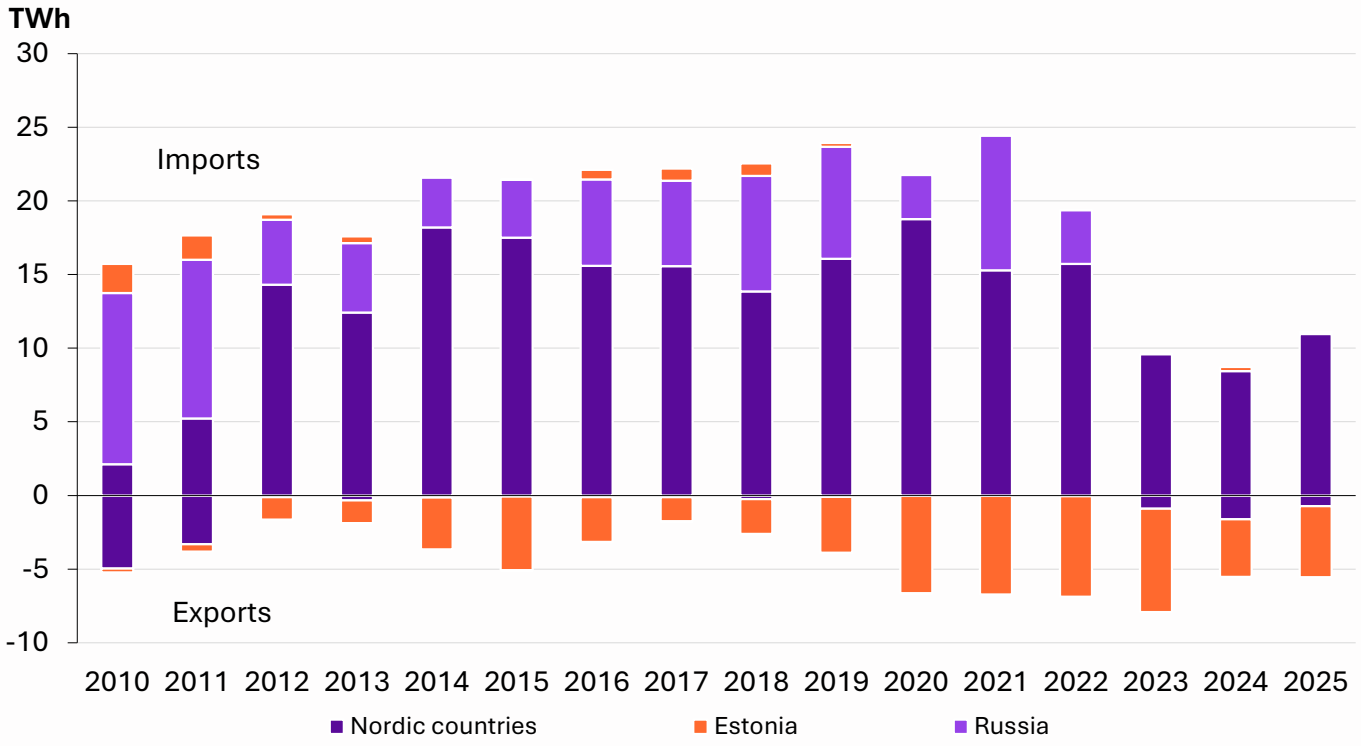
2025



2024

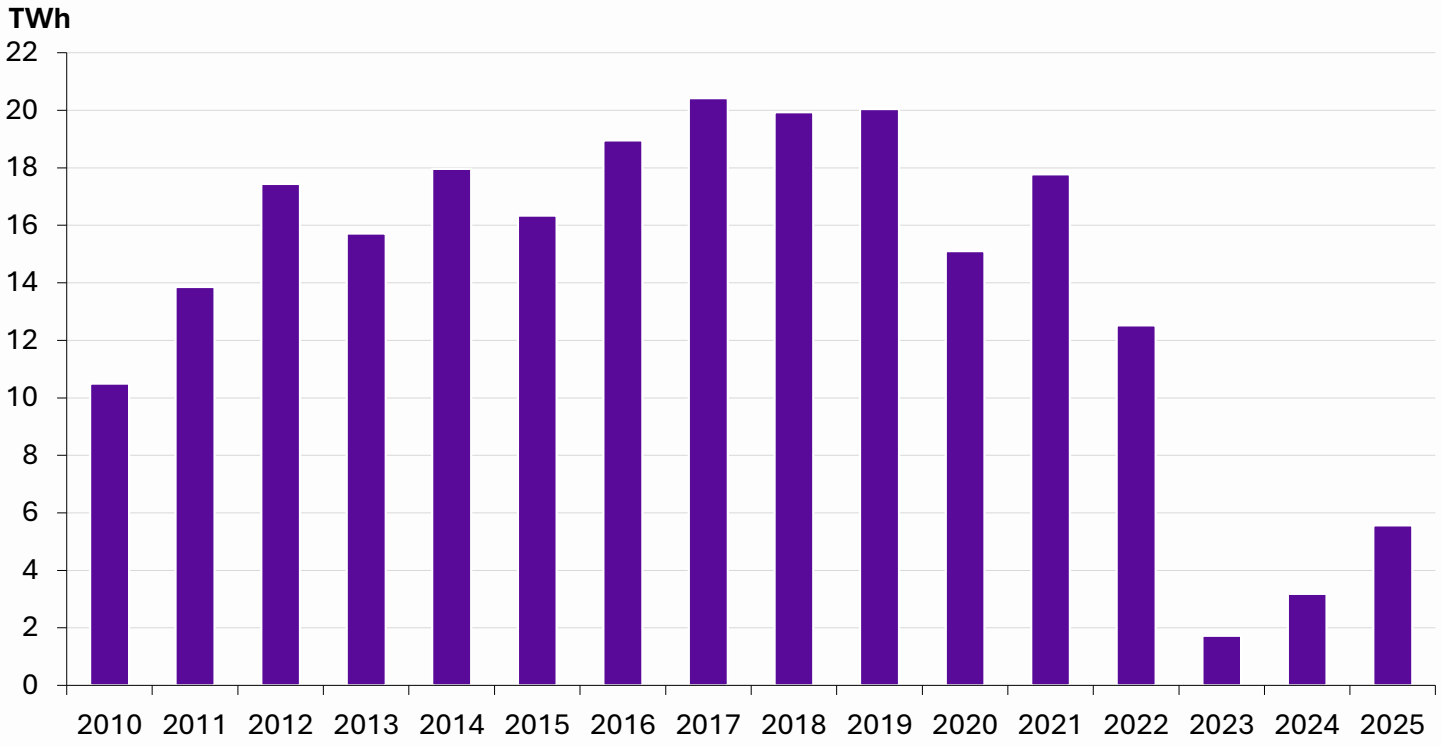


Imports of electricity from Sweden increased 31 percent



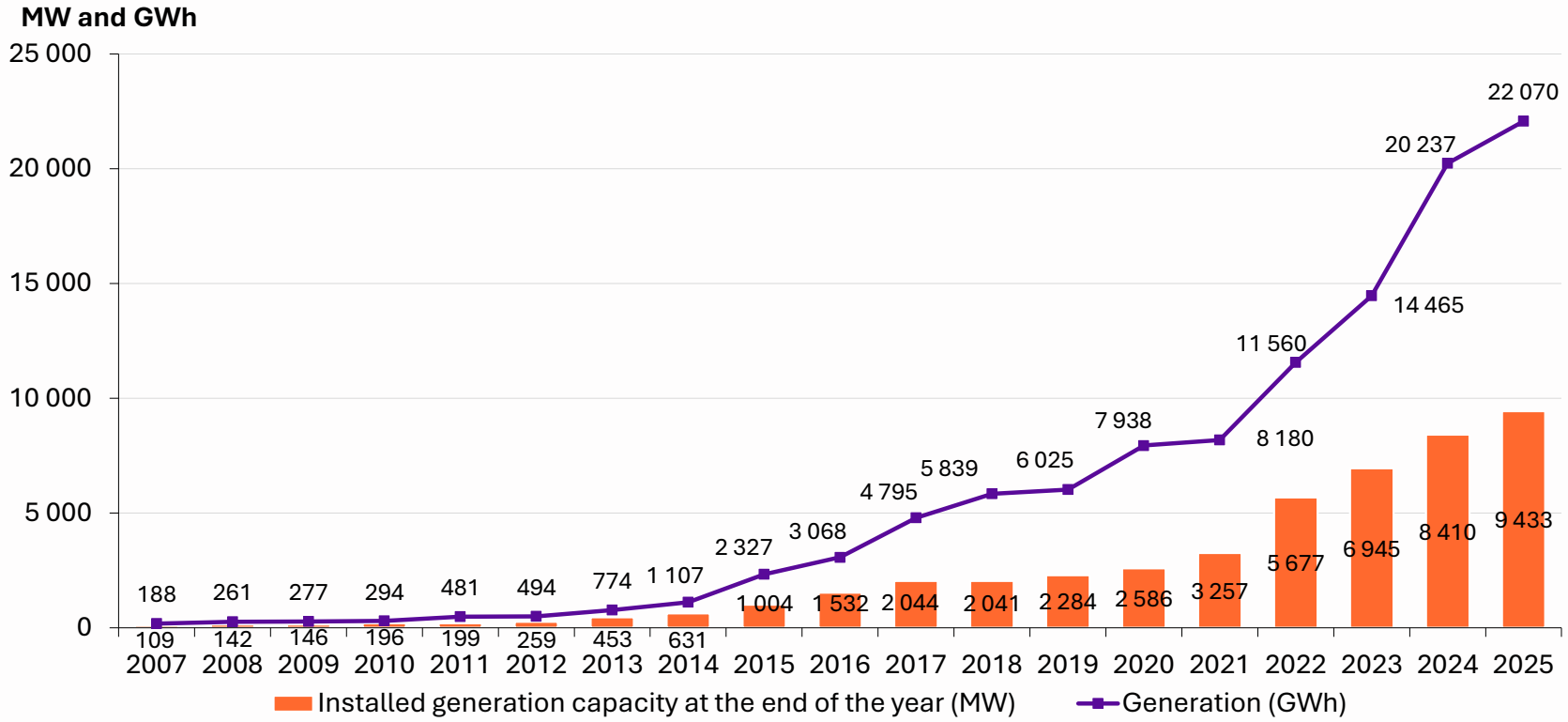
- Imports increased 27 % and exports remained at previous year's level
- Imports from Nordics increased 30 %
- Exports to Estonia increased 23 % but exports to Nordics decreased 55 %

Net imports of electricity
5.6 TWh in 2025

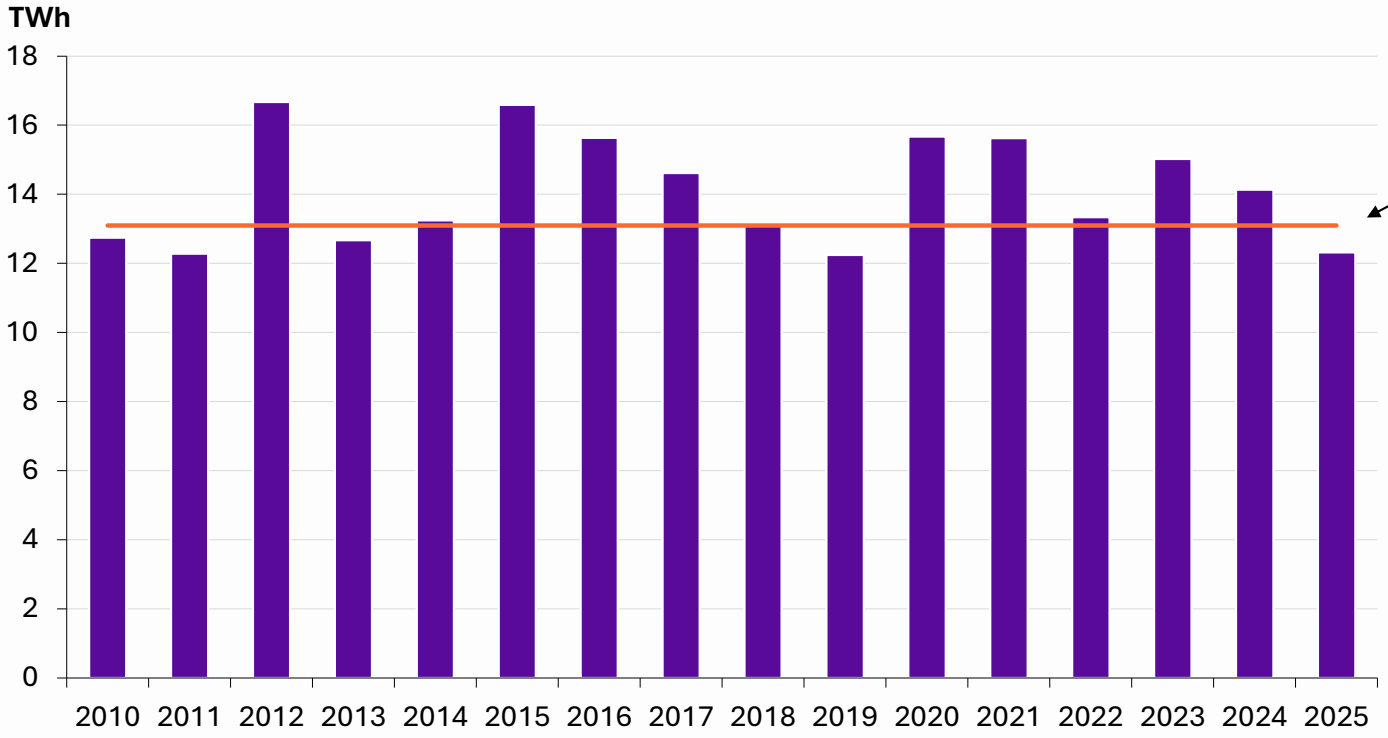


Wind power generation increased 9 % in 2025

New capacity 1 023 MW



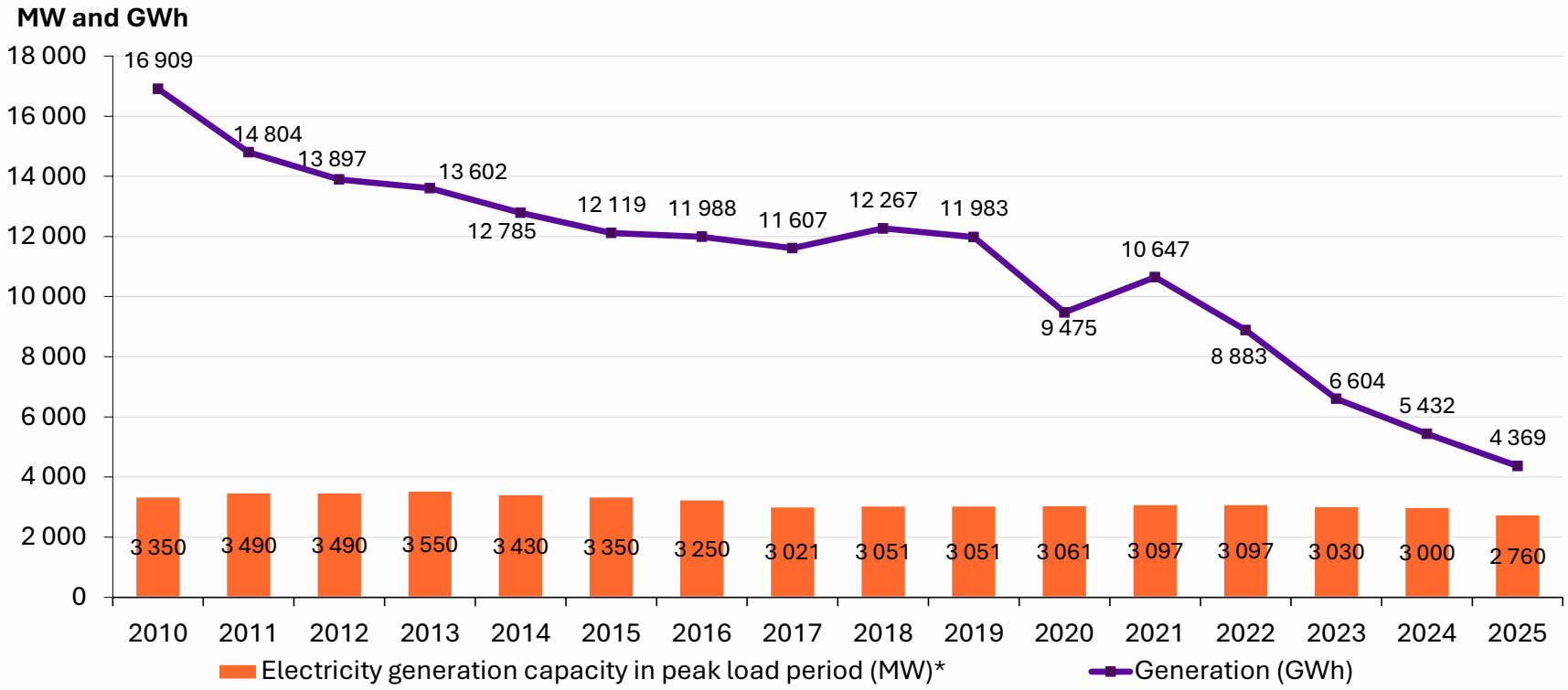
Hydro power generation
12.3 TWh in 2025



Average year

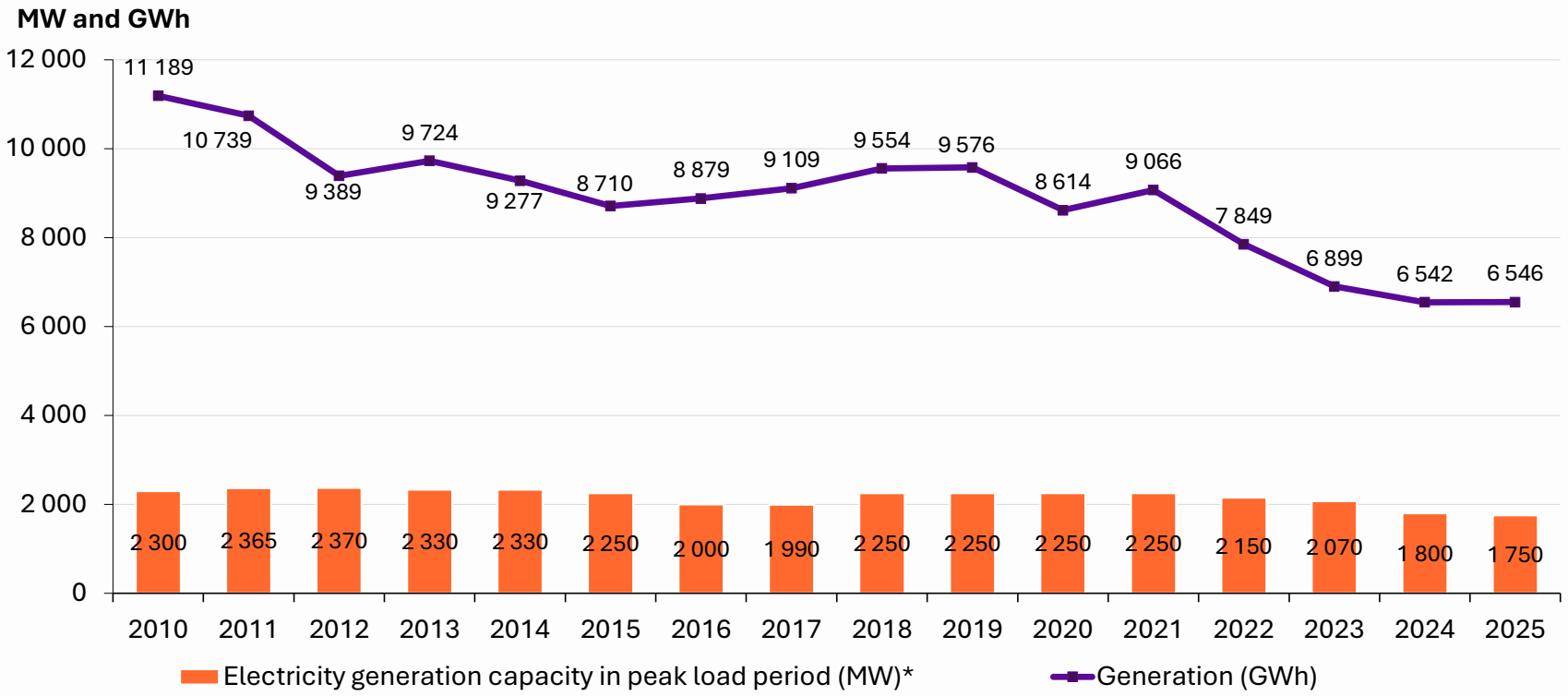
= hydropower production calculated when flows of built rivers are in average level

Generation and capacity of CHP in district heating



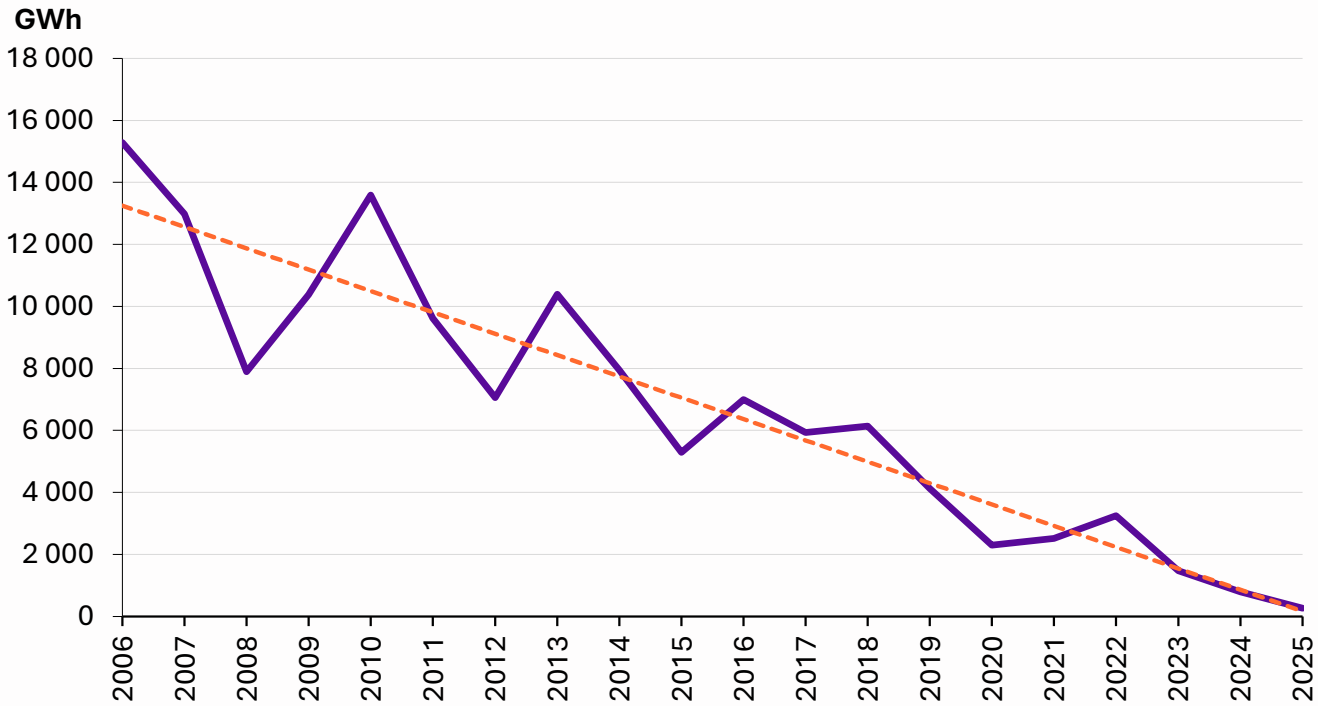
*Peak load capacity is not included from year 2017
*Source: Statistics Finland, Energy 2024 table service, table 3.5

Generation and capacity of CHP in industry

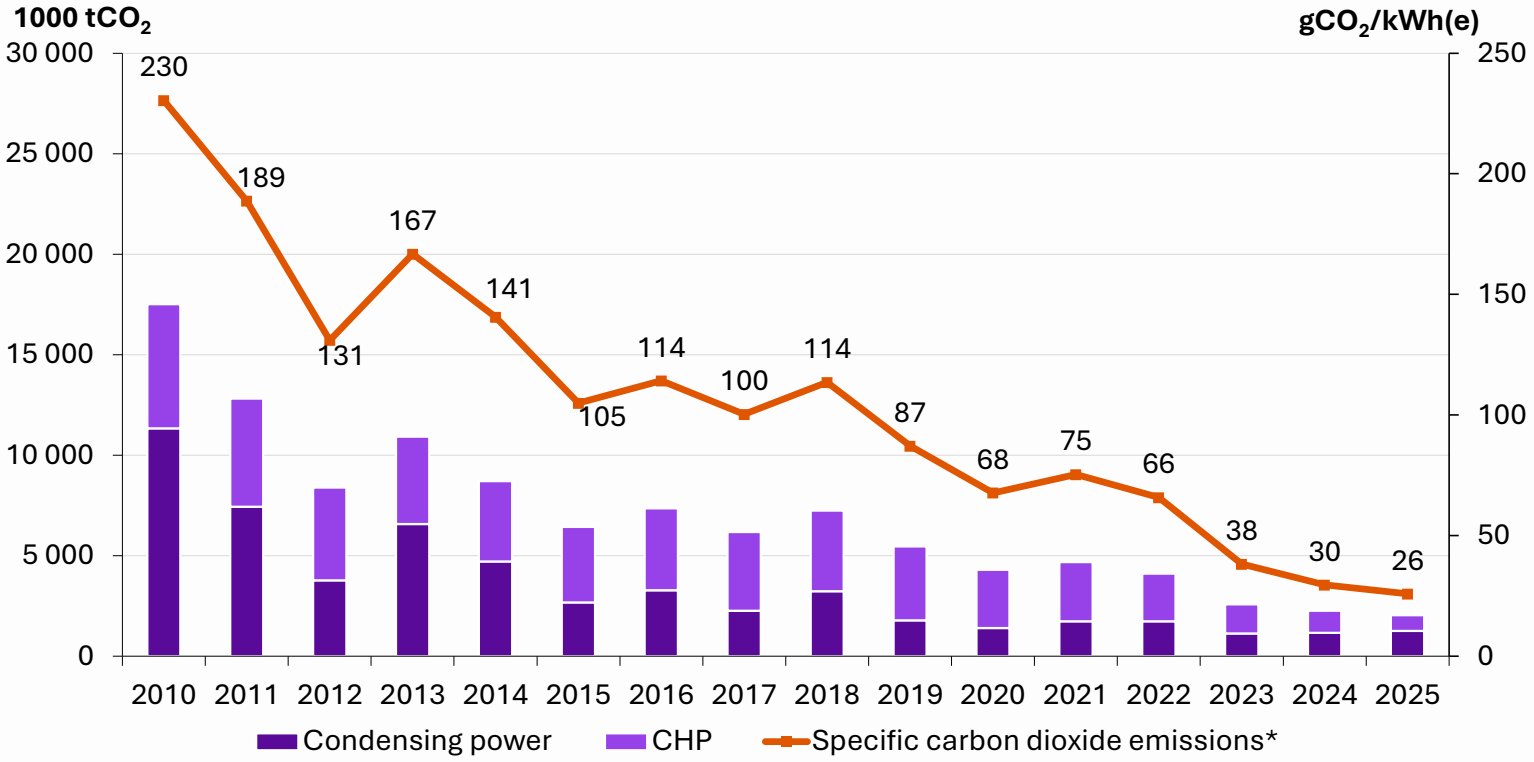


*Source: Statistics Finland, Energy 2024 table service, table 3.5

Electricity Generation with Hard Coal
0.3 TWh in 2025



CO2-emissions of power generation have collapsed



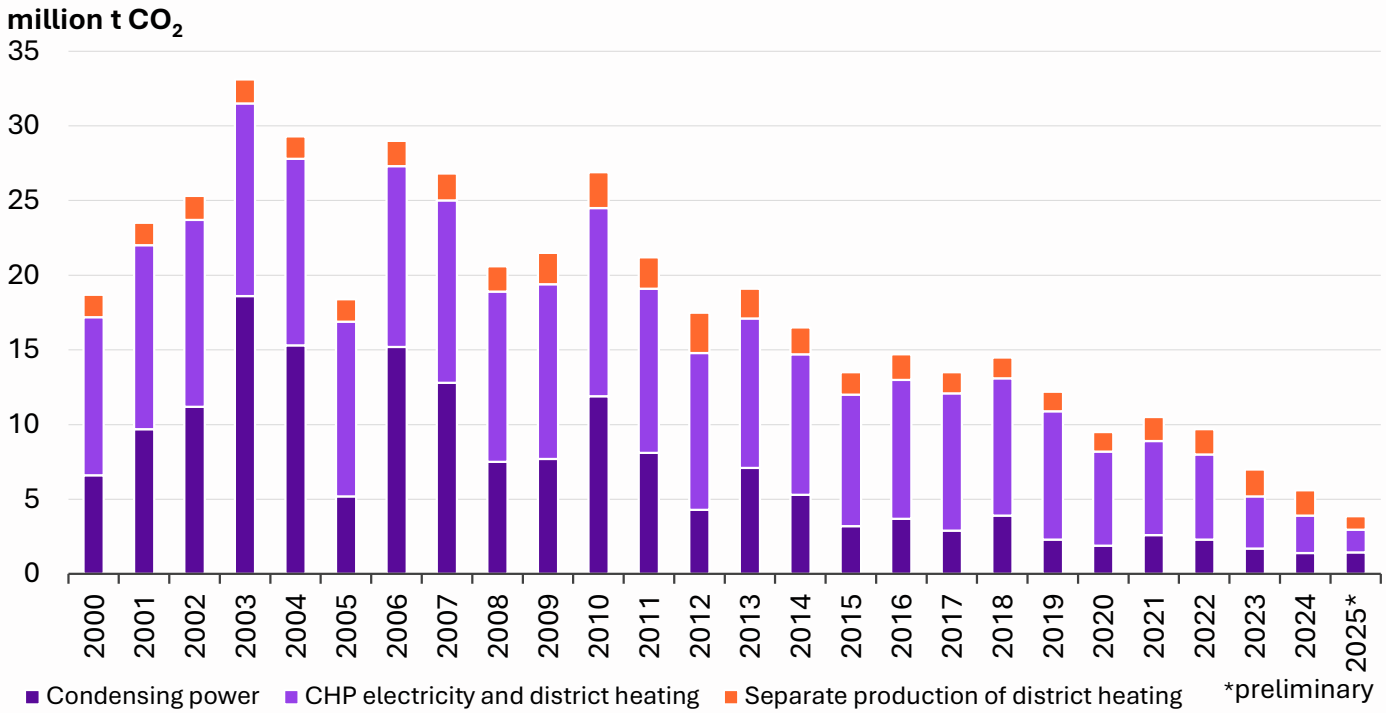
*Source: Statistics Finland (2010-2024), estimation by Finnish Energy (2025)

CO2-emissions of power generation:

- 2.0 Mt in year 2025
- 2.3 Mt in year 2024
- 6.4 Mt in year 2015
- 17.5 Mt in year 2010

- 2025 vs. 2024 -10 %
- Emissions -52 % since 2020
- Emissions -88 % since 2010

The CO2-emissions from Finland's energy production are decreasing

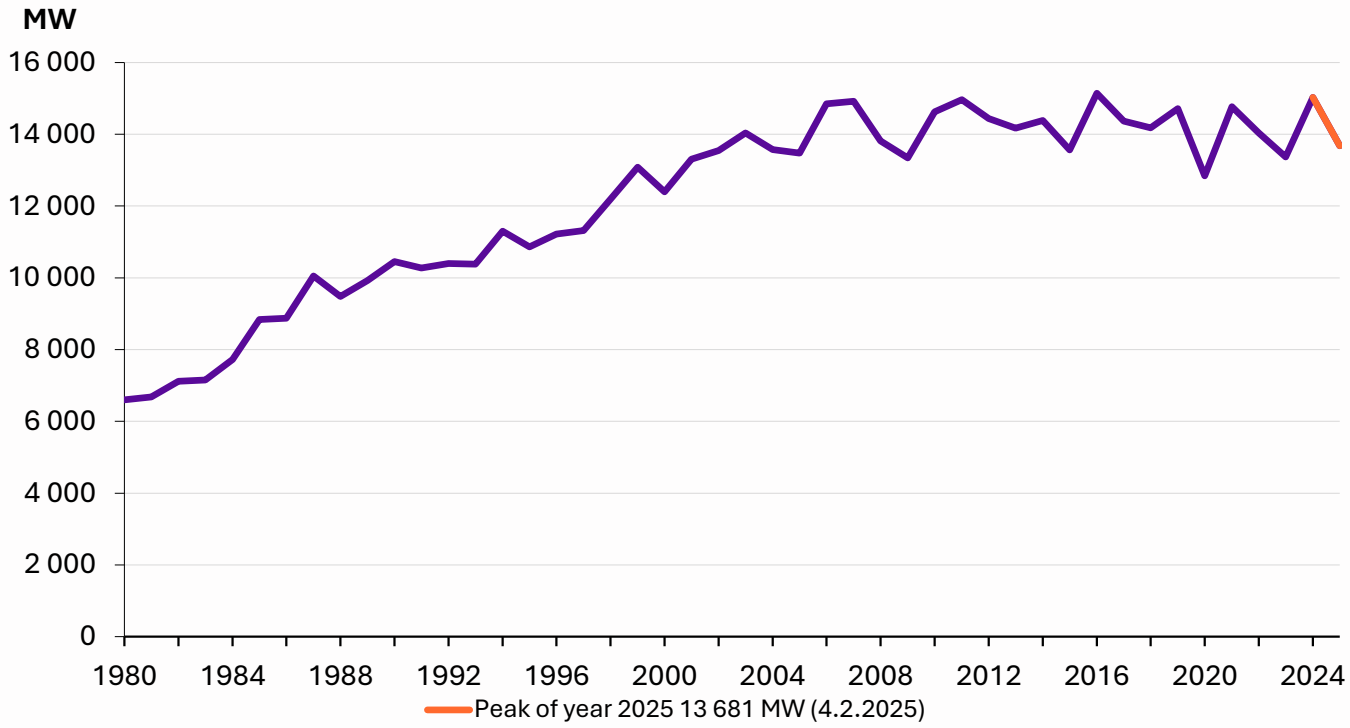


- CO2-emissions from electricity and district heating production were 3.9 million tons in year 2025 and decreased by 31 % from the previous year
- Emissions have declined 88 % compared to 2000s highest emission year 2003

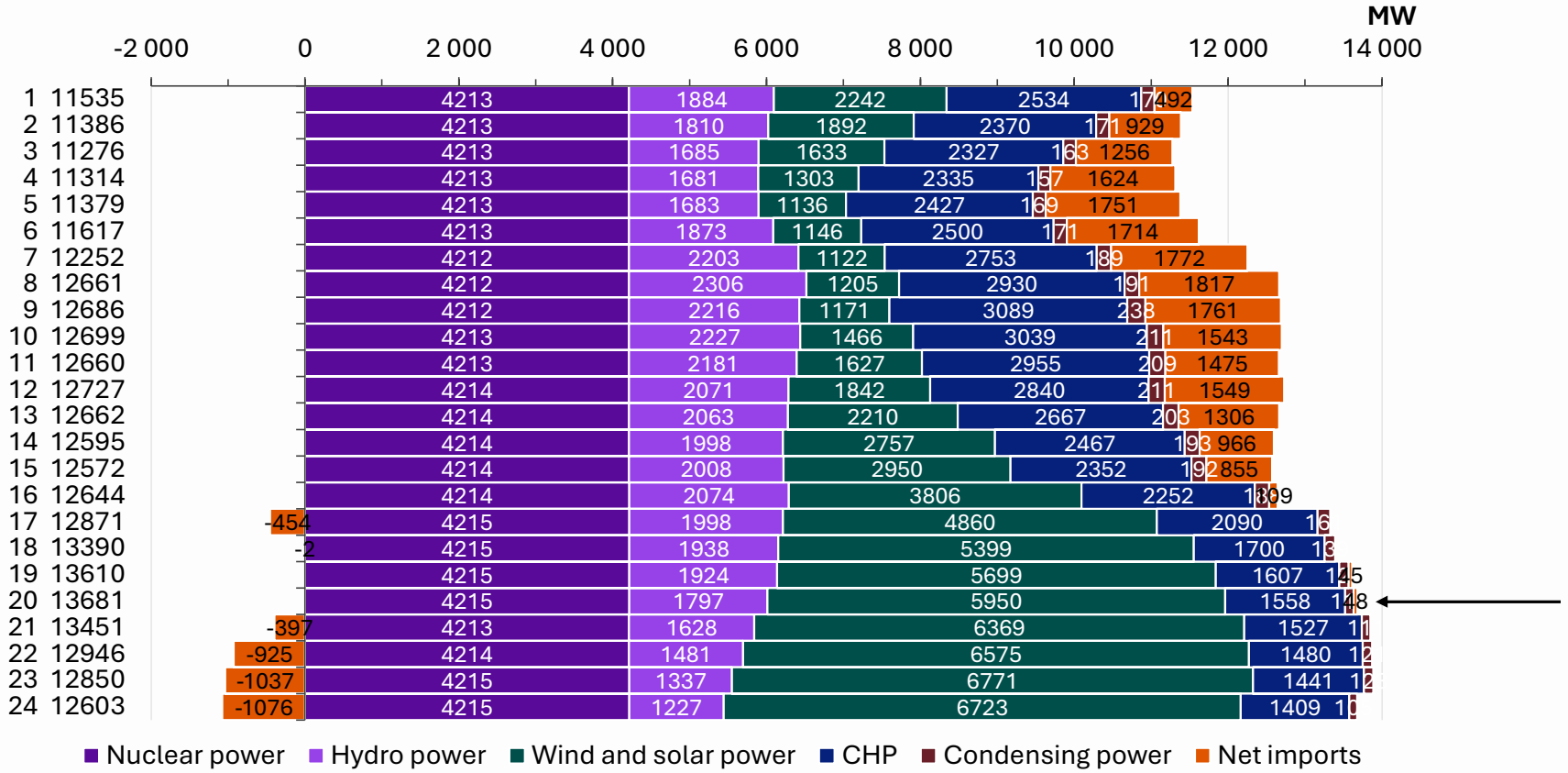
Source: Statistics Finland (2000...2024); Finnish Energy (2025)

Peak loads of electricity

Maximum electricity power /hour

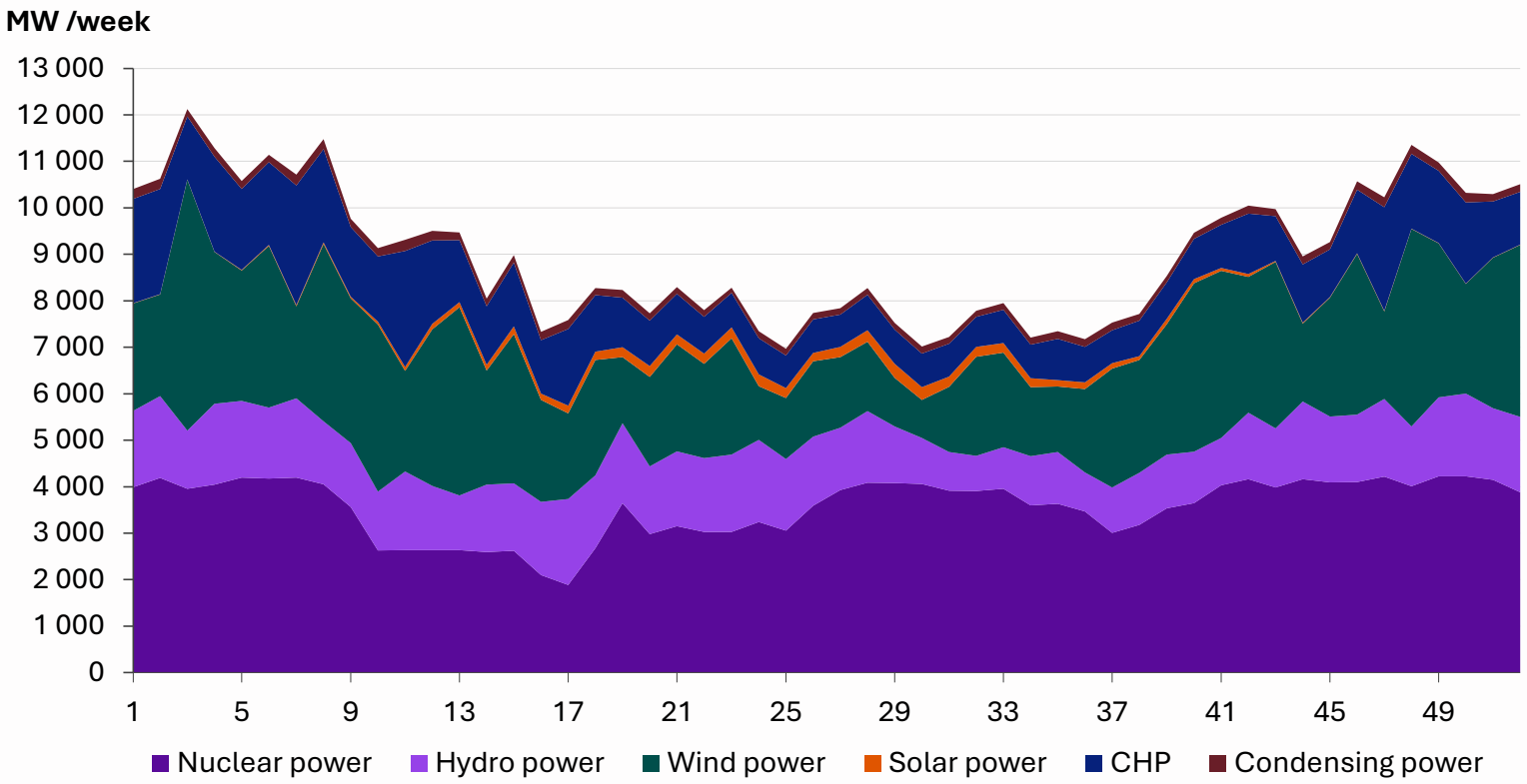


Electricity supply hourly in year 2025 peak load day 4.2.



Variation of Electricity Production in 2025

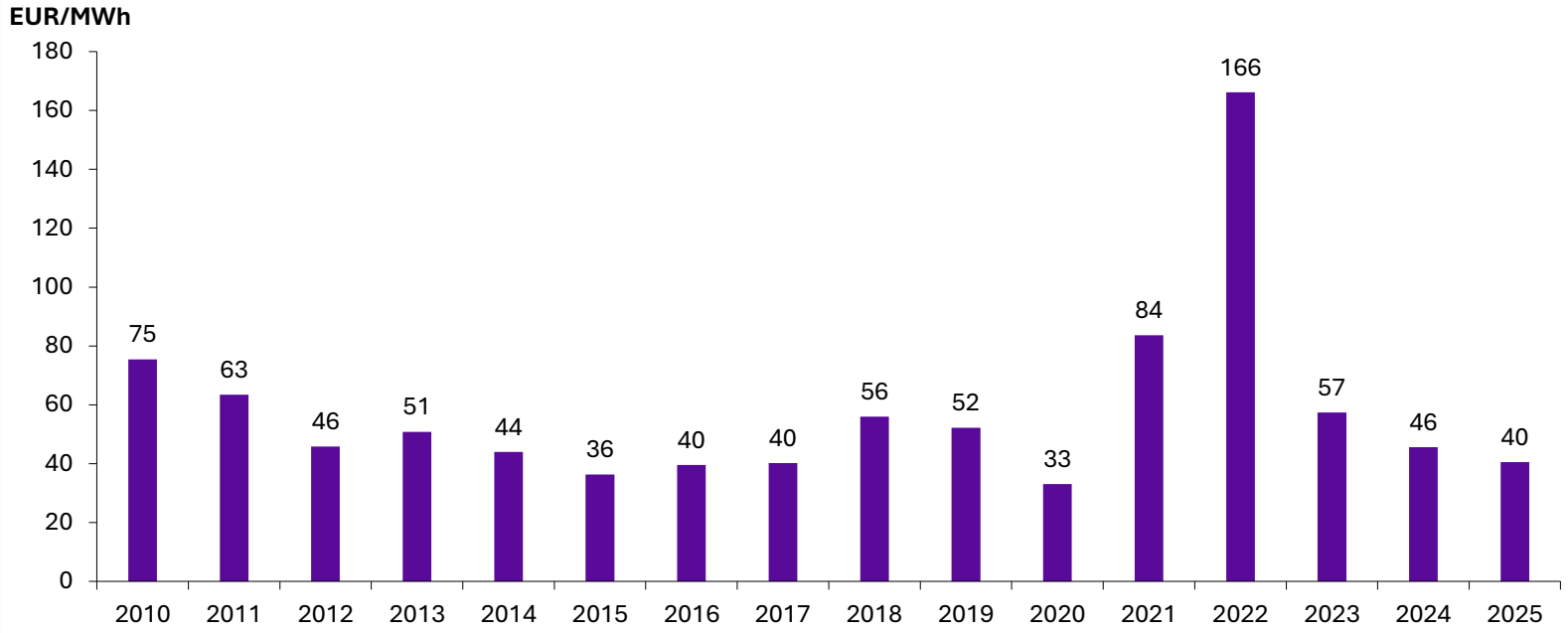
Average week power



Electricity price statistics 2025

The development of annual prices in Finland relative to the Consumer price Index

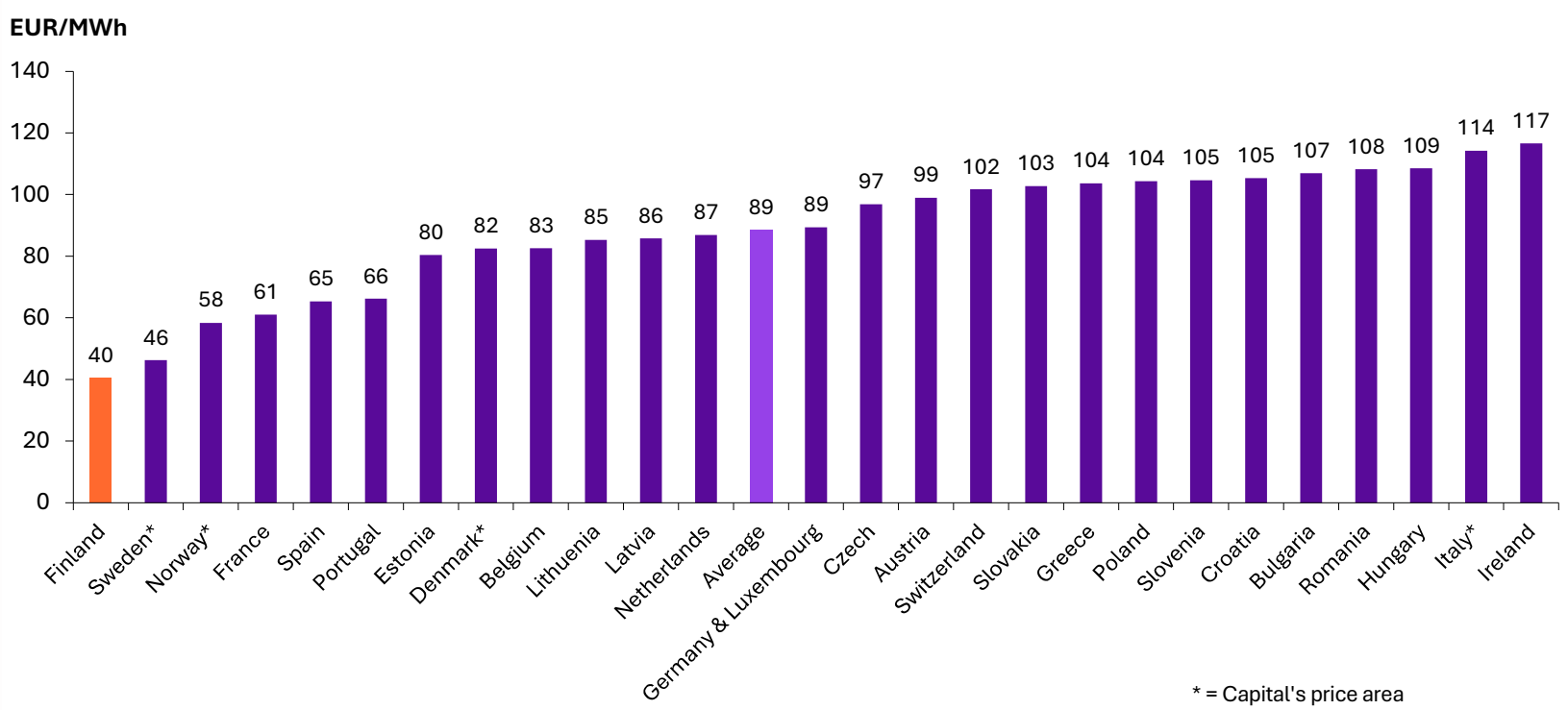
The inflation-adjusted wholesale electricity price in Finland



Data: Statistics Finland & Nord Pool

Finland has the lowest electricity prices in Europe

Electricity wholesale prices in year 2025 (EU + Norway and Switzerland)

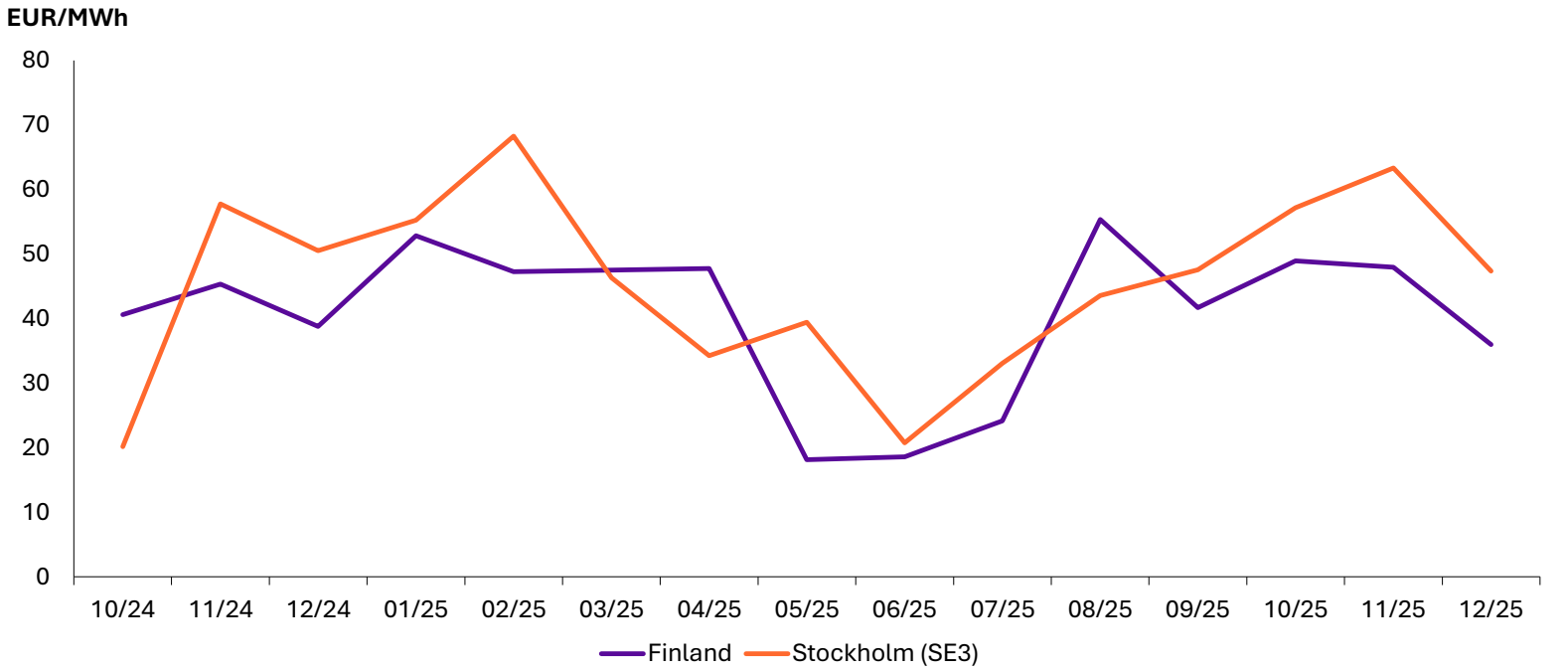


* = Capital's price area

Data: Nord Pool & Energy-Charts

In Finland, cheaper on an annual basis than in Stockholm for the first time since 2010

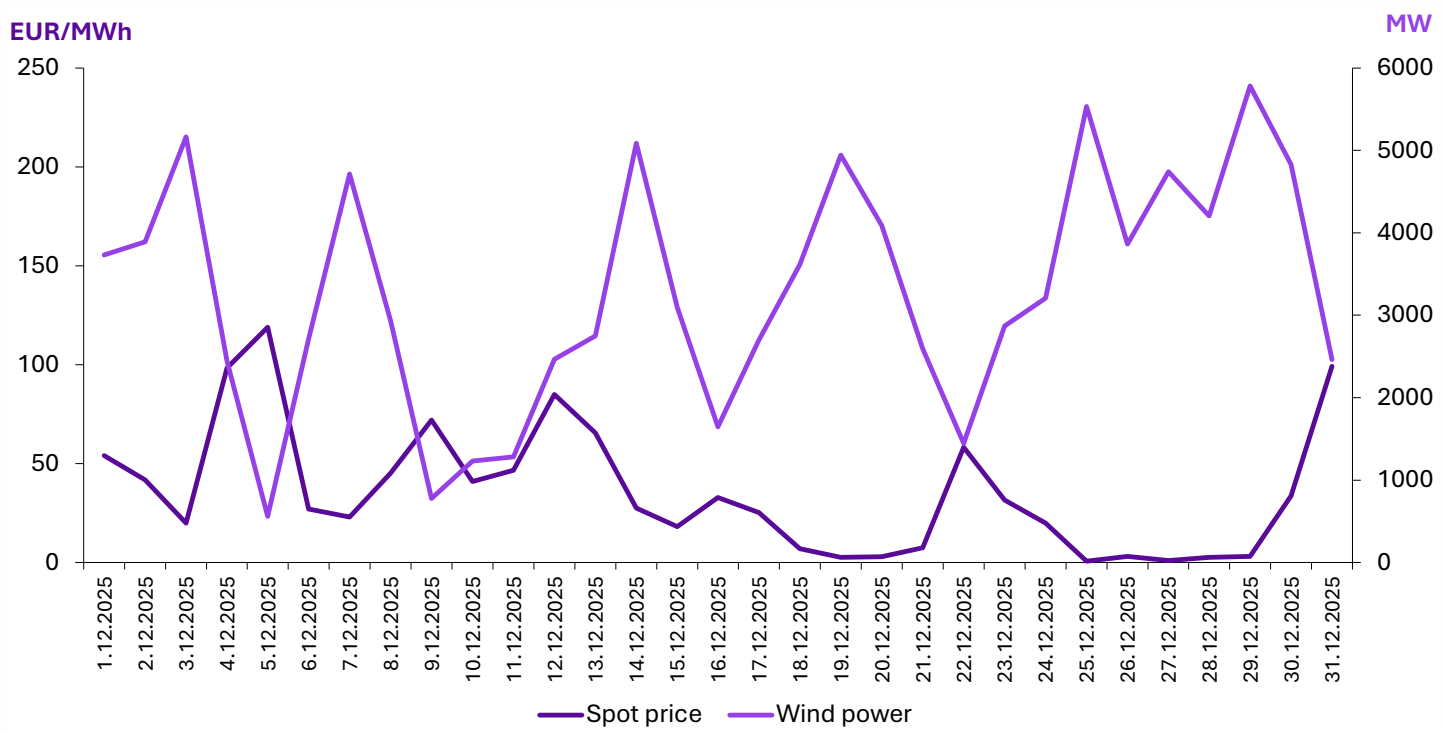
Electricity wholesale prices in Finland's and Stockholm's (SE3) price areas monthly, October 2024 – December 2025



Data: Nord Pool

The connection of wind power to the price

December wind power production & wholesale price of electricity (daily averages)

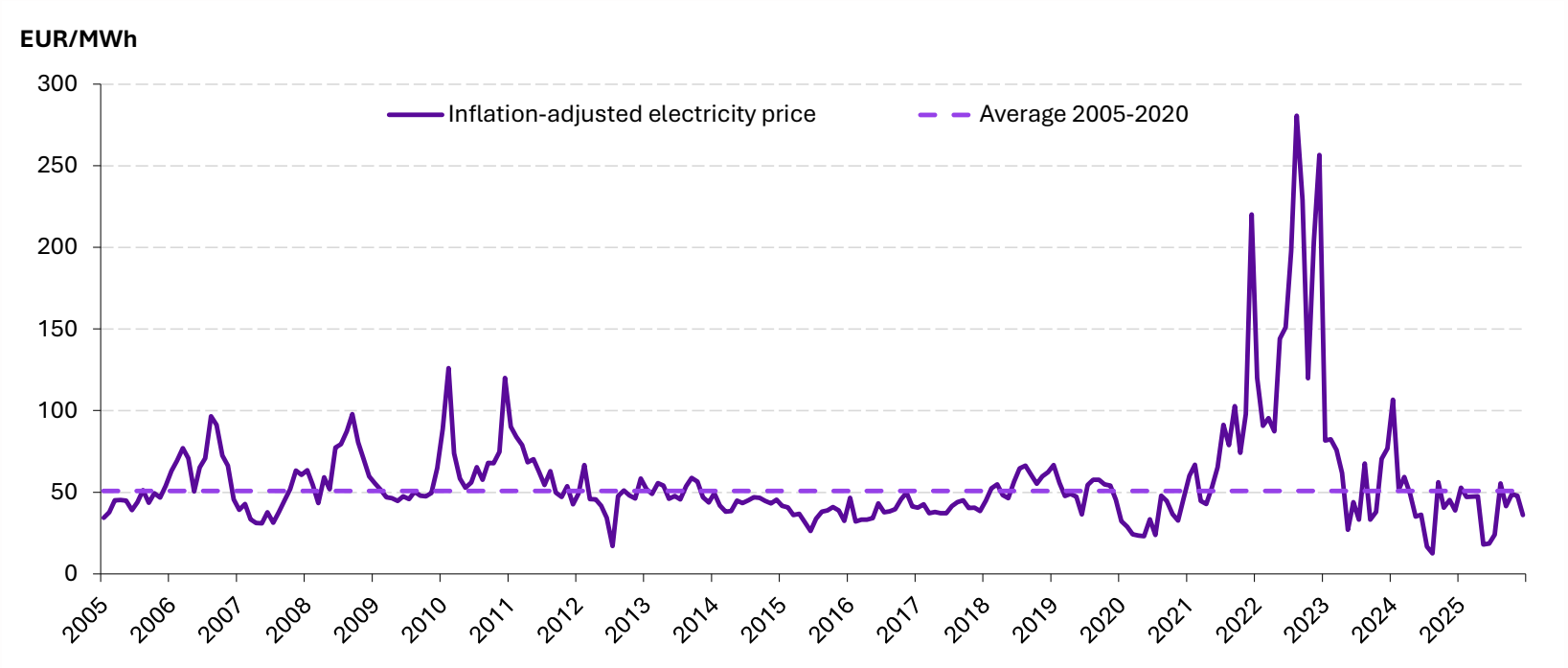


- On windy days the price of electricity is often close to zero, on days with little wind the price is higher
- The amount of wind power is the biggest factor affecting prices, but many other factors also affect prices:
  - Regarding demand, e.g. day of the week, time of day, heating demand, industrial occupancy rate, etc.
  - Regarding supply, e.g. availability of power plants and border lines, fuel and emission costs, water situation, etc.

Data: Entso-e & Finnish Energy

The monthly development of the inflation-adjusted wholesale electricity price

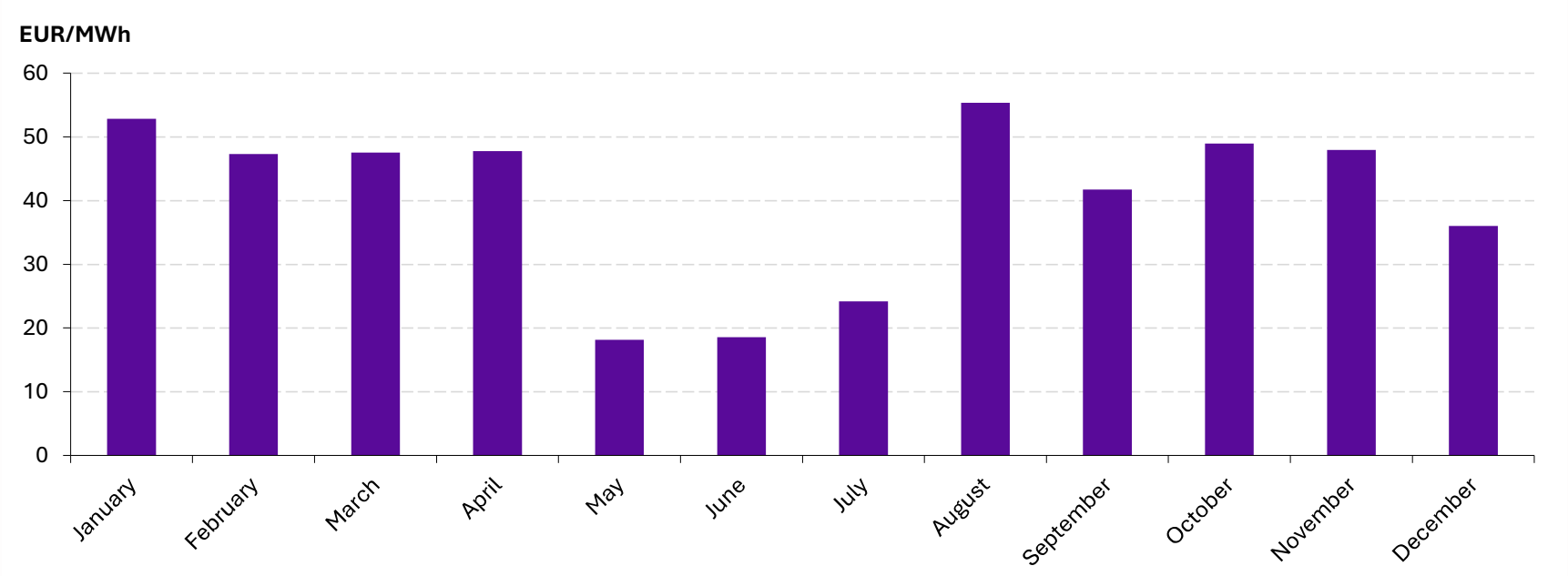
The inflation-adjusted wholesale electricity price in Finland monthly



Data: Nord Pool & Statistics Finland

The wholesale electricity prices in Finland monthly in year 2025 – August the most expensive month

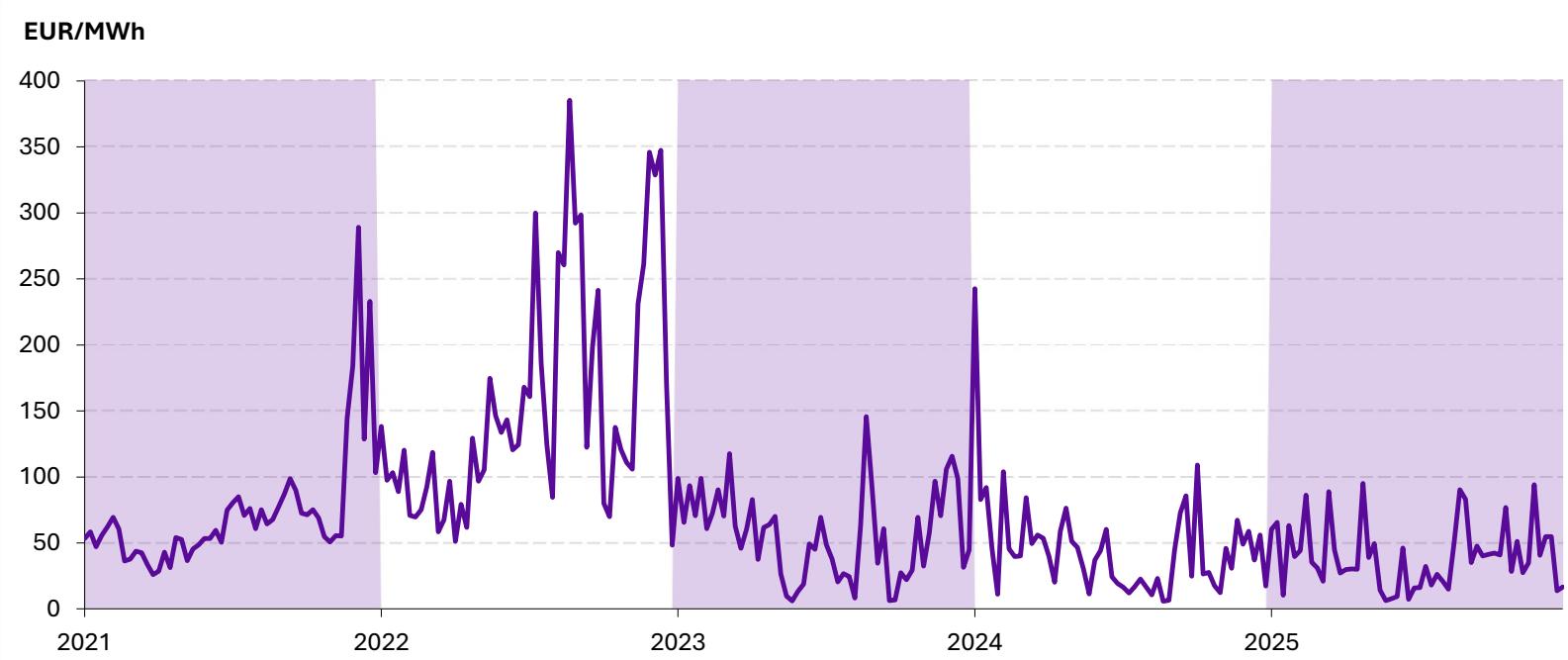
Wholesale electricity prices in Finland monthly in 2025



Data: Nord Pool

Weekly prices of electricity in 2021 to 2025

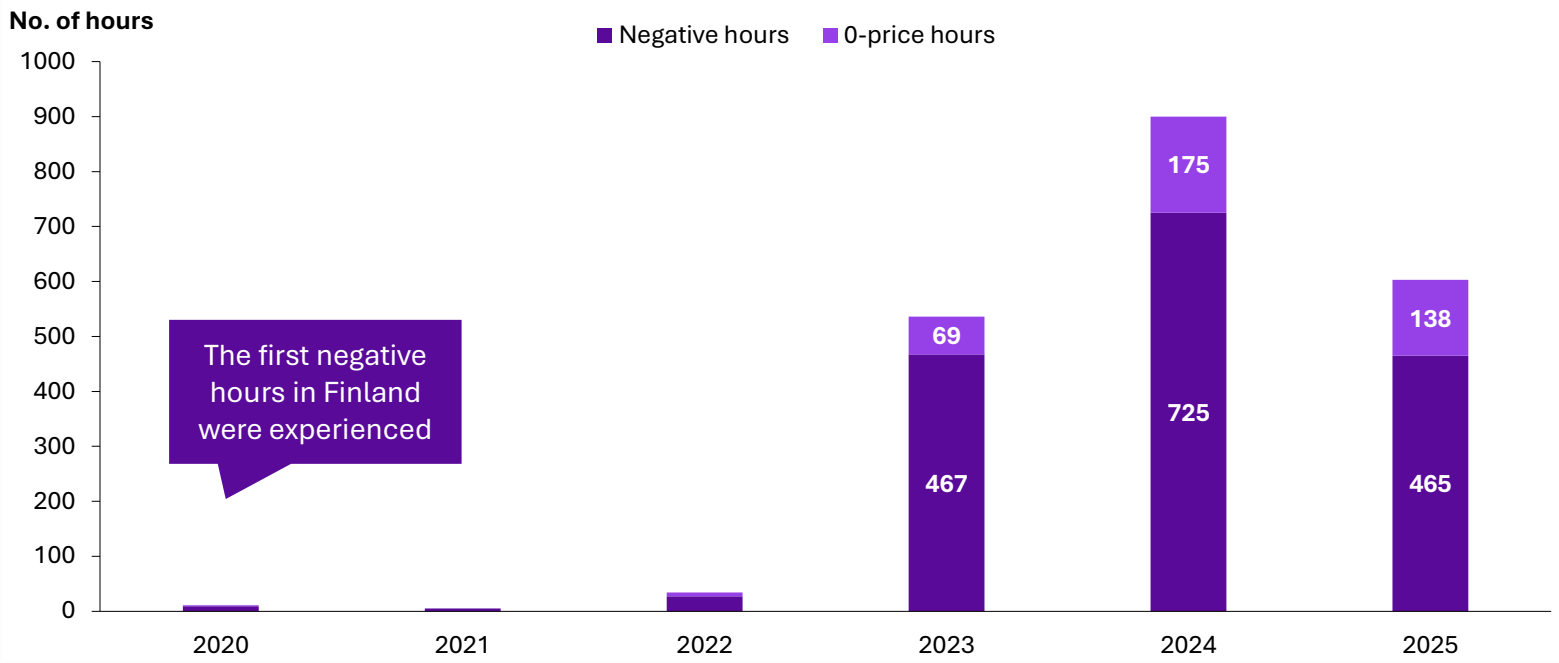
Wholesale electricity prices in Finland weekly



Data: Nord Pool

The amount of negative and zero-price hours decreased from previous year

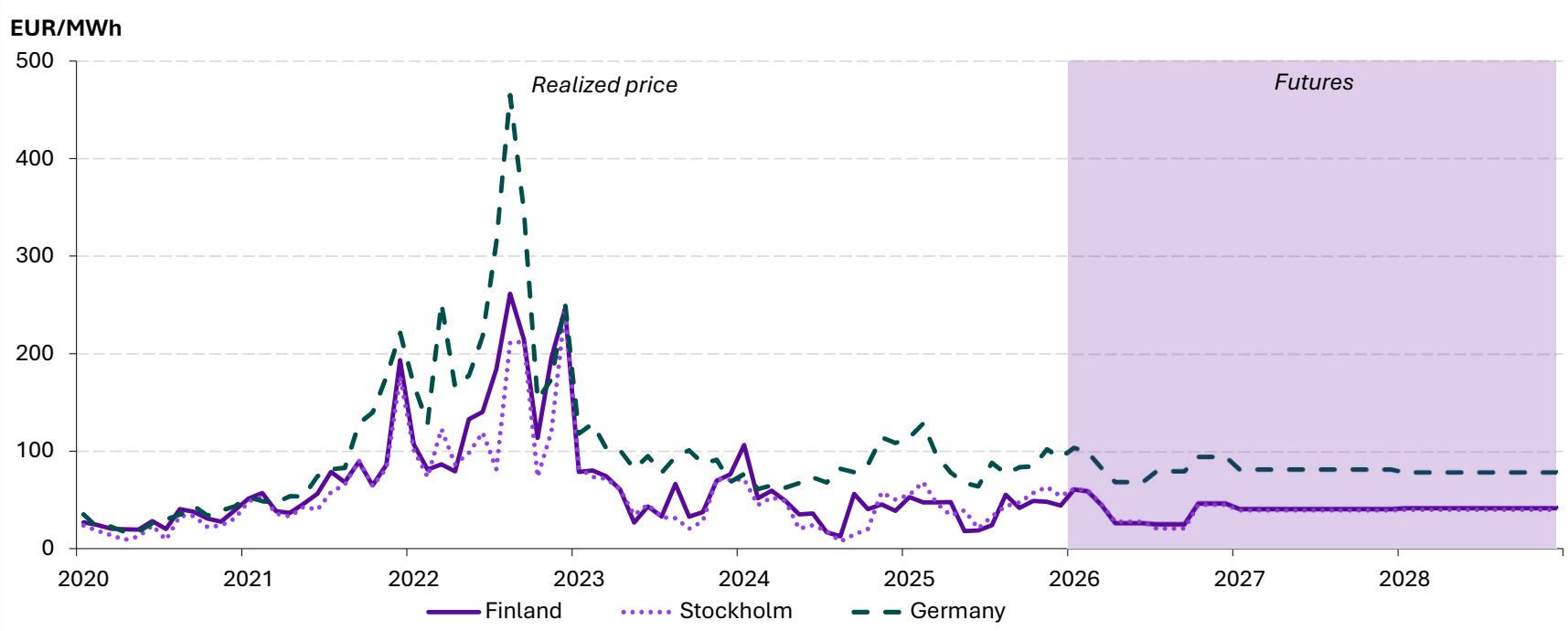
Negative and 0-price electricity prices in Finland



Data: Entso-e

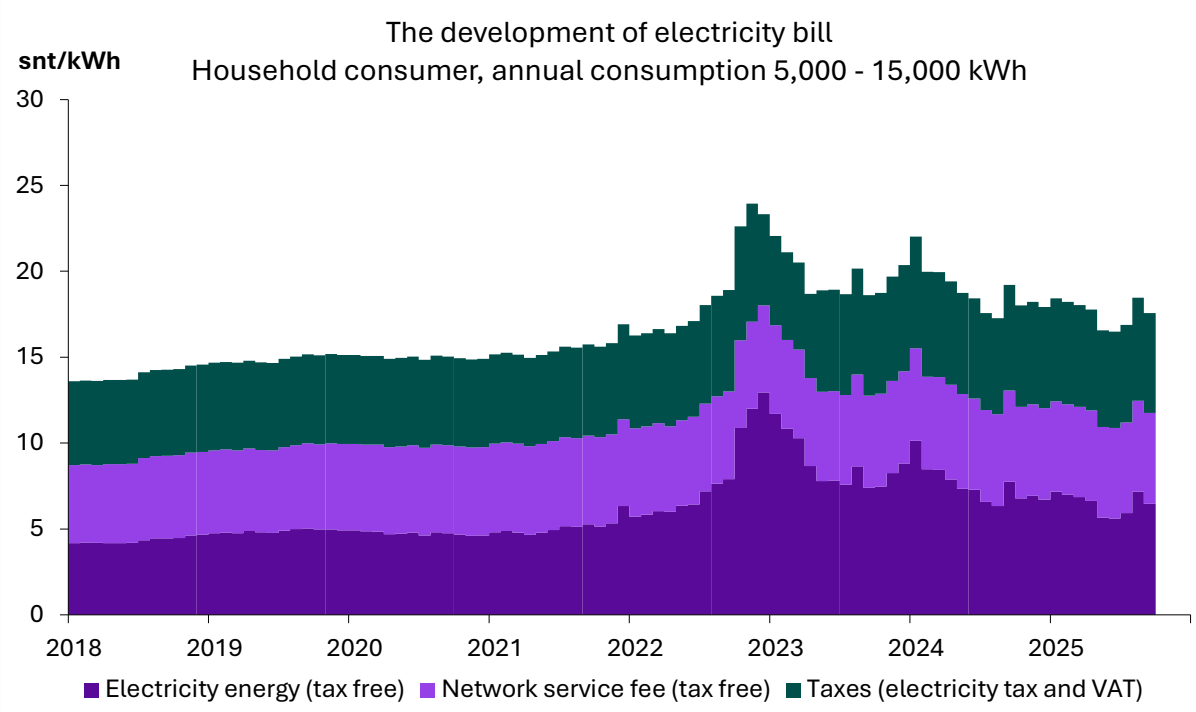
Electricity price outlook: Prices in Finland and Sweden are significantly cheaper than in Central Europe

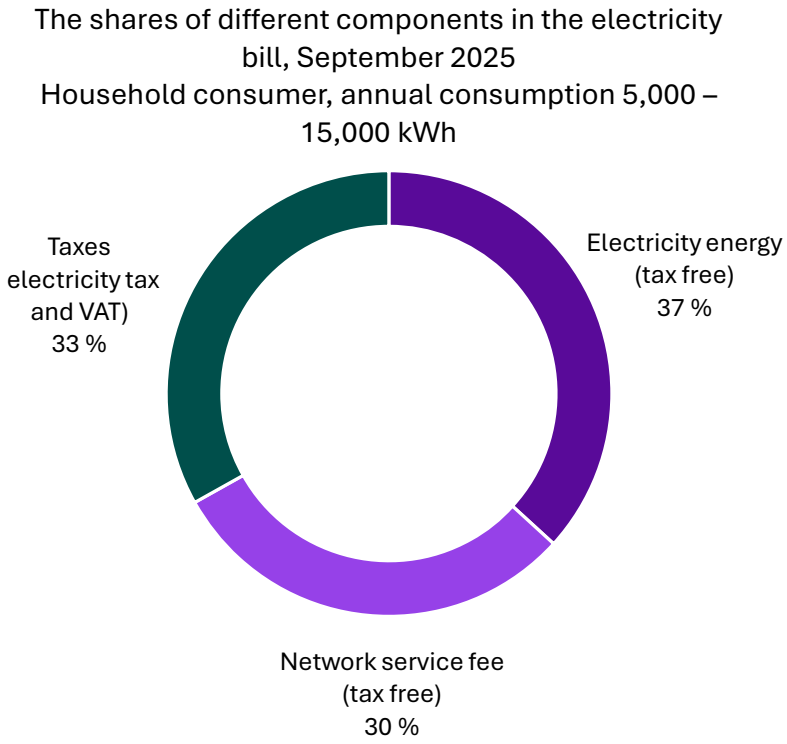
Realized wholesale electricity price and futures 19.12.2025



Data: Nord Pool, Nasdaq Commodities & EEX

Consumers' electricity bills have decreased over the past year

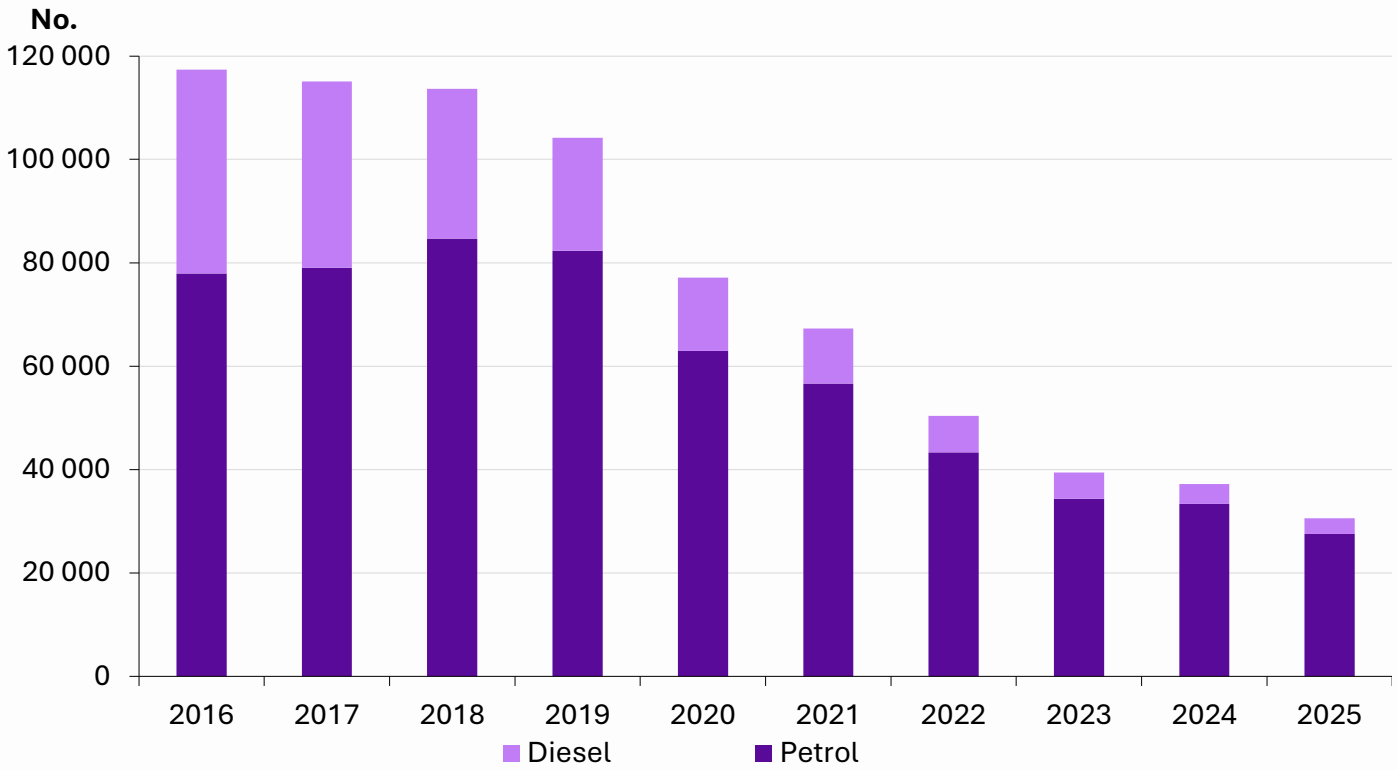




Data: Statistics Finland

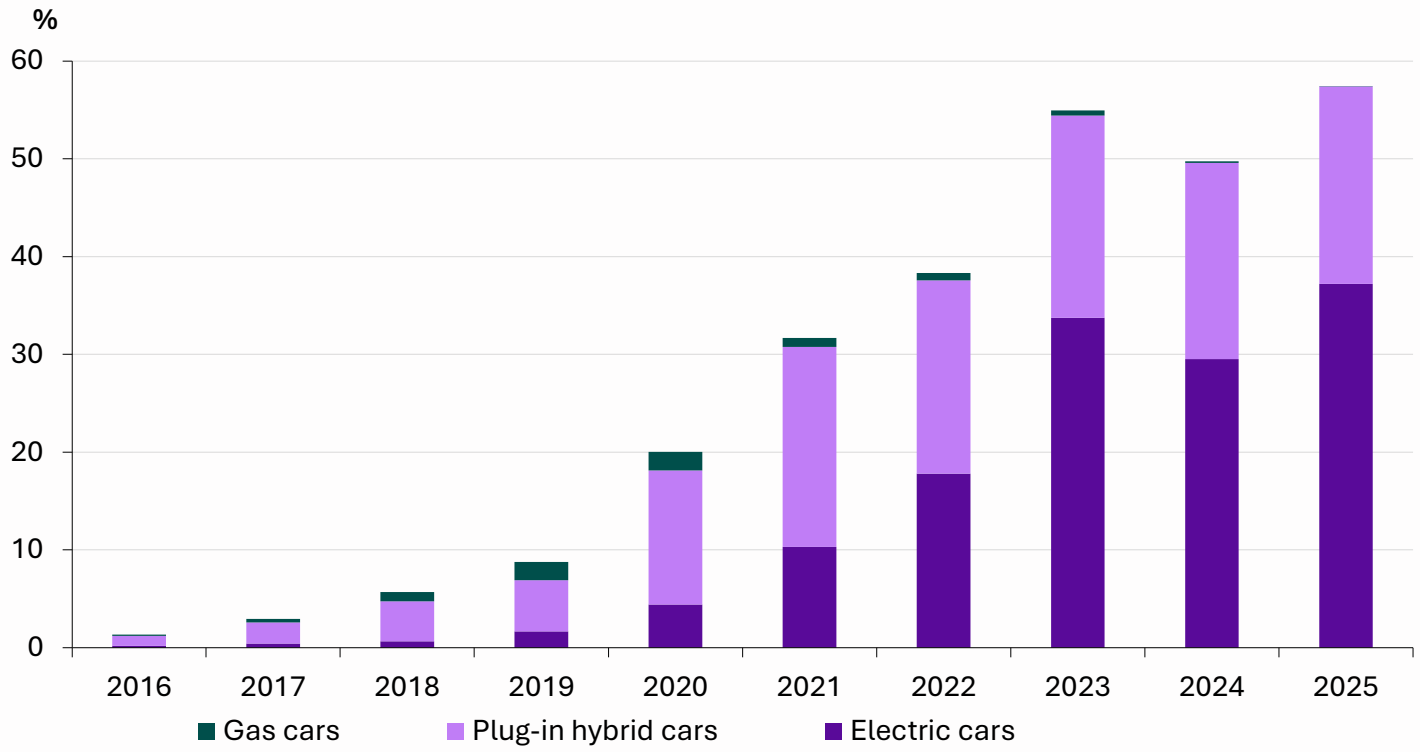
The low carbonization of traffic is progressing

Petrol and diesel car sales in Finland
(new passenger cars, plug-in hybrid cars not included)



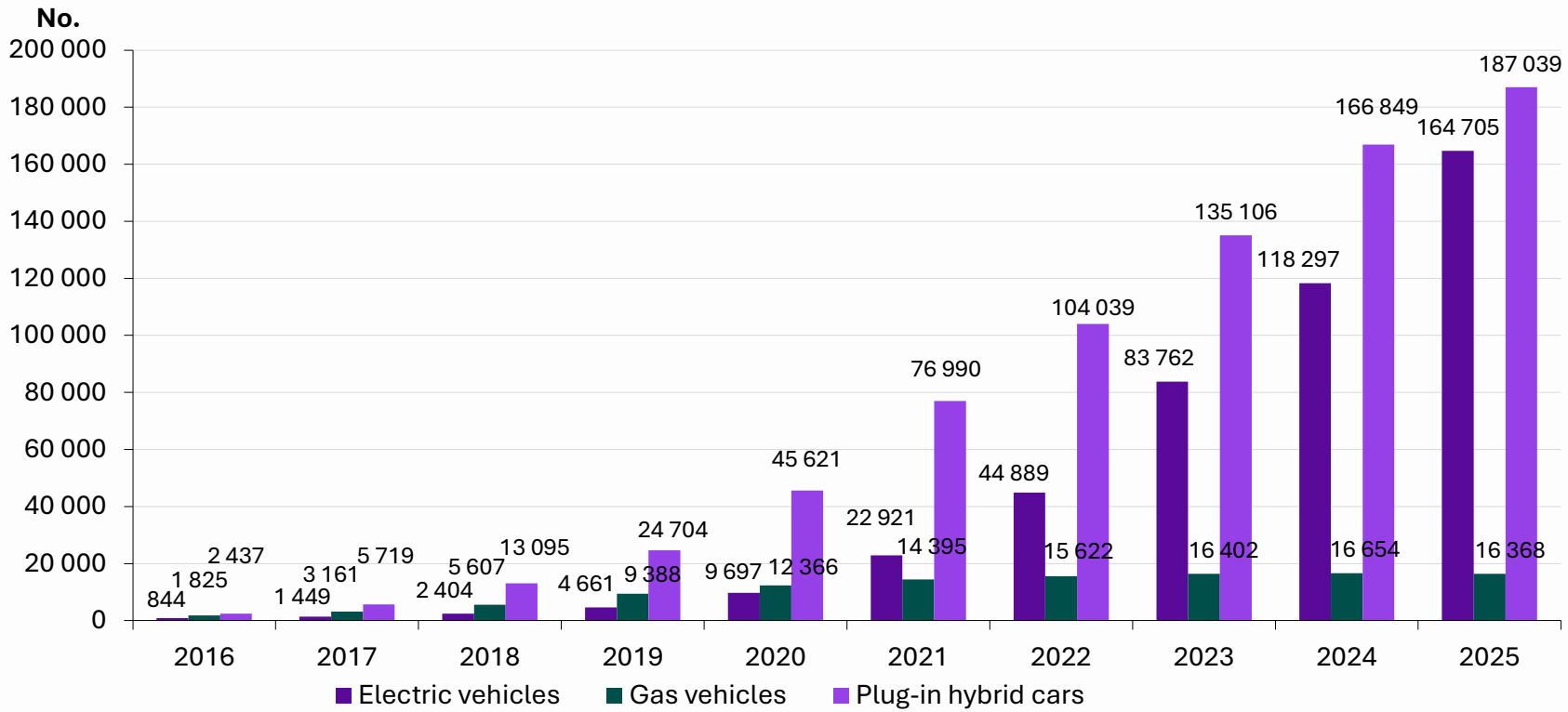
Source: Traficom

Alternative power sources for the first registration of passenger cars



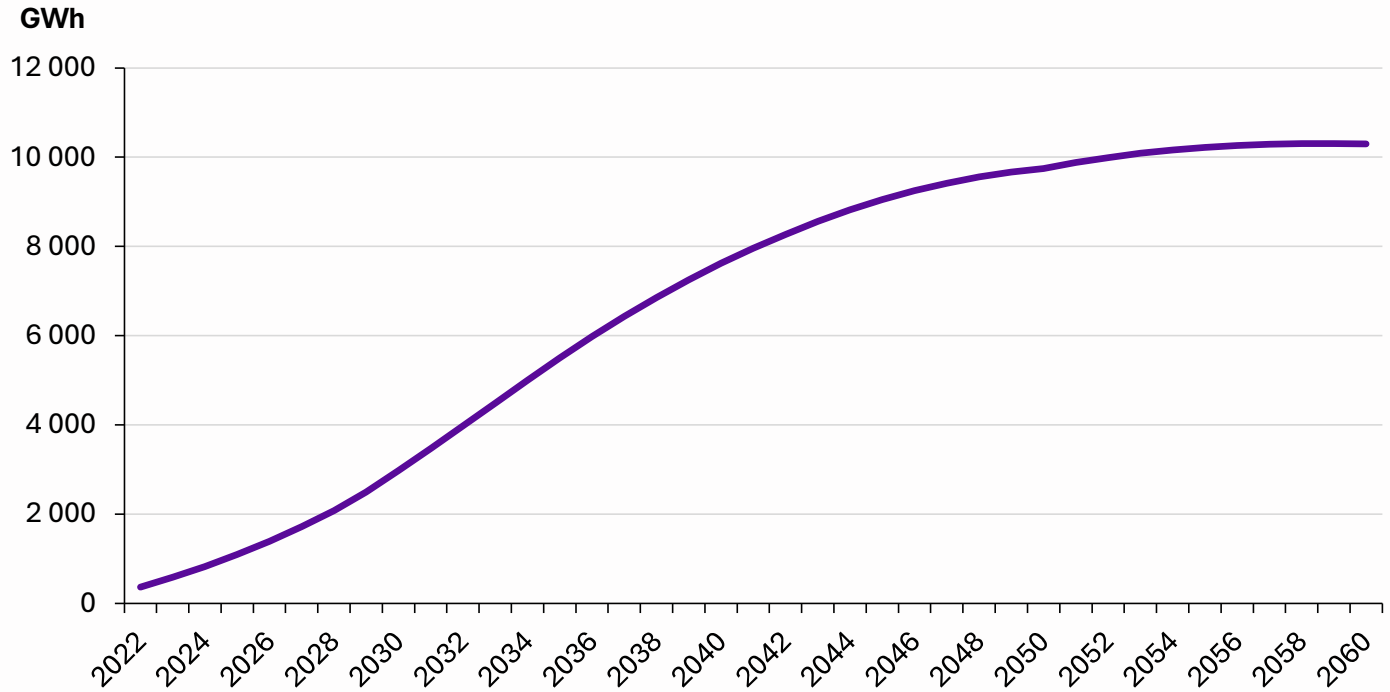
Source: Traficom

Alternative power sources in passenger cars in traffic by end of the year



Source: Traficom

Electricity consumption of passenger cars 2022-2060



Source: Scenarios for energy consumption of road transport, VTT

Background information on the preliminary electricity statistics

- The preliminary electricity figures are based on the monthly electricity statistics of Finnish Energy, except for transport and electricity prices.
- The final electricity production and consumption statistics are usually published in October–November.