

# Electricity price statistics in 2023

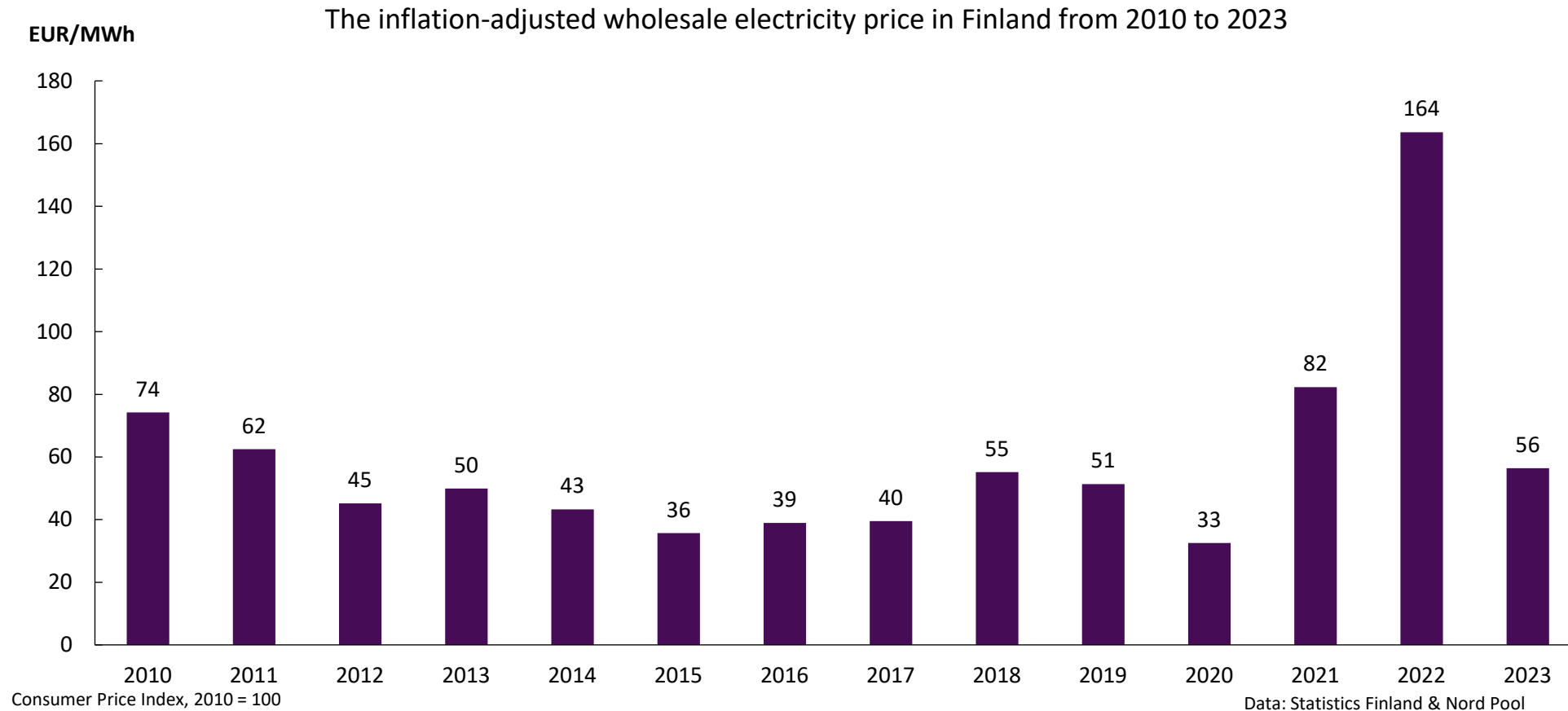
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Finnish Energy 4.1.2024

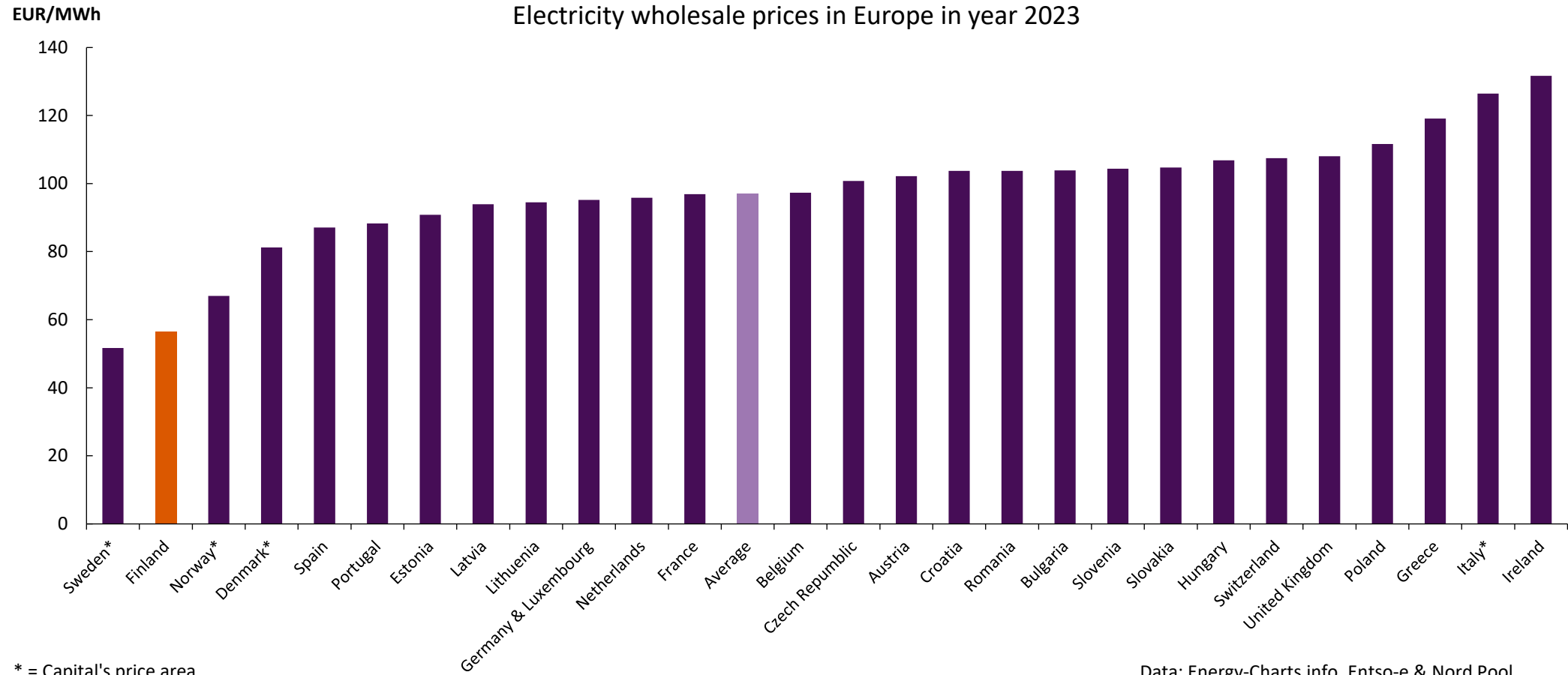


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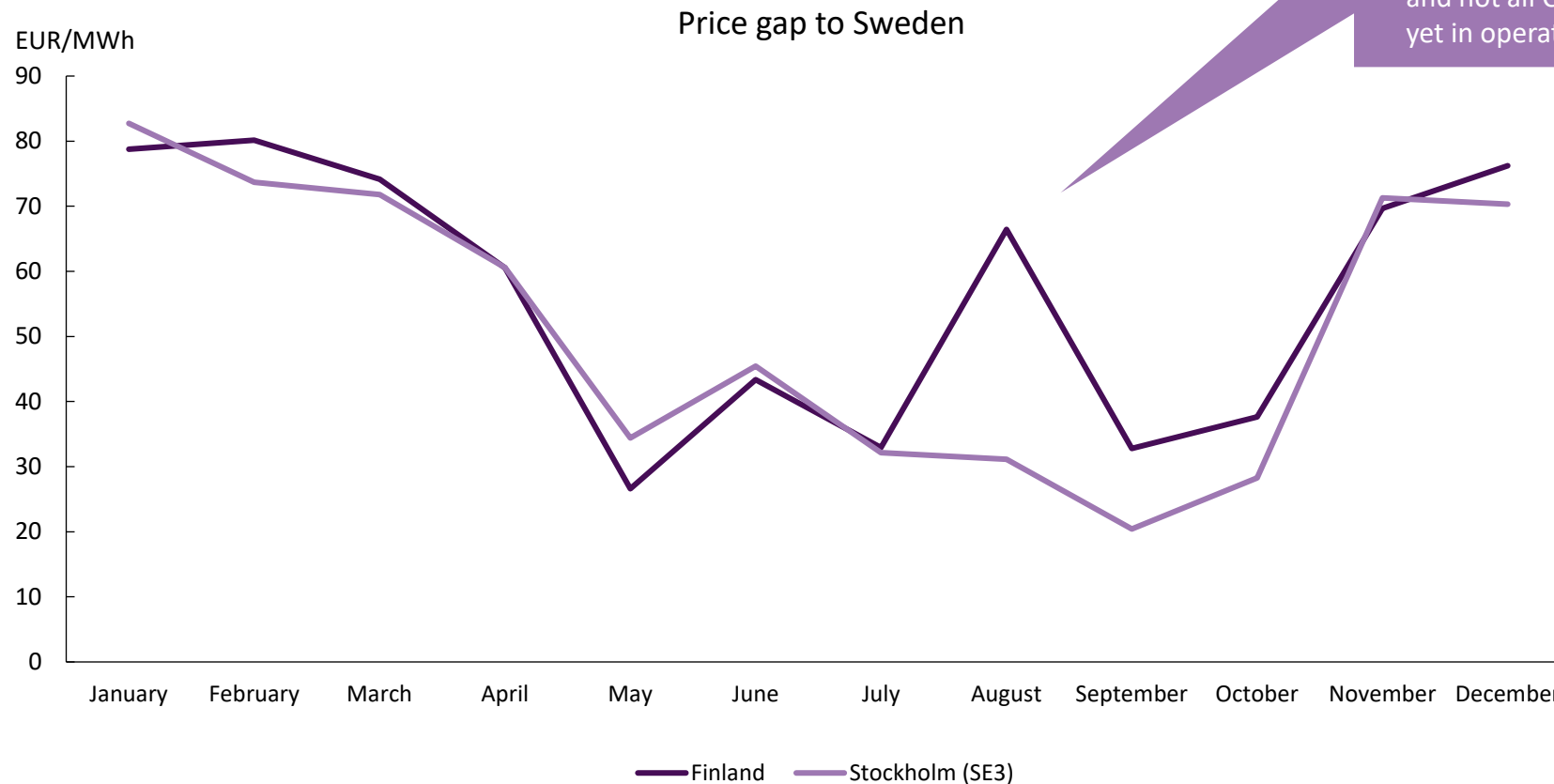
# The development of annual prices in Finland relative to the Consumer price Index



# Finland has the second lowest electricity prices in Europe

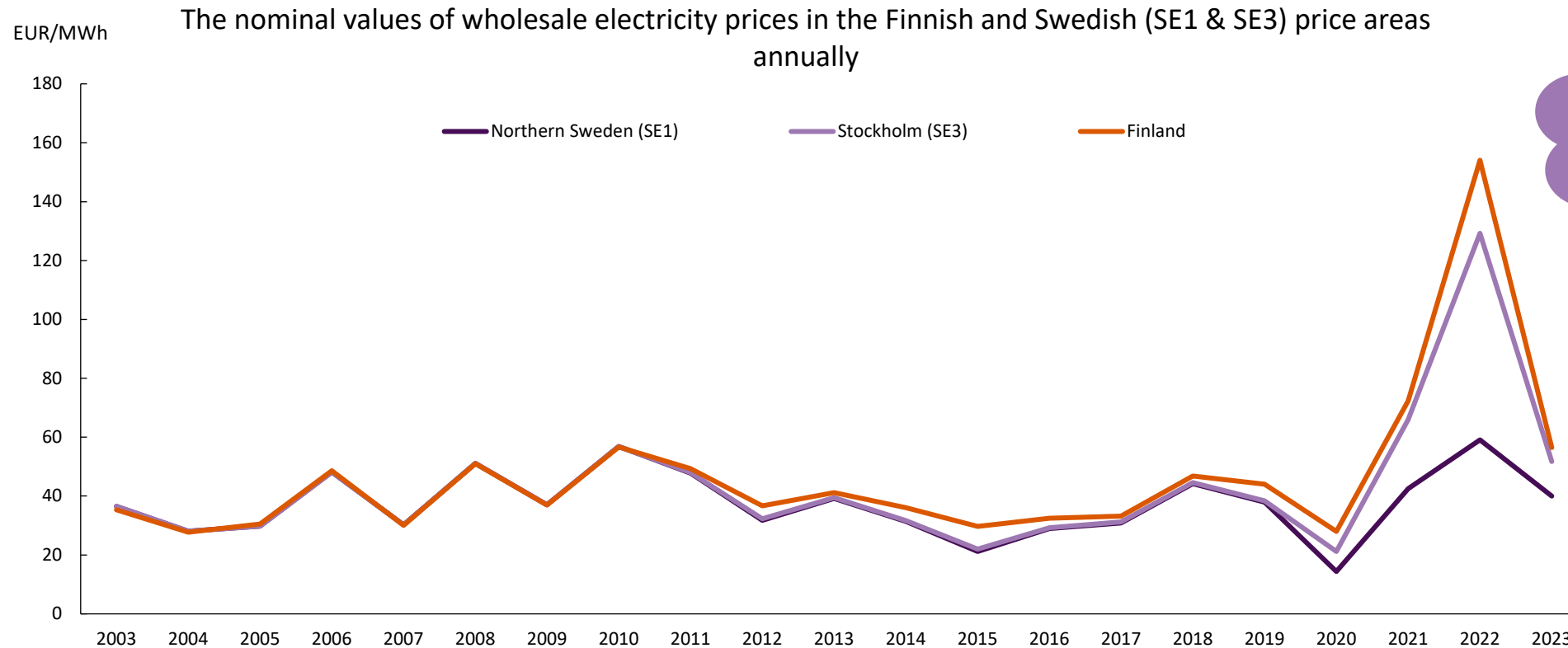


# Price gap to Sweden in year 2023



- At the end of August, Olkiluoto 2 and Loviisa 2 were out of operation, and there were disruptions in transmission connections.
- Simultaneously, there was a prolonged period with little wind, and not all CHP power plants were yet in operation.

# Price differentials between regions have increased, with Finland following Stockholm



The Aurora 1 transmission connection, scheduled to be completed in 2025, is expected to reduce the price difference between Finland and Northern Sweden.

SE1 & SE3 between years from 2003 to 2011 = The price of Sweden before splitting the country into four bidding zones

Data: Nord Pool

# Factors influencing the electricity price

## Supply

- Variable costs of generation units (e.g. fuel costs and CO2 prices)
- Status of water reservoirs
- Wind/solar conditions

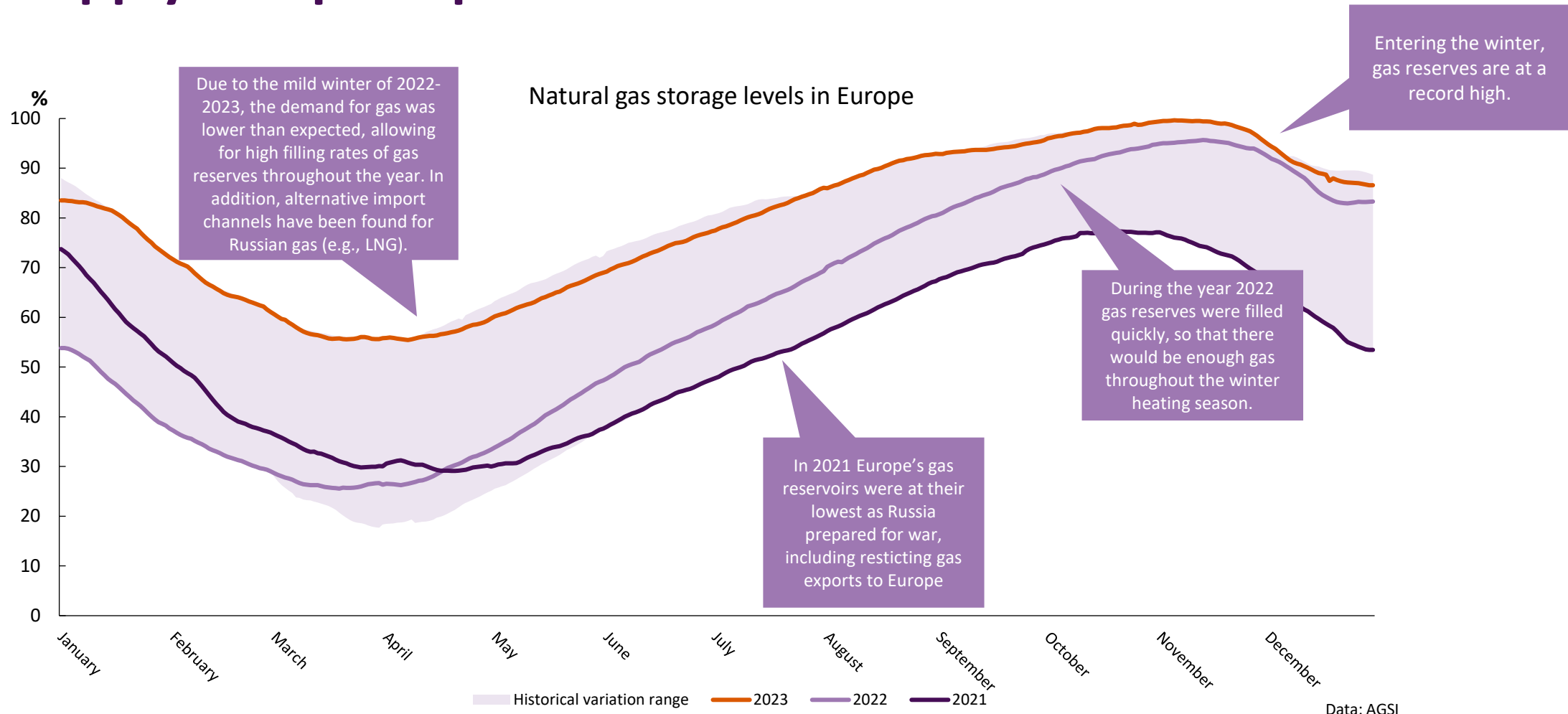
## Demand

- Weather conditions (Temperature, seasonality...)
- Time of day or week (day vs. night & weekday vs. weekend)
- Industrial activity

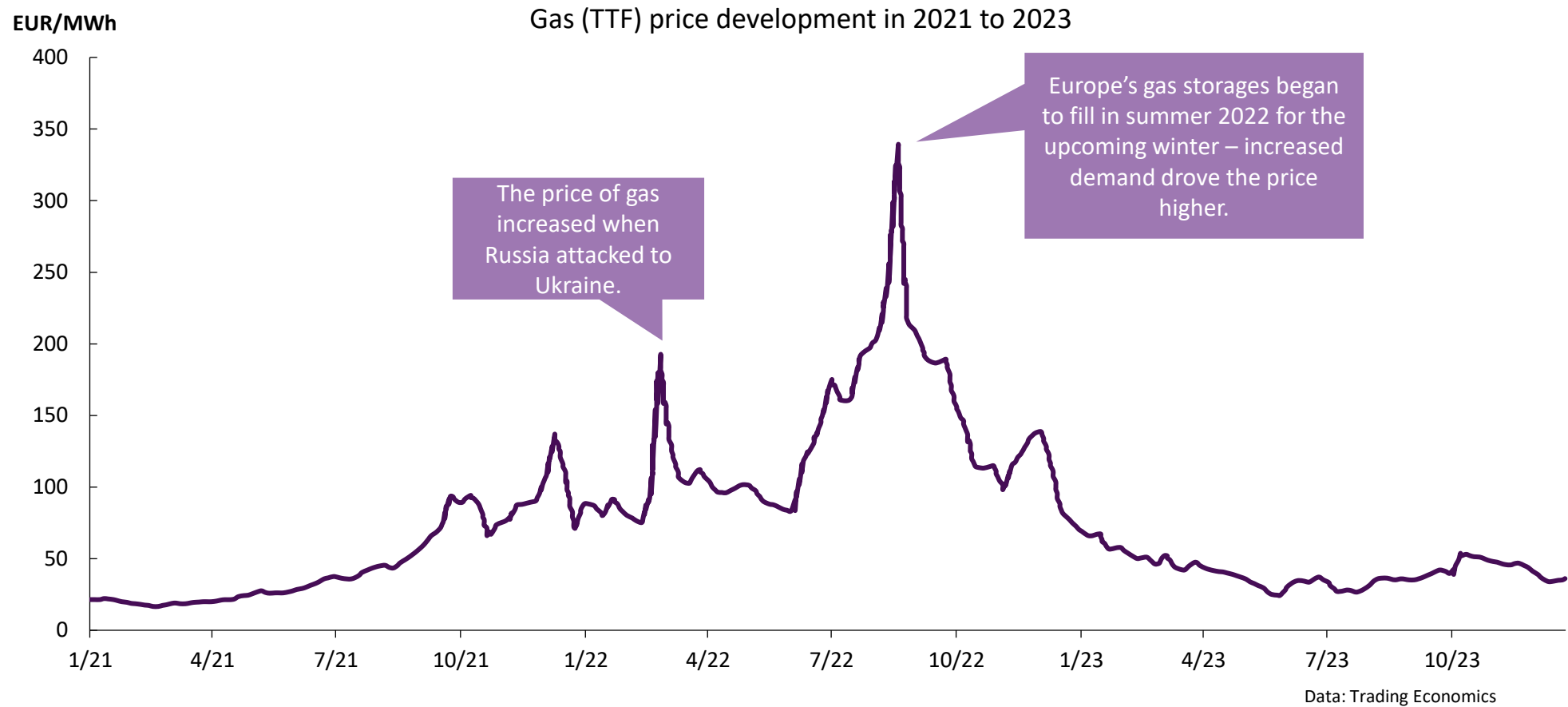
## Cross-border impacts

- Available transmission connections
- Maintenance and incidents in transmission connections
- Demand/supply in neighboring countries

# Alternative import channels have been found for Russian gas – supply and price pressures have eased

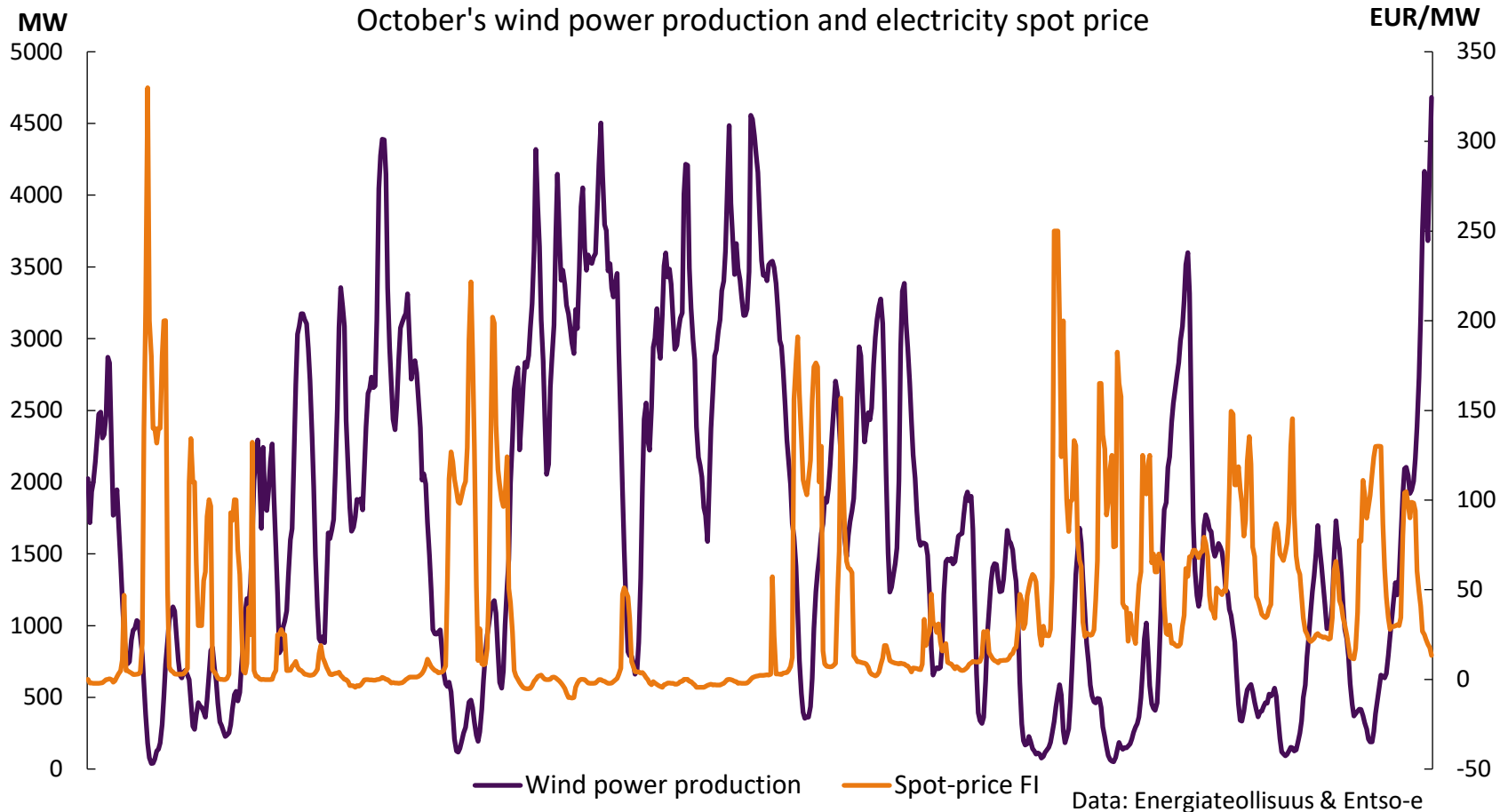


# Price development of gas



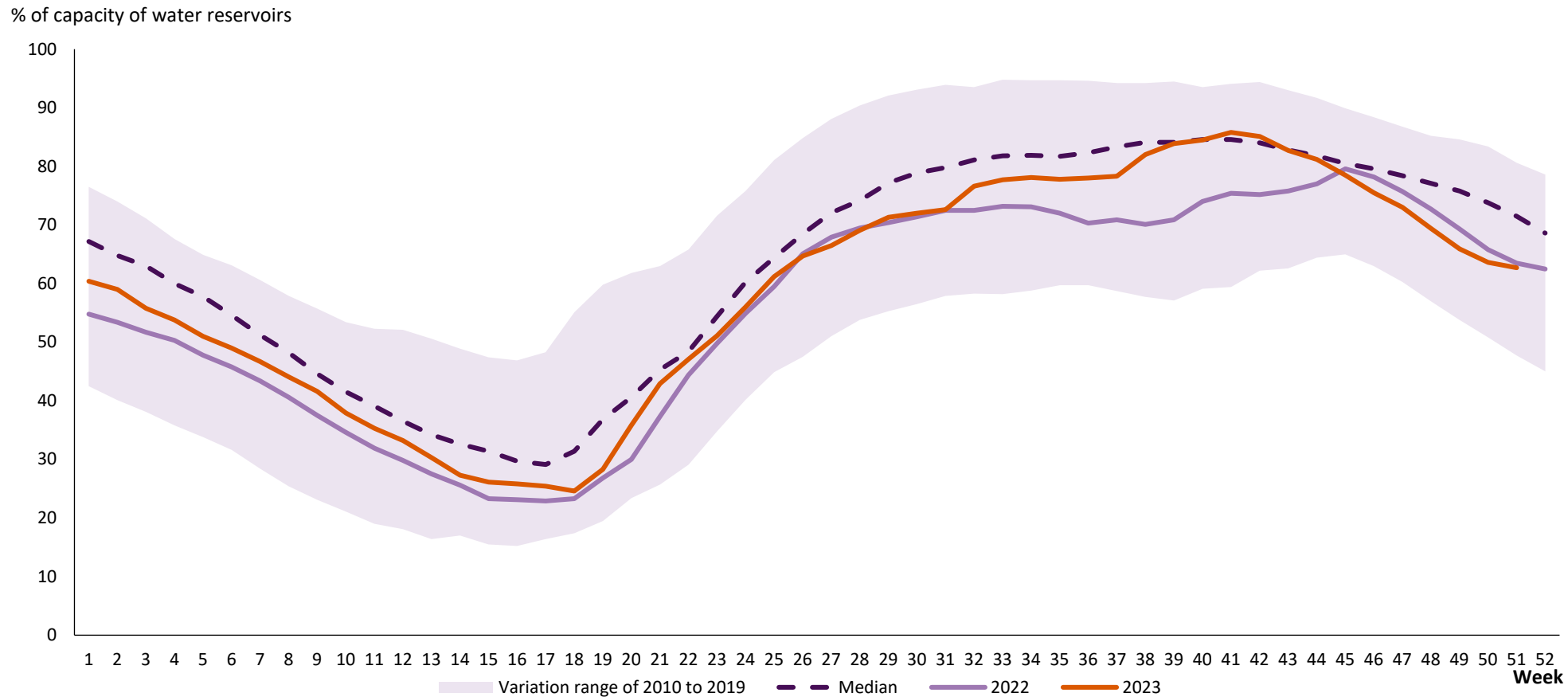


# The connection of wind power to the price

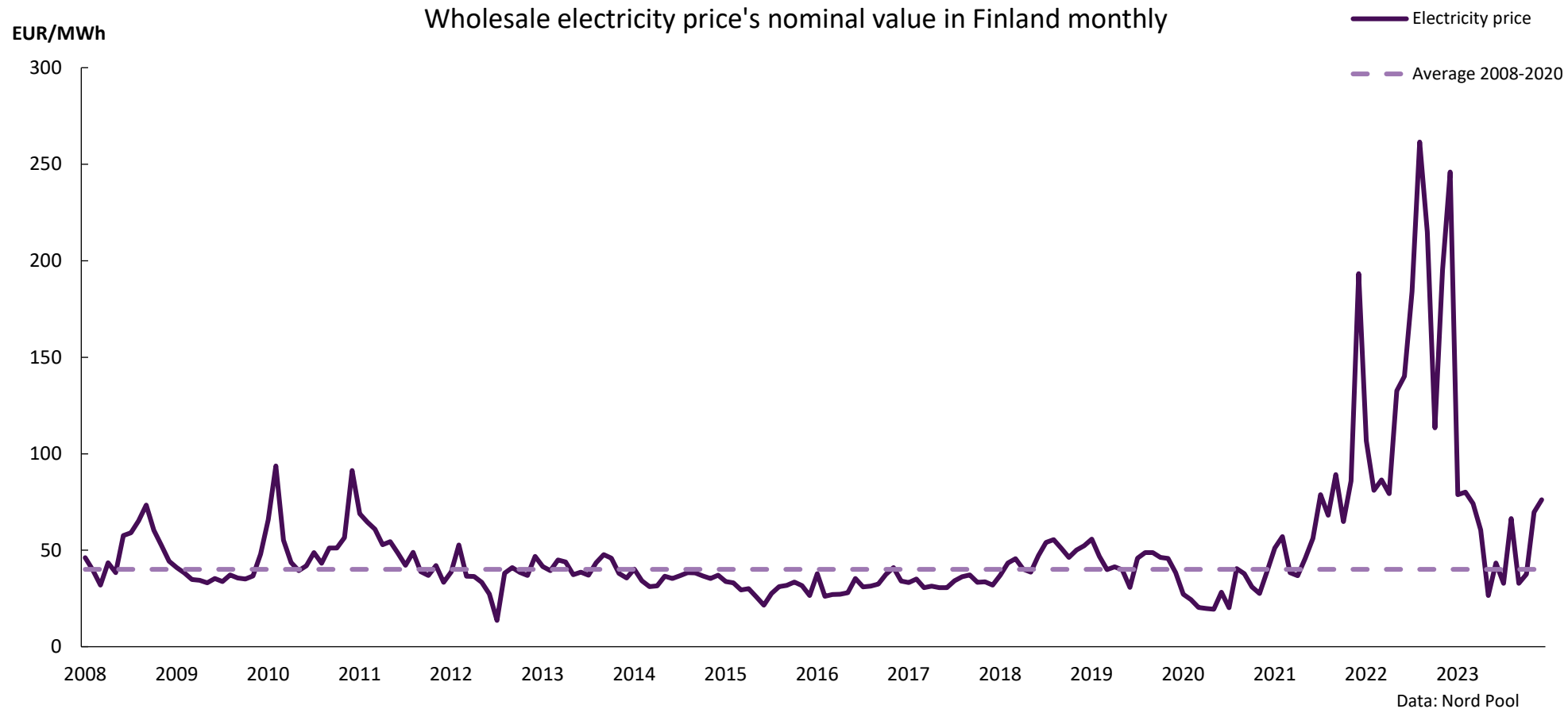


- The amount of wind power production is a significant individual factor influencing the price in Finland
- Other factors continue to have a significant impact on the price as well, such as electricity demand, temperature, status of water reservoirs, transmission connections and maintenance and incidents in nuclear and thermal power plants.

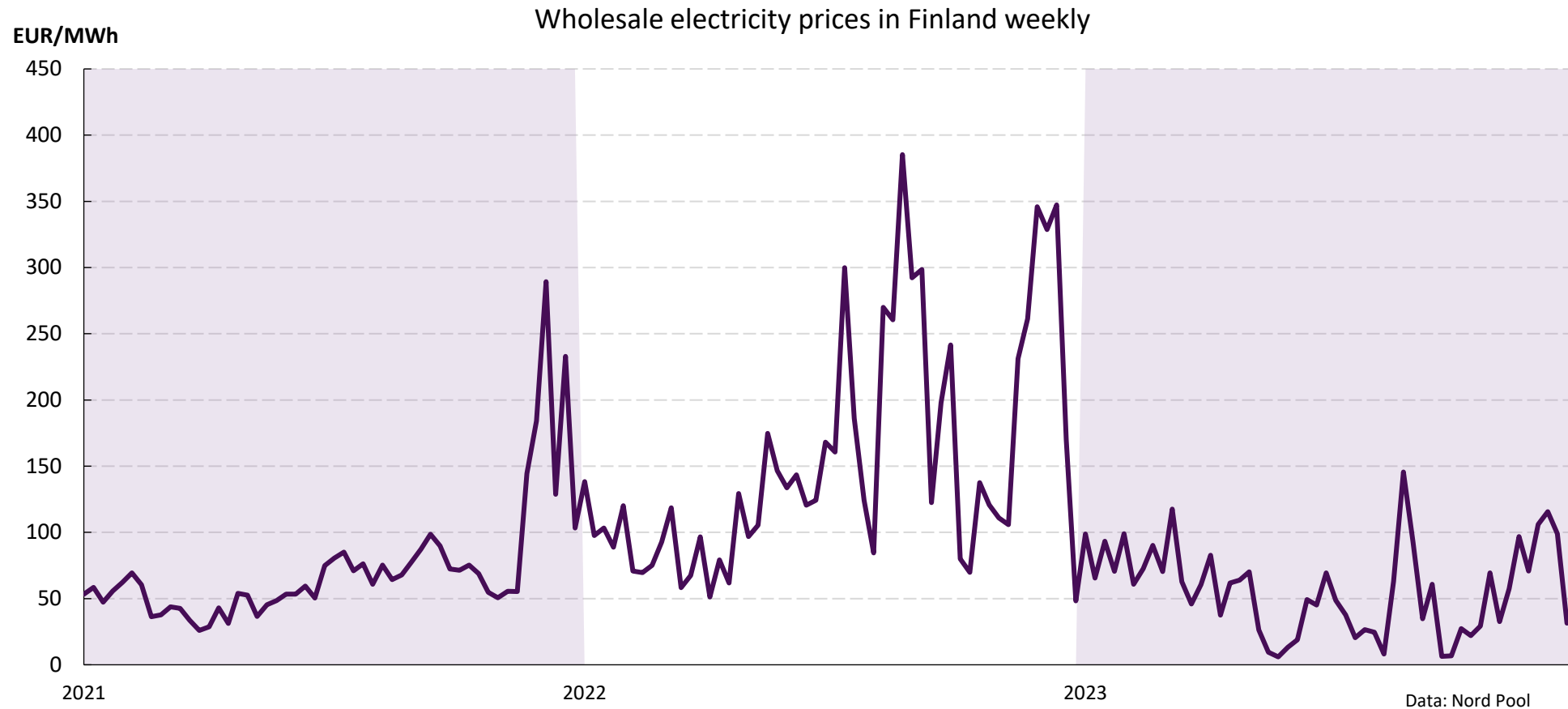
# Hydro reservoir balance in the Nordics



# The development of the nominal wholesale electricity price

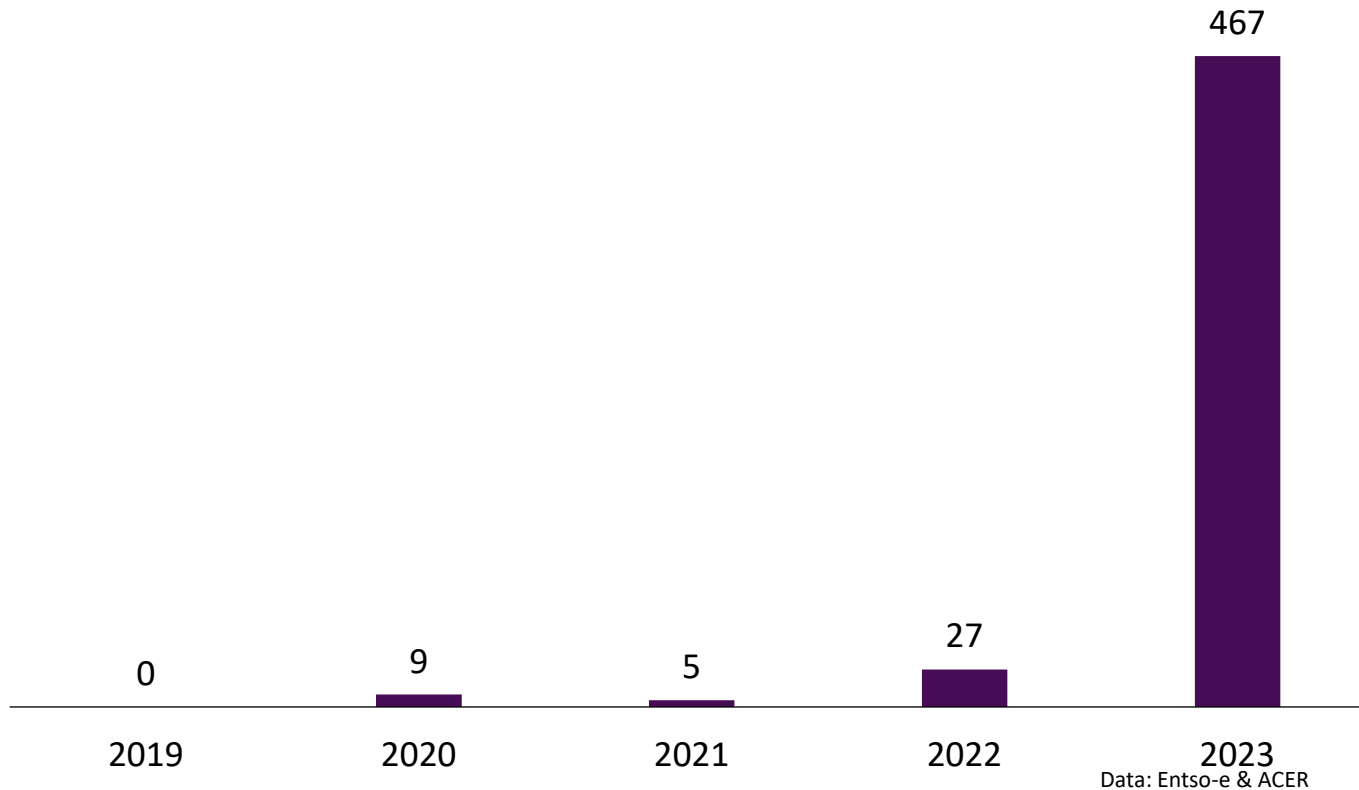


# Weekly prices of electricity in 2021 to 2023



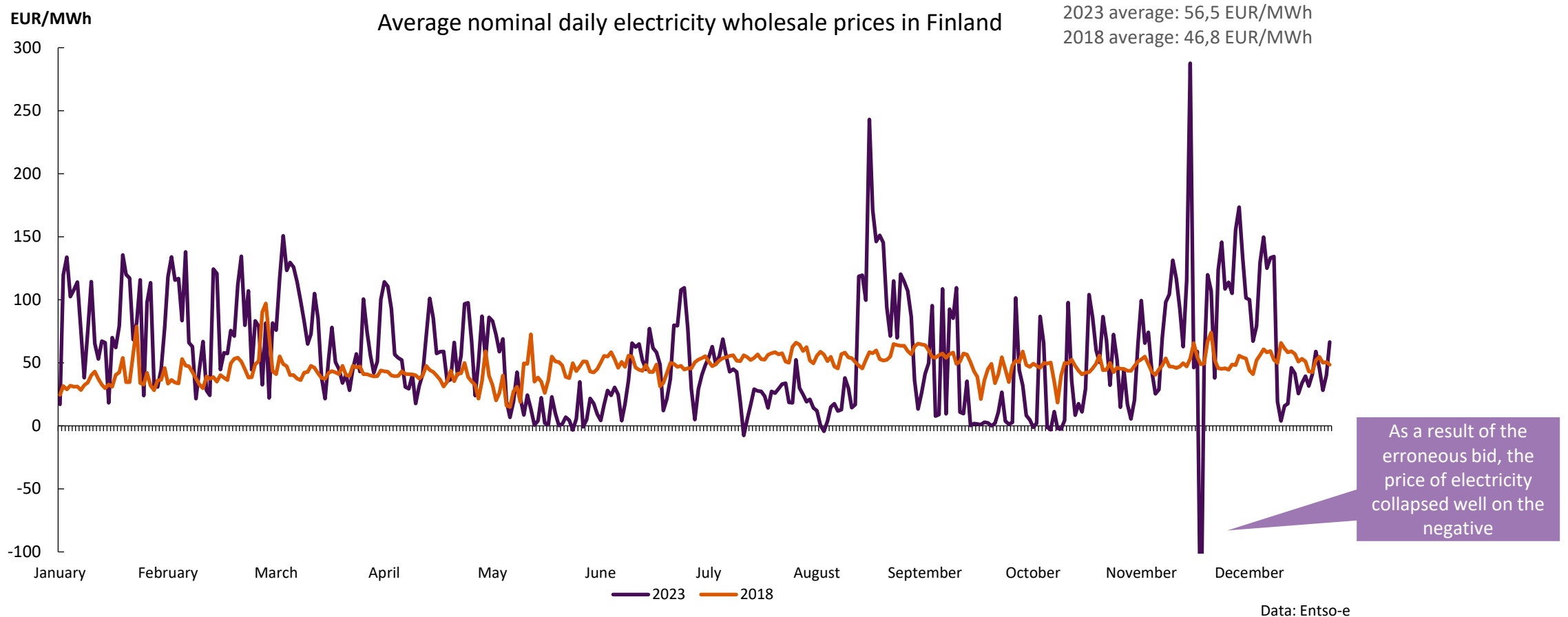
# The amount of hours with negative price has grown sharply

The number of negative electricity prices in Finland

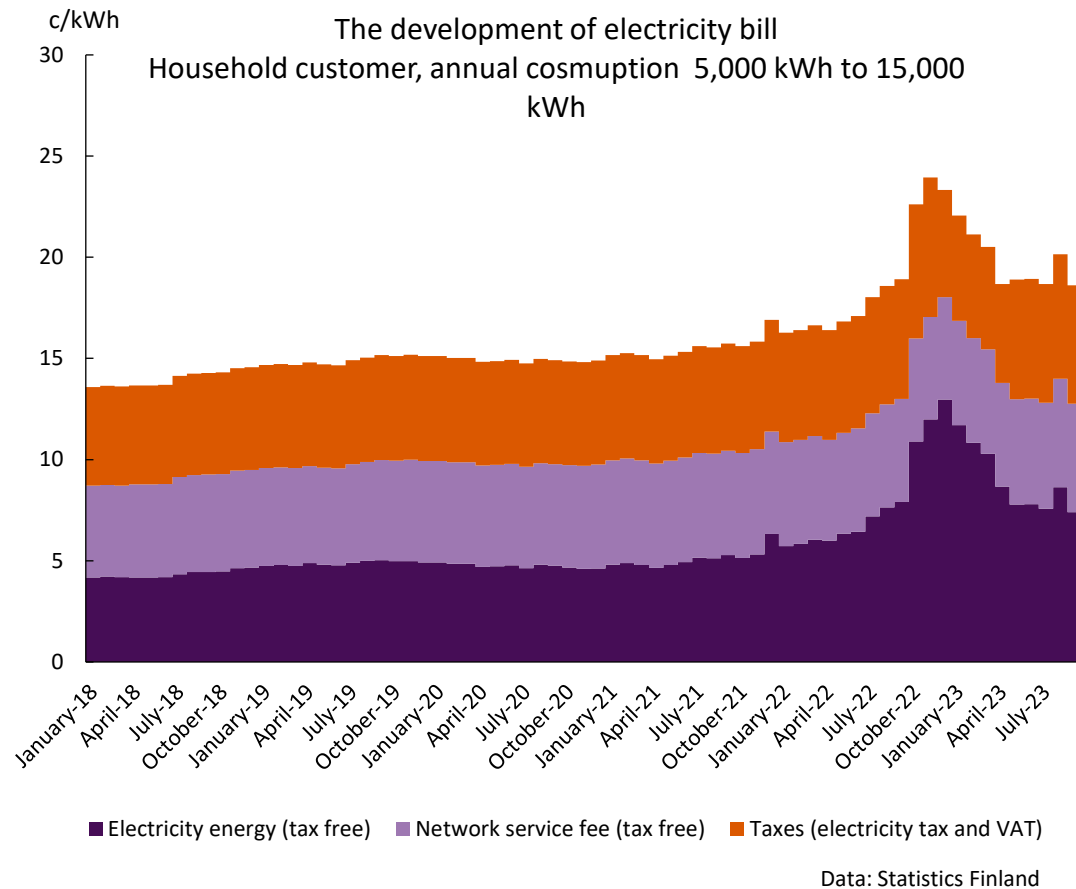


- The number of negative electricity prices has significantly increased due to the rapid growth of wind power.
- Low and negative electricity prices incentivize investments in flexible demand, such as electric boilers connected to district heating networks, with electricity capacity soon exceeding 1 GW.

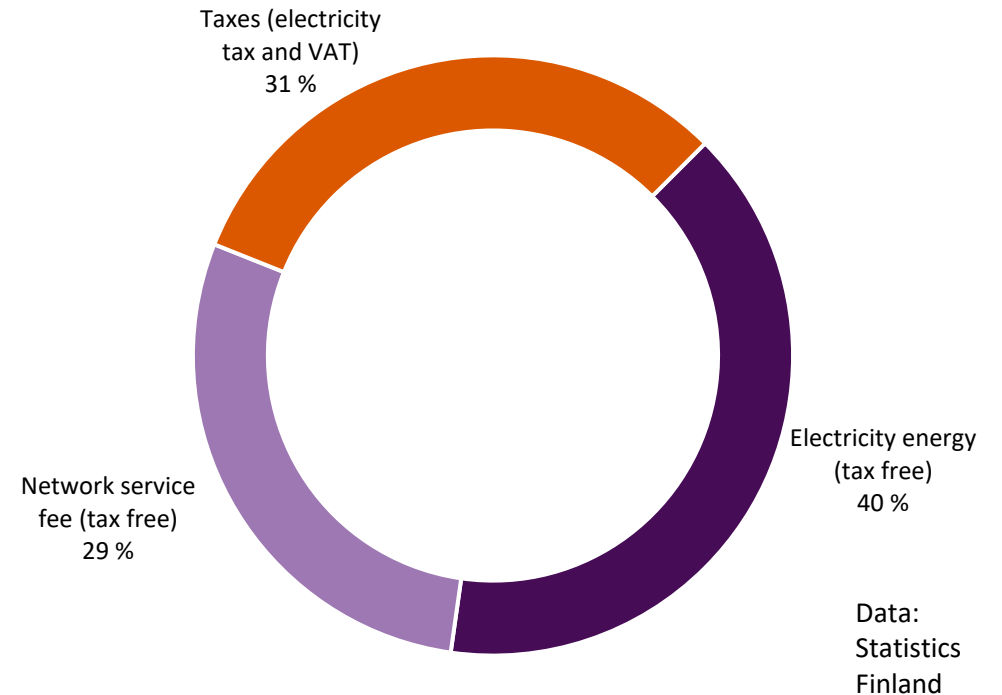
# Electricity price fluctuations have increased



# Consumers' electricity bills have significantly decreased over the past year



The shares of different components in the electricity bill for a household customer with an annual consumption of 5,000 kWh to 15,000 kWh



# Electricity price overlook: Prices in Finland and Sweden are significantly more favorable than in Central Europe

