

NORDIC UTILITIES SUPPORTED BY SUSTAINABLE POWER PRODUCTION AND STRONG OWNERSHIP

ANALYST

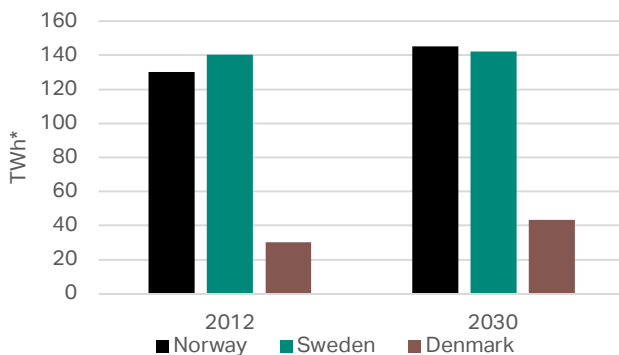
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Nordic Credit Rating views the overall credit outlook for the Nordic utility sector as stable. Long-term structural demand for power, a focus on renewable energy and sustainability, improved credit metrics and strong ownership are common factors among the region's utilities. However, the sector remains fragmented in terms of operational focus and financial performance both within and across the Nordic countries.

LONG-TERM TRENDS SUPPORTIVE

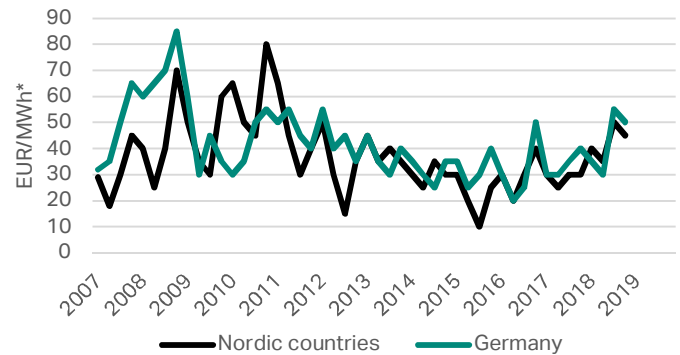
We expect the long-term demand for electric power to increase. This view is supported by continued economic growth, rising populations, higher global energy prices, and increasing electrification. Despite an increasing focus on energy efficiency, energy output is likely to grow due to electrification of transport and, perhaps more significantly, growth of data usage and data centres. Forecasts, however, diverge across the region. While the Swedish Energy Agency expects domestic demand to increase by low single-digit percentage figures through 2030, its Danish counterpart expects an increase of about 50% over the same period driven by transport electrification and data centres.

Figure 1. Power demand forecast



Source: Norwegian, Swedish and Danish energy agencies
*TWh: Terawatt hours

Figure 2. German and Nordic power prices



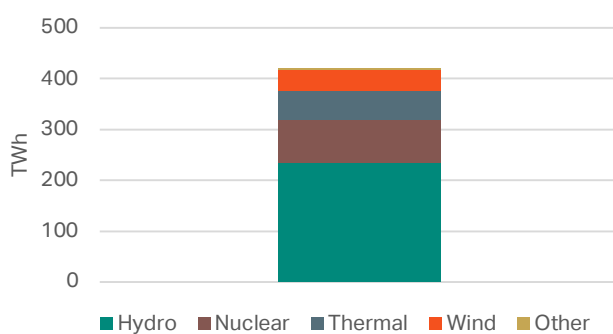
Source: Statnett, Eurostat, market statistics
*MWh: Megawatt hours

In a shorter-term perspective, the entire European power sector has benefited from higher power prices in recent years following a rise in coal, gas and carbon dioxide emission prices. The short-term supply situation seems relatively stable, while the continued long-term build out of wind and other renewable capacity could lead to oversupply and pressure on future power prices.

RENEWABLE PRODUCTION CAPACITY SUPPORTS THE NORDIC POWER SECTOR

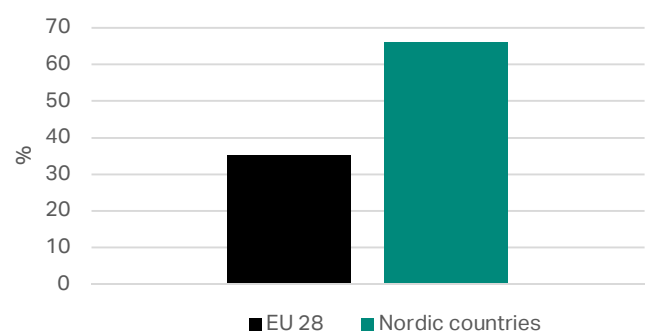
The Nordic utility sector is well placed from a sustainable perspective with more than 60% of total generation coming from renewable sources such as wind and hydro compared with 30-40% in the EU area. Although there are large differences between the individual Nordic countries in terms of energy sources, we believe that the regional sector as a whole has an advantage over continental Europe in relation to sustainable power production. As the price of carbon dioxide emissions and fossil energy in Europe and globally is likely to continue to rise, demand for renewable energy should increase. As the Nordic and European markets become increasingly interconnected, EU demand for excess renewable capacity (especially Norwegian hydro) is likely to support the Nordic power sector.

Figure 3. Nordic power generation mix



Source: International Energy Agency (IEA), Nordic Council of Ministers

Figure 4. Renewables as a share of total generation



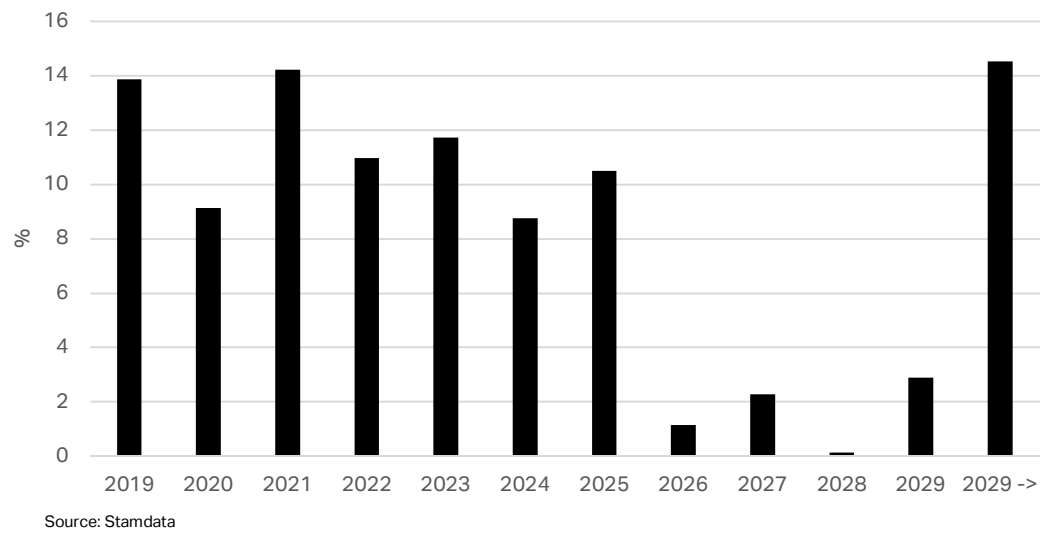
Source: IEA, Nordic Council of Ministers, Eurostat

Renewable energy generation is virtually certain to increase, and power prices could become increasingly volatile as both wind and hydro power production are typically more volatile than traditional production methods due to seasonal and weather-related factors. There is also a risk that future excess wind capacity will structurally lower electricity prices. Increased use of renewable sources will demand more flexibility from power producers. Increased interconnection could, however, partly offset swings in demand as excess capacity could be exported elsewhere in Europe to a greater degree.

FUNDING CONDITIONS STABLE

The utility sector is one of the largest issuers in the Nordic bond markets. Appetite for utility bonds is typically strong as regional investors often seek diversification into non-financial and non-property related sectors. In line with the overall regional bond market, the Nordic utility sector saw credit spreads widen during the second half of 2018, with smaller issuers' spreads typically widening more than those of larger issuers. However due to increasing power prices, most regional utility issuers have managed to improve their credit metrics over the past two years. Regional bond maturities are relatively evenly spread throughout the next 6-7 years. Moreover, quite a few of the Swedish utilities also fund themselves directly through their owners by borrowing from local municipalities. Accordingly, we believe that the current funding and liquidity situation in the sector is good.

Figure 5. Maturities of Nordic utility bonds (as a % of total outstanding), 31 Mar. 2019



NORWEGIAN UTILITIES HAVE BENEFITED MORE FROM RISING POWER PRICES

We have examined a sample of ten Swedish and ten Norwegian small and mid-size utilities (see Figure 9). The Norwegian utilities are typically more vertically integrated, operating in all parts of the value chain (generation, network, supply), with an increasing share of other services such as broadband. The Swedish utilities in the sample typically have a much smaller share of generation or none at all, but often a relatively large share of other operations, such as district heating.

Figure 6. Debt/EBITDA (average from sample)

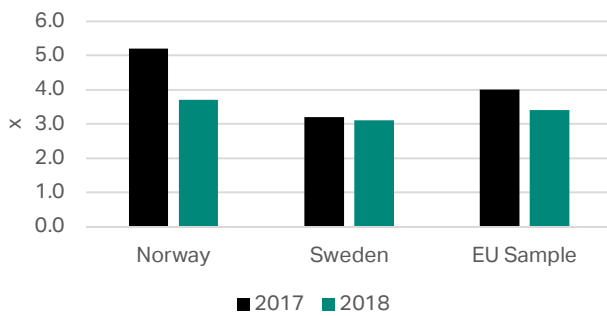
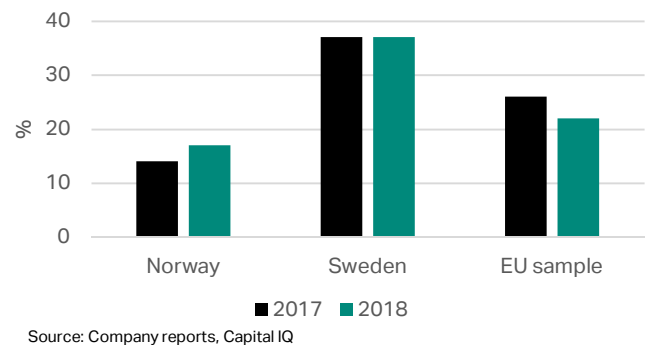
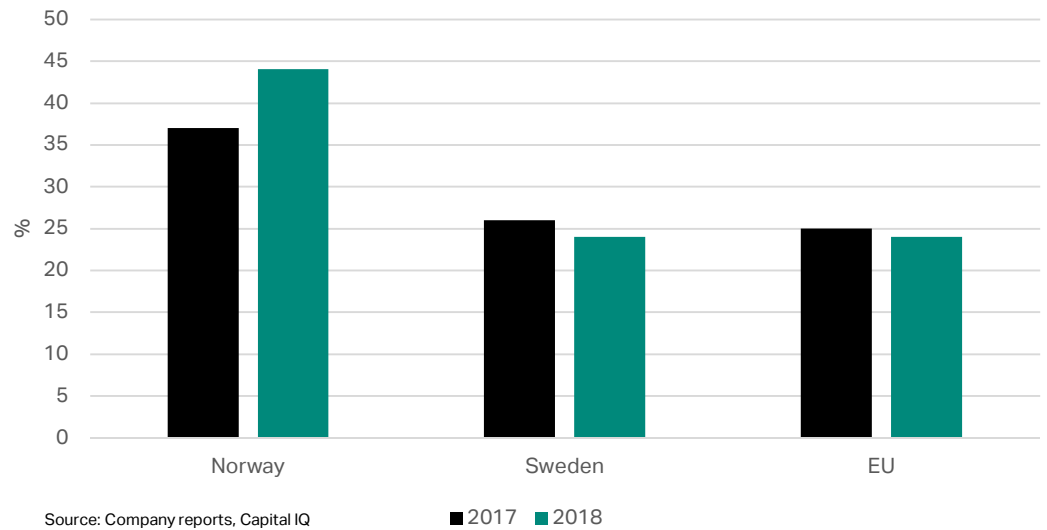


Figure 7. FFO/debt (average from sample)



The smaller Norwegian power companies have historically operated with higher leverage than their Swedish peers and many other industrial sectors. Their operating margins are, however, significantly better than those of our broader European sample (40 of the largest European utilities by market capitalisation) and they have managed to improve their credit metrics much more than their Nordic and European counterparts. The credit metrics in our sample are unadjusted, as we typically adjust for cash, pensions, operating leases and, occasionally, one-offs. Not all companies have reported their figures for the 2018 financial year, however the overall trend is clear.

Figure 8. EBITDA margins (average from sample)



SUPPORTIVE OWNERS STRENGTHEN CREDITWORTHINESS

Like the companies in our sample, the wider Nordic utility sector enjoys supportive ownership. Ownership in Norway is typically broader than in other regional countries and often several counties and/or municipalities share ownership unlike Sweden where often a sole municipality or city is the majority owner. Although support or guarantees are not always explicit, many owners have historically exercised direct or indirect support through equity injections, lowered or cancelled dividend payments or funding through shareholder loans.

Figure 9. Sample group and main owners

SWEDEN	MAIN OWNERS	NORWAY	MAIN OWNERS
Göteborg Energi	City of Gothenburg	Troms Kraft	Troms County, Tromsø municipality
Jämtkraft	Östersund municipality	Nordkraft	Narvik municipality, Jämtkraft/Hålogaland Kraft/Troms Kraft
Telge Kraft	Södertälje municipality	Akershus Energi	Akershus County
Skellefteå Kraft	Skellefteå municipality	Eidsiva Energi	Hedemark County, Oppland County + 27 municipalities
Mälare Energi Kraftringen	City of Västerås Lund, Eslöv, Lomma municipalities	Østfold Energi	Østfold County + 13 municipalities
Mölndal Energi	City of Mölndal	Fredrikstad Energi	Fredrikstad municipality + Hafslund
Öresundskraft	Helsingborg municipality	Helgeland Kraft	14 municipalities
Stockholm Exergi	Fortum, City of Stockholm	Ringerikskraft	Ringerike municipality, KLP, Hole municipality
Tekniska verken	City of Linköping	Tafjord Kraft	Ålesund municipality, BKK.
		Sogn og Fjordane Energi	Sogn & Fjordane County + BKK + 7 municipalities

Source: Company reports

BKK: Bergenshalvøens Kommunale Kraftselskap, KLP: Kommunal Landspensjonskasse

OVERALL SECTOR OUTLOOK STABLE

Our overall view of the outlook for the Nordic utility sector is stable. We see a majority of issuers' credit profiles in investment grade territory (bbb- and above). Limited size and diversification, as well as somewhat weaker credit metrics in comparison with many other industrial sectors, are typically offset by strong local and regional market positions (including local monopolies), as well as support from owners. Continued large investments, consolidation and potential regulatory intervention are all factors that could affect the creditworthiness of this highly fragmented sector.

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