



European power and utilities report

KPMG Global Energy Institute

—

4Q19



Contents

	Page
Price and margins	
— Overview	3
— Electricity price evolution	4
— Fuel price evolution	8
— Coal and Carbon price evolution	9
— Clean dark and spark spreads	10
Regulatory news	
— Regulatory and economics news overview	12
— Links to new Key Regulations	15
Capital markets	
— Overview	28
— Share price evolution: Overview	29
— Share price evolution: Individual stocks	31
— Relative valuation per company	33
— Leverage and credit ratings	34
M&A	
— Overview	35
— Top 15 M&A operations, by deal value	36



Price and margins overview

Electricity prices

Electricity prices in Germany and Spain continued to increase till the last week of October, primarily due to higher than expected colder weather and low wind generation, however, prices declined in the first week of November on account of higher renewable energy generation. Electricity prices for the UK, France, Germany and Spain peaked to 10 month high in the second and third week of November due to unstable renewable energy production and lower temperatures forecast. Prices declined in December resulting from high renewable output and low demand.

Oil prices

The spot price of Brent crude oil averaged US\$66 per barrel in December 2019, up US\$4 per barrel from the average in November and US\$10 per barrel higher than in December 2018. Price increases in December partly reflect market expectations of better global economic conditions in 2020 than anticipated, and positive impact of announced first phase of a trade deal between the United States and China to be signed in January. Brent and WTI crude prices continued to rise throughout the quarter, reaching nearly US\$66 and US\$60 per barrel in December, partly driven by OPEC's announcement to increase production cuts.

Gas prices

The average prices of EU border, Henry Hub and NBP continued to increase in October and November due to bullish movement of oil prices, strong demand from power sector, rise in coal and carbon prices, forecast of cooler weather and lack of wind generation. EU border, Henry hub and NBP prices declined in December due to high storage level and low demand. Average price for Henry hub and Eu border increased by 1 percent and 28 percent respectively compared to 3Q19.

Coal prices

South African and Coal API 2 prices increased by 13 percent during the quarter reaching US\$76/T and US\$67/T in December, driven by reduction in European coal storage and boost in seasonal demand. Australian coal prices declined by 4 percent during the quarter due to high level of stocks driven by strong supply, abundant gas availability and weak generator demand, falling freight rates and bearish signals from Asia pacific region.

Carbon prices

Carbon prices peaked to EUR29.8/t in June–July 2019 and then declined till October first week reaching 6 month lowest of EUR22.5/t. Average Carbon price in 4Q19 decreased by 7 percent q-o-q, reaching EUR24.9/T in December last week. Carbon prices recovered in the second week of October driven by market expectation for a Brexit agreement between UK and EU, on account of announcement of elections in the UK, and also due to the deadline being extended till 31st January. Carbon Prices declined in December first week, mainly by the announcement that Germany plan to close 4GW of coal fired generation in 2020.

Dark/spark spreads

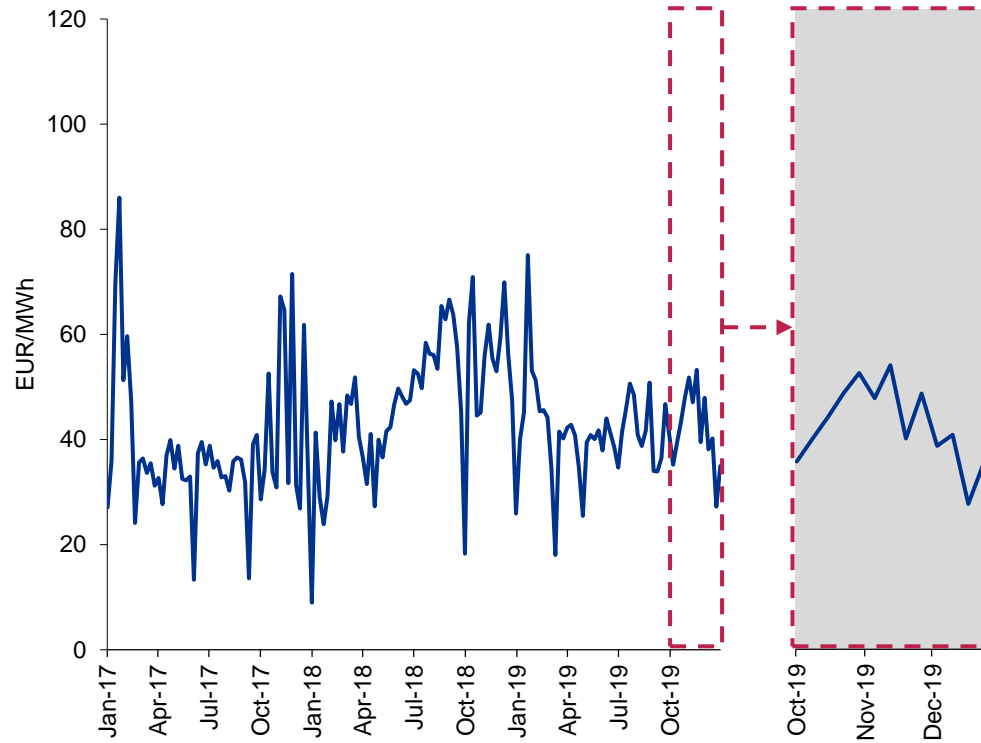
Continuing the 3Q19 trend Spark spread surpassed the dark spread for most of the 4Q19. Abnormally mild winter weather in December and abundant fuel storage and supplies across Europe resulted in reduced demand. Higher costs for carbon-emissions allowances has tilted the economics of generating electricity away from coal and toward using more gas. The premium is the widest ever, and underlines the growing economic viability of coal-to-gas switching across Europe. The CDS in France, Germany, Spain and the UK improved in 4Q19 due to low gas prices.

Electricity price evolution



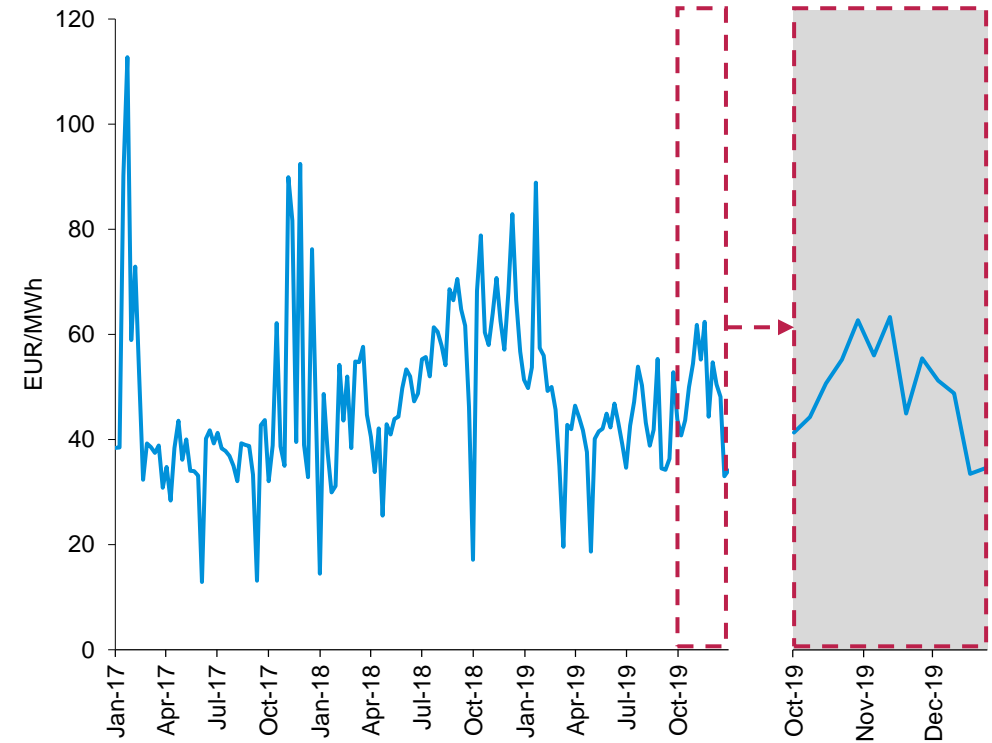
Germany

Base load



Source: Reuters, 2020.

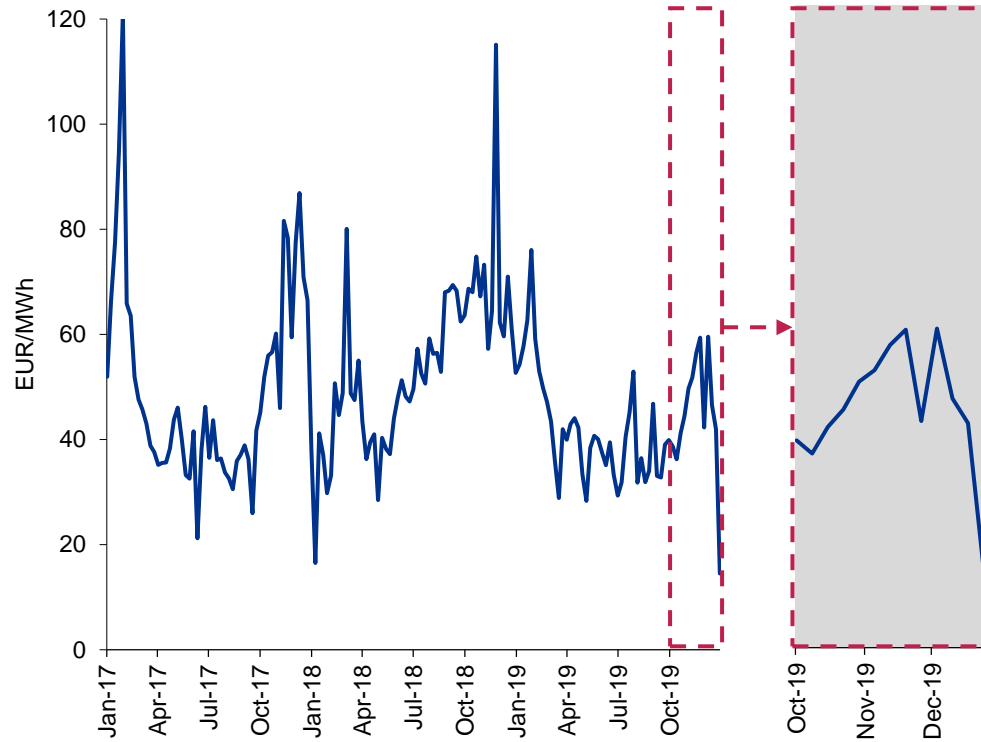
Peak load



Electricity price evolution (cont.)

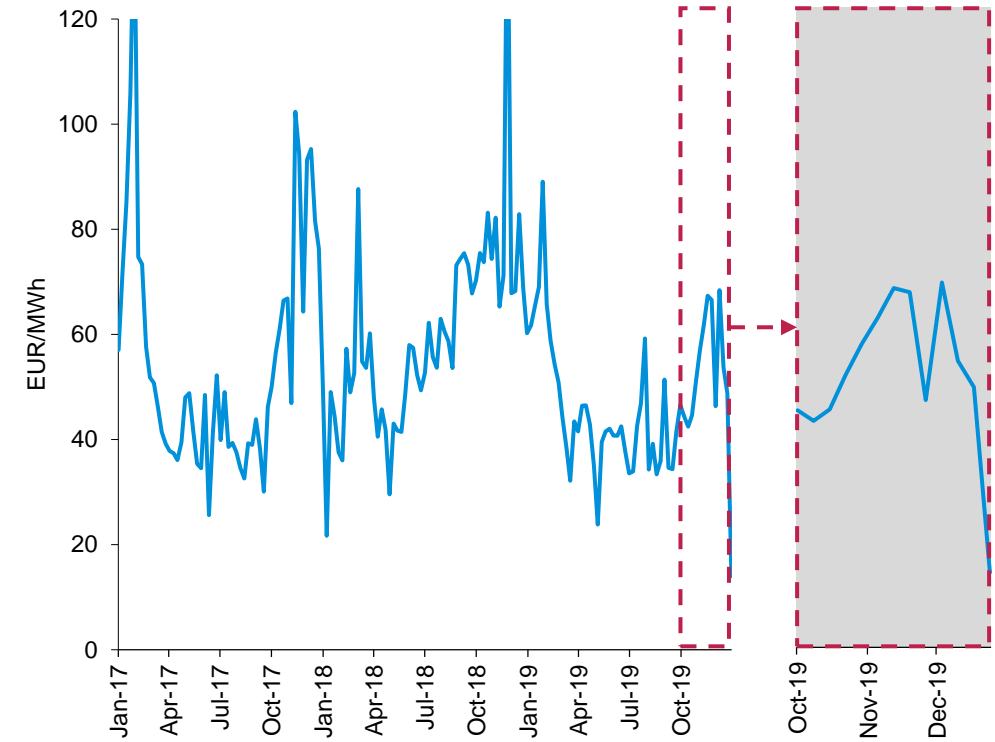


Base load



Source: Reuters, 2020.

Peak load

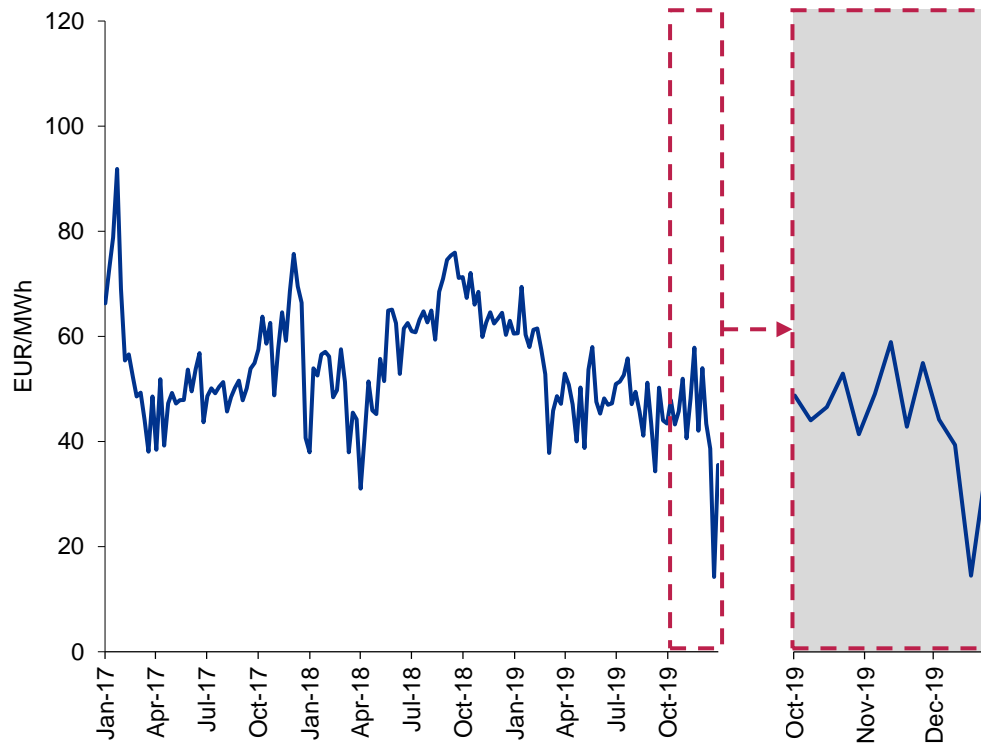


Electricity price evolution (cont.)



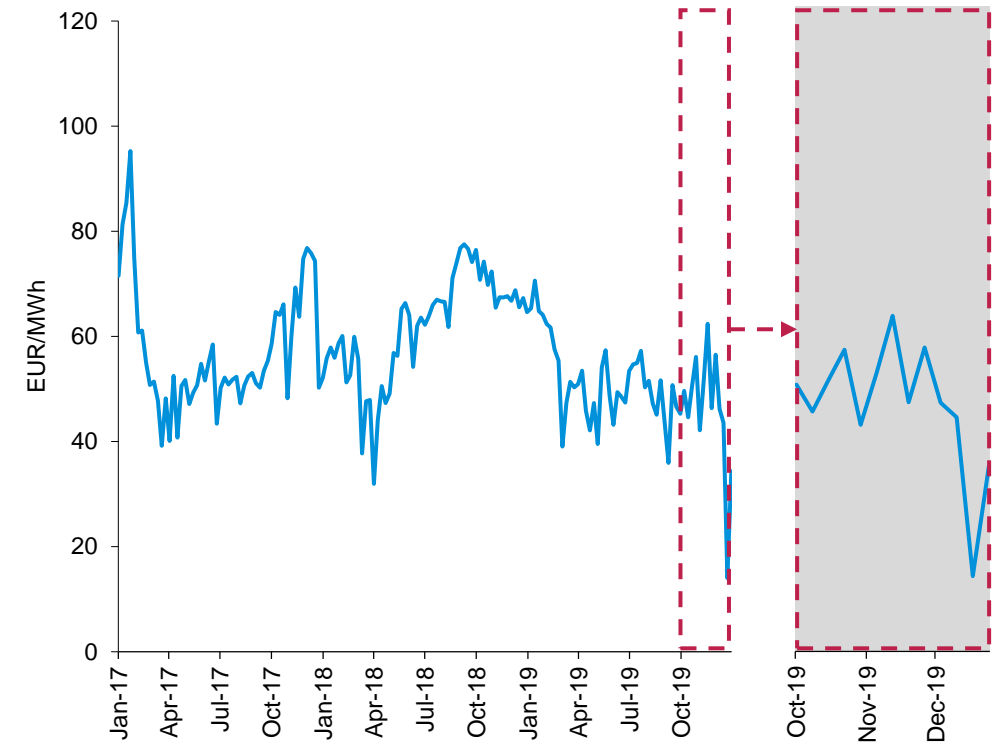
Spain

Base load



Source: Reuters, 2020.

Peak load

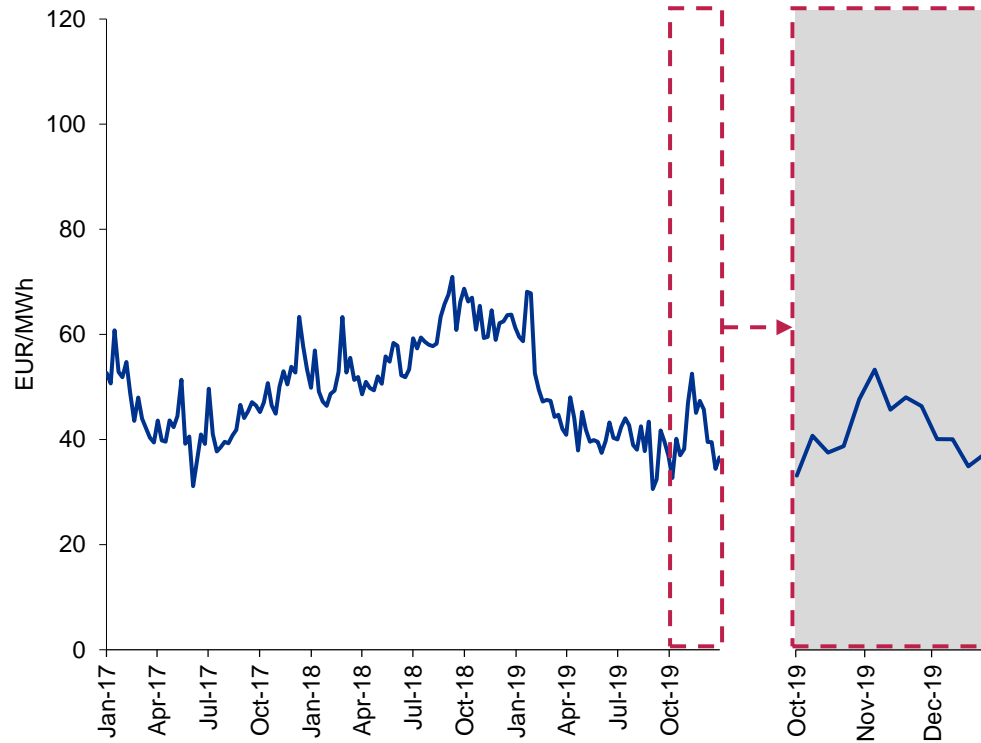


Electricity price evolution (cont.)



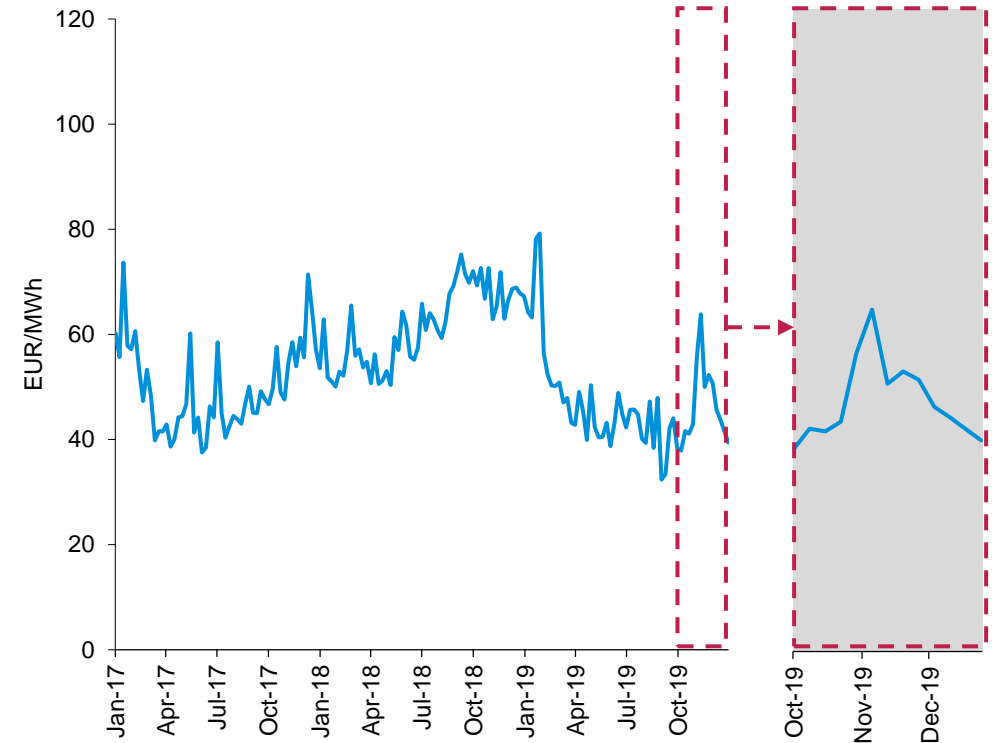
United Kingdom

Base load



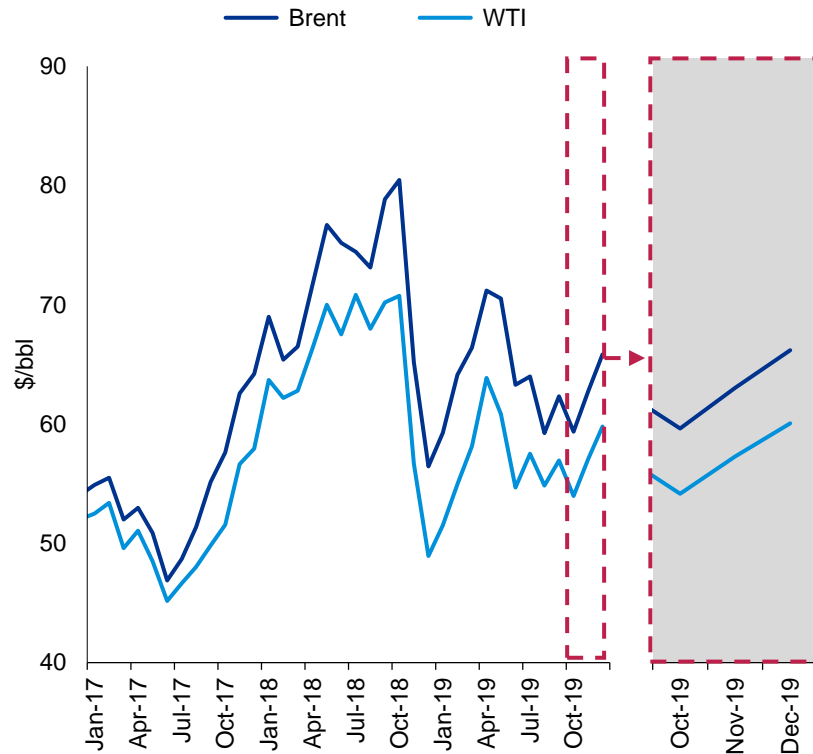
Source: Reuters, 2020.

Peak load



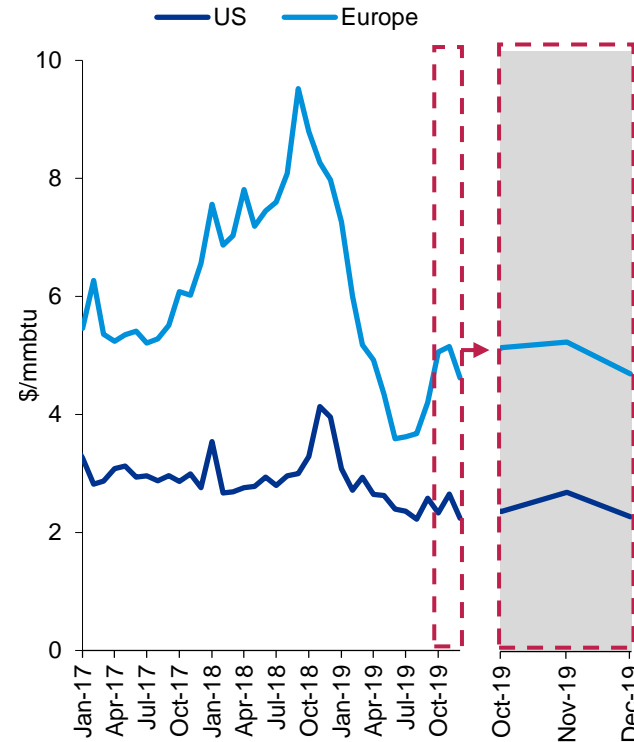
Fuel price evolution

Crude oil

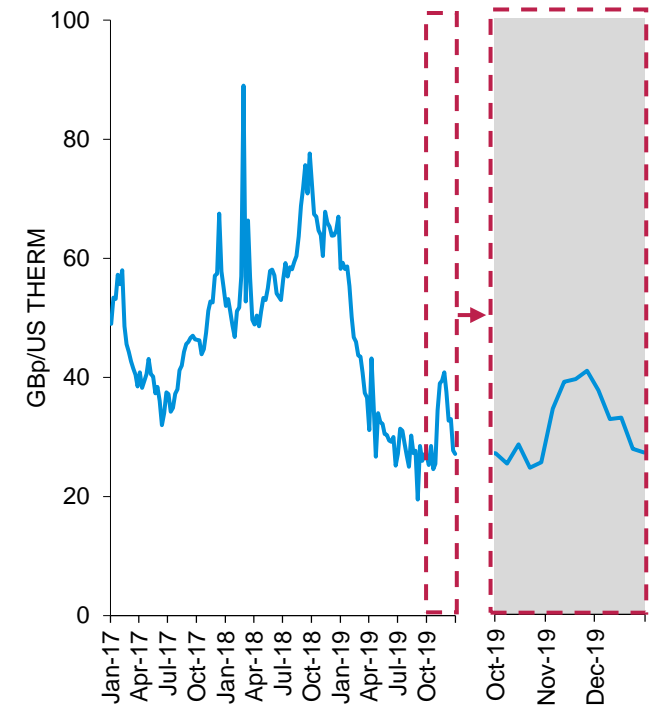


Gas prices

US (H.Hub) and EU (border)



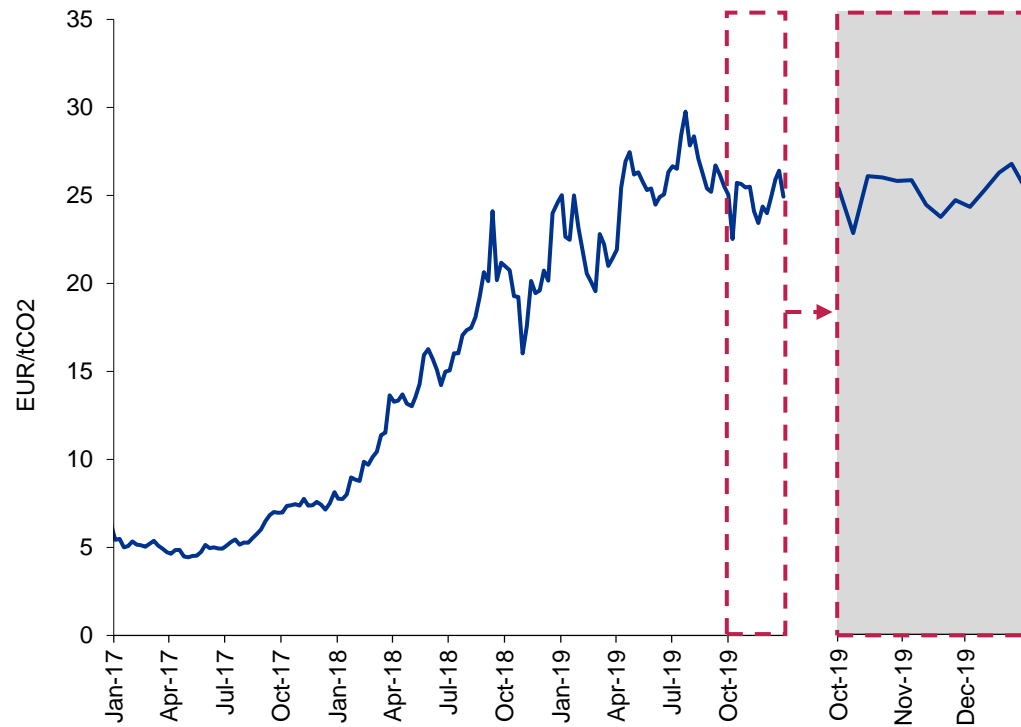
NBP



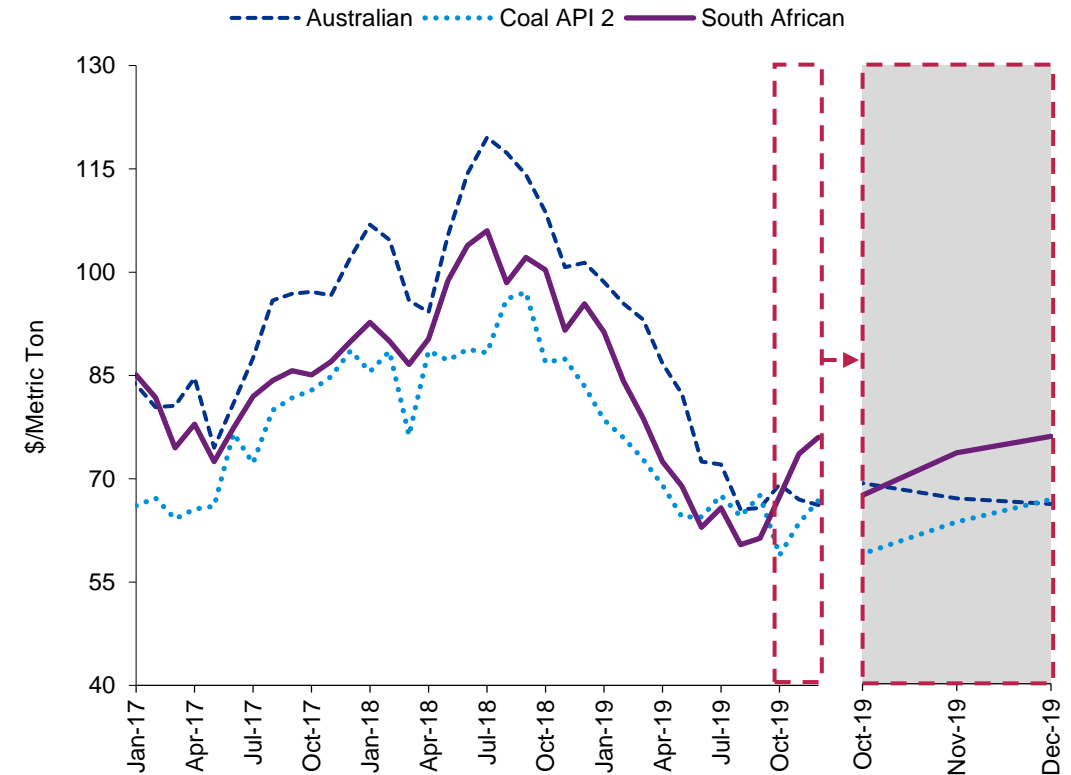
Note: (a) The World Bank has not published the Colombian coal prices since Q3 2018, — therefore the Colombian coal prices are not included in the report. Coal API 2 price assessment is the benchmark price reference for coal imported to northwest Europe (Rotterdam pricing).
Source: World Bank commodities price data (The Pink Sheet), 30 January 2020; Reuters, 2020.

Coal and Carbon price evolution

Carbon price — EU ETS

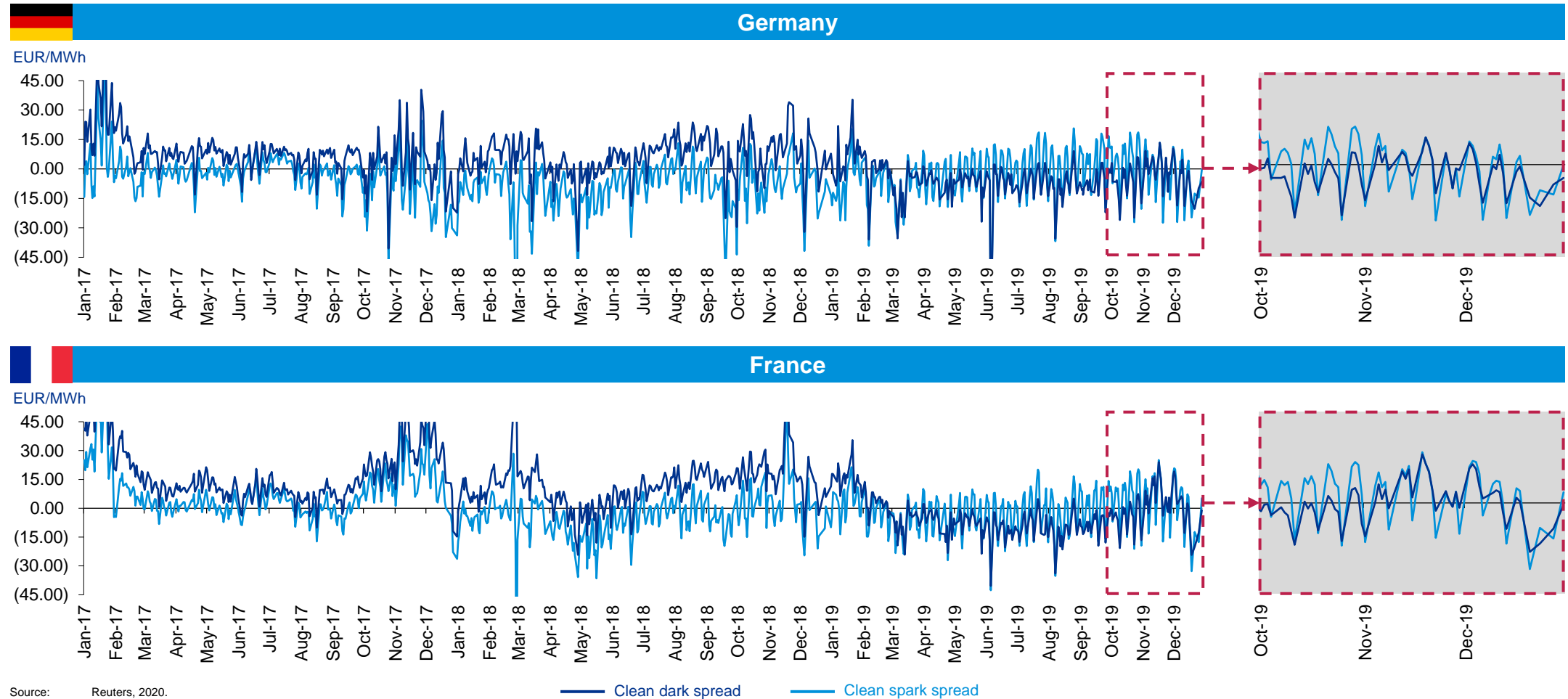


Coal^(a)



Note: (a) The World Bank has not published the Colombian coal prices since Q3 2018, — therefore the Colombian coal prices are not included in the report. Coal API 2 price assessment is the benchmark price reference for coal imported to northwest Europe (Rotterdam pricing).
Source: World Bank commodities price data (The Pink Sheet), 30 January 2020; Reuters, 2020.

Clean dark and spark spreads



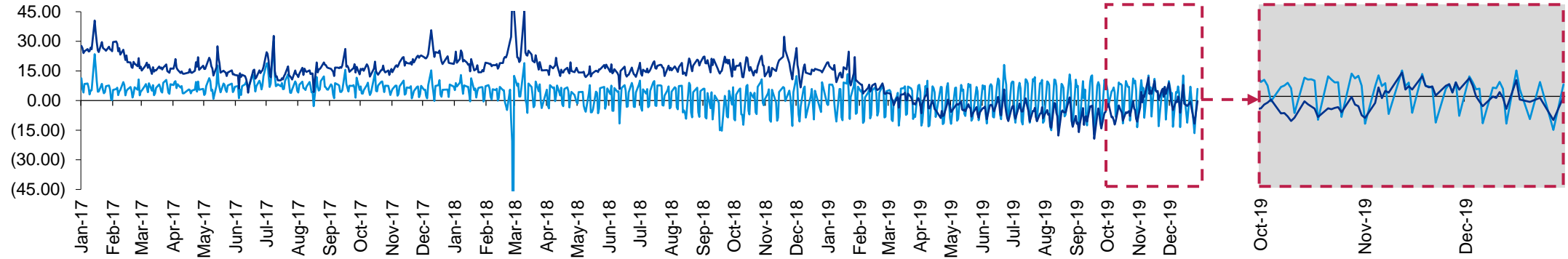
Source: Reuters, 2020.

Clean dark and spark spreads (cont.)



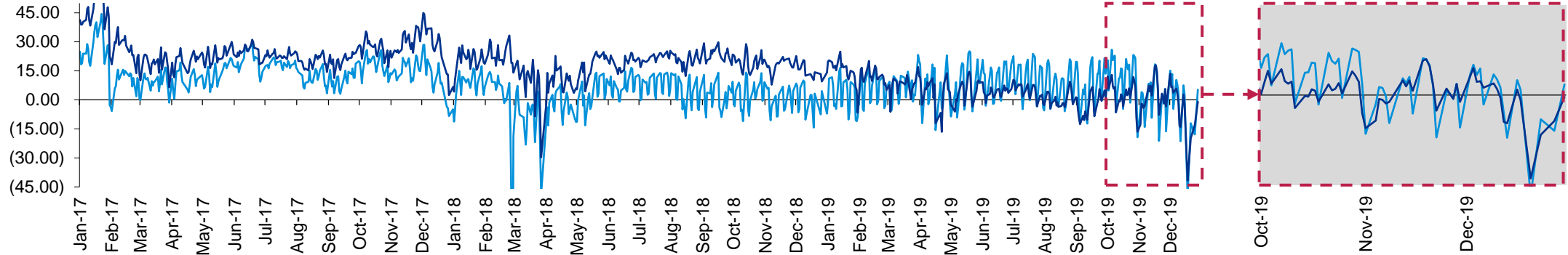
The UK

EUR/MWh



Spain

EUR/MWh



Source: Reuters, 2020.

— Clean dark spread — Clean spark spread



Regulatory and economics news overview

European Union (EU)

The EU has been witnessing several initiatives taken by its member countries to reduce emissions and promote renewable energy sources. The initiatives include investments in renewable energy production and setting up action plans for achieving future zero emissions target. Countries are also collaborating to initiate energy transition and increase renewable production.

UK

UK's re-elected government announced to present a white paper detailing the UK's path toward zero carbon emission by 2050.

The Gas and Electricity Markets Authority of the country opened an investigation into a power outage in August 2019, to determine the circumstances and causes of the outage and take steps to improve the resilience of Great Britain's energy network.

The UK's 'Big 6' energy retail companies are continuously losing their market share over the last decade (from 100 percent to 58 percent) due to the growing customer base of new suppliers such as Shell Energy and Octopus Energy.

In October 2019, the EU Commission reapproved the GB Capacity Market (CM), which ensures security of electricity supply.

Germany

By 2030, Germany aims to reduce carbon emissions by 55 percent through stricter regulations (GEG and KSG), which were recently passed. The Gebäudeenergiegesetz (GEG) Act aims to reduce bureaucracy and simplify regulations related to the construction and renovation of buildings. The Act also focuses on energy efficiency in buildings and the use of renewable energy for heating and cooling supply. In 2019, Germany witnessed a significant expansion in electricity grids primarily driven by simplification in the Grid Expansion Acceleration Act 2.

According to the Energy Monitoring Report 2019, currently, the electricity generation market is not dominated by any individual player. The report also talks about the decreasing conventional energy generation capacity and increasing prices of wholesale electricity.

France

The planned ATRD tariff for gas transport in France during July 2020–24 is expected to remain stable, with an expected 0.3 percent decrease annually.

On 1 January 2020, ENGIE's regulated tax free prices fell by 0.9 percent resulting from the application of the tariffs defined in the 27 June 2019 decree.

In a bid to promote offshore wind capacity, the French government has presented an energy roadmap update, which was open to public consultation until 19 February 2020. It focusses on increasing offshore wind capacity and decreasing onshore capacity. In line with this, EDF, the country's electric utility company, launched the construction of the 480MW Saint-Nazaire offshore wind project, along with its Canadian partner Enbridge.

Also, France has proposed a reform in the Regulated Access to Historic Nuclear Electricity (ARENH), related to the price mechanism on the nuclear electricity, which is open to public debate until 17 March 2020.

Regulatory and economics news overview (cont.)

Spain

During 4Q19, the Spanish National Commission on Markets and Competition (CNMC) approved eight regulations (Circulars 2/2019-9/2019) related to transmission and distribution activities in both electricity and gas sectors.

On 20 November 2019, the Spanish National Commission on Markets and Competition (CNMC) approved the Circular 2/2019, which defines a new methodology for the energy sector's financial remuneration rates and decided upon a rate of 5.58 percent for the transmission and distribution of electricity for the period 2020–25.

The country is focusing on increasing the use of renewable energy. According to REE, 6,456MW of renewable energy was installed in the country in 2019, 6,126MW higher compared with 2018.

In December 2019, the United Nations Climate Conference (COP25) was organized in Madrid. It was primarily focused on the absence of cooperation with regard to Article 6 of the Paris Agreement, dealing with the creation of a carbon market and the lack of commitment toward increasing the ambition of the Nationally Determined Contributions.

Netherlands

The Netherlands is taking several initiatives to reduce emissions. It is expected to close its 4.8GW of coal-fired capacity by 2030, in line with its initiatives to reduce emissions. Also, the government has announced that it would invest money to mitigate nitrogen emissions in the country. On 17 December 2019, the Dutch Senate backed proposals seeking a tax of EUR31 per ton on the import of waste for incineration, starting 1 January 2020.

The Dutch High Court has directed the government to cut CO2 emissions by at least 25 percent by 2020 compared with the 1990 levels. Also, the country is expected to start the funding program for its green bond in 2020; through a Dutch Direct Auction (DDA).

In November 2019, the Dutch Climate minister announced an additional round of applications for renewable energy subsidies under the Netherlands' SDE+ scheme, which is being planned in the spring of 2020. The Netherlands Environmental Assessment Agency expects that the country's solar generation capacity would increase by another 5GW by the end of 2020, from around 4.4GW at the end of 2018.

The Netherlands signed a joint declaration of intent with Germany, laying out a common energy transition plan and pledging for a closer cooperation in the areas of defense and asylum policy.

Portugal

The Regulatory Entity for Energy Services in Portugal established and approved the tariffs and regulated prices in the country, including in the Autonomous Regions of the Azores and Madeira. The Regulatory Entity for Energy Services also approved a new regulation for electric mobility to boost the transition process.

The Secretary of State for Energy has announced a discount of 33.8 percent in electricity tariffs to economically vulnerable families, applicable from 1 January 2020.

Regulatory and economics news overview (cont.)

Italy

The Italian Regulatory Authority for Energy, Networks and Environment (ARERA), has updated the service quality regulation for the gas distribution and measurement business for the 2020–25 period. The ARERA also updated the tariff system for the distribution and measurement service in the gas sector for the 2020–25 period to encourage the aggregation of different players and shift to a different cost recognition system to improve the efficiency of the distributors.

The Italian authority has updated the output-based regulation for the distribution and measurement of electricity for the period 2020–23, to improve the quality of the service, especially in poorly served regions, so that there is a balance in the overall quality on a national basis. It has also established a new criteria for recognizing efficient operating and investment costs for the 2018–21 period, through adoption of the tariff method for the Integrated Waste Management Service.

Hungary

Hungary closed its previous feed-in tariff support scheme and switched to a new market-based premium system. The first pilot tender of the new system, which was issued on 29 October 2019 by the Hungarian energy regulator (MEKH), received bids, totaling 322MW, from 155 participants.

The DE-AT-PL-4M MC Project (Interim Coupling), which aims to couple the 4M Market Coupling, Poland and the Multi-Regional Coupling (MRC), has entered into its implementation phase after completing the design phase. During the NRA-TSO-NEMO meeting held on 6 November 2019 in Budapest, the relevant national regulatory authorities have reconfirmed their support for the continuation of the project.

During the quarter, the Hungarian Power Exchange (HUPX) and the Hungarian electricity Transmission System Operator (MAVIR) joined the common European market coupling solution (XBID), taking a step toward the integrated European electricity intra day market.

In September 2019, E.ON SE acquired majority shares in Innogy SE. Innogy operates in Hungary through ELMŰ and ÉMÁSZ.

Russia and CIS

Russia: The country has allowed amendments to the Federal Law (#35-FZ dated 26 March 2003) on the Electric Power Industry, allowing owners of small solar and wind generators to sell surplus electricity to guaranteed suppliers.

Kazakhstan: The country intends to attract investors to the waste processing sector, especially to the thermal waste treatment, offering subsequent scope for electricity generation. Electricity generated from burning waste will be supplied to the central electric grid.

Ukraine: By 2023, Ukraine intends to connect its power system to the European power system by joining it with the digital single market, which is a proposed economic zone of the EU member states focused on telecoms and digital economy.

Uzbekistan: The Ministry of Energy and the International Financial Corporation (IFC) discussed the second stage of tenders as part of the Scaling Solar II project for constructing photoelectric (solar) power stations.

Georgia: In December 2019, the Georgian Energy Exchange was incorporated. It will be responsible for arranging and coordinating activities for the creation of a competitive electricity market and compilation of bilateral contracts. JSC Georgian State Electrosystem (GSE) and JSC Electricity System Commercial Operator (ESCO) equally served as the exchange founders for the Energy Exchange.

Links to new regulation



UK

News

Conservative government re-elected

On 12 December 2019, after the re-election of the Conservative Government, the prime minister confirmed that the government aims to reach net-zero emissions target by 2050. The energy white paper is expected to be released by 1H20, which would outline the country's plan to achieve the zero-emissions target. Post Brexit, electricity and gas are expected to continue to flow through the interconnectors. However, trading positions might be impacted due to changing macroeconomic conditions, including exchange rate movements.

[Link I](#)

Three energy firms to pay GBP10.5 million for failings over August blackout

In August 2019, the Gas and Electricity Markets Authority opened an investigation into a power outage that took place on 9 August 2019. The investigation was conducted to determine the circumstances and causes of the outage and take steps to improve the resilience of Great Britain's energy network. It would also look into the compliance of the key licensed parties involved. Following the investigation, Hornsea One, a wind farm company part-owned by Orsted and RWE, owner of a gas power station, have agreed to pay GBP4.5 million each to Ofgem's redressal fund, for not remaining connected after the lightning strike. UK Power Networks, a company that runs distribution networks in the east England, south-east England and London, will also pay GBP1.5 million for not following correct procedures.

With the review being conducted into the structure and governance of the Energy System Operator, post the power outage, another debate has started on the need for the UK to move to an Independent System Operator.

[Link II](#)

The fall of the Big 6 Energy retail suppliers' share

The 'Big 6' UK energy retail companies such as British Gas, EDF, E.ON, Npower, Scottish Power and SSE are increasingly losing their market share. Following E.ON's acquisition of Npower, sale of SSE's retail arm to Ovo, and growing customer base of suppliers such as Shell Energy and Octopus Energy, the market share of the former Big 6 is expected to be at 58 percent, compared with about 100 percent 10 years ago.

[Link III](#)

The EU Commission approves the GB Capacity Market return

In October 2019, the EU Commission, following an in-depth review, reapproved the GB Capacity Market (CM). This signifies that the mechanism is currently legal and all previous agreements are reinstated with immediate effect, provided the UK government prospectively addresses a number of conditions.

[Link IV](#)

Links to new regulation (cont.)



Germany

News

Amendment of the Gebäudeenergiegesetz (GEG)

On 23 October 2019, the German Government passed the Gebäudeenergiegesetz (GEG). The amendment aims to reduce bureaucracy and simplify regulations related to the construction and renovation of buildings. The amendment involves regulations for energy efficiency in buildings and the use of renewable energy for heating and cooling supply.

[Link I](#)

Klimaschutzgesetz (KSG) comes into force

In a bid to reduce greenhouse gas emissions by about 55 percent by 2030, the federal government on 18 December 2019, passed the Klimaschutzgesetz (KSG). It lays down the already agreed climate goals in law, establishing more stringent obligations. The federal ministries are obliged to ensure compliance with annual emission targets in individual sectors such as Energy and Transport apart from others. Germany aims to be climate-neutral by 2050, whereas the federal administration is to be mandated to operate in a climate-neutral way by 2030.

[Link II](#)

Progress in grid expansion

In December 2019, at the fourth meeting of Energy ministers, the progress related to the expansion of electric grids was discussed. It was highlighted that, in 2019, there was significant expansion of electric grids. By the end of October 2019, transmission of electricity also begun through a new line connecting Schleswig-Holstein and Lower Saxony. Since then, the transmission capacity at this key network node increased four times. A simplification of the procedure in the Grid Expansion Acceleration Act 2 **Netzausbaubeschleunigungsgesetz Übertragungsnetz, (NABEG)**, which has lead to a reduction of bureaucracy, has resulted in significant advancement in the expansion of electric grids.

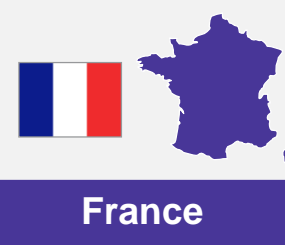
[Link III](#)

Energy Monitoring Report 2019

According to the Energy Monitoring Report 2019, published on 27 November 2019, by the Bundesnetzagentur and the Bundeskartellamt, currently, there is no dominant player in the electricity generation market. With a declining market shares of the five largest electricity generators, the relative standings within the group have shifted. The report also talks about the decreasing conventional generation capacity and increasing wholesale electricity prices.

[Link IV](#)

Links to new regulation (cont.)



News

Tariff project for the distribution of natural gas from 1 July 2020

The ATRD tariff for gas transport in France, through the historical GRDF (**Gaz réseau distribution France** — French gas distribution) network is governed by a four year scheme, which is decided by a CRE (**Commission de regulation de l'énergie** — Energy Regulatory Commission) deliberation. The planned tariffs for the next four year period (July 2020–24) is expected to remain almost stable, with about 0.3 percent annual decline, and will allow in particular biomethane injection in the GRDF network. For the ATRD tariff, CRE plans to renew the main incentive regulation mechanisms to control operating expenses, capital expenditure and quality of service.

[Link I](#)

ENGIE— Monthly evolution of ENGIE's regulated gas sales tariffs

On 1 January 2020, ENGIE's regulated tax free prices fell by 0.9 percent. There was a 0.2 percent decline for customers using gas for cooking, a 0.5 percent decline for customers using gas for dual purposes such as cooking and hot water and a 1.0 percent decline for homes using gas for heating. The decline was attributed to application of the tariffs defined in the 27 June 2019 decree, related to ENGIE's regulated natural gas tariffs. For the year 2019, regulated gas sales tariffs fell by 11.9 percent overall.

[Link II](#)

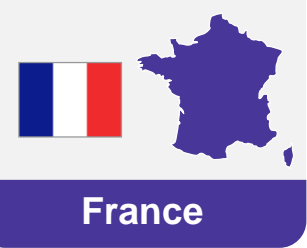
Energy roadmap: more focus on offshore wind, slightly less on onshore

The French government has presented an energy roadmap update, which is open to public consultation until 19 February 2020. In France's Multiannual Energy Program, the revised objectives for 2028 :

- An increase in offshore wind objectives, with revised capacities: from 4.7–5.2GW to 5.2–6.2GW
- A decrease in onshore wind objectives, with revised capacities: from 34.1–35.6GW to 33.2–34.7GW
- Confirmation of the shutdown of 14 nuclear reactors by 2035, including the shutdown of Fessenheim's two reactors in 2020. Rest of the nuclear sites that are not required to shutdown their reactors, will still need to close their 900MW reactors.
- An increase in purchase prices of biogas tenders.

[Link III](#)

Links to new regulation (cont.)



News

Launching the first offshore wind project in France

In December 2019, EDF along with its Canadian partner Enbridge launched the construction of the 480MW Saint-Nazaire offshore wind project, which is expected to start production in 2022. Two other offshore projects — Fécamp and Courseulles-sur-Mer — are expected to be launched in 2020.

[Link IV](#)

Reform of the ARENH mechanism now open to public debate

The reform in the Regulated Access to Historic Nuclear Electricity (ARENH), related to the price mechanism on nuclear electricity, is open to public debate until 17 March 2020. Under the ARENH mechanism (which is valid from 2010–25), out of about 400 Tera Watt hour (TWh) annual output from historical nuclear plants, a maximum of 100 TWh, is currently available to EDF's competitors at EDF price.

Under the contemplated reform, 100 percent of historical nuclear electricity would be sold by EDF in the market to the suppliers, including to EDF itself, thus splitting itself into producer and supplier.

Nuclear electricity output volumes would depend on the MultiAnnual Energy Plan's revised objectives in terms of nuclear energy proportion in the French energy mix. The planned output would be approved by the current French Electricity Regulator Body. The CRE would supervise the pricing mechanism and the variation in the price range would be a maximum of GBP6.0 per Mega Watt hour.

[Link V](#) | [Link VI](#)

Links to new regulation (cont.)



News

During 4Q19, the Spanish National Commission on Markets and Competition (CNMC) approved eight regulations (Circulars 2/2019-9/2019) related to transmission and distribution activities in the both electricity and gas sectors. One of the important regulations approved is the revision of the remuneration parameters of the above-mentioned activities, which signifies reduction in an agents' remuneration.

[Link I](#)

On 20 November 2019, the Spanish National Commission on Markets and Competition (CNMC) approved Circular 2/2019 that defines the new methodology for the energy sector's financial remuneration rates.

Specifically, a financial remuneration rate of 5.58 percent was established for the transmission and distribution of electricity for the 2020–25 period. Currently, this rate is at 6.5 percent. For the 2021–26 period, the rate is set at 5.44 percent for regasification and transportation of natural gas, and 5.83 percent for distribution. The financial remuneration rate was calculated using the WACC (Weighted Average Cost of Capital) parameter.

[Link II](#)

According to REE, 6,456MW of renewable energy was installed in Spain in 2019, 6,126MW higher compared with 2018. Of the 6,456MW installed in 2019, 5,689MW corresponded to auctioned capacity in 2017.

[Link III](#)

The United Nations Climate Conference (COP25) was organized in Madrid during the first two weeks of December 2019. The two key highlights from the event are:

- The non-existence of cooperation related to Article 6 of the Paris Agreement, which deals with the creation of a carbon market.
- The lack of commitment toward increasing the ambition of the Nationally Determined Contributions, submitted by all participating countries.

[Link IV](#)

Links to new regulation (cont.)



Netherlands

News

In December 2019, the Dutch High Court ordered the government of the Netherlands to intensify its fight against climate change and reduce greenhouse gas emissions faster than it has planned. Upholding a 2015 decision by a lower court, the High Court in its final verdict said that the government needs to ensure that CO2 emissions are at least 25 percent below the 1990 levels by the end of 2020.

[Link I](#)

On 17 December 2019, the Dutch Senate backed proposals seeking a tax of EUR31 per ton on the import of waste for incineration starting 1 January 2020. To delay this to until April 2020, Attero (waste management firm) and AVR (energy from waste company) launched a court case against the Dutch state, which was subsequently dismissed by the court.

[Link II](#) | [Link III](#)

The Netherlands is expected to restart the funding program for its green bond in 2020, through a Dutch Direct Auction (DDA). On 14 January 2020, the Dutch State Treasury Agency sought to raise between EUR750 million to 1.25 billion in the DDA. The country aims to bring its green bond to a benchmark size of around EUR10 billion.

[Link IV](#)

The Netherlands is expected to close its 4.8GW of coal-fired capacity by 2030, to meet its emission reduction targets. The closure is expected to take place in two steps, with older units set to close by 1 January 2025 and new generation plants to close by 1 January 2030.

[Link V](#)

In November 2019, the Dutch Climate minister, Eric Wiebes, announced that an additional round of applications for renewable energy subsidies under the Netherlands' SDE+ scheme is being planned for the spring 2020. The estimated budget for this scheme is set at EUR1.5–2 billion.

[Link VI](#)

The Netherlands Environmental Assessment Agency expects the country's solar generation capacity to increase by another 5GW by the end of 2020, from around 4.4GW at the end of 2018. By 2023, the PV capacity is expected to reach about 15GW.

[Link VII](#)

Links to new regulation (cont.)



Netherlands

News

In October 2019, the Dutch government announced that it would make investments to mitigate nitrogen emissions in the country. The move is expected to boost the construction of about 18,000 building projects, which were stalled since May 2019 post a ruling by the court, stating the breach of nitrogen emission laws during construction of these buildings.

[Link VIII](#)

The Netherlands and Germany signed a joint declaration of intent, post the Dutch government's visit to Germany, laying out a common energy transition plan, and pledging for a closer cooperation in the areas of defense and asylum policy.

[Link IX](#)

Links to new regulation (cont.)



Portugal

News

The Regulatory Entity for Energy Services established and approved the tariffs and regulated prices applicable in Portugal, including the Autonomous Regions of the Azores and Madeira. The newly approved tariffs and regulated prices would be applied in 2020.

[Link I](#)

Based on the economic and social sustainability of the energy tariff, the Portuguese government established a mechanism for five-year repercussions of the extra costs of production under a special regime. This is supported by the regulated companies and recovered in a five-year straightening mechanism. The Minister for the Environment and Energy Transition established the values of the parameters for the remuneration rate of the five-year straightening mechanism for the year 2020.

[Link II](#)

The Regulatory Entity for Energy Services, following the conclusion of the public consultation process, approved the new regulation for electric mobility. The new regulation focusses on simplifying and clarifying the regulatory model as well as tariff structures, to boost the electric mobility transition process.

[Link III](#)

The electricity social tariff is an instrument of social policy, aimed at protecting economically vulnerable families by guaranteeing them access to essential energy services. The Secretary of State for Energy has announced a discount of 33.8 percent in electricity tariffs to economically vulnerable families. The discount would be applicable from 1 January 2020.

[Link IV](#)

The draft version of the State Budget for 2020, which is under discussion in the Portuguese parliament, maintains the extraordinary contribution to the Energy sector, with the already existing terms of 2019.

[Link V](#)

Links to new regulation (cont.)



News

With the Delibera 569/2019/R/gas, the Italian Regulatory Authority for Energy, Networks and Environment (ARERA) has updated the service quality regulation for the gas distribution and measurement business for the 2020–25 period. The Italian Authority has set new parameters and requirements about safety and quality of the service in terms of customer assistance and infrastructure installations such as the introduction of a new index about the residual life of the pipelines.

[Link I](#)

The ARERA updated the tariff system for the distribution and measurement service in the gas sector for the 2020–25 period (Delibera 570/2019/R/gas). Through this, the ARERA intends to encourage the aggregation of different players and shift to a different cost recognition system to improve the efficiency of the distributors. The authority has also significantly deduced the tariff recognized to cover OPEX costs.

[Link II](#)

The ARERA has updated the output-based regulation for the distribution and measurement of electricity for the period 2020–23 (Delibera 566/2019/R/eel). With this, the Italian authority intends to improve the quality of the service, especially in poorly served regions, to balance the overall quality on a national basis.

[Link III](#)

The ARERA established new criteria for recognizing efficient operating and investment costs for the period 2018–21, with the passing of Delibera 443/2019/R/rif. Under this, it adopted a tariff method for the Integrated Waste Management Service (MTR). The authority provides the rules for determining tariff revenues for the provision of the integrated waste management service or its individual service components by defining a uniform management parameter for the entire country.

[Link IV](#)

Links to new regulation (cont.)



Hungary

News

Post the approval of the European Commission, Hungary closed its previous feed-in tariff support scheme and switched to the new market based premium system. The first pilot tender of the new system was issued on 29 October 2019 by the Hungarian energy regulator (MEKH). While the pilot tender had certain limitations, but after public opening, it received bids from 155 participants for a total amount of 322MW. Bidding prices ranged between EUR6.1 and EUR7.8. Final bid result is expected to be released in 1H20.

[Link I](#)

The DE-AT-PL-4M MC Project (Interim Coupling) aims to couple the 4M MC (Czech Republic, Hungary, Romania, Slovakia), Poland and the Multi-Regional Coupling (MRC). It has entered the implementation phase after completing the design phase. During the NRA-TSO-NEMO meeting held on 6 November 2019 in Budapest, the relevant national regulatory authorities have reconfirmed their support for the continuation of the project. As per the current planning, the project is expected to go live by 3Q20.

[Link II](#)

On 19 November 2019, the Hungarian Power Exchange (HUPX) and the Hungarian electricity Transmission System Operator (MAVIR) successfully joined the common European market coupling solution (XBID). Hungary, along with six other countries joined the project — where 14 countries have already participated in the past — in the second stage of the extension process. This market coupling is an important step toward the integrated European electricity intra day market.

[Link III](#)

In September 2019, E.ON SE acquired majority shares in Innogy SE. Innogy's presence in Hungary has been carried out through ELMŰ and ÉMÁSZ. Under the agreement, E.ON Hungária obtained the 27 percent share package of ELMŰ and ÉMÁSZ from EnBW. The other transactions announced post this deal were (expected to be closed by the end of 2021). :

- Sale of E.ON's Hungarian electricity DSO (E.ON Tiszántúli Áramhálózati Zrt.) to OPUS
- Sale of E.ON's newly purchased electricity DSO (ÉMÁSZ Hálózati Kft) to MVM Group
- Sale of 50 percent of E.ON's share in Budapesti Dísz-és Közvilágítási Kft. to MVM Group
- Purchase of 25 percent minority shares in E.ON Hungária. by MVM

[Link IV](#)

Links to new regulation (cont.)



Russia & the CIS

News

Russia: The recent amendments to the Federal Law (#35-FZ dated 26 March 2003) on the Electric Power Industry would allow owners of small solar and wind generators to sell surplus electricity to guaranteed suppliers. The law enables owners of private alternative power stations to deal with excess power without wasting time in bargaining with grid companies. Also, renewable technologies will not only help in reducing electricity bills to zero but also support opportunities to earn money for households. The document allows any inhabitant of a single-family house with an installed microgeneration facility to sell unused power to a guaranteed supplier at the average weighted wholesale price. The primary requirement is that the capacity should not exceed 15KW.

[Link I](#)

Kazakhstan: The country intends to attract investors to the waste processing sector, especially to thermal waste treatment, with subsequent scope for electricity generation. Electricity generated from burning waste will be supplied to the central electric grid by analogy with renewable energy facilities. It is expected that, in the future, the country would hold tenders for building power plants and thus attract investors. Projects are planned to be funded through private investment.

[Link II](#) | [Link III](#)

Ukraine: By 2023, Ukraine intends to connect its power system to the European power system by joining the digital single market — a proposed economic zone of EU member states focused on telecoms and digital economy. Previously, the Ukrainian government intended to join the European power market in 2025.

[Link IV](#)

Uzbekistan: The Ministry of Energy and the International Financial Corporation (IFC) discussed the second stage of tenders as part of the Scaling Solar II project of constructing photoelectric (solar) power stations. Tenders for the construction of two photoelectric stations with the capacity of 200MW each in Samarkand and Dzhizak regions are expected to be announced in 1Q20. The winner of the first stage of the international tender was Masdar (UAE) with a tariff of US\$2.679 per kWh (generated electricity) and a construction period of 12 months.

[Link V](#) | [Link VI](#)

Georgia: In December 2019, the Georgian Energy Exchange was incorporated. It will be in charge of arranging and coordinating activities related to the creation of a competitive electricity market and compilation of bilateral contracts. JSC Georgian State Electrosystem (GSE) and JSC Electricity System Commercial Operator (ESCO) equally served as the exchange founders.

The electricity market project, which will start operating from 2021 is expected to boost investment into the sector. With the integration of an European model, pricing is expected to become more transparent, which will also serve as a guarantee of Georgia's power sustainability.

[Link VII](#) | [Link VIII](#)

Capital markets overview

Eurostoxx Utilities

The Eurostoxx Utilities index cumulated 19.0 percent gains in the last 12 months.

Best performance

EnBW Energie Baden, National Grid plc, SSE Plc, EDP, Enel SpA, RWE AG, ENGIE SA (GDF Suez S.A.), EDP Renováveis, registered the best performance (more than 5 percent share price increase quarter on quarter) in Q4 2019, in terms of share pricing. During this period, 20 of the top 25 European players experience positive price evolution.

Valuation levels

Valuation levels in the sector averaged at 9.5 EV/EBITDA in Q4 2019, 2,2 percent above the previous quarter (9.3 EV/EBITDA in 3Q19). Wide differences persist in EBITDA multiples, with Innogy SE (XTRA:IGY), Ørsted A/S (CPSE:ORSTED), VERBUND AG (WBAG:VER), RWE Aktiengesellschaft (XTRA:RWE), E.ON SE (XTRA:EOAN), Snam S.p.A. (BIT:SRG), EnBW Energie Baden-Württemberg AG (XTRA:EBK), National Grid plc (LSE:NG.), Terna-Rete Elettrica Nazionale Società per Azioni (BIT:TRN), Elia Group SA/NV (ENXTBR:ELI), EDP-Energias de Portugal, S.A. (ENXTLS:EDP), Iberdrola, S.A. (BME:IBE), Fortum Oyj (HLSE:FORTUM), EDP Renováveis, S.A. (ENXTLS:EDPR), SSE plc (LSE:SSE), trading at 10x TEV/EBITDA and above (as of 31 December 2019).

Net debt ratios

Net debt ratios for Q4 2019 averaged at 3.9x EBITDA, 11.4 percent above the figure registered in Q3 2019 (3.5x EBITDA).

Credit ratings

In January 2020, VERBUND AG (WBAG:VER) observed an upgrade in its Moody's rating to 'A3'.

Share price evolution: Overview (4Q19)

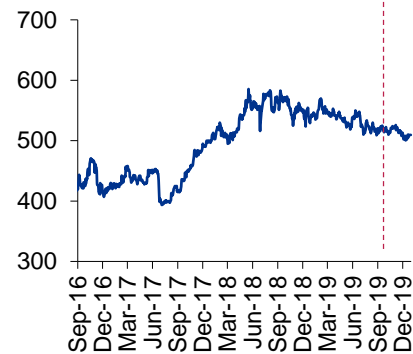
Company ^(a)	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Last quarter Q4 2019/Q3 2019	Last year Q4 2019/Q4 2018
EnBW Energie Baden-Württemberg AG	21.43	22.03	23.72	27.78	27.40	28.90	32.67	30.47	31.67	32.47	35.67	44.88	25.84%	47.31%
National Grid plc ^(b) (GBP)	9.63	10.74	9.52	8.98	7.89	8.37	8.16	8.19	8.37	8.26	8.48	10.50	23.79%	28.15%
SSE Plc ^(b) (GBP)	15.19	14.71	14.27	13.54	12.55	13.56	12.64	11.17	11.74	11.14	11.44	13.20	15.40%	18.16%
EDP – Energias de Portugal, S.A.	2.84	3.13	3.12	2.97	2.87	3.28	3.39	3.09	3.21	3.37	3.40	3.67	8.00%	19.03%
Enel SpA	4.10	4.62	5.00	5.29	4.96	4.96	4.59	4.61	5.31	5.75	6.40	6.85	7.01%	48.73%
RWE Aktiengesellschaft	13.28	17.01	19.26	19.98	17.44	20.00	21.55	18.61	21.56	22.83	25.34	26.84	5.92%	44.26%
ENGIE SA (GDF Suez S.A.)	11.88	13.48	13.93	14.53	13.52	13.95	13.06	12.24	13.58	13.16	13.78	14.59	5.88%	19.22%
EDP Renováveis	6.13	6.98	6.92	6.92	7.19	8.14	8.74	7.89	8.15	8.81	9.53	10.02	5.16%	26.99%
Elia Group SA	48.01	50.10	49.50	49.03	50.73	53.30	54.20	57.47	63.00	62.40	73.07	76.71	4.98%	33.48%
Endesa SA	20.04	21.85	20.17	18.92	17.69	19.13	19.44	19.48	21.76	22.69	23.10	24.12	4.38%	23.82%
Fortum Oyj	14.59	13.84	14.88	17.57	17.72	19.44	21.59	19.33	19.56	18.99	20.59	21.47	4.24%	11.08%
Public Joint stock company	4.04	3.96	3.81	3.55	3.78	4.06	4.10	3.99	3.83	4.15	4.42	4.53	2.64%	13.71%
Veolia Environnement S.A.	16.25	18.51	19.44	20.96	19.84	19.14	18.30	18.12	19.22	21.06	22.62	23.11	2.16%	27.55%
E.ON SE	7.14	7.74	9.01	9.79	8.67	9.13	9.35	8.78	9.52	9.66	8.92	9.09	1.91%	3.61%
Terna – Rete Elettrica Nazionale Società	4.36	4.80	4.91	5.07	4.72	4.71	4.64	4.82	5.50	5.47	5.70	5.81	1.87%	20.55%
Uniper SE	14.11	16.29	20.50	25.04	24.57	26.11	26.51	23.59	25.92	26.25	28.54	28.80	0.93%	22.08%
Iberdrola SA	6.17	6.89	6.81	6.62	6.25	6.39	6.53	6.55	7.31	8.27	8.98	9.06	0.86%	38.23%
Naturgy Energy Group, S.A	18.32	21.17	20.00	18.63	19.17	21.14	23.31	22.53	23.86	25.58	23.43	23.55	0.51%	4.52%
Snam SpA	3.81	4.11	4.03	4.23	3.81	3.72	3.67	3.79	4.24	4.58	4.53	4.54	0.40%	19.99%
Innogy SE	33.66	34.92	36.72	37.15	36.44	37.97	40.04	41.09	41.22	44.49	44.49	44.53	0.09%	8.39%
Red Eléctrica Corporación, S.A.	17.21	19.17	18.47	18.39	16.84	17.13	18.10	18.95	19.46	19.01	17.83	17.81	(0.16%)	(6.05%)
CEZ as ^(b) (CZK)	435.62	437.61	413.66	477.50	510.22	549.44	566.89	549.60	548.46	536.11	519.64	513.78	(1.13%)	(6.52%)
Orsted A S	35.32	38.18	44.29	47.49	50.89	52.57	55.24	57.30	64.73	71.89	84.89	83.50	(1.63%)	45.72%
VERBUND AG	15.50	16.18	18.24	20.30	22.57	27.09	37.03	36.32	43.24	45.01	51.65	46.84	(9.31%)	28.97%
Electricité de France S.A.	8.85	8.86	9.25	10.93	10.79	11.65	13.49	16.59	13.47	11.65	10.80	9.44	(12.65%)	(43.12%)
Eurostoxx Utilities	244.04	273.03	282.12	291.95	272.82	283.24	282.83	276.10	300.77	315.73	329.24	328.58	(0.20%)	19.01%

Note(s): Includes list of 25 European top companies per capitalization, February 2020, plus Russia's public joint stock company plus Elia Group SA

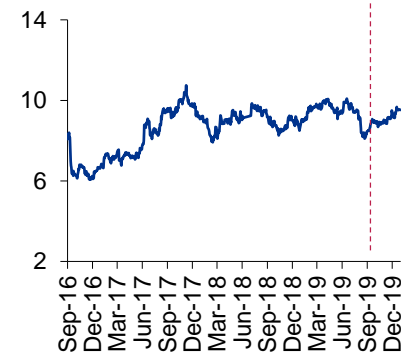
Source: S&P Capital IQ, 2020

Share price evolution: Individual stocks

CEZ a.s ^(a)CZK



E.ON



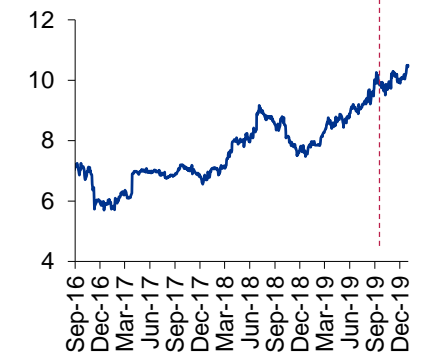
EDP



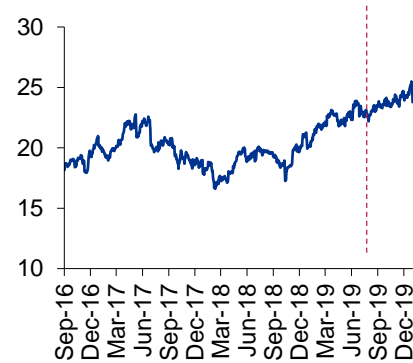
EDF



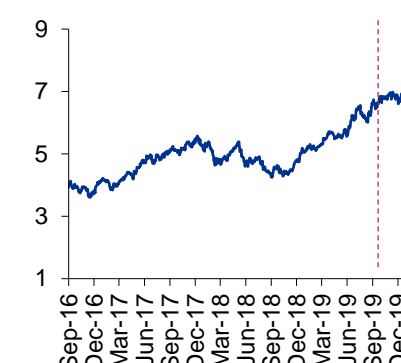
EDP Renováveis



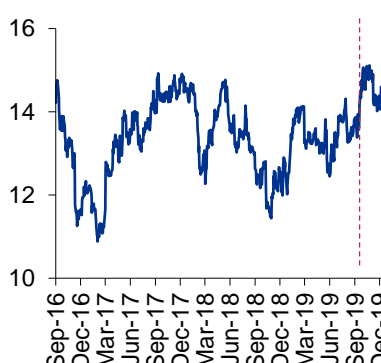
Endesa S.A.



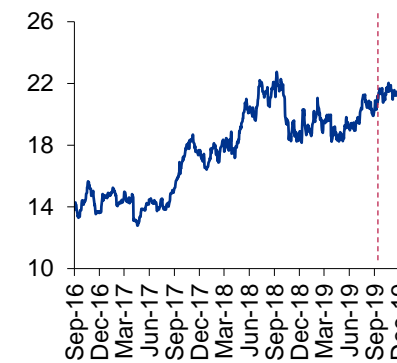
Enel SpA



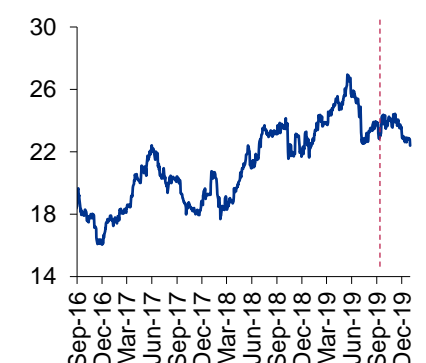
Engie S.A.



Fortum Oyj



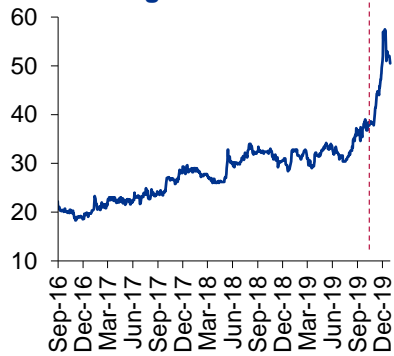
Naturgy Energy Group, S.A



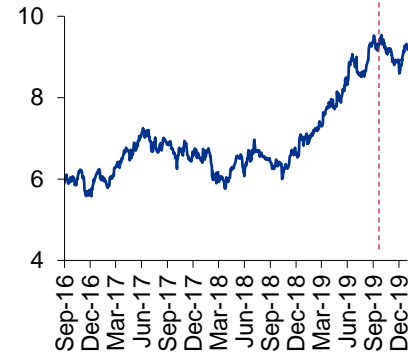
Source: S&P Capital IQ, 2020

Share price evolution: Individual stocks (cont.)

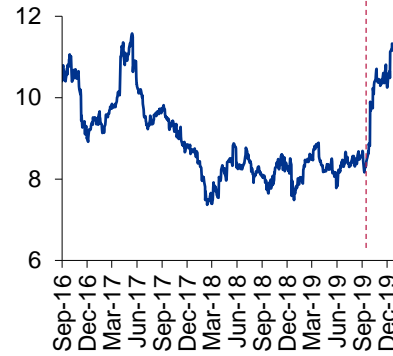
EnBW Energie Baden-Württemberg AG



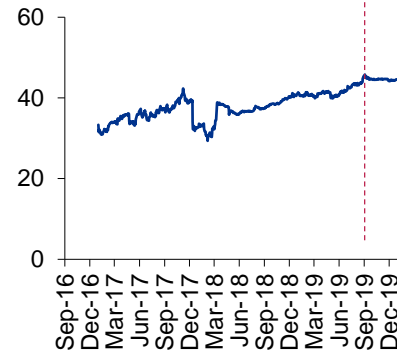
Iberdrola S.A.



National Grid Plc



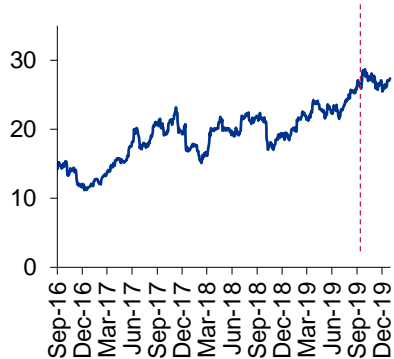
Innogy SE



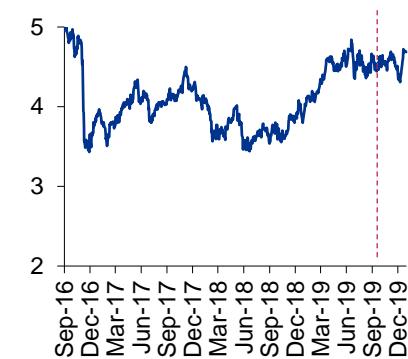
REE (after the split)



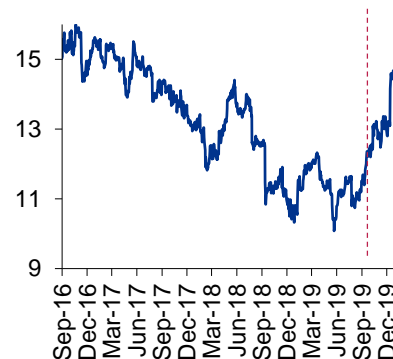
RWE AG



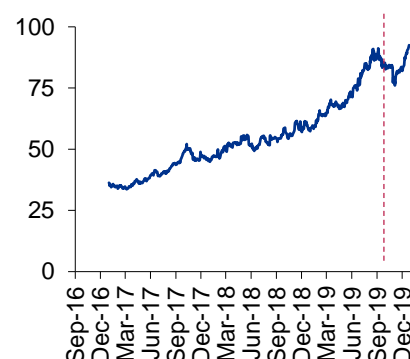
Snam SpA



SSE Plc ^(a)GBP



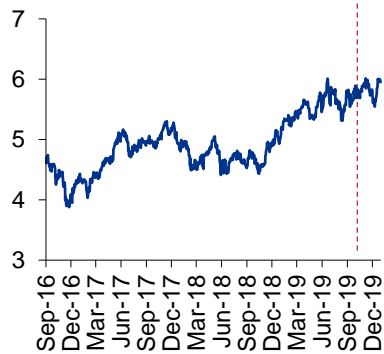
Orsted A S



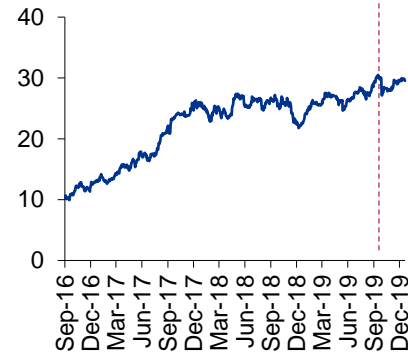
Source: S&P Capital IQ, 2020

Share price evolution: Individual stocks (cont.)

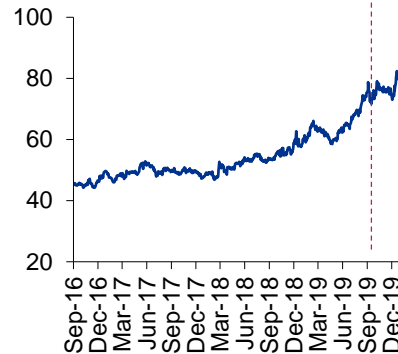
Terna – Rete Elettrica Nazionale



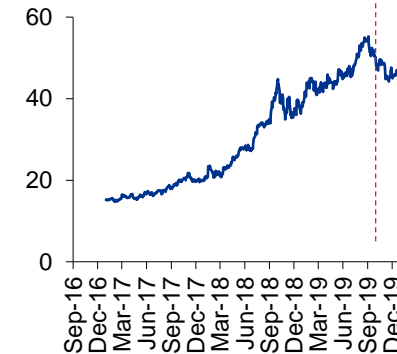
Uniper SE



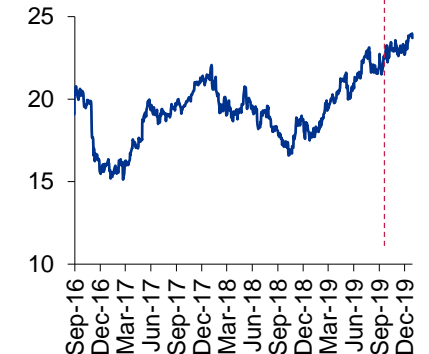
Elia Group SA



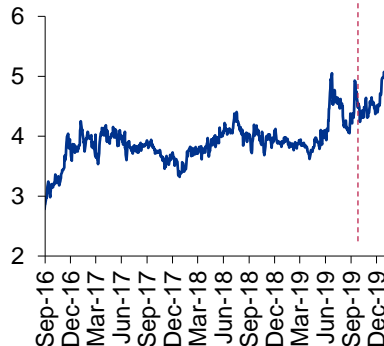
Verbund AG



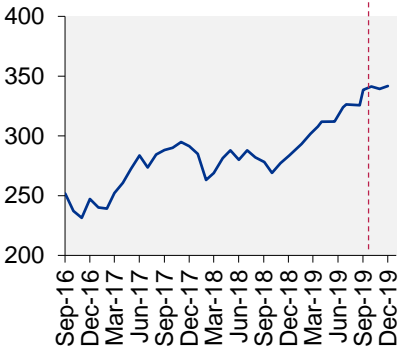
Veolia Environnement S.A.



**Public Joint Stock Company
Inter RAO UES ^(a)RUB**



Eurostoxx Utilities



Source: S&P Capital IQ, 2020

Relative valuation per company (4Q19)

	TEV/EBITDA (LTM) (as of 31 December)	^(a) TEV (EUR million) (as of 31 December)	Market Capitalization (EUR million) (as of 31 December)
Innogy SE (XTRA:IGY)	51.0x	41,014.8	24,777.8
Ørsted A/S (CPSE:ORSTED)	16.0x	40,865.7	38,718.7
VERBUND AG (WBAG:VER)	15.4x	18,054.2	15,543.4
RWE Aktiengesellschaft (XTRA:RWE)	15.0x	15,465.1	15,738.1
E.ON SE (XTRA:EOAN)	14.8x	55,447.6	24,832.6
Snam S.p.A. (BIT:SRG)	12.7x	27,341.5	15,467.5
EnBW Energie Baden-Württemberg AG (XTRA:EBK)	12.6x	21,994.3	13,678.2
National Grid plc (LSE:NG.)	12.3x	73,903.8	39,140.9
Terna – Rete Elettrica Nazionale Società per Azioni (BIT:TRN)	12.0x	20,254.1	11,967.5
Elia Group SA/NV (ENXTBR:ELI)	11.3x	10,213.6	5,430.4
EDP – Energias de Portugal, S.A. (ENXTLS:EDP)	11.1x	34,042.9	14,046.2
Iberdrola, S.A. (BME:IBE)	11.1x	100,655.1	58,397.1
Fortum Oyj (HLSE:FORTUM)	11.0x	25,214.5	19,542.5
EDP Renováveis, S.A. (ENXTLS:EDPR)	10.9x	14,255.2	9,159.2
SSE plc (LSE:SSE)	10.0x	29,492.4	17,660.2
Red Eléctrica Corporación, S.A. (BME:REE)	9.5x	14,649.2	9,675.8
Endesa, S.A. (BME:ELE)	9.2x	32,516.7	25,187.7
Enel SpA (BIT:ENEL)	8.9x	139,867.8	71,887.8
ENGIE SA (ENXTPA:ENGI)	8.8x	66,262.1	34,724.1
Veolia Environnement S.A. (ENXTPA:VIE)	8.8x	26,742.0	13,152.2
CEZ, a. s. (SEP:CEZ)	6.6x	15,763.7	10,971.5
Electricité de France S.A. (ENXTPA:EDF)	5.0x	72,774.7	30,775.7
Naturgy Energy Group, S.A. (BME:NTGY)	4.6x	40,639.1	21,802.1
Uniper SE (XTRA:UN01)	4.6x	13,398.5	10,799.5
Public Joint Stock Company Inter RAO UES, 120 MW Kumertau TPP	-	-	-
Weighted average: 9.5		950,828.60	553,076.70

Note: (a) Total Enterprise Value as of 31 December 2020, TEV = market capitalization + interest-bearing debt + preferred stock-excess cash

Source: S&P Capital IQ, 2020

Leverage and credit ratings

	LTM Net Debt/EBITDA (as of 31 December)	S&P Rating	Date ^(a)	Moody's Rating	Date ^(a)	Fitch Rating	Date ^(a)
Innogy SE (XTRA:IGY)	18.6	BBB	28-Jan-20	Baa2	18-Feb-20	BBB+	1-Aug-19
E.ON SE (XTRA:EOAN)	7.1	BBB	18-Feb-20	Baa2	18-Feb-20	BBB+	1-Aug-19
National Grid plc (LSE:NG.)	5.8	BBB+	18-Feb-20	Baa1	18-Feb-20	BBB+	18-Feb-20
Snam S.p.A. (BIT:SRG)	5.5	BBB+	18-Feb-20	Baa2	18-Feb-20	BBB+	18-Feb-20
EDP-Energias de Portugal, S.A. (ENXTLS:EDP)	5.3	BBB-	15-Apr-19	Baa3	1-Apr-19	BBB-	12-Feb-19
Elia Group SA/NV (ENXTBR:ELI)	5.0	BBB+	8-Oct-19	NA	-	NA	-
Terna-Rete Elettrica Nazionale Società per Azioni (BIT:TRN)	4.9	BBB+	27-Nov-19	Baa2	18-Feb-20	BBB+	30-Jun-19
Veolia Environnement S.A. (ENXTPA:VIE)	4.1	BBB	2-Aug-19	Baa1	18-Feb-20	-	-
SSE plc (LSE:SSE)	4.0	BBB+	14-Nov-19	Baa1	18-Feb-20	BBB+	6-Mar-19
Iberdrola, S.A. (BME:IBE)	3.9	BBB+	1-Nov-19	Baa1	18-Feb-20	BBB+	20-Feb-19
ENGIE SA (ENXTPA:ENGI)	3.5	A-	31-Jul-19	A3	18-Feb-20	A	19-Jun-19
EnBW Energie Baden-Württemberg AG (XTRA:EBK)	3.5	A-	10-Nov-19	A3	18-Feb-20	A-	-
Enel SpA (BIT:ENEL)	3.2	BBB+	15-Nov-19	Baa2	18-Feb-20	A-	18-Feb-20
Red Eléctrica Corporación, S.A. (BME:REE)	3.2	A-	30-Oct-19	NA	-	A-	6-Jun-19
EDP Renováveis, S.A. (ENXTLS:EDPR)	2.8	NA	-	NA	-	NA	-
Fortum Oyj (HLSE:FORTUM)	2.3	BBB	11-Feb-20	Baa2	10-Oct-19	BBB	9-Oct-19
Electricité de France S.A. (ENXTPA:EDF)	2.3	A-	27-Jul-19	A3	18-Feb-19	A-	29-Aug-19
Endesa, S.A. (BME:ELE)	2.0	BBB+	10-Nov-19	Baa2	18-Feb-20	A-	11-Feb-19
CEZ, a. s. (SEP:CEZ)	1.9	A-	14-Nov-19	Baa1	7-Oct-19	A-	26-Feb-19
Naturgy Energy Group, S.A. (BME:NTGY)	1.7	BBB	8-Feb-20	Baa2	18-Feb-20	BBB	28-Jan-20
VERBUND AG (WBAG:VER)	1.6	A	21-Jan-20	A3	13-Jan-20	NA	-
Ørsted A/S (CPSE:ORSTED)	1.0	BBB+	30-Jan-20	Baa1	18-Feb-20	BBB+	1-Aug-19
Uniper SE (XTRA:UN01)	0.7	BBB	13-Nov-19	NA		NA	-
RWE Aktiengesellschaft (XTRA:RWE)	-0.7	NA	-	Baa3	18-Feb-20	BBB	23-Oct-19
Public Joint Stock Company Inter RAO UES	-	NA	-	NA	-	NA	-
Average:	3.9	Mode: BBB+					

Note: (a) The date of publication of latest report (company release, market/industry/peer report) from which the rating has been sourced;
 (b) The exact date of publication of credit ratings was not mentioned in the source website;
 (c) On 15 February 2018, RWE ended its rating by the agency S&P's.

Source: S&P Capital IQ/Moody's/Fitch, 2020

Quarterly rating variation: Upgrade Unchanged Downgrade Rating not available: NA

Global M&A overview 4Q19

Key trends

Total value of the top 15 deals amounted to EUR31.5 billion.

The top deals, primarily constituting power generation, distribution and renewable companies, focused on geographical expansion, internal growth, energy transition and expansion of current portfolio. The M&A deals were also driven by other factors such as repayment of debts, divestment in certain geographies, requirement of additional capital, strengthening of stakeholder relations and privatization of the companies.

Key transactions

Canada Pension Plan Investment Board (CPPIB) entered into an agreement to acquire Pattern Energy Group Inc. Under the terms of agreement, CPPIB would acquire 98,489,599 Pattern Energy shares, representing 100 percent stake in the company. The financing for CPPIB would be done through a combination of equity contribution and debt funding from Bank of Montreal, BMO Capital Markets, Citigroup Global Markets, Royal Bank of Canada and RBC Capital Markets. The transaction, expected to close by the 2Q20, will drive Pattern Energy to grow further.

Mitsubishi Corporation and Chubu Electric Power Co., Inc. have agreed to acquire Eneco Group B.V. As per the deal, Mitsubishi would acquire 80 percent stake in Eneco while Chubu Electric would acquire rest of the 20 percent stake. Both the bidders are expected to finance the transaction through existing cash resources. Mitsubishi and Chubu Electric together intend to expand the Eneco Group internationally and aim to make Eneco the European center for all its activities related to energy.

Knight Vinke Asset Management and Elliott Management Corporation have agreed to sell 20.5 percent of its stake in Uniper SE to Fortum Oyj AB. Fortum will acquire 75,021,800 shares of Uniper, at an offer price of ~EUR29.93 per share. Fortum plans to finance the transaction through cash and credit facilities, underwritten by Barclays. The deal will increase Fortum's share in Uniper to more than 70.5 percent and will help the company in synchronizing its strategies with Uniper's Swedish and Russian portfolios. The deal will also allow Fortum to increase its footprint in Europe.

An investor group led by China Life Insurance Company Limited agreed to acquire a 34.97 percent stake in Qinghai Huanghe Upstream Hydropower. As per the terms of the deal, China Life Insurance will acquire 13.01 percent stake, followed by ICBC Financial Asset Investment, that will purchase 8.67 percent stake. The deal would enable Qinghai Huanghe Upstream Hydropower Development to develop clean energy related projects, promote transformation, supplement working capital and repay bank loan.

ENGIE SA, Mirova SA, and Credit Agricole Assurances SA together have entered into an agreement to acquire six hydroelectric portfolios of assets, from Energias de Portugal S.A. The acquisition aims to support ENGIE's zero-carbon strategy, complementing its wind and solar portfolios, primarily managed in partnership with Mirova. The deal is also in line with Credit Agricole's climate strategy and its plans for energy transition.

Source: Mergermarket, 2020; [Fortum agrees to acquire majority in Uniper to improve stability and accelerate realisation of strategy](#), 12 February 2020, Fortum website;

Top 15 M&A operations 4Q19, by deal value

Date	Target company	Target description	Target country	Bidder company	Bidder country	Seller company	Deal value EUR (million)
04 Nov 2019	Pattern Energy Group Inc.	Headquartered in California, US, Pattern Energy is an owner and operator of wind and solar facilities.	USA	Canadian Pension Plan Investment Board	Canada	NA	5,469
25 Nov 2019	Eneco Group B.V.	Integrated energy company engaged in the production, trade, transmission and supply of gas, electricity and heat and related services.	Netherlands	Mitsubishi Corporation; Chubu Electric Power	Japan	NA	4,383
8 Oct 2019	Uniper SE (20.5 percent stake) ^(a)	Uniper SE is a German company engaged in the conventional power generation and energy trading businesses.	Germany	Fortum Oyj AB	Finland	Knight Vinke Asset Management LLC; Elliott Management Corporation	4,100
10 Dec 2019	Qinghai Huanghe Upstream Hydropower Development Co (34.97 percent stake)	Hydropower generating company based in China.	China	An investor group led by China Life Insurance Company	China	NA	3,102
19 Dec 2019	Energias de Portugal S.A. (1.7GW hydroelectric portfolio in Portugal)	Hydroelectric portfolio of Energias de Portugal; a company engaged in the generation and distribution of electricity.	Portugal	Engie SA; Credit Agricole Assurances SA; Mirova SA	France	Energias de Portugal S.A.	2,200
14 Oct 2020	Chilquinta Energia S.A.	Chilquinta Energia S.A is based in Chile, engaged in electric power generation and distribution.	Chile	State Grid International Development Co. Limited.	China	Sempra Energy	2,022
03 Oct 2019	Huaneng Renewables Corporation Limited (47.29 percent stake)	Headquartered in Beijing, China, Huaneng is engaged in renewable energy business and wind power energy.	China	China Huaneng Group Co	China	NA	1,842
15 Nov 2019	OneTaipan Holdings, Inc. (67 percent stake); Pacifica21 Holdings, Inc. (67 percent stake)	One Taipan Holdings and Pacifica21 Holdings are Philippines based investment holding companies having an interest in companies that operate national power transmission network.	Philippines	Synergy Grid & Development Philippines Inc.	Philippines	Henry Sy (Private Investor); Robert G. Coyiuto (Private Investor)	1,463

Note: (a) With the purchase of 20.5 percent stake, Fortum will increase its share in Uniper to more than 70.5 percent; NA stands for Not Available
Source: Mergermarket, 2020

Top 15 M&A operations 4Q19, by deal value (cont.)

Date	Target company	Target description	Target country	Bidder company	Bidder country	Seller company	Deal value EUR (million)
5 Dec 2019	EWE Aktiengesellschaft (26 percent stake)	EWE Aktiengesellschaft is a German company operating in energy, telecommunications and information technology businesses.	Germany	Ardian Infrastructure	France	Ems-Weser-Elbe Versorgungs-und Entsorgungsverband	1,200
21 Oct 2019	AltaGas Canada Inc.	AltaGas Canada operates in natural gas distribution utilities and renewable power generation assets.	Canada	AltaGas Canada Consortium	Canada	NA	1,123
23 Dec 2019	Sorgenia SpA	Sorgenia SpA sells and distributes electricity. It also operates in the production of solar energy, wind energy, hydro energy, thermo energy, bio mass energy and operation of LNG med gas terminal.	Italy	F2i SGR SpA; Asterion Industrial Partners SGEIC, S.A.	Italy	Banca Monte dei Paschi di Siena SpA; Banco BPM S.p.A.; Intesa Sanpaolo S.p.A. ; UniCredit Group; UBI Banca S.p.A	1,000
23 Dec 2019	AquaVenture Holdings Limited	It is a US based provider of water-as-a-Service (WAAS) solutions.	USA	Culligan International Company	USA	NA	965
13 Nov 2019	Toshiba Plant Systems & Services Corporation (50.13 percent stake)	Toshiba Plant Systems & Services Corporation is a provider of surveillance systems, security systems, environment-related systems and services in the business sphere of infrastructure encompassing power plants and substation facilities, apart from others.	Japan	Toshiba Corporation	Japan	NA	925
15 Dec 2019	Oman Electricity Transmission Company S.A.O.C. (49 percent stake)	An Oman based operator, developer, financier and owner of electricity transmission system.	Oman	State Grid Corporation of China	China	Electricity Holding Company SAOC	900
22 Nov 2019	Argo Energia Empreendimentos e Participacoes S.A.	Brazil-based investment holding company having interest in companies engaged in electric energy transmission.	Brazil	Grupo Energia Bogota SA ESP; Red Elctrica Internacional SAU	Colombia; Spain	Patria Investimentos; Sommerville Investments B.V	766

Note: NA stands for Not Available
Source: Mergermarket, 2020

Contact

KPMG Global Energy Institute

Ted Surette
tsurette@kpmg.com.au

Valerie Besson
valeriebesson@kpmg.fr

Country contacts

France **Valerie Besson**
valeriebesson@kpmg.fr

Germany **Michael Salcher**
msalcher@kpmg.com

Hungary **Edina Pazstor**
Edina.Pasztor@kpmg.hu

Italy **Francesco Galgliardi**
fgagliardi@kpmg.it

Netherlands **Jaap Van Roekel**
vanroekel.jaap@kpmg.nl

Portugal **Susana Abreu**
sabreu@kpmg.com

**Russia
and CIS** **Maria Borovikova**
MBorovikova@kpmg.ru

Spain **Alberto Martin Rivals**
albertomartin1@kpmg.es

UK **Simon Virley**
simon.virley@kpmg.co.uk

ENR EMA Report main contacts

Valérie Besson
valeriebesson@kpmg.fr

Alexis Majnoni d'Intignano
amajnoni@kpmg.fr

Cécilie Timestit
ctimestit@kpmg.fr



kpmg.com/socialmedia

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2020 KPMG International Cooperative (“KPMG International”), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm third parties, nor does KPMG International have any such authority to obligate or bind any member firm. All rights reserved.

The KPMG name and logo are registered trademarks or trademarks of KPMG International. | CREATE: CRT124672A