Statnett

Long-term Market Analysis 2026-2060

Executive summary - October 2026

Translated from Norwegian with AI assistance.



Executive summary Europe

➢ **The energy transition in Europe continues**

Europe broadly supports replacing imported fossil fuels with domestic low-emission energy. War and competitiveness concerns have strengthened support for renewables, nuclear power and electrification. Hydrogen and other costly measures are likely to face delays.

➢ **Lower generation emissions and rising electricity demand**

New wind and solar generation will replace most of the gas and coal generation in the coming years, making Europe's power system largely emission-free. Gas will still balance the system when wind and solar output is low. From 2035, gas supplies only 5-10% of annual generation but sets prices in around 40% of hours in the Base scenario. Electrification will continue throughout the analysis period. Together with data centres, it raises European electricity demand by around 80% by 2060 in the Base scenario.

➢ **Renewables and batteries increase the need for lasting support**

Falling costs and strong demand drive battery deployment. Together with wind, solar and nuclear power, batteries lower operating costs and electricity prices for much of the time, increasing the need for financial support for new generation and flexibility.

➢ **Governments take a greater role in market and system development**

EU and national governments consider market-led development too slow to deliver energy independence, low emissions and cheaper energy. Geopolitical tensions strengthens the case for state intervention through requirements, emissions trading and financial support for renewables, nuclear power, batteries and firm capacity.

➢ **Lower average power prices with a wide range of outcomes**

Average prices fall from current levels in the Base, Low Price and High Price scenarios as renewables, batteries and nuclear power increase hours with near-zero prices. From 2035, Base prices average around €50/MWh in continental Europe and the UK. The other scenarios span €35-80/MWh. Key uncertainties are costs, the extent to which support schemes push prices below the cost of new generation, and gas and CO2 prices.

➢ **High short-term price volatility and large seasonal differences**

Prices vary sharply in the short term across Europe. High solar output makes summer prices much lower than winter prices. Batteries and other flexibility partly reduce short-term volatility but increase seasonal differences.

Executive summary Norway

➢ **Moderate growth in Norwegian generation is most likely**

Widespread opposition limits the scope for new onshore wind in Norway. Even with substantial support, offshore wind projects off Utsira and in the southern North Sea remain uncertain. Further offshore wind development will likely need lasting financial support, as would nuclear power. Without new political decisions on support, generation growth is likely to remain low. High growth is possible but will take time.

➢ **Norwegian electricity demand grows less than expected**

Transport electrification and data centres drive demand growth. Industry, shipping and aviation offer further growth as they shift to emission-free energy, alongside more data centres. Industrial uncertainty and costly hydrogen will likely limit growth. Limited new generation and higher prices than abroad may also constrain demand. Our Norwegian scenarios show growth of 20-80 TWh over the analysis period, down from 50-120 TWh in the previous analysis.

Statnett has reserved grid capacity for about 50 TWh of new demand. Much could materialise quickly, but several factors are likely to spread growth over time, even in the high scenario.

➢ **A weaker energy balance is likely - but a surplus requires more control**

Demand will outgrow generation in the coming years, weakening Norway's energy balance. Securing a lasting surplus will likely require greater acceptance of onshore wind, support for offshore wind or nuclear power, and tighter control of demand growth.

➢ **A lasting energy deficit is a possible scenario**

One main Norwegian scenario shows a 20 TWh energy deficit from 2035, raising prices above neighbouring countries. Low prices abroad may limit this disadvantage. If Norway retains lower grid tariffs, the scenario could be economically sustainable. It also increases the risk of energy scarcity in dry years.

➢ **A capacity surplus requires more hydropower capacity**

Norway's large hydropower fleet currently provides a capacity surplus. Planned hydropower capacity investments will likely cover much of the increase in peak demand. However, peak demand could still grow faster than available capacity, leaving Norway with a capacity deficit.

Executive summary Norway

➢ **Lower, more convergent average prices, but a wide range of outcomes**

In the first five years, average prices in southern and central Norway fall to €40-50/MWh with medium Norwegian demand and generation and European developments as in the Base scenario. Lower prices abroad more than offset the price impact of a weaker Norwegian energy balance. Rising demand lifts northern prices. More grid capacity also narrows regional average price differences.

Prices abroad and Norway's energy balance are the main uncertainties. Updated scenarios give a range of €30-70/MWh from 2030.

➢ **The analysis confirms the need to reinforce transmission corridors**

Priority corridor reinforcements remain necessary under both high and low Norwegian demand and generation growth. They narrow regional price differences, deliver socio-economic benefits and are largely needed regardless of reinvestment requirements.

➢ **Power trade continues to deliver high benefits and lower tariffs**

Short-term price volatility abroad and long-term, inflow-driven variations in Norway create large price differences and socio-economic gains from cross-border trade. In the Base scenario, congestion revenues to 2060 have a net present value of around NOK 150 billion.

➢ **Highly uncertain demand for grid connection capacity**

High demand growth requires extensive local grid development, including substations, transformers and regional lines to connect new demand. Low growth implies far smaller needs. The location of demand growth is also highly uncertain. Investment in local connection capacity must therefore adjust to actual demand growth over time.

➢ **Changes in reservations, queues and existing demand are likely**

Many planned demand and generation projects are likely to drop out and give way to others. Energy savings, competition and changing markets will also reduce some existing demand. This is more likely with limited new generation and higher Norwegian prices than abroad.

➢ **Balanced demand and generation growth is most efficient**

The analysis confirms that the target grid can accommodate a doubling of Norway's power system. Demand and generation must grow broadly in step. Norway can manage an energy deficit, but market conditions make more than 20-25 TWh in a normal year difficult to envisage. A larger deficit would increase vulnerability in one of the world's most electrified societies.

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