



27.11.2025

Baltic Sea Adequacy Working Group

Baltic Sea region resource adequacy webinar

AST

elearning

ENERGINET

Litgrid

PSE

FINGRID

Statnett

SVENSKA
KRAFTNÄT

50hertz
| Elia Group

Previous and upcoming winter



Electricity adequacy remained in a good level during previous winter

- No adequacy issues were recorded during winter 2024 – 2025 and the weather conditions remained favorable most of the winter
 - The synchronization of the Baltic countries was completed successfully reducing the influence of Russia on the Baltics' electricity system
 - Estlink 2 was damaged in December 2024 thereby reducing transmission capacity between Estonia and Finland, but it was repaired and brought back to operation after 6 months

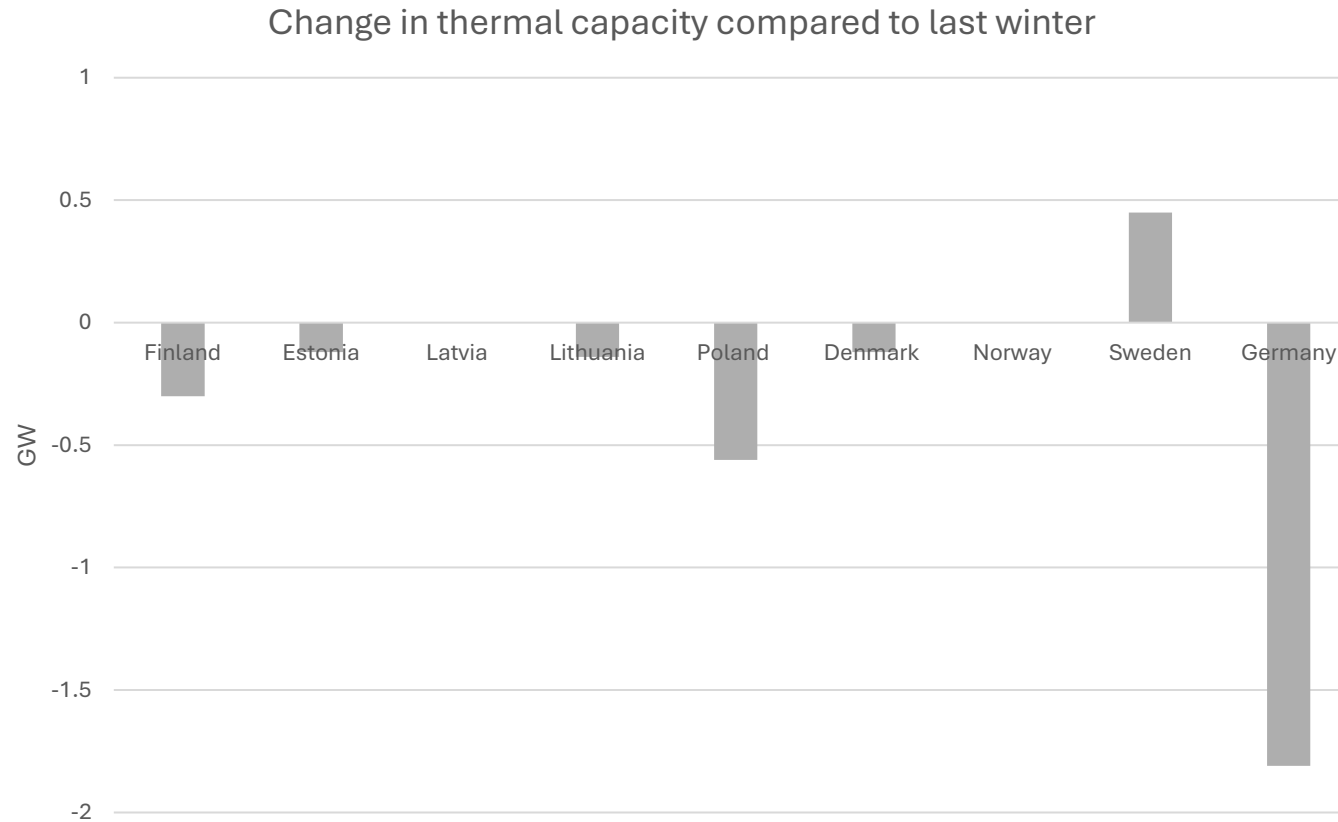


No major issues expected for upcoming winter

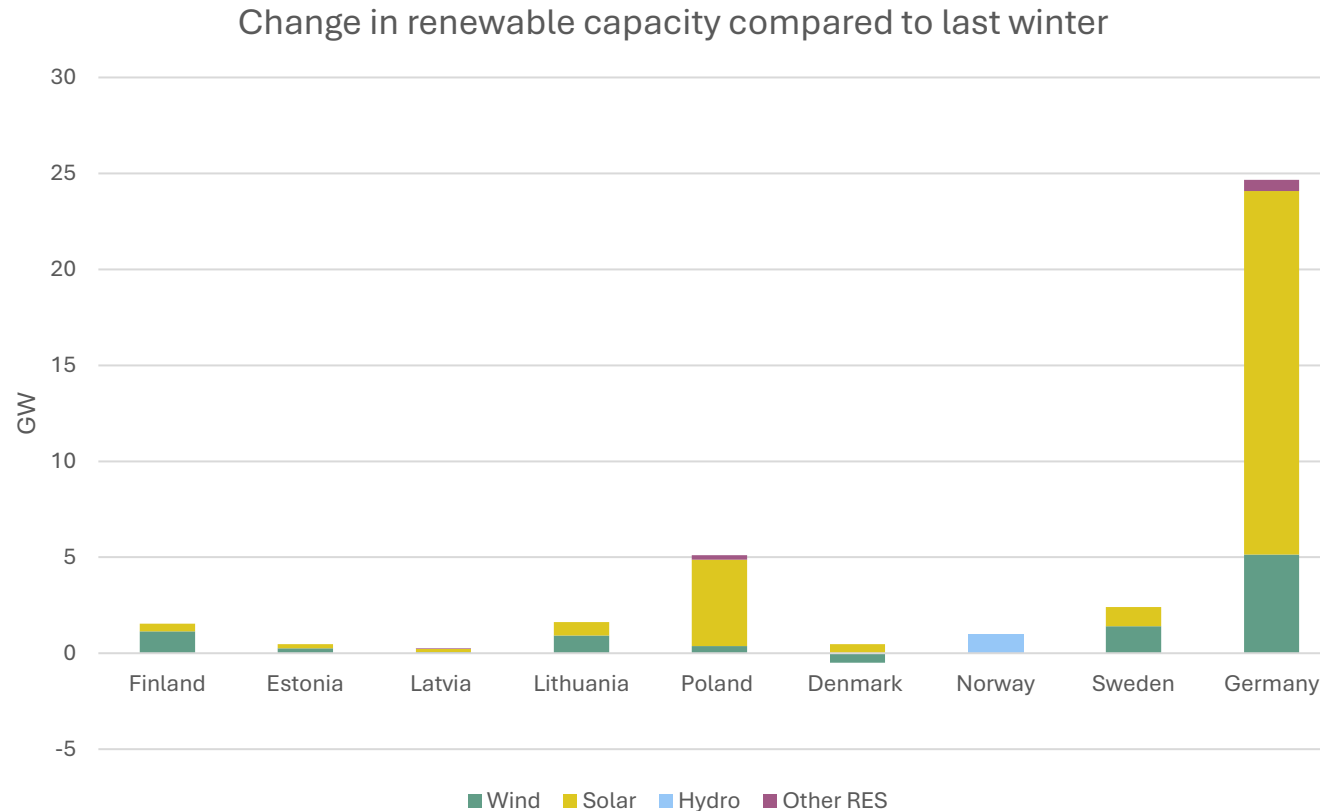
- There are no significant risks identified in any country for the upcoming winter
 - Under normal conditions, without extreme weather events or unexpected large-scale outages, the situation is expected to remain stable
 - Reservoir levels are at a good level, supporting system reliability
 - Winter Outlook from Entso-E has been published on November 19 ([Winter Outlook 2025-2026](#))



Thermal capacity is decreasing in most of the countries



Renewable capacity is increasing rapidly in the Baltic Sea region



Upcoming years and adequacy measures



The power system is changing during the upcoming years



the share of renewables in the power system is increasing



thermal capacity is becoming infeasible and exiting the market



demand is expected to grow but the pace is uncertain

The Baltic Sea region is preparing for the changes

- The clear trend in the power system which is expected for the Baltic Sea region are shown both in Pan-European and national studies
- These changes in the energy system need to be addressed to prevent it from turning into an adequacy challenge
- The electricity market needs supportive actions that can deliver reliability in a cost-efficient manner while enabling the decarbonization of the economy throughout the year
- The TSO community has had its focus on this topic for several years and a range of measures is being taken across the region
 - Some actions have already taken place but there are still a lot of preparations ongoing
- While adequacy challenges are addressed at the national level with tailored solutions, the electricity system must be considered as an interconnected whole, as adequacy concerns stem from systemic changes across the region



elering

ENERGINET



Litgrid

PSE

FINGRID

Statnett



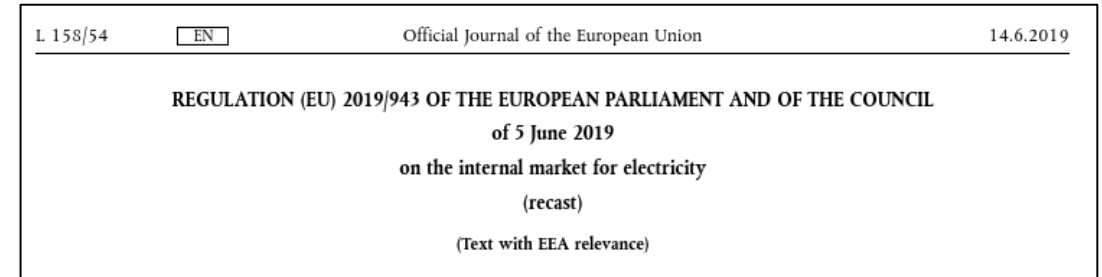
SVENSKA
KRAFTNÄT



| Elia Group

Capacity mechanisms

- Capacity mechanism designs in the Baltic Sea area follow the requirements of Regulation (EU) 2019/943, the Internal Market for Electricity Regulation.
- Chapter 4 of the Regulation outlines the main principles that guide the design of such mechanisms.
- In 2025, two new state aid permits for capacity mechanisms were granted to countries in the Baltic Sea region- Sweden and Estonia, both for strategic reserve.



- Article 21 (3) states „*Member States shall assess whether a capacity mechanism in the form of **strategic reserve** is capable of addressing the resource adequacy concerns. Where this is not the case, Member States may implement a different type of capacity mechanism.*“

Case: Estonia

- Estonia received strategic reserve permission on 28 October
 - State aid could be granted for 10 years, until 27 October 2035
 - Link: [Commission approves €750 million Estonian strategic reserve](#)
 - Earliest time possible to procure strategic reserve would be 2027
 - In 2026 further preparations are made regarding implementing of a strategic reserve
 - Strategic reserve demand is estimated before each procurement after the latest ERAA or NRAA
 - Procurement would be technology neutral, but would have technology-specific de-rating factors
 - Strategic reserve is an out-of-market measure, meaning capacity under that contract would not affect market prices
 - Delivery period will be 1 January to 31 December and would have a lead time of at least 2 months



elering

ENERGINET



Litgrid

PSE

FINGRID

Statnett



SVENSKA
KRAFTNÄT



| Enea Group

Case: Sweden

2025 Procurement Outcome

- Tender launched in August 2025; 713 MW offered (target: 800 MW).
- None of the three bids met cost-effectiveness requirements → procurement cancelled in October.

Current SVK Actions

- Strategic reserve is top priority; assessing conditions for a potential renewed procurement this winter.
- Re-evaluating cost-effectiveness criteria and exploring partial-volume procurement options.
- Preparing improved framework for future tenders.
- Communicating actively to the market.

Outlook

- Adequacy is stronger this winter than previous years; no shortage expected under normal conditions.
- Long-term need for a strategic reserve expected to increase; securing proper conditions for future procurements is essential.

Country comments



Estonia

- No adequacy issues expected in the upcoming winter as existing powerplants and interconnectors are operational.
- The Baltic and Finland region has secured enough natural gas to ensure sufficient fuel supply for the gas power plants.
- ERAA and national analyses have shown that once the currently economically non-viable power plants exit the market the reliability standard will be exceeded
- A recent procurement of ancillary services capable power plants will bring 236 MW of new capacity online between 2027-2030.
- More detailed analyses will be published December 2025: [Link](#)



elering

ENERGINET



Litgrid

PSE

FINGRID

Statnett



SVENSKA
KRAFTNÄT



| Elia Group

Sweden

- No adequacy issues are expected in the coming winter.
- The contract for the old strategic reserve expired in March 2025. No new reserve was procured during the tender held in 2025, as no bid complied with the cost efficiency requirement set out in the state aid approval
- Svenska kraftnät works towards procuring a strategic reserve in the near future.
- Electricity demand in Sweden is increasing in the coming years.
- ERAA 2024 identifies increasing LOLE in Sweden during the upcoming years, especially in southern Sweden. From 2030 some LOLE is also detected in northern Sweden, as the industrial electricity demand increases there.



elering

ENERGINET



Litgrid

PSE

FINGRID

Statnett



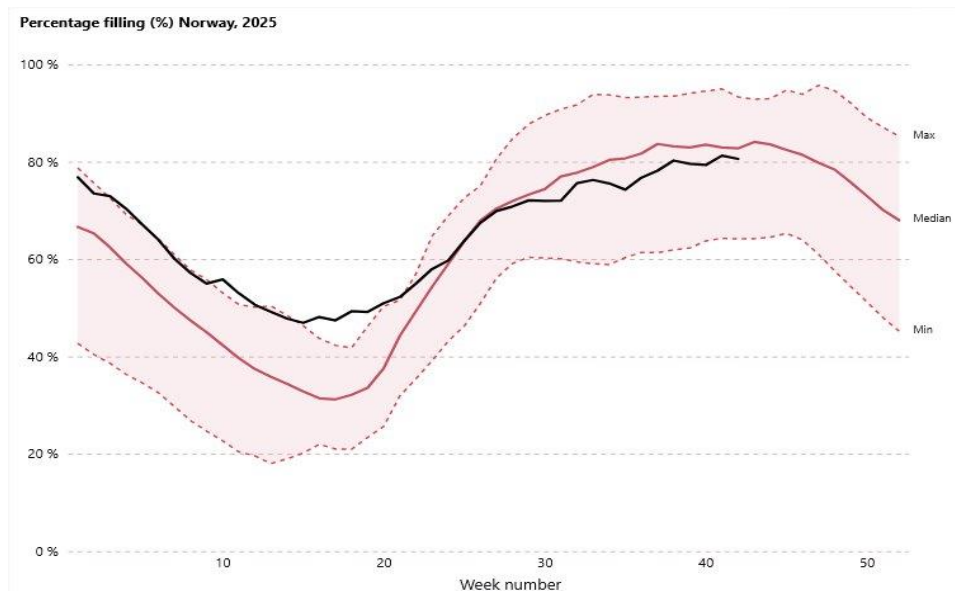
SVENSKA
KRAFTNÄT



Norway

Upcoming winter

- No adequacy issues were experienced for the last winter
- No adequacy issues are expected for the upcoming winter 2025-2026 because the reservoir levels are good



Source: [NVE](#)

Mid-term (2026-2030)

- Statnett has recently published an update of our Short-term Market Analysis (KMA 2025-2030) for the mid-term perspective. Despite some delays in the electrification processes, demand is expected to increase significantly
- Based on the increased demand and a low production increase, Norway is expected to go from a large energy-surplus to a more balanced situation. This leads to a tighter adequacy-situation, in where especially the dry-year-situation might be more stressed

Denmark

- No adequacy issues are expected for the upcoming winter.
- On the mid-term perspective:
 - Both the ERAA2024 & the NRAA 2025 have identified adequacy concerns. In both studies, Eastern Denmark (DK2) sees an increased risk compared to DK1. The main reason for the increasing risk in the upcoming years is a rise in the overall electricity consumption and a decline in dispatchable generation capacity.
- On the proactive measures to secure electricity supply:
 - The Danish Government has formed a task-force with the mandate of providing a proposal for decision on how to proceed with a capacity mechanism, which is expected to be a capacity market. Energinet is not formally involved in the task-force, but supports the Danish Energy Agency, who provides the information and data etc. to the task-force.
 - Following a decision by the Danish government, the pre-notification process with the EC is expected to be initiated around March 2026.
 - The overall timeline is that Energinet should submit application to NRA around summer 2026, and that a first auction could be hold in 2029.



The NRAA 2025 was published on November 14th, 2025.

Find the link below (in Danish):
[Energinet anbefaler: Fokus på robusthed, europæisk samarbejde og sikkerhed](#)

Latvia

- No adequacy issues were experienced during last winter
- The installed generation capacity in Latvia is almost three times higher than winter peak demand

Installed Capacity 3860 MW vs Peak Demand 1263 MW

- No big risk for this winter's seasonal adequacy and no critical weeks defined
- All the cross-border interconnections must be in operation and contribute in case of adequacy risk
- Starting from September 2028 Riga CHP-2 power plant (884 MW) could have some constraints in electricity production – reduced base generation



Lithuania

- No adequacy issues were experienced last winter. Imports contributed significantly to adequacy in Lithuania.
- Some adequacy issues were observed for the upcoming winter. However, the TSO does not see this as big risk for this winter's seasonal adequacy and no downward regulation issues are expected for the coming season.
- For mid-term perspective ERAA 2024 highlight adequacy concerns in Lithuania. National adequacy assessment, supplementing ERAA, is underway. Results expected by mid-2026 will guide future decisions on system reliability and capacity planning.

In early February 2025, Lithuania, along with other Baltic countries, synchronized with continental Europe after departing from the BRELL power grid.



Source: [ENTSO-E](https://www.entsoe.eu)

Poland

- In Poland, the Capacity Remuneration Mechanism was established in 2018 for the period from 2021 to 2030. Thanks to this, security of supply has improved significantly.
- However, implementation of IEM regulation's CO2 emissions limit, caused coal-fired units to be excluded from this CRM system from 1 July 2025. Many of these units could be decommissioned from January 2026, which, combined with the commissioning rate of new gas-fired capacity, would threaten the security of supply.
- Therefore, after performing detailed analyses (NRAA), Poland has successfully applied for the derogation and coal-fired units are allowed to participate in annual auctions within the CRM up to 2028 if there will be a capacity gap in those years. Auction for 2028 will be held in Q3 2027.
- Starting from 2029, these units will operate on the basis of energy market principles, so it is possible that some of them, especially the worst-efficient ones, will be decommissioned. Possible adequacy problems will depend on the scale of the decommissioning and commissioning of new units.
- The ERAA analyses carried out so far, which assess the economic viability of the units, show that there is capacity gap and Poland does not meet the reliability standard from 2028 onwards.

Germany

Upcoming winter

Out-of-market generation capacity

Germany has around 10.3 GW of reserve capacity outside the market. At 7.9 GW, the grid reserve accounts for a large fraction of all reserves. It is primarily used to manage grid congestions.

Load

The forecasted national gross electricity consumption was estimated at 518 TWh, which corresponds to a stagnation compared to the same period last year.

Conclusion

No resource adequacy concerns are foreseen for winter 2025/26.

Mid-term (2026-2030)

- 10.6 GW expected to be decommissioned within the 2026-2030 period, mainly due to the coal phase-out
- For compensation, a timely implementation of announced capacity tenders in the near future is required
- Despite delays in electrification ramp-up, long term targets (post 2030) still foresee strong electrification
- The ERAA's Economic Viability Assessment (EVA) anticipates endogenous early decommissioning of coal power plants in the coming years, leading to an increase in LOLE (Loss of Load Expectation)

Finland

Upcoming winter

- Increased transmission capacity will improve electricity availability compared to previous winter
 - Aurora line was commissioned in November 2025 and increases transmission capacity by 700 MW from Northern Sweden
 - 300 MW of CHP has been decommissioned
 - Wind power capacity has increased by 1200 MW
 - There will not be scheduled maintenance of Olkiluoto 3 nuclear power plant (1600 MW) in March as in previous years

Mid-term (2026-2030)

- Electricity adequacy is expected to deteriorate in Finland towards the end of the 2020s based on ERAA and Fingrid's internal assessments
 - The main reason is the exit of fossil fuel-based generation capacity from the market due to economic unviability
 - Growth in consumption and uncertainty in demand-side flexibility also reduce visibility into electricity adequacy
 - Challenges are particularly pronounced during prolonged cold and windless periods, where the “few hours” average over weather years can mean dozens of hours of electricity shortage in the coldest winters
 - Ongoing discussions for a Non-fossil flexibility support mechanism which is pending the outcome of an interim Flexibility Needs Assessment (FNA)



elering

ENERGINET



Litgrid

PSE

FINGRID

Statnett



SVENSKA
KRAFTNÄT



| Elia Group

Thank you! Any questions?

Questions can also be sent to jutta.kallanto@fingrid.fi
and they will be forwarded to other TSOs if needed.

