

Europe's energy shock: winners & losers

Price spike puts energy transition, security trade-offs in spotlight



Scope
Ratings

Energy price spikes are more complex phenomena than headlines pretend, with short- and medium-term winners and losers. Europe's autumn energy crisis is no different. Some traders, providers of back-up gas storage and reserve generation capacity and generators with a significant unhedged outright capacity are benefiting now. Well-placed power generators and integrated suppliers will also benefit, though longer term. Among the losers, unhedged suppliers with little price flexibility and consumers.

In the long run, lessons learnt from this energy squeeze should benefit Europe's energy sector more broadly - if policy makers heed them by working toward a better balance between affordable energy, energy security and sustainable, environmentally friendly economic growth. The crisis has again shown how sensitive the sector is to regulation and politics.

Europe's politicians have set a clear path toward decarbonisation, with the ultimate decommissioning of coal and gas-fired power plants in many markets. However, given today's structure of the region's energy system, it is nearly impossible to guarantee uninterrupted supplies of electricity unless better energy backups are put in place. An energy transition which focuses on relentless expansion of intermittent sources of renewable energy and full decommissioning of reliable thermal and nuclear power-generation capacity only undermines security of supply, leading to volatile energy prices

Solutions to the problem exist. Better energy storage – notably of natural gas – improved power-grid interlinkages across Europe, more reliable renewables such as offshore wind, better incentives for power generators to maintain back-up capacity and a rethink of the role of nuclear power are all components of a more sustainable European energy system. So too is better priced carbon dioxide to offer the required investment incentives for green energy projects.

In the table below, we set out the European energy sectors winners and losers so far.

Winners	Losers
Generators (1) with a low-carbon power mix, significant exposure to unhedged outright power generation, leading to windfall profits subject to regulatory caps	Generators (1) with unfavourable power generation mixes reliant on coal- and gas-fuelled fleets of power stations
Generators (2) with significant reserve capacity to meet impromptu shortages, take advantage of high spot prices and providers of power purchasing agreements (PPAs) to creditworthy off-takers	Generators (2) which have offered PPAs with inadequate volume, performance and energy-balancing hedges
Generators (3) with comprehensive hedging for input commodities, such as CO2 certificates and gas from storage, which protects profit margins	Generators (3) for which prices are capped by the regulator for an extended time period
Suppliers (1) with exposure to creditworthy industrial customers with flexible back-to-back hedging strategy or variable pricing based on commodity prices	Suppliers: with large exposure to markets with limited pricing flexibility and customers with poor credit quality
Suppliers (2) within large integrated utilities are well placed take market share from defunct or struggling smaller rivals lacking price buffers	
Traders which can take advantage from increased volatility to widen margins through more lucrative option pricing	
Power-intensive industrial customers , which can maintain output due to sufficient hedging or limited flexibility to pass on increased costs	End-consumers such as households and power-intensive industry without sufficient hedging of energy procurement or lack of pricing power
Gas explorers which are not fully hedged	

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[Renewables-based PPAs transform sector](#), Oct 2019

[Germany's grid operators face growing multibillion-euro investment challenge](#), Mar 2019

[Commodity Rebound – Past the Trough](#), Nov 2017

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Bloomberg: RESP SCOP

Europe electricity, gas prices rocket

Supply and demand pressure; rising CO2 prices play role

Price spike exposes poorly hedged power suppliers

Favourable conditions for utilities...

... but government intervention on the rise

Coincidence of multiple factors send Europe's power prices soaring

Energy prices across much of Europe have hit unprecedented highs due to a coincidence of multiple factors (See **Figures 7-10 in the Annex**).

In a nutshell, higher commodity prices – primarily natural gas, but also coal and CO2 – have combined with poor weather-related electricity output from Europe's wind farms and other unforeseen disruptions to power generation. Behind the gas squeeze are lower supplies of liquefied natural gas from Asia and piped gas from Russia coupled with a run-down in gas stocks in Europe after the harsh winter 2020-21.

A stagnation in gas storage capacity over recent years has also played its part. So too has a robust post-lockdown global economic recovery. High CO2 prices – currently at record levels above EUR60 a tonne – have aggravated the tight gas market as they have encouraged utilities to switch to gas- from coal-fuelled power generation.

We have seven insights for Europe's energy utilities sector.

1. Wrong-footed power suppliers face profit squeeze

The energy-sector players facing the most pressure in the current tight energy market are those electricity and gas suppliers which offered bargain prices, aimed at gaining market share, without sufficient hedging on the procurement side and without sufficient flexibility on the supply side to protect them against operating losses.

Regulation can make matters worse. In the UK, the regulator Ofgem caps the gas prices suppliers can charge but also requires them to maintain deliveries. Operating under such constraints tests smaller brands' financial health which creates opportunities for others.

Octopus Energy has acquired nearly 600,000 customers from Avro Energy, the biggest victim to date of the UK's energy crisis. Avro followed in the footsteps of Hub Energy, Green, MoneyPlus Energy, People's Energy, PFP Energy and Utility Point. And other smaller independent energy suppliers such as Bulb Energy remain at risk.

At the same time, the supplier units of large integrated and diversified utility incumbents but also oil&gas majors are expected to benefit from such market consolidation, particularly in those markets with high churn rates in power supply and very thin margins for energy suppliers. British Gas, owned by utility Centrica PLC, and Electricité de France SA's UK operation have also picked up customers in the market shake-out. While the squeeze of energy suppliers is most apparent in the UK – as this market is the most competitive in Europe for energy suppliers – we expect a similar shake-out of smaller suppliers in other European markets.

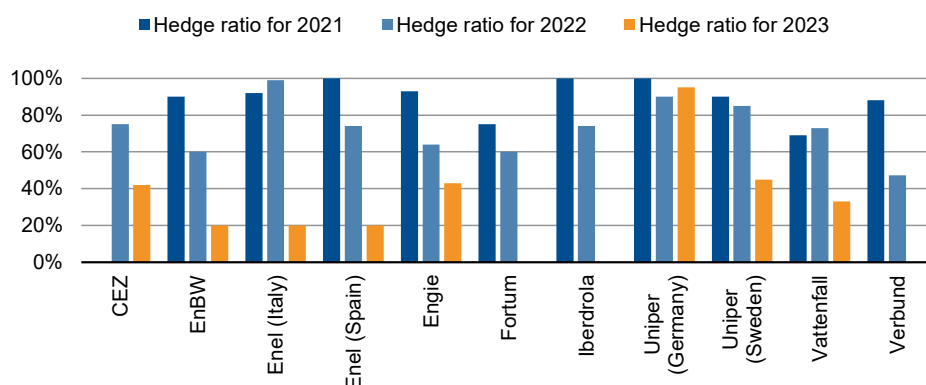
2. Higher prices will take time to feed through to generators' cash flow

Increased commodity prices which translate into higher wholesale prices are generally good news for utilities as they can usually pass on higher procurement costs to customers. On the one hand, higher prices for commodities improve the absolute level of net cash flow earned in the energy supply business when the supply margin can be upheld. On the other, increased wholesale prices widen the earnable margin for electricity generators which have capacity with the lowest marginal cost in the merit order which runs from hydro, nuclear, unregulated renewables to gas and coal.

There is a caveat. This assumes no government intervention. However, governments in Europe are increasingly nervous about the near-term political fallout from rising energy prices. Spain has capped windfall profits for certain generation assets. France has announced a winter-long freeze in regulated consumer gas prices and effectively capped an increase in electricity prices at 4%.

Leaving government intervention aside, most utilities lock in prices and spreads for a large portion of their power generation output for rolling 12- to 24-month periods. In today's market, that ensures only modest benefit for their EBITDA and cash flow this year and to a large extent 2022 as well (**Figure 1**). However, as we believe that wholesale electricity prices will remain higher for some time, given the limited short-term solutions for reducing commodities prices and increased supply-demand pressure from the continued decommissioning of reliable generation capacity, we will expect cash flow upside for power generations in 2023 and beyond.

Figure 1: Percentage of hedged generation volume (selected utilities, H1 2021)



Source: company presentations, Scope

EU considers facilitating government responses to crisis

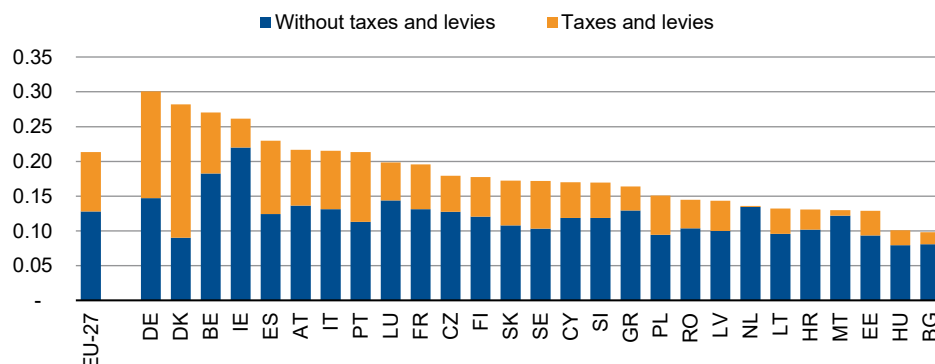
3. Higher gas, electricity bills shine spotlight on energy policy, regulation

Soaring energy prices in Europe underscore the sector's exposure to regulation and political intervention which help explain why market conditions are so tight in the first place. That in turn is leading to more political intervention to soften the impact on customers, particularly households and power-intensive industrials, and to limit windfall gains for some generators.

If government starts to impose caps on prices or limit profits for some generation capacity (hydro, nuclear) is certainly not good news for utilities' power supply divisions while it also limits the cash-flow upside in generation.

- EU is considering help for governments to respond quickly to price spikes without breaching EU rules, including tweaking value-added tax (VAT) and excise duties or using direct support to shield consumers from high costs (considering that duties can make up a significant share of end-consumers' prices in many markets (**Figure 2**).

Figure 2: Electricity prices for household consumers, second half 2020 (EUR per kWh)



Source: Eurostat, Scope

- France has frozen gas prices for the winter, capped an increase in electricity prices, and plans a special EUR 100 “energy cheque” to as many as 5.8 million households before year end to help them cope with rising energy prices
- Greece's government is setting up a fund to help subsidising households' energy bills
- Spain has passed an emergency package including a redirection of windfall profits for power generators (including operators of subsidy-free large-scale renewables) to consumers, a significant cut of energy taxes and a cuts of VAT on electricity bills for the next few months
- Italy's government has eliminated system costs – an extra charge to energy bills – and will provide energy bonuses to households and small enterprises worth around EUR 3bn.
- UK: the government is studying offering loans to energy companies that take on customers from firms which go bust due to soaring wholesale natural gas prices

The above are just examples of ad-hoc political reactions and underpin the sector's inherent political and regulatory risk exposure. We all know that the affordability of energy is a popular theme particularly ahead of general elections (France in April 2022, Italy in May 2023, Spain in Dec 2023). Consequently, regulatory intervention beyond the above measures that we expect to have only modest and temporary negative effects for utilities, though they could well restrict cash flow upside for generators.

4. Energy market volatility looks set to stay for a while in Europe

Power prices could remain at the current record levels for some time, depending on weather (temperature, wind yields and hydrology) and the speed at which Europe can replenish gas inventories. We expect prices to be remain volatile, with swings from low or even negative hourly prices, when wind generation is high, to very high prices when wind speeds are low and demand is high.

The pace of ramping up renewables capacity and interconnectors in Europe will not be fast enough to offset the loss of conventional capacity in major markets from the phasing out of nuclear, coal and gas capacity. This will further tighten the supply-demand balance in the mid-term, providing extra impetus for price volatility. Such volatility degrades the overall market environment for energy suppliers and will feed calls for flexible pricing clauses, but it also improves the environment for power traders which have chances to widen achievable margins.

5. Is it time to recalibrate Europe's energy policy?

Europe's energy sector is torn between politics and physics.

Europe's politicians have set a clear path toward decarbonisation, with the ultimate decommissioning of coal and gas-fired power plants in many markets.

However, given today's structure of the region's energy system, it is nearly impossible to guarantee uninterrupted supplies of electricity unless better energy backups are put in place and supply tightens and becomes less predictable. At the same time of the phase-out of reliable generation sources, the challenge of higher demand needs to be met from the execution of a mobility transition, a heating transition and the growing data and thus power intensity of the developed world.

An energy transition which focuses on relentless expansion of intermittent sources of renewable energy and decommissioning of reliable thermal and nuclear power-generation capacity only undermines security of supply, leading to volatile energy prices.

Higher, more volatile prices
could last for some time

More profound thinking about
energy transition required

Market vulnerable to small changes in supply, demand

Solutions to the problem exist. Better energy storage – notably of natural gas – improved power-grid interlinkages across Europe, better incentives for power generators to maintain back-up capacity and a rethink of the role of nuclear power are all components of a more sustainable European energy system. So too is a better price of carbon dioxide to offer the required investment incentives for green energy projects. Offshore wind capacities which can offer large-scale solutions with less production swings than onshore wind assets as well as the accompanying grid connections should be part of the solution.

Without such changes, even small disruptions such as the fire which disrupted the electricity interconnector between France and UK can cause severe market disruption. It also leads to the bizarre circumstances in which Germany, still committed to phasing out nuclear power, had to cover H1 electricity demand with electricity generated by its remaining coal-fired power plants because of low wind speeds, reducing electricity output from the wind farms in which the country has invested heavily.

Germany and other countries may have to consider bringing mothballed power plants back on stream to cover demand, at least as back-up power plants. Hence, we expect politicians will also need to rethink capacity-remuneration schemes for the power utilities to provide the incentives for investment in back-up supplies for those times when renewable energy supply falls short of demand.

A cold 2021-22 winter would further expose storage problem

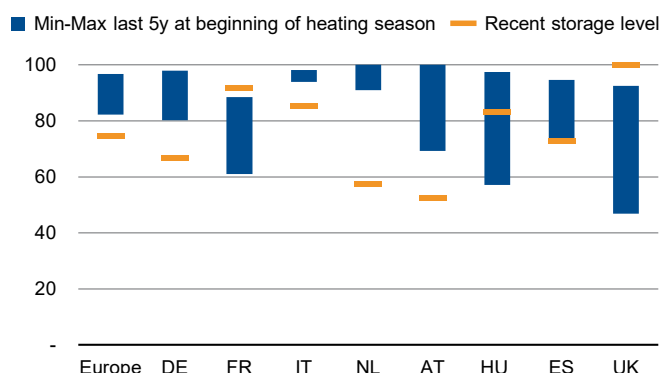
6. Fixing Europe's gas-storage problem

To date, there is little integration of gas storage in Europe, with some markets better equipped than others (Figures 3, 4, 5).

A cold winter in 2021-22 might leading to supply problems in countries such as Austria, Germany and the Netherlands.

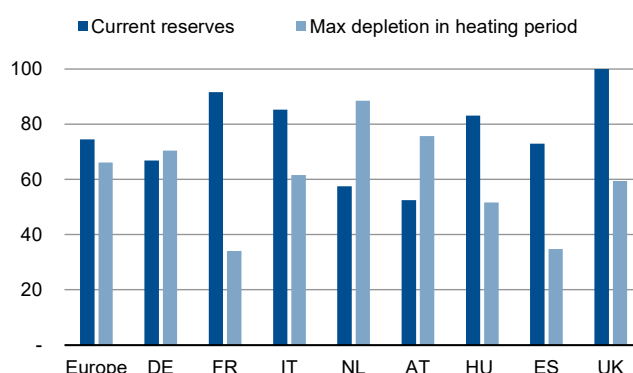
We expect renewed debate about the incentives needed to encourage investment in gas storage capacity. Investment has stagnated over the past five years while investment focus was rather on increasing pipeline import capacity in recent years such as the Trans-Anatolian, Turk Stream, the Trans Adriatic and NordStream2 pipelines – and the merits or reliance on LNG imports as well as the dependency on Russian gas imports.

Figure 3: Current storage level well below historical levels in major markets in %



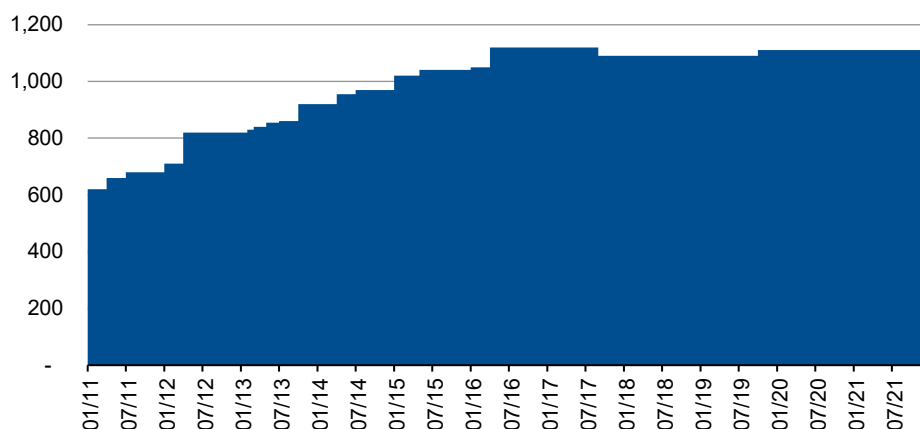
Source: AGSI+ Aggregated Gas Storage Inventory, Scope Ratings

Figure 4: Current storage levels compared to max storage depletion during heating season (Sep-Mar) in %



Source: AGSI+ Aggregated Gas Storage Inventory, Scope Ratings

Figure 5: Stalled growth in European gas storage (TWh)



Source: AGSI+ Aggregated Gas Storage Inventory, Scope Ratings

7. Volatile prices to boost corporate PPAs for unregulated renewables

Catalyst for more corporate PPAs

Sustainedly high and less predictable wholesale prices should provide stimulus to the signing of bilateral power purchase agreements (PPAs) between operators of renewable energy power plants and off-takers such as industrial customers but also other utilities.

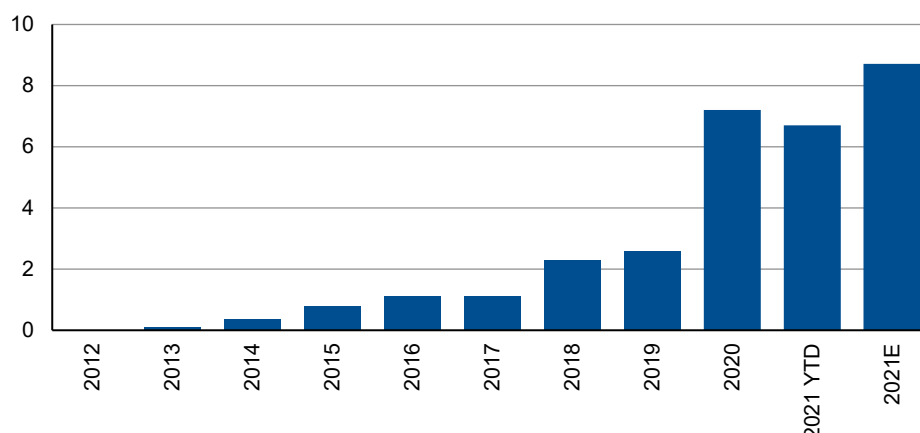
Higher prices and rising volatility should convince more off-takers to hedge against unpredictable electricity prices given PPAs can be agreed for longer periods than typically available in the open market.

PPAs offer way for renewable energy projects to cover costs

PPAs for renewable energy power plant projects can be agreed at compelling price conditions for the off-taker – below achievable market prices – still attractive for the generator to cover fixed costs generate a satisfactory IRR.

We expect that this will boost the financing and bankability of renewables projects of more than 8.5 GWp this year for Europe's industrial off-takers. However, the surge in the number of bilateral PPAs will leave less business for power-sector intermediaries.

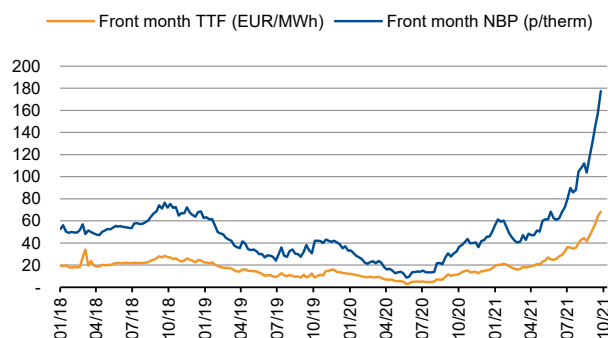
Figure 6: Corporate PPAs for renewable capacities in Europe (in GW)



Source: BNEF, Scope Ratings expectations

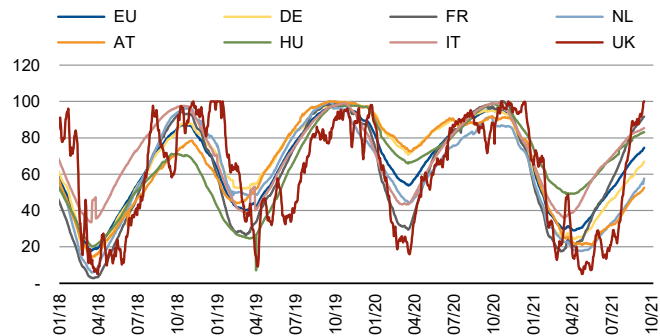
Annex I: Europe's energy commodity prices surge to 10-year highs bolstered by unprecedented gas prices

Figure 7: European benchmark gas prices



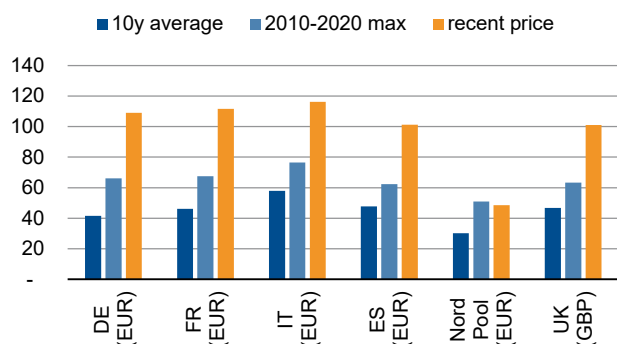
Source: Bloomberg, Scope Ratings

Figure 8: Gas storage in major markets in %



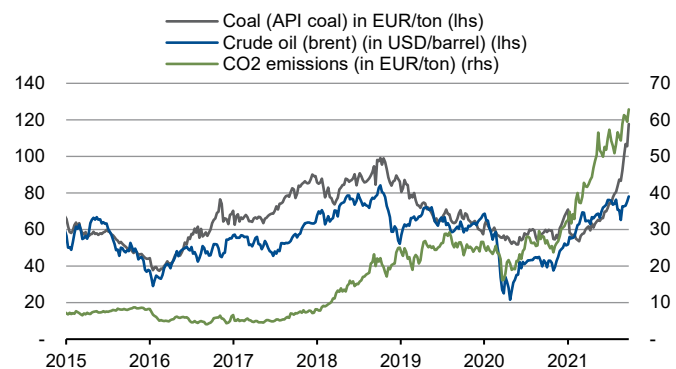
Source: AGSI+ Aggregated Gas Storage Inventory, Scope Ratings

Figure 9: One-year baseload forwards in EUR/MWh or GBP/MWh



Source: Bloomberg, Scope Ratings

Figure 10: Surging input prices (coal, oil, CO2) for power generation



Source: Bloomberg, Scope Ratings

Annex II: Scope's rating coverage on European utilities*

Utility	Rating
2i Rete Gas SpA	Rating for subscribers on ScopeOne
A2A SpA	Rating for subscribers on ScopeOne
ACEA SpA	Rating for subscribers on ScopeOne
Agder Energi AS	BBB+/Under review for a developing outcome
Akershus Energi AS	BBB/Negative
Alliander NV	Rating for subscribers on ScopeOne
ALTEO ENERGIASZOLGALTATO NYRT	BB+/Stable
BKK AS	BBB+/Stable
CEZ AS	Rating for subscribers on ScopeOne
Eesti Energia AS	Rating for subscribers on ScopeOne
Eidsiva Energi AS	BBB+/Stable
Électricité de France SA	Rating for subscribers on ScopeOne
Elering AS	Rating for subscribers on ScopeOne
Elia Group SA	Rating for subscribers on ScopeOne
Encavis AG	BBB-/Stable
Enel SpA	Rating for subscribers on ScopeOne
Enexis Holding NV	Rating for subscribers on ScopeOne
Engie SA	Rating for subscribers on ScopeOne
Fingrid Oyj	Rating for subscribers on ScopeOne
Fortum Oyj	Rating for subscribers on ScopeOne
Glitre Energi AS	BBB/Under review for a developing outcome
Green Network SpA	BBB-/Stable
Greenergy Holding Vagyonkezelő Zrt	B+/Stable
Hafslund E-CO AS	BBB+/Stable
Hera SpA	Rating for subscribers on ScopeOne
Iberdrola SA	Rating for subscribers on ScopeOne
Iren SpA	Rating for subscribers on ScopeOne
Lyse AS	BBB+/Stable
Ørsted A/S	Rating for subscribers on ScopeOne
Réseau de Transport d'Électricité SA	Rating for subscribers on ScopeOne
Snam SpA	Rating for subscribers on ScopeOne
Statkraft AS	Rating for subscribers on ScopeOne
Statnett SF	Rating for subscribers on ScopeOne
Tensio AS	A-/Stable
TenneT Holding BV	Rating for subscribers on ScopeOne
Teréga SA	Rating for subscribers on ScopeOne
TERNA RETE ELETTRICA NAZIONALE SPA	A-/Stable
Uniper SE	BBB+/Stable
Vattenfall AB	Rating for subscribers on ScopeOne

* private ratings not included



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