



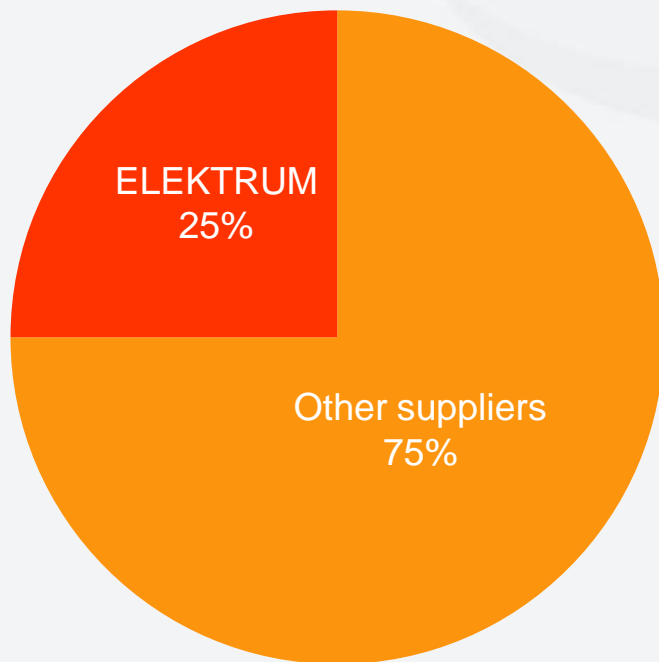
Lithuania's prospects in electricity market: the right strategy for generation capacities and investment incentives

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About ELEKTRUM

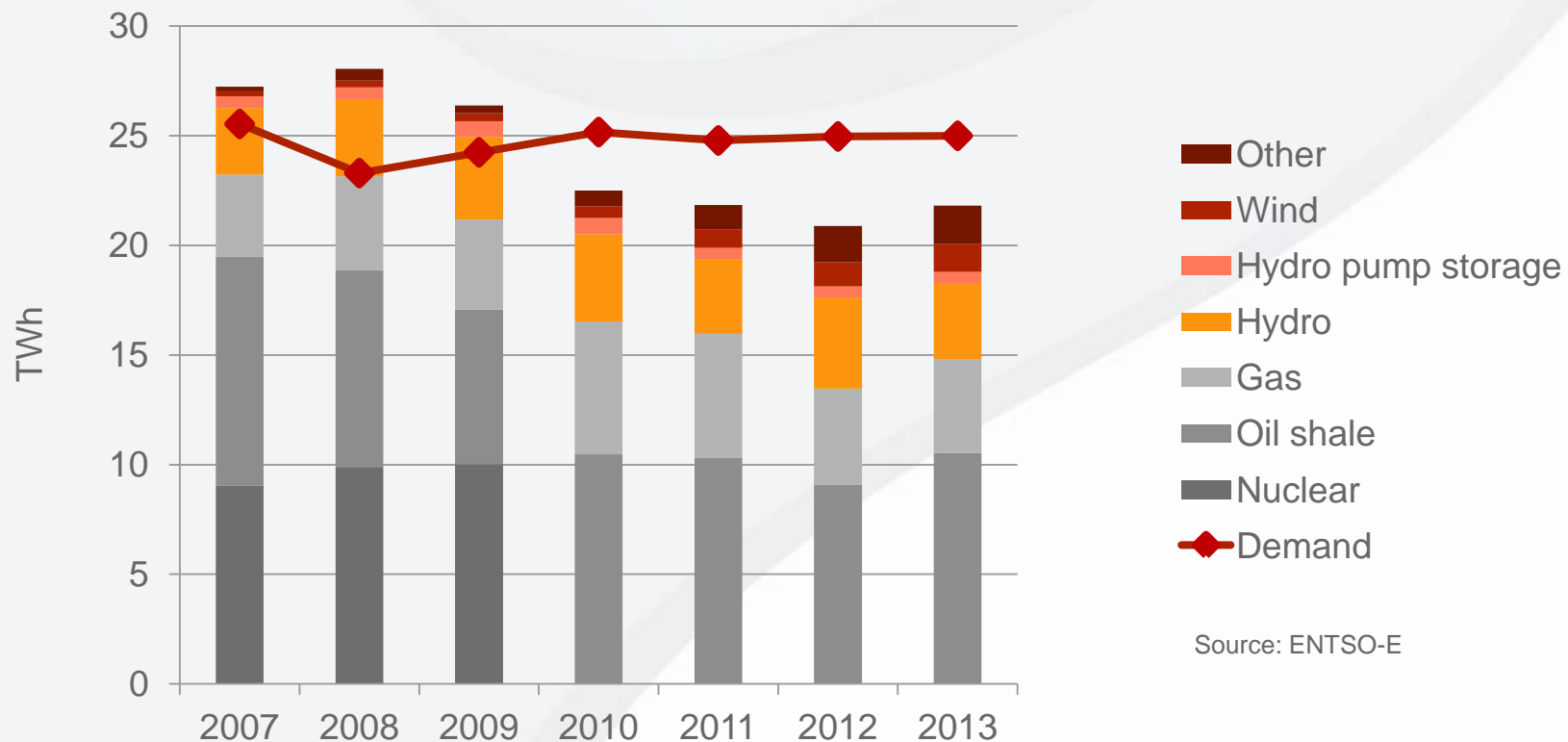
Market share in Lithuania's open electricity market in January 2014



- ELEKTRUM is a 100% subsidiary of AS Latvenergo – one of the biggest electricity suppliers in the Baltics.
- AS Latvenergo serves 1 million clients in all Baltic states.
- ELEKTRUM operates in Lithuania since 2008.
- Today ELEKTRUM is the largest independent electricity supplier in Lithuania.
- Business area: supply of electricity.
- Today we serve >5000 business customers in Lithuania.
- In 2015 ELEKTRUM will offer electricity to households.

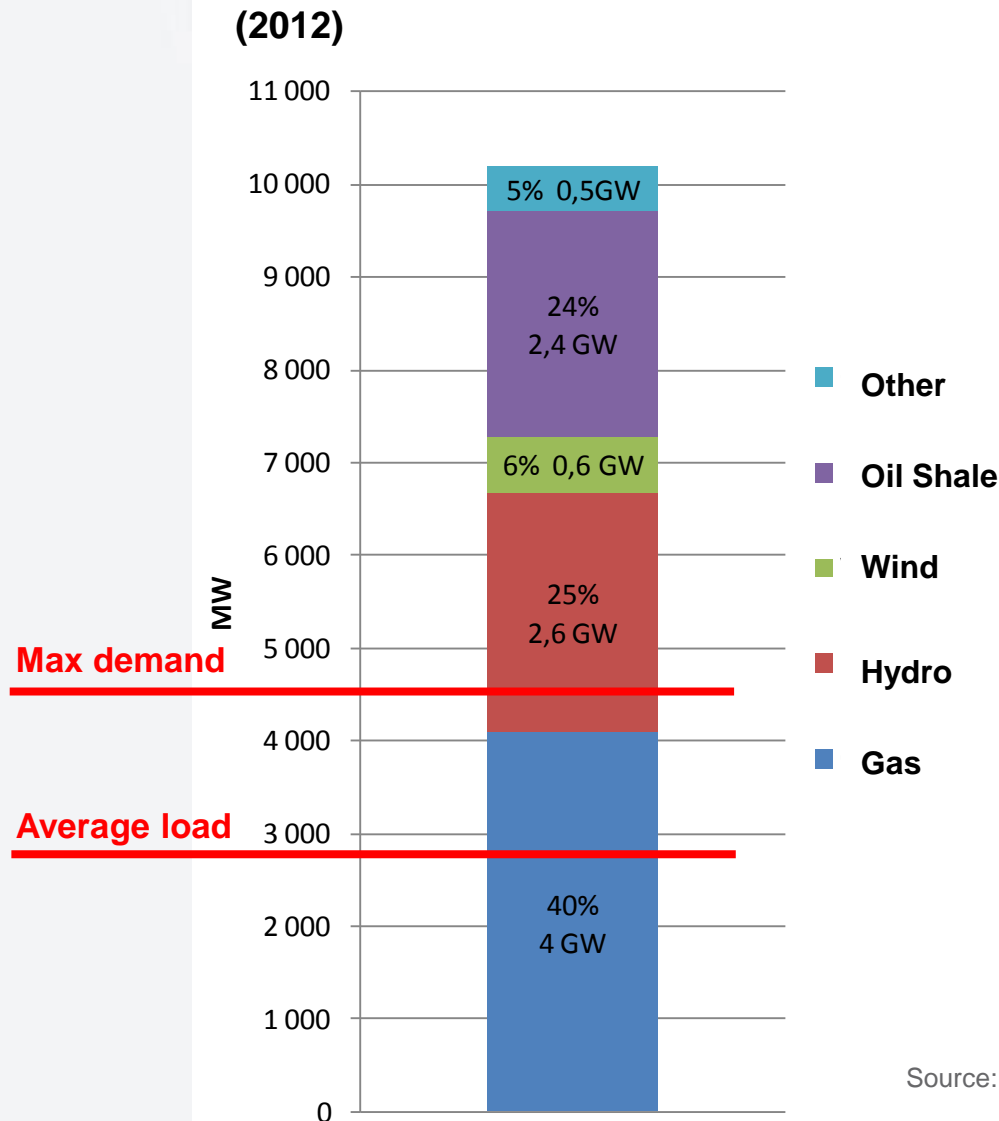
Electricity production in the Baltics

Electricity generation mix in the Baltics

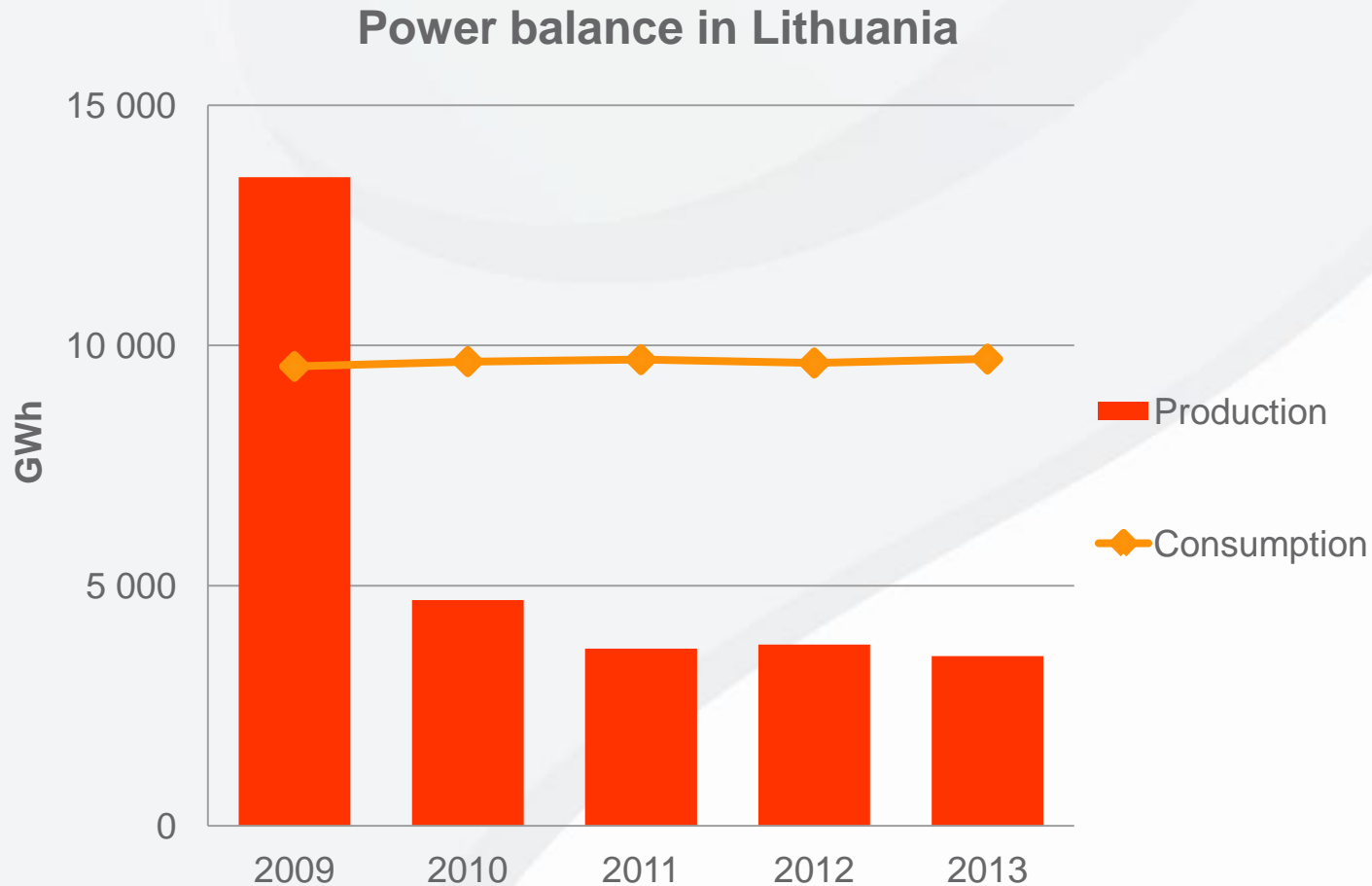


Source: ENTSO-E

Production capacity in the Baltics

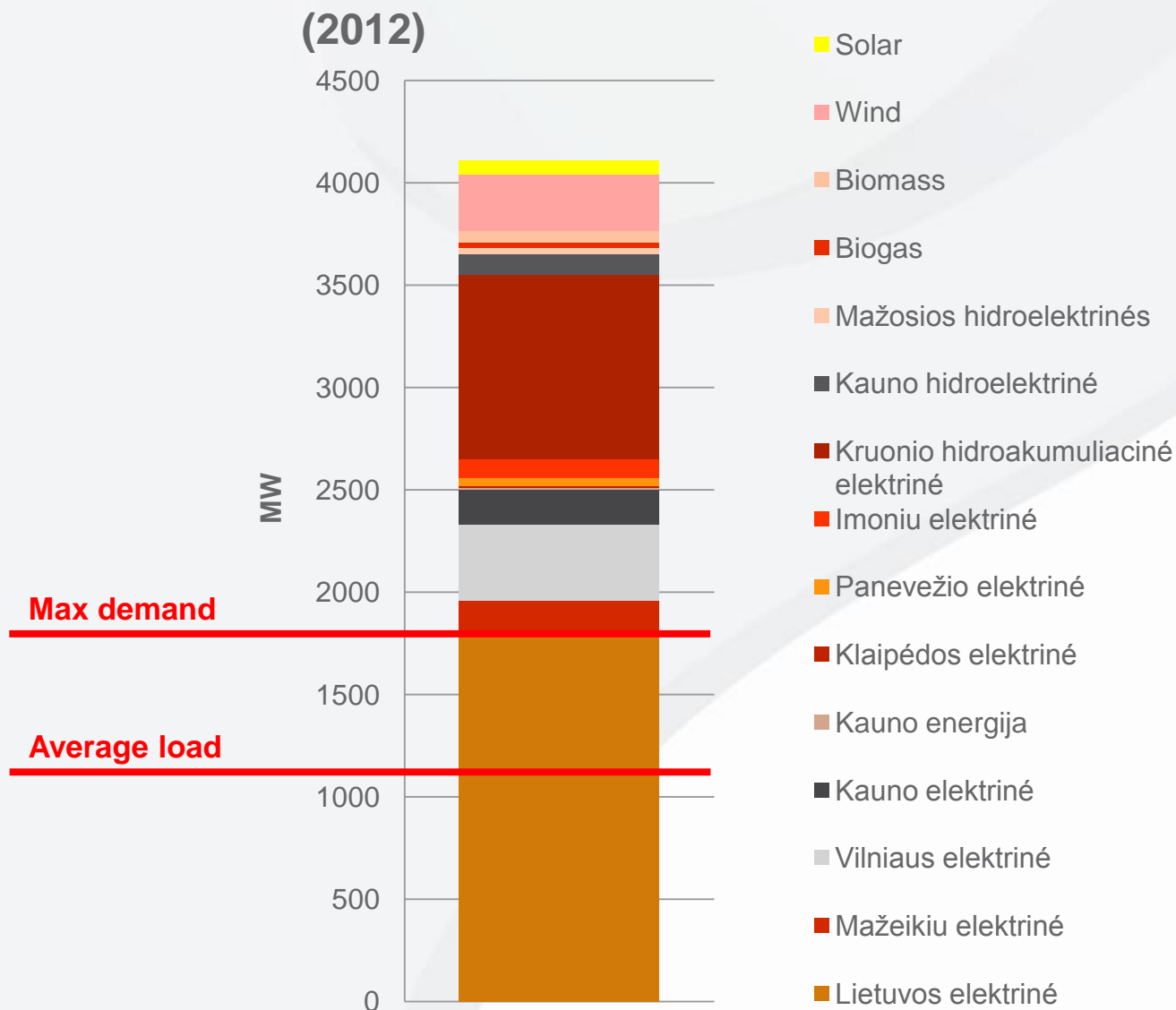


Electricity production in Lithuania

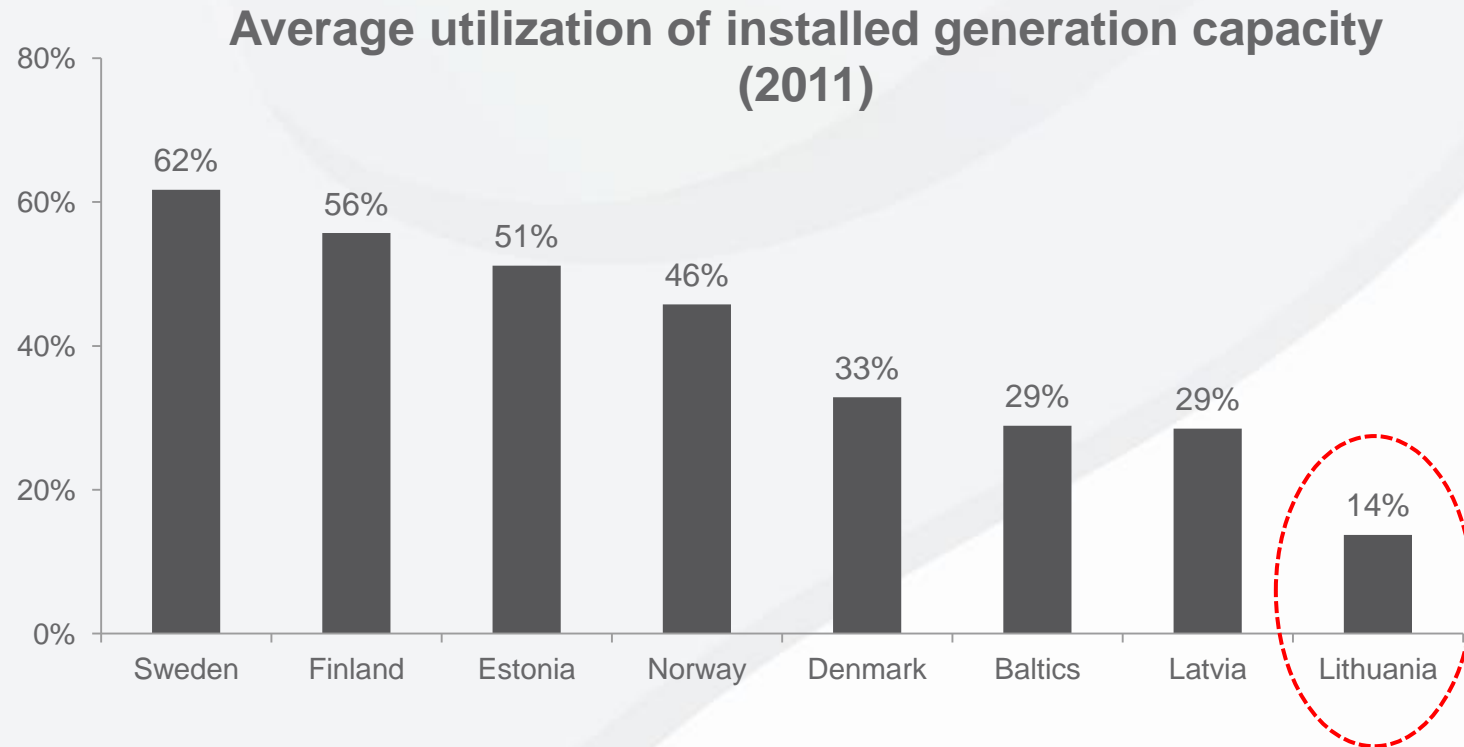


Since 2010 Lithuania imports on average 65% of its annual electricity demand.

Production capacity in Lithuania



Lithuania has the lowest utilization of production capacity in the region

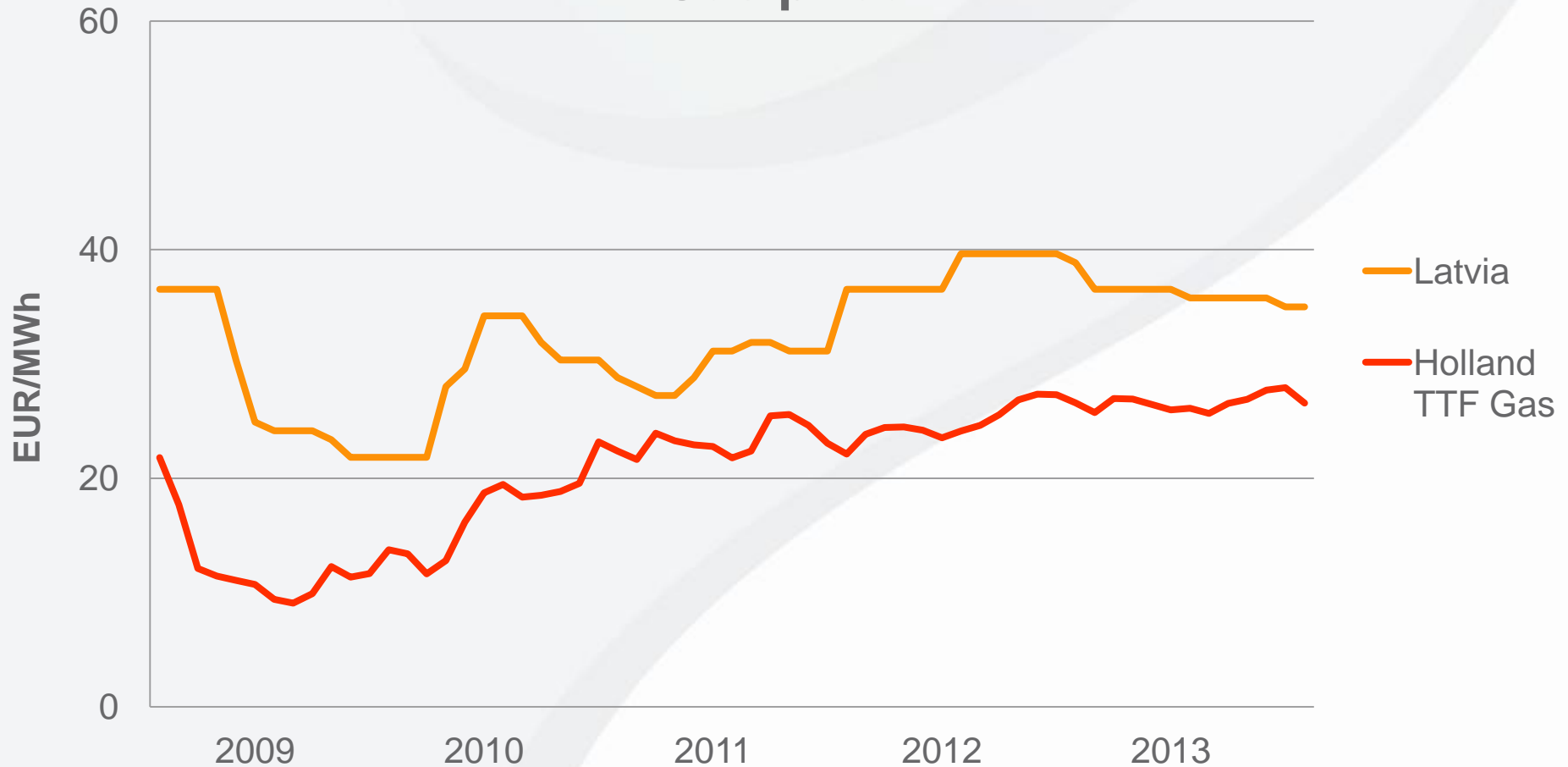


Gas-fired power plants in the Baltics have the lowest average utilization rate (~15%).

Oil-shale power plants have the highest utilization rate (~50%).

Baltics consumes the most expensive gas in Europe

Gas price



Electricity price trend is downward

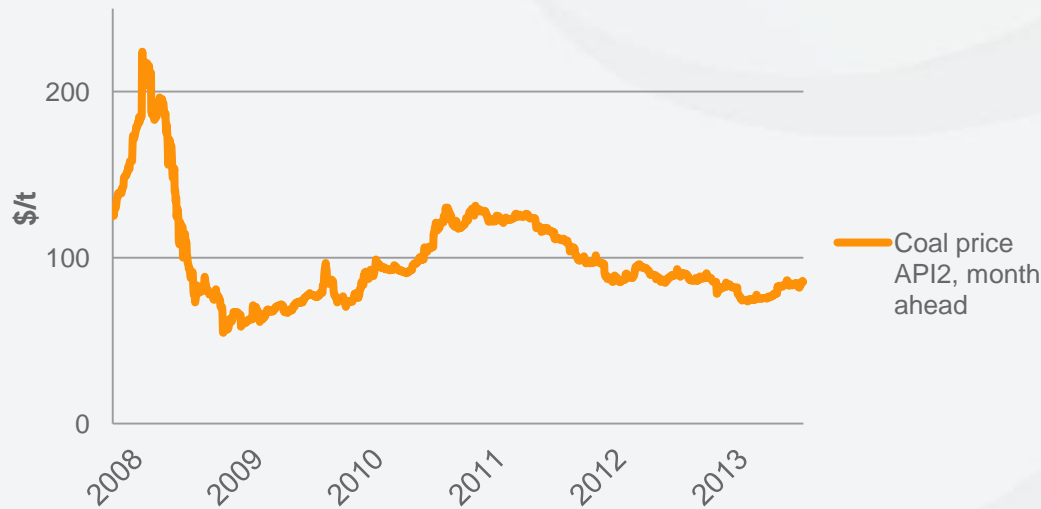
Electricity forward prices



The two main reasons for downward electricity price trend are decreasing fuel costs and massive rise of wind and solar power plant capacity.

Coal and CO2 price

Coal price



CO2 emission allowances

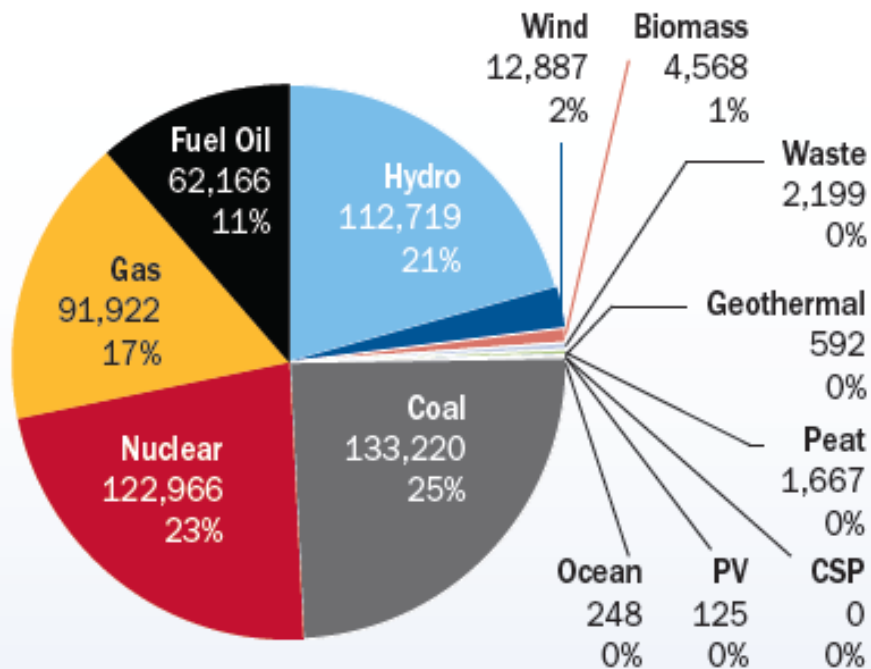


Although fossil fuel power plants produce just ~15% in the Nordic region, these power plants are often marginal producers and define electricity market price.

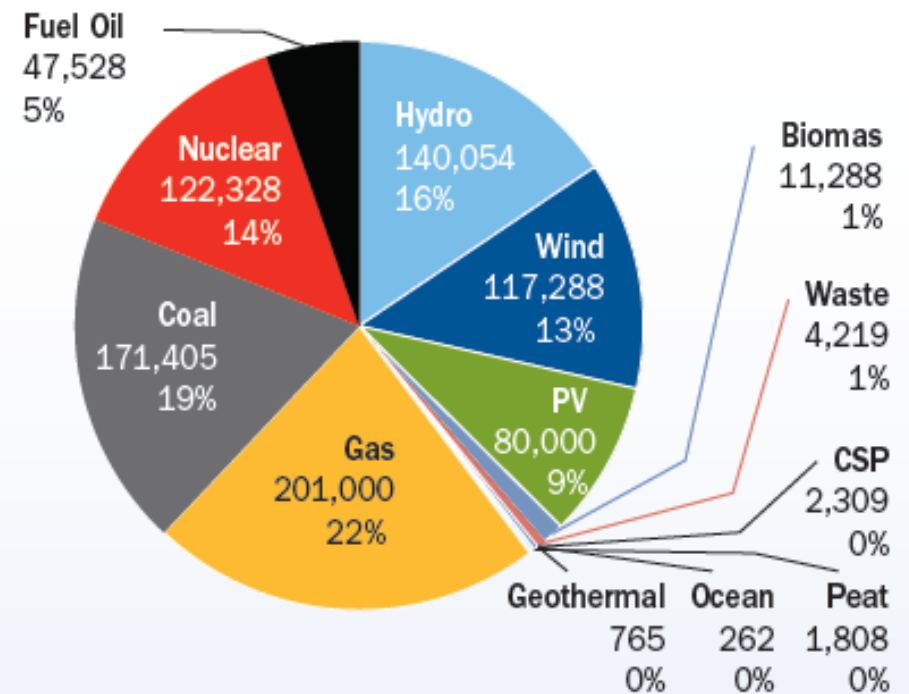
Both CO2 and coal market experience abundant supply exerting pressure on price.

Total installed power capacity in EU

2000

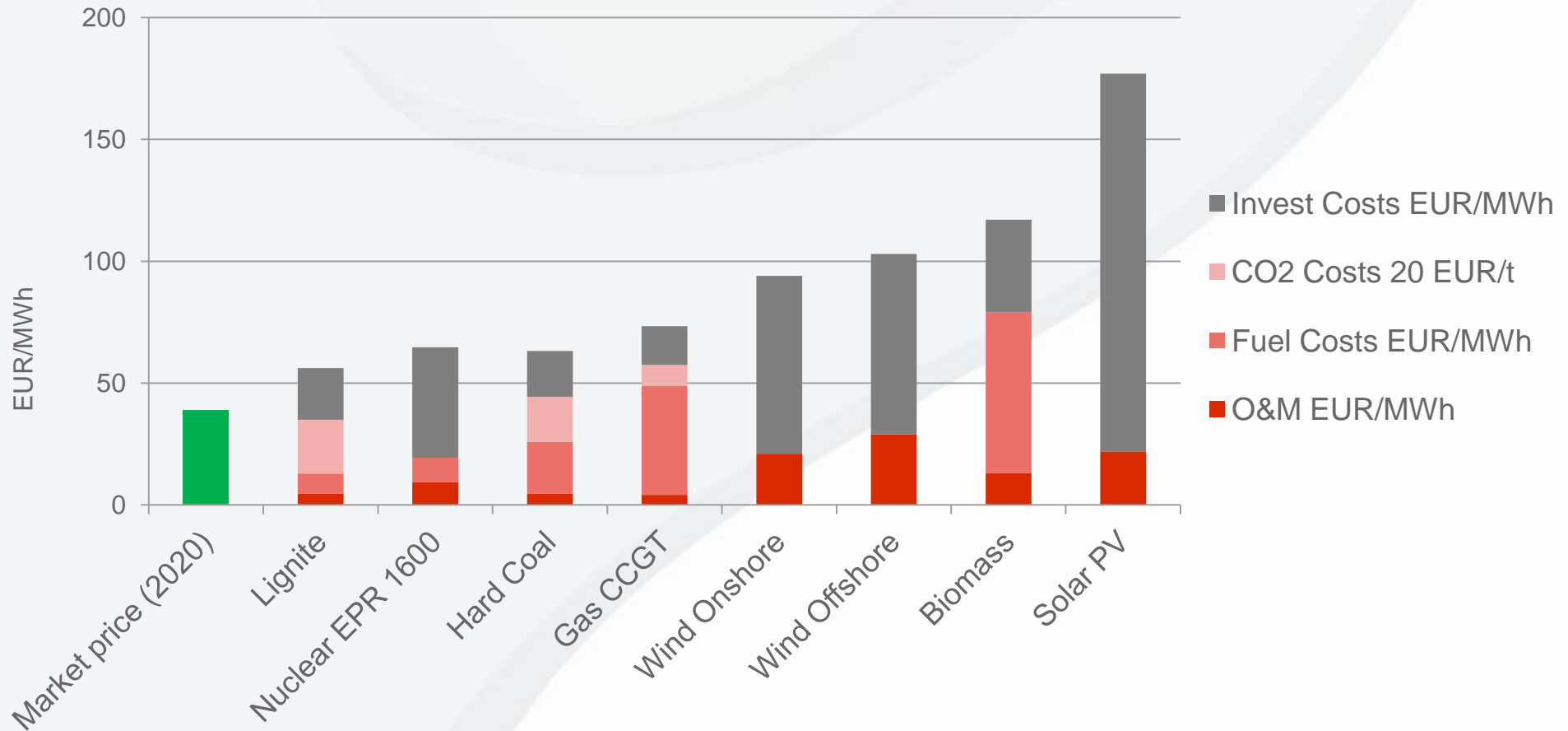


2013



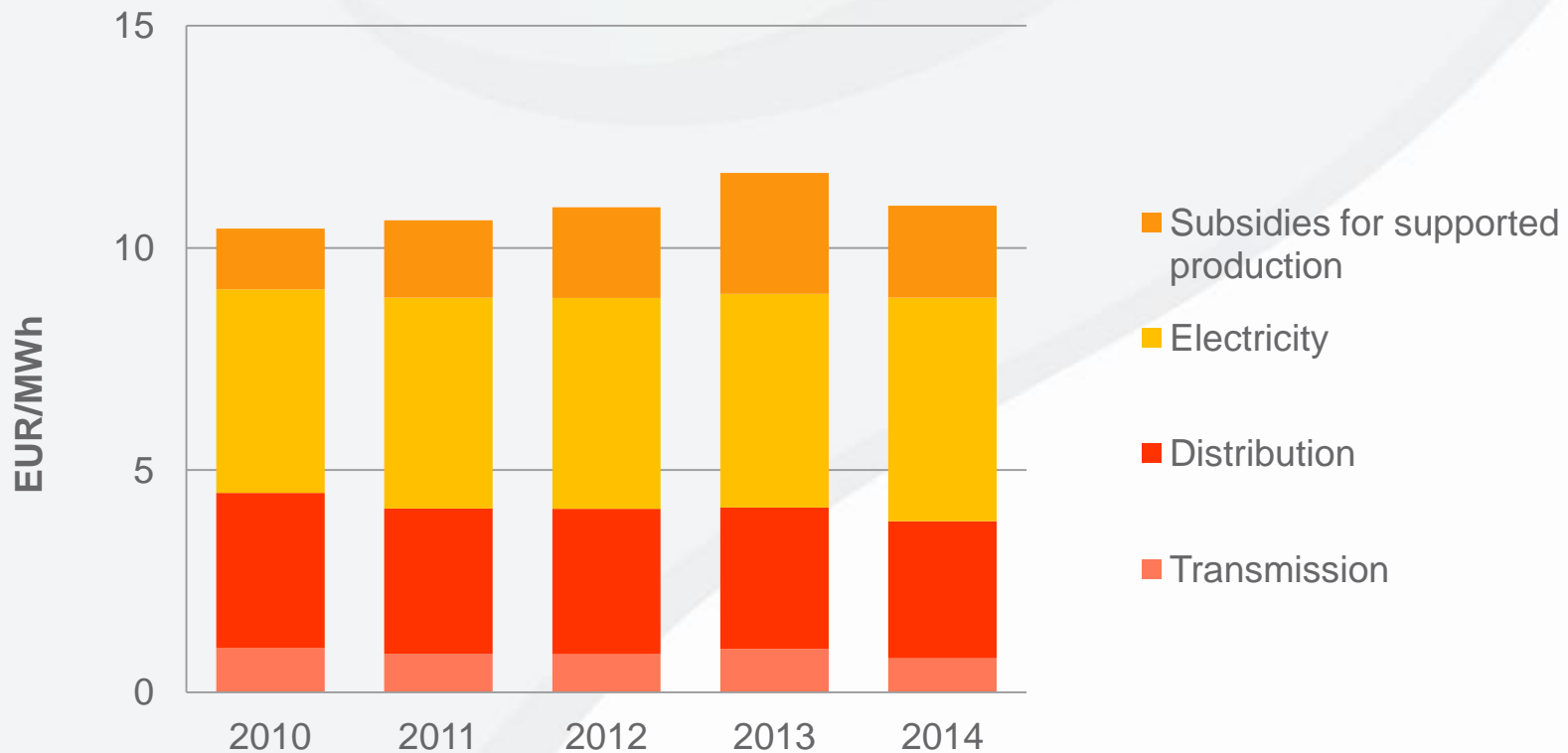
Market signal is clear: do not invest

Levelized cost of electricity production



Low electricity market price does not mean smaller electricity bills

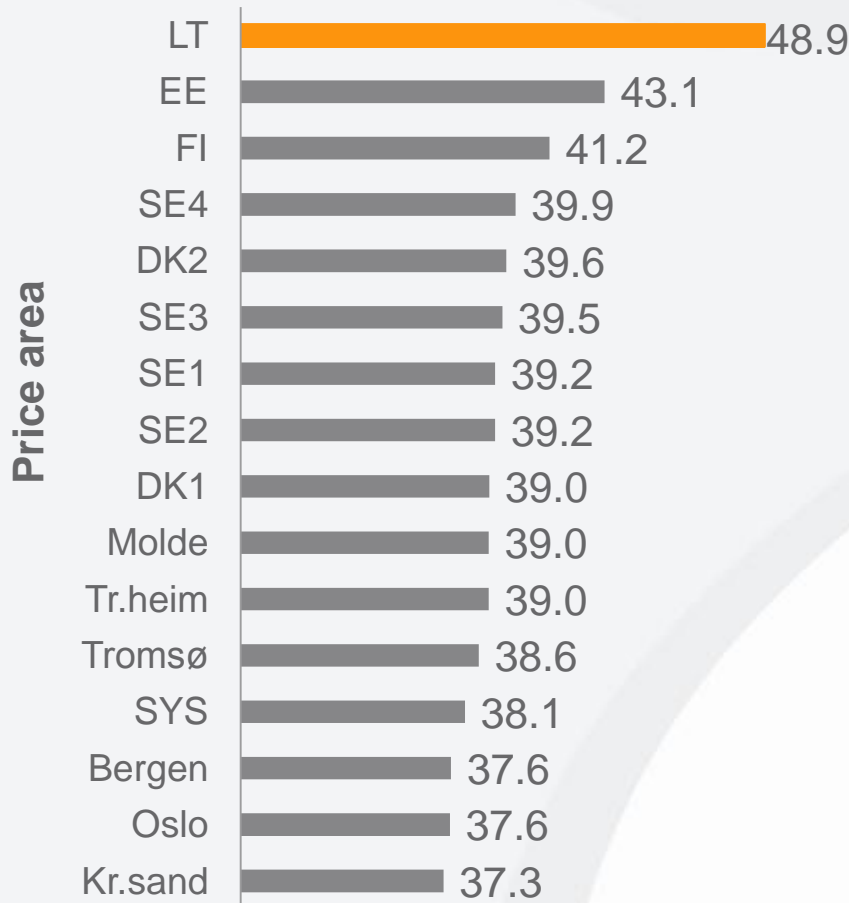
Electricity tariffs for households in Lithuania



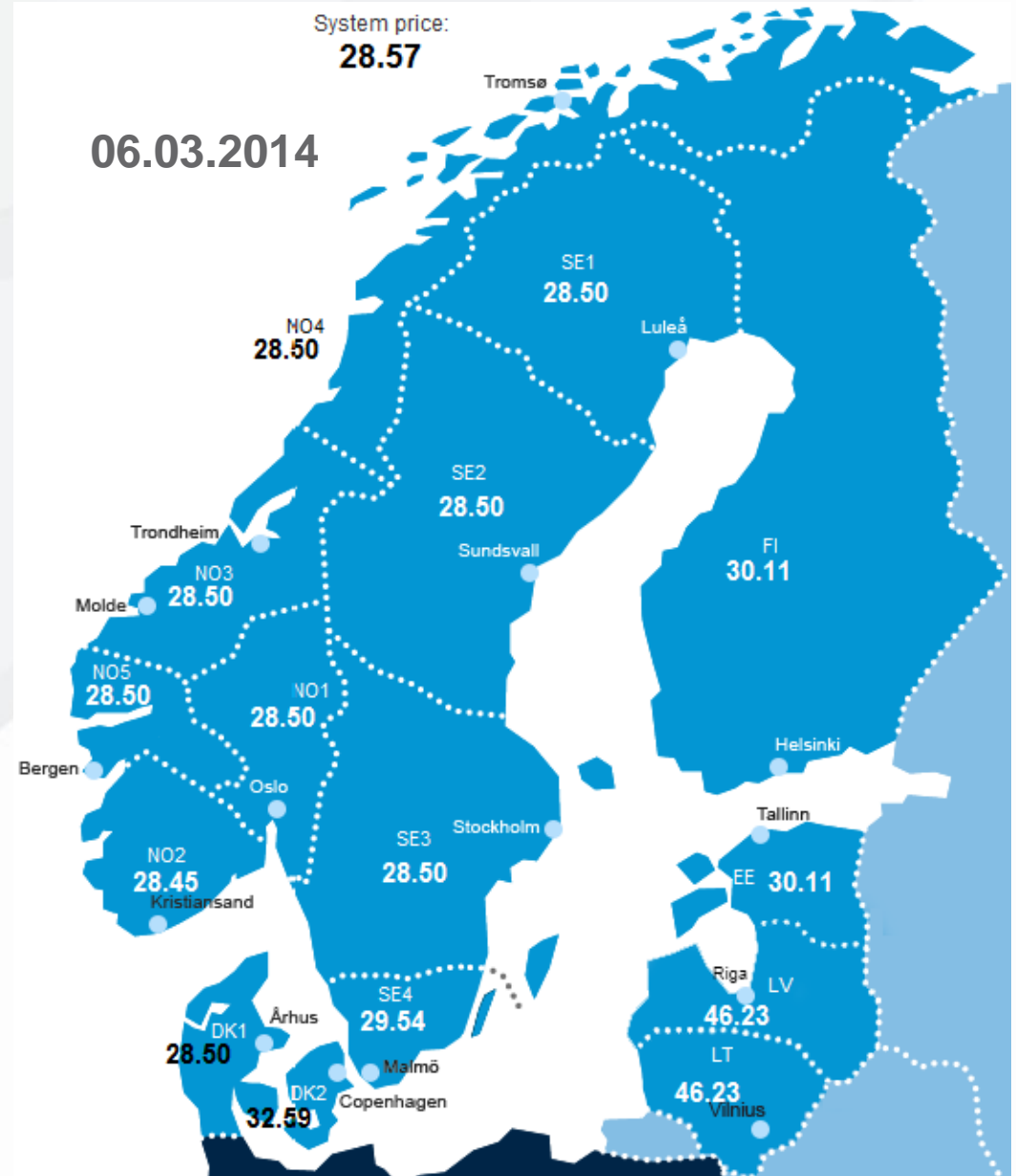
Lower electricity price in the electricity bill is offset by increasing subsidy component.

Baltic internal transmission congestions set Lithuania's price higher

Nord Pool Spot prices in Nordic-Baltic market, EUR/MWh (2013)

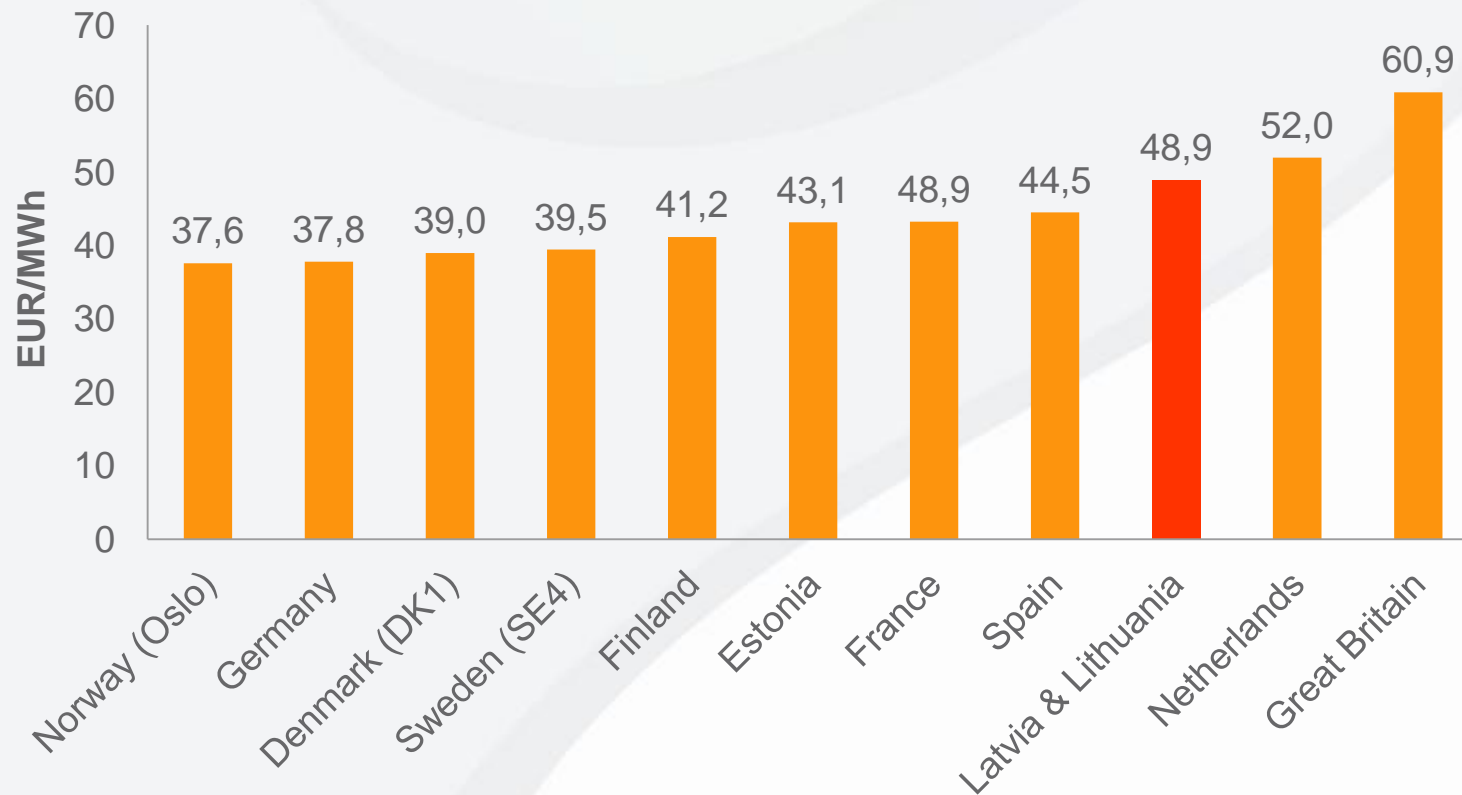


Source: Nord Pool Spot

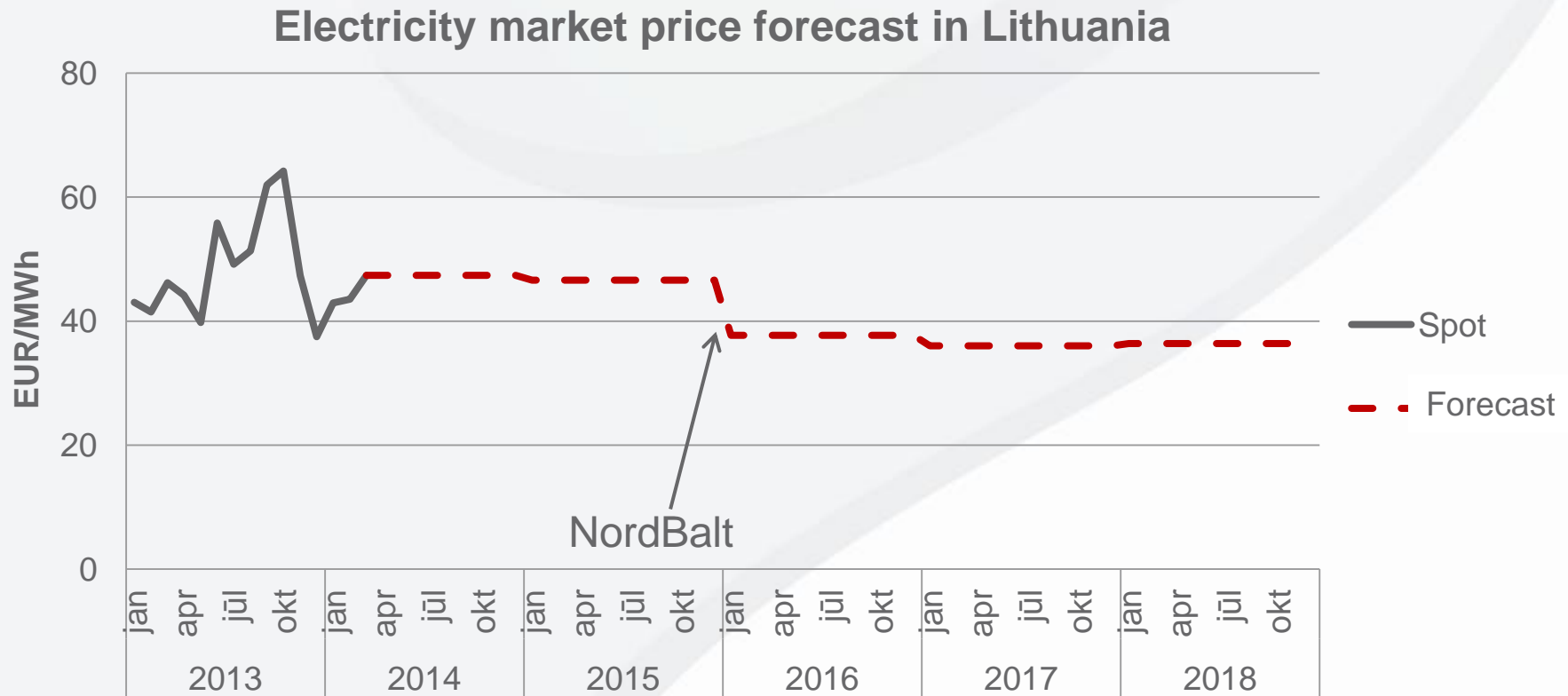


Electricity day-ahead market price

Average electricity spot price in 2013



Electricity price forecast



Market price in Lithuania is expected to decrease by ~20% after commissioning of 700 MW interconnection between Lithuania and Sweden in 2016.

Problem of the Baltic market: unequal competition with 3rd countries

Baltic producers are discriminated against suppliers from 3rd countries in the following areas:

1. No reciprocal access to markets.

- Russian supplier can access Baltic market. Baltic players can not access Russian market.

2. Unequal CO2 cost burden.

- When supplying electricity to Baltic market Russian producer do not pay for CO2 emissions.

3. Unequal access to cross-border capacity in day-ahead market.

- Baltic producers pay congestion rent for utilization of interconnections. Russian supplier does not.

4. Unequal possibilities to secure transmission costs on EE-LV cross-border capacity.

- Baltic players secure transmission costs over EE-LV border by buying Transmission Rights in the auctions. Russian supplier get it for free.

Conclusions on investment incentives

1. No major investments in electricity production capacities in the Baltic region had been made without state subsidies.
2. Nord Pool Spot exchange is good at economically dispatching available capacities in the short term. But, spot price alone does not provide good investment incentive.
3. To incentivize market-driven investments in production capacities, market model must ensure additional revenue for providing capacity (e.g. capacity market).
4. Unequal competition with producers in 3rd countries additionally deteriorates investment incentives in the Baltic region.

Suggested principles for Lithuania's generation capacity strategy

- 1. Ensure security of supply with adequate local generation capacity at a possible lowest cost.**
- 2. Use cheaper import possibilities at all times.**
 - By 2016 Lithuania's total capacity of external interconnections will exceed average demand 3 times.
 - Production surplus in the Nordic market is expected to reach 40-50 TWh/year by 2020.
- 3. Striving to achieve electricity self-sufficiency by sparing no expense should be avoided.**

Thank you!

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