Deloitte.

Power & Utilities July 2020



Newsletter Power & Utilities in Europe

Commodities



Crude oil (\$/bbl)



With oil prices having seen a dramatic fall at the end of Q1 2020 in response to both demand and supply side shocks of the Covid-19 pandemic, Volatility continued in April 2020 with US oil prices going negative for the first time in history as storage capacity was running out - the settlement price for WTI on Monday 20 April 2020 reaching an all-time low of US\$-37.63. However, during Q2 2020, both Brent and WTI oil prices have increased to reach US\$40.79/bbl and US\$38.33/bbl respectively on average by the end of June 2020. While this represents an increase over the last three months, they are below the levels seen over the last four years.

The recent rise in oil price from the lows seen in April 2020 is driven by a combination of cuts in oil production, and easing of lock-down restrictions in many countries. The Opec+ oil alliance agreed to remove almost 10 million barrels a day from production in May and June 2020, by far the largest cut announced by the cartel. Although this announcement had a small effect given the sizeable reduction in demand at the time, Opec+ confirmed the extension of these cuts in June 2020 aiming to prop up the market. As Covid-19 lockdown measures were eased in many countries, including the US ahead of the summer peak in oil product demand, oil prices have tracked steadily higher over May and June 2020.



The COVID-19 pandemic has also impacted the gas market, with the UK's NBP gas benchmark and the Dutch TTF equivalent continuing to fall in Q2 2020. Prices fell by over 40% to \leq 4.91/MWh and \leq 4.95/MWh respectively on average between the end of March 2020 and the end of June 2020 – this is well below the long term average and is the lowest level in over 20 years.

A combination of factors has affected the demand for gas in Europe compounding the impact of seasonality on demand. As Covid-19 lockdown measures have temporarily closed industrial and manufacturing businesses, demand for gas has reduced. This reduction has also been seen in the use of gas for electricity generation, as demand for electricity has also fallen - by up to 20% in some European countries. As renewable generation, such as wind and solar, continues to provide a growing share of electricity, the reduced overall demand for electricity and gas-fired electricity in particular has led to a further reduction in gas demand.

Following a relatively mild winter in Western Europe, gas storage levels are higher than has been historically observed, so this has not provided additional support on the demand side which has further contributed to the reduction in gas prices.

On the supply-side, the Covid-19 pandemic has also had an impact. For example, liquefied natural gas exports from the US have fallen by around 60% from the January 2020 peak. This slump may be temporary as there are other indications of specific countries looking to diversify their gas supplies. Poland has not extended an existing gas supply contract with Russia (which is due to end in 2022), and is looking at the potential for Norwegian gas and US LNG to fill the gap. Despite the reduction in demand, certain countries continue to invest in expanding their production – Qatar stated in May 2020 that the expansion of its North Field, the largest natural gas field in the world, will continue this year.



As the EU continues to focus on renewable energy and reducing the reliance on fossil fuels for fired power generation, together with the impact of Covid-19 pandemic on demand, ARA prices continued its decline during Q2 2020. Prices went below US\$40 per metric ton on average at the end of May 2020, before recovering back to US\$45.52 per metric ton on average by the end of June 2020.

The COVID-19 pandemic has influenced the demand for coal in two ways. First, as overall electricity demand has fallen due to lockdown measures, thermal generation from fossil fuels (including coal) has been reduced. Second, as the price of natural gas has also come down, there has been some substitution of coal for gas power generation, with coal being crowded out for example in the US market. In Great Britain, a new record of over 67 days without coal fired generation was achieved in mid-June 2020, and the expectation is that low electricity demand will mean that coal fired generation is unlikely to come back during the summer months.

The outlook for coal supply is mixed and will depend on how relations between China and a number of coal exporting countries (e.g. Australia) develop over the coming year. It remains to be seen if the reduction in demand from Covid-19 pandemic marks a sizeable shift in future demand for coal (with implications for the supply side), or whether governments will look to support the economic recovery with an increased focus on fossil fuels. For example, China has recently approved plans for new coal fired power stations at the fastest rate in five years, which could support coal demand for years to come.



Carbon (€/ton)



Carbon prices saw a rebound in June 2020 after having fallen sharply in the first quarter to under €20 per metric ton in line with demand reductions for power generation and industrial output driven by lockdowns and restrictions caused by Covid-19. Prices recovered to €23.47 per metric ton on average for June 2020 as lockdowns were eased in Europe, and this rise has continued into July. It is unclear whether this increase will continue for the rest of the year, in particular given how the aviation sector has been hit by the Covid-19 pandemic. Prior to this, aviation was the second largest source of carbon allowances demand. As many airlines are now predicting that 2019 passenger levels will not return until 2023, the expected growth in demand from aviation is likely to dampen future prices.

Other medium term factors are likely to impact the future prices. For example, there is an expectation that the EU will raise its emissions reduction target in 2030 versus 1990 levels from 40% to 50% or higher. This may put further upward pressure on prices, alongside the widening of the scope of the EU ETS to cover transport, shipping and buildings.



In April and May 2020, baseload electricity prices fell to some of the lowest levels seen in the last five years as electricity demand fell following Covid-19 related lockdowns in the four European countries. Lower electricity demand, combined with reductions in commodity prices and carbon prices all contributed to this outcome. Price falls were particularly pronounced in Italy, with average baseload spot day ahead prices going under €20/MWh in April and May 2020.

With demand falling, the proportion of renewable energy in the energy mix has increased in Q2 2020 - increasing solar generation (linked to seasonality and sunny weather) combined with wind generation to provide significant renewable electricity output in a number of markets. For example, the GB market the end of May 2020 saw a record proportion of renewable electricity generation exceeding 60% of demand and leading to negative prices. In Germany, day ahead prices also turned negative on the expectation of excess production in mid-April 2020.

As lockdown restrictions were eased towards the end of Q2 2020, baseload prices recovered, but still averaged less than €30/MWh in June 2020 across all four countries. The outlook on baseload prices will depend on how quickly business activity returns to normal levels, but electricity demand could remain subdued over the summer, potentially limiting further price increases in the coming months.

Newsletter Power & Utilities



In Q2 20202, clean spark spreads, which capture the price surplus or deficit generated by burning a natural gas for energy after accounting for carbon credit tariffs, were positive and increasing following a small negative period in April 2020. The increased observed in May and June 2020 shows increased profitability, driven by reductions in gas prices and the recovery in electricity prices seen in June 2020.

The pellet spreads for Q2 2020, which capture the profitability of energy generated by burning commoditised biomass pellets, showed greater volatility in this quarter than previously seen. As electricity prices reached their lowest levels in April and May 2020, the pellet spread turned negative, averaging around -£11/MWh in those two months. The spread has recovered as electricity prices increased in June 2020, but still remained negative. Note that this spread is here defined as the difference between the baseload price and the price of pellets, plus any level of support that biomass plants receive from Renewable Obligation Certificates or existing Contract for Difference arrangements.



German clean dark & spark spreads (€/MWh)



Falling gas prices and a small increase in coal prices across the second quarter, together with the changes in the carbon price and falls in electricity prices in April 2020, led to clean spark spreads – those yielded from burning natural gas for electricity generation – becoming negative for April 2020. As electricity prices recovered, the spark spread has turned positive in May and June 2020, reaching an average of close to €10/MWh in June 2020. Dark spreads on the other hand – those yielded from burning coal – continued to be negative. The changes in Q2 2020 reflect changes in carbon prices, but as coal prices increased and carbon prices recovered in June 2020, the dark spread went further into negative territory getting close to -€3/MWh by the end of Q2 2020.



Spotlight on Power and Utilities market

Capital market overview

	Deloitte Index ⁽¹⁾	Enel	Iberdrola	EON	EDF	ENGIE	RWE	Naturgy	Centrica
Market cap. ratios									
Currency		EUR	EUR	EUR	EUR	EUR	EUR	EUR	GBP
Market Cap (June 20) ⁽³⁾		76 380	64 449	25 956	25 753	27 111	18 949	16 420	2 420
3m stock price performance	14%	25%	17%	11%	16%	24%	33%	5%	14%
YoY stock price performance	12%	25%	18%	3%	-25%	-18%	41%	-32%	-56%
Market multiples									
EV/EBITDA 2019	9.2x	9.3x	12.5x	n/m ⁽²⁾	8.5x	7.0x	n/m (2)	8.0x	5.1x
EV/EBITDA 2020	9.2x	8.1x	10.9x	10.5x	8.4x	7.0x	12.3x	8.2x	5.2x
P/E 2019	12.3x	n/m	18.9x	16.6x	5.0x	27.6x	2.2x	11.7x	n/m
P/E 2020	15.8x	15.0x	18.9x	15.9x	20.0x	14.0x	18.8x	13.7x	11.4x
Price/book value 2019	2.0x	2.5x	1.6x	4.1x	0.6x	0.8x	1.1x	1.7x	2.0x
Profitability ratios									
ROE forward 12m	11%	17%	9%	18%	3%	6%	6%	11%	18%
ROCE forward 12m	6%	10%	6%	6%	3%	5%	4%	7%	8%
EBITDA margin 2019	19%	20%	26%	8%	21%	16%	-12%	19%	7%
EBITDA margin 2020	23%	22%	28%	11%	22%	17%	19%	19%	6%
EBIT margin 2019	11%	14%	16%	3%	9%	8%	-17%	13%	1%
EBIT margin 2020	13%	14%	17%	6%	7%	9%	9%	11%	2%



---- Weighted average EV/EBITDA LFY 8,8x

Source: Capital IQ



9.0x

Source: Capital IQ

- Deloitte Index is composed of Engie, EDF, EON, Iberdrola, RWE, Gas Natural, Enel, SSE and Centrica
- (2) Due to the large asset swap between E.ON and RWE, financials and multiples are irrelevantt

(3) One-month average weighted by volume

Key messages from brokers and analysts

"Utilities look better positioned than other sectors to withstand the economic from the COVID-19 outbreak." (JP Morgan – June 4, 2020)

"Regulated Utilities: Regulatory protection and earnings mix suggest that the fall in electricity and gas demand induced by Covid-19 should lead to no more than low single digit EPS downside."

(Exane BNP Paribas – May 29, 2020)

"Post-pandemic – More opportunities than risk – key debates likely to emerge and Utilities exposure; inflation vs deflation ; mobility, supply chains, battery/hydrogen, consolidation, competition, and the future of merchant generation."

(Exane BNP Paribas – May 27, 2020)

"We remain bullish long-term on Carbon EUAs and expect prices to rise significanty towards mid-decade as a policy tool for effecting decarbonisation change."

(Morgan Stanley - May 20, 2020)

M&A Trends

Transactions involving power and utilities companies

Iberdrola launched a tender offer for c.**\$864 million**, on **Infigen Energy**, a developer, owner and operator of renewable energy in Australia, with a total 670 MWh in wind and solar generation capacity and c.1.0 GWh in projects. *(See Awareness Times – July 1 2020)*

SSE Renewables, a leading developer and operator of renewable energy across the UK and Ireland, has agreed to invest around £580 million in the construction and development of Viking onshore wind power project situated in Shetland, Scotland, with an annual electricity output expected to be around 1.9TWh. (See MarketLine – June 19 2020)

Iberdrola, has finalized the purchase of two onshore **wind projects in Scotland**, with a combined **165MW** capacity and which will involve an investment of around **€190 million**, from individual local shareholders **3R Energy** and **Mitchell Energy**. (See Saur Energy International – May 15 2020)

Iberdrola France acquired **Aalto Power**, a developer of onshore wind power projects, from **Aiolos**, a private group, **and Caisse des Depots et Consignations**, to strengthen **Iberdrola's** presence and growth in France for **\$108.1 million**. (See Financial deals tracker – May 8 2020)

Solarcentury, a UK solar power company, has completed project financing of €96 million for the construction and development of Cabrera solar power project situated in Andalusia, Spain. (See MarketLine – June 30 2020)

Total through its subsidiary **Total Quadran** has acquired **Global Wind Power France**, a company with a 1 GW portfolio of onshore wind projects, for an undisclosed amount. (See Platts European Power Daily – March 23, 2020) **Gasum**, a Finnish state-owned gas company, has completed the acquisition of LNG and biogas business in Sweden and Norway and Nauticor's Marine Bunkering business in Germany from global industrial gas major Linde AG for an undisclosed amount. (See Bioenergy Insight – May 4 2020)

Transaction involving equity funds

A consortium including Italy's Snam Rete Gas, Global Infrastructure Partners, Brookfield Asset Management, Ontario Teachers' Pension Plan and NH Investment & Securities, is buying a **49% stake in Abu Dhabi National Oil Company's** gas pipeline assets, for an estimated value of **\$10.14billion**. *(See Bebeez – June 24 2020)*

Japan's trading house **Mitsubishi Corp** and **Chubu Electric Power** have completed the acquisition of **Eneco**, a Dutch producer and suppliers of natural gas, electricity and heat, from **44 Dutch municipalities** for **\$4.5 billion**. (See Reuters News – March 25 2020)

Credit Suisse Energy Infrastructure Partners (CSEIP) has acquired an 85% majority stake in the "northern part" of the Markbygden II 253 MW wind project in Sweden for €200 million. (See IJ Global – June 8, 2020)

EP UK Investments Ltd., an equity fund owned by **Energeticky a prumyslovy holding**, has acquired 100% interest in **Humbly Grove Energy Ltd**, a company that owns and operates an underground gas storage facility in Hampshire, from **Petroliam Nasional Berhad** for an undisclosed amnount. (*See Financial deals tracker – March 24 2020*).



European Power and Utilities companies wrap-up

While Utilities have a higher resilience to Covid-19 crisis, lockdown period has aggravated the existing trend of declining power demand in Europe due to adverse climate impact.

In addition, **Utilities have been at the core of some measures to assist communities** during the turmoil with payment facilities and assistance.

Moreover, **electricity prices and futures prices witnessed significant decline** giving lower demand, drop in commodities prices and **strong output from renewables.**

During the lockdown, **renewables stand resilient with positive outlooks** sustained given European countries adherence to climate agenda.

Given uncertainties over recovery in demand and prices, risk on utilities earnings is increasing and selfhelp needed.







Q1 2020 Highlights	 First quarter 2020 sales at €20.7bn, a decrease of 1% in organic terms mainly driven by: (i) the change in the price of gas for c€0.7bn but with limited impact on EBITDA and (ii) the negative impact of the Covid-19 crisis for c€0.2bn; partly offset by (i) better price conditions on electricity prices in France (regulated sales tariff of +7.7%) and in the United Kingdom and (ii) a positive impact from renewable generation from good wind condition. In France the French nuclear output sharply decreased compared to Q1 2019 (-10 TWh) due to extensions of unit outages but it is parly offset by lower purchase volumes due to 	 terms, namely due to (i) adverse temperature with impact on Supply in France and across Europe, as well as gas distribution in France and (ii) the first Covid-19 effects, mainly in Client Solutions, particularly in France. EBITDA is up by 1,4% at €3.1bn, in organic terms. This increase is mainly driven by the mirror effect of increased depreciation attributable to the increase of the dismantling asset resulting from the triennial review of nuclear provisions that occurred at the end of last year and to the amortization of some gas distribution assets in France. Reported Current operating income amounts to €1.9bn in O1 		
	the sharp drop in demand. In aggregate the drop in demand, combined with the decline in nuclear generation led to a negative volume impact on sales for €446 million.	2020 vs €2.0bn in Q1 2019. Excluding the negative temperature effect in France, COI1 would have been up 2.1% on an organic basis.		
Key events in the period	• Covid-19 crisis: EDF is committed with significant measures to (i) guarantee continuity of essential services, (ii) support to customers and suppliers with payment facilities and (iii) mitigation measures against energy poverty.	 Due to Covid-19, robust actions have been taken to protect employees, ensure financial support for smaller suppliers, deliver essential services to customers and maintain critical energy supply. 		
	 Notification of termination of ARENH contracts (committed acces to EDF nuclear generation). 	• Engie issues a triple tranche senior bond for a total amount of €2.5bn.		
	• Launch of an innovative storage for business solutions in Germany by EDF Renewables.	Investment in hydrogen technology platform H2SITE		
	 Acquisition of a portfolio of 180,000 iSupply (Vattenfall) residential customers by EDF Energy. 			
FY 2020	FY20 guidance removed	FY20 guidance removed		
Outlook	 Revised annual nuclear output forecast: nuclear output in France will be between 315-325 TWh in 2020, whilst ranging from 330TWh to 360TWh each year in 2021 and 2022. 	 The impact of the covid-19 health crisis remains unquantifiable and Engie will update its forward financial outlook in due course. 		







Q1 2020	 Q1 2020 sales rose at €17.7bn mainly attributable to: 	 Sales in the first quarter are up by 2% at €3.8bn due to: 		
Highlights	 the inclusion of innogy's operations, particularly in Germany notably within Customer Solutions and Network segment parlty offset by warm weather 	 the acquisition of E.ON's renewable energy business partly offset by the gas sales mabe by RWE Supply &Trading in the Czech Republic recognized as pure trading transactions 		
	 The first-quarter figures covid-19 impact on E.ON's business to a limited degree because the lockdown restrictions only affected the final three weeks of the quarter. 	 Adjusted EBITDA of €1.3bn shows a 59% rise than in the same period last year. The main reasons are (i) the first-time inclusion of the renewables business acquired from E.ON and (ii) the considerable increase in the utilization of wind farms and the reinstatement of the British capacity market. 		
	 Adjusted EBIT of €1.5bn shows an increase of €0.3bn compared to prior-year figure namely due to the above mentioned partially offset by expenditures for residual power output rights. 			
	Merger squeeze-out finalized of innogy. This co	ncludes the final step in RWE / E.ON asset swap.		
Key events in the period	 Bond issues of €2.75bn including €1.25bn: €750m green bond (1% - 5.5 yers) €1 bn bond (0.375% -2023) €0.5 bn bond (0.750% - 2028) €0.5bn green bond (0.875% - 2031) The Extraordinary General Meeting of innogy SE in Essen has approved the squeeze-out of the minority shareholders of innogy SE. The minority shareholders will receive €42.82 per innogy share as compensation. Innogy will then become a wholly owned subsidiary and can be fully integrated into the E.ON Group. 	 In respect with the German Coal Phase-out Act RWE announced to shut-down before the end of this year the first power plant unit with a capacity of 300 megawatts. Further power plant units with a total capacity of 2,500 MW will follow in the next two years. Until 2030, RWE will shut down two thirds of its lignite-fired capacity and thus bears the major burden of the measures laid down in the decommissioning path for lignite. Acquisition of a 382MW gas-fired power plant in the east of England for £101. A contract secures capacity payment from October 2020 to September 2035 Official closure of RWE's last hard coal power station in the UK (1,560MW). 		
FY 2020 Outlook	 E.ON expects the E.ON Group's 2020 adjusted EBIT to be between €3.9 and €4.1 billion and its 2020 adjusted net income to be between €1.7 and €1.9 billion. This does not include risks from the COVID-19 pandemic 	 Despite Covid-19 crisis, FY20 guidance released with 2019 financial statement is confirmed 		

Guel



Q1 2020 Highlights	• Q1 2020 sales totaled €20bn, i.e12.2% compared to Q1 2019, mainly due to:	 No financial results published by Centrica except the following informations:
- Harman G	 (i) lower volumes of electricity sales in Italy and Spain as well as gas in Spain, (ii) Thermal Generation and Trading in Italy, reflecting a decline in trading activities and the effects connected with the application of IFRIC interpretations and (iii) adverse exchange rate developments especially in Brazil, Chile and Colombia; The gross operating margin amounts to €4.7bn, i.e. +6% compared to Q1 2019, due to 	 The Board remains committed to taking appropriate actions to maintain a strong balance sheet. Substantial liquidity available to accommodate anticipated increase in working capital arising from certain customer segments deferring payments. Decision to pause planned divestments of our interests in Spirit Energy and our interest in Nuclear due to current environment However intention to exit oil and gas production and nuclear power generation in line with strategic shift
	 (i) the improved performance of Thermal Generation and Trading, (ii) a larger contribution from Enel Green Power, (iii) the effects of the renewal of the 5th Endesa Collective Bargaining Agreement in Spain Partly offset by adverse exchange rate developments in Latin America. 	towards the customer is maintained.
Key events in the period	 Enel Green Power Brasil Participações Ltda (EGPB) started operations to connect the 475 MW section of São Gonçalo solar plant to the grid. The construction of the 475 MW solar plant involved an investment of \$390 million Issue of two new share swap transactions to increase its shareholding in its listed Chilean subsidiary Enel Américas S.A by 2.7% to reach 62,3%. 	 Cancellation of the 2019 final dividend payment to be paid in June 2020. Following the decision not to pay any Board level bonuses relating to 2019, bonus payments to all other management have also been paused and will be reviewed when the financial impacts become clearer
FY 2020 Outlook	• FY 2020 targets confirmed with no current evidence of significant impacts of COVID-19 on the Group.	• FY 2020 guidance removed





Q1 2020 Highlights	 Q1 2020 sales totaled €9.4bn, i.e8% compared to Q1 2019. EBITDA is increasing by 5,8% at €2.8bn thanks to (i) the arrival of additional installed capacity and normalization of hydroelectric production in Spain and (ii) the Generation and Supply business due to lower costs. Gross investment was up 24,2% to €1,729 million, mainly in the Networks and Renewables businesses, with 1,200 MW of new capacity installed over the quarter and more than 5,500 MW in the last 12 months. 	 Q1 2020 sales totaled €5.1bn, i.e20.2% compared to Q1 2019, mainly as a result of lower energy prices and volumes sold in the liberalized businesses. EBITDA is decreasing by 15.6% at €0.94bn, following (i) the challenging scenario in International LNG, (ii) the already expected lower contribution from EMPL and Spanish electricity distribution activities, (iii) the FX impact in LatAm, and (iv) the €158m of capture costs.
Key events in the period	 An agreement was reached with Siemens for the sale of Iberdrola's entire stake in Siemens Gamesa, representing 8.07% of its share capital. The capital gain on the sale amounted to €485m. Due to the Covid-19 crisis, the Iberdrola Group has implemented a comprehensive series of measures to ensure the protection of employees, suppliers and customers, as well as security of supply. The General Shareholders' Meeting agreed to distribute a final dividend of €0.232/share, bringing total shareholder remuneration to €0.40/share against 2019 earnings — 14% higher than a year earlier. 	 Acquisition of a 34% stake in Medgaz to Mubalada for €445m. After this operation, Medgas gas field should be 49% owned by Naturgy and 51% by Sonatrach Completion of the sale of its ownership in Iberafrica Power (Kenya) to AP Moller Capital for a total amount of \$62m. Naturgy builds largest wind project in Castile and Leon: this project involves a total of nine wind farms with an investment of approximately €300m.
FY 2020 Outlook	 Iberdrola maintains its targets 2020: a net profit will exceed that of 2019 despite of Covid-19 impacts thanks to its financial strength and liquidity but also its non-recurrent results from Siemens-Gamesa divestment. 	 FY20 guidance removed No alternative outlook given the lack of visibility linked to the development of the pandemic on a global scale.



Policy and Regulation Radar

This section summarizes the key changes respectively in the EU or in the country regulation that may significantly affect the power and utilities companies.

What is changing in the EU regulation?

Recovery Plan for Europe

Key features	Insights	
In May 2020, the European Commission proposed a major recovery plan for Europe	The Commission is designing the Recovery Plan based on two major programs to mobilize the necessary investments:	
to help repair the economic and social damage brought by the coronavirus	 Next Generation EU, a new recovery instrument of €750 billion which will boost the EU budget with new financing raised on the financial markets for 2021-2024. 	
and protect and create jobs.	 A reinforced long-term budget of the EU for 2021-2027 (€ 1,100 billion). 	
The investments will be channelled via a variety of instruments under three pillars which pretend to power recovery and resilience:	The Commission proposes to reinforce the flexibility of the EU budget and emergency tools for the period 2021-2027. To finance the necessary investments, the Commission will issue bonds on the financial markets on behalf of the EU. To make borrowing possible, the Commission will amend the Own Resources Decision and increase the headroom – the difference between the Own Resources ceiling of the long-term budget (the maximum amount of funds that the Union can request from Member Catao to	
(among others, supporting investments and reforms considering a just transition).	finance its expenditure) and the actual spending. With the headroom as a guarantee, t Commission will raise funds on the markets and channel them via Next Generation E	
 Kick-starting the economy and helping private investment. 	to programmes destined to repair the economic and social damage and prepare for a better future.	
• Learning the lessons of the crisis and addressing Europe's strategic challenges (i.e. reinforcing programmes	The Commission remains fully committed to delivering on its flagship initiatives, the twin green and digital transitions, which are key to relaunching the European economy. In this sense, it is important to highlight, among others:	
for research, innovation and external	The European Green Deal as the European growth strategy by:	
action).	 Promoting a massive Renovation Wave to modernise Europe's buildings and critical infrastructure, including building one million charging points for electric vehicles. 	
	• Creating 1 million new green jobs through a more circular economy.	
	• Supporting European natural ecosystems. In this sense, the European Commission recently adopted a Biodiversity Strategy for 2030 and a Forest Strategy is upcoming.	

- Supporting the **Just Transition Fund**, which will focus on re-skilling of workers and creating economic opportunities for small and medium-sized enterprises **via funds from Next Generation EU program (up to €40 billion**, to assist Member States in accelerating the transition towards climate neutrality).
- Promoting the Farm to Fork Strategy, which supports farmers in providing Europeans with affordable, nutritious, safe and sustainable food. Given the vital role of rural areas in the green transition, the Commission is proposing to reinforce the budget for the European Agricultural Fund for Rural Development (a €15 billion reinforcement for the European Agricultural Fund for Rural Development to support rural areas).

A deeper and more digital Single Market by:

- Investing more in better connectivity, and its industrial and technological presence (such as, artificial intelligence, 5G and 6G networks, etc.).
- Supporting a real data and digital economy as a motor for innovation and job creation.
- Determining a new cybersecurity strategy.

Key features	Insights
	The Commission is also proposing to reinforce other programmes to allow them to play their full role in making the Union more resilient and addressing challenges brought along by the pandemic and its consequences for what it is considered that recovery should have a fair and inclusive measures.
	Next steps
	By July 2020, the European Council expects to reach a political agreement on Multiannual Financial Framework 2014-2020 and 2021-2027. It is estimated that the Multiannual Financial Framework 2021-2027 implementation could start by January 2021.

Link: <u>Recovery Plan for Europe</u>

energy system during the COVID-19

pandemic.

European Council adopts conclusions on the response to the COVID-19 pandemic in the EU energy sector

Key features	Insights
On June 25th, the European Council adopted conclusions on the response to the COVID-19	Some of the major conclusions adopted by the European Council regarding the energy sector response to the pandemic are the following:
pandemic in the EU energy sector. Above all, the Council expresses its appreciation for staff in the energy sector for their dedicated and effective efforts to ensure	 It highlights the crucial role of the energy sector in the EU's economic recovery and notes that the European economy needs to become greener, more circular and more digital while remaining competitive globally. In this sense, the Council considers the necessary economic transformation towards sustainable growth
the continuous operation of the European	and climate neutrality, building on the European Green Deal, as a major

• This transition will also gradually reduce the use of fossil fuels and further promote European leadership in developing and deploying safe and sustainable low-carbon technologies in a cost-efficient manner while respecting the member state's right to choose their energy mix and appropriate technologies.

- The Council further acknowledges the need for initiatives to support a robust recovery plan, towards an affordable, safe, competitive, secure and sustainable energy system. It considers important in the current circumstances to streamline the state aid rules for environmental protection and energy in order to facilitate support for investments necessary for the energy transition.
- It also notes the need to further **incentivise future decarbonisation investments**, **including through the improvement of the EU carbon market** while developing a carbon border adjustment mechanism in a WTO compatible way.

In its conclusions, the Council calls on the Commission to:

opportunity to stimulate the member states' economies.

- Continue its work, in cooperation with the member states, on initiatives planned in the framework of the European Green Deal and its investment plan, such as the renovation wave, the EU strategy on energy system integration, the offshore renewable energy strategy, the review of the regulation on guidelines for trans-European energy infrastructure (TEN-E) and the renewable energy financing mechanism, and,
- to present an action plan and a roadmap for hydrogen with emphasis on renewable hydrogen to contribute to the energy transition.

Next steps

The Council encourages the Commission to maintain its ambitious timetable for the initiatives included within the 2020 work programme, which shall be reviewed due to the COVID-19 pandemic.

Link: <u>Response to the COVID-19 pandemic in the EU energy sector</u>

What is changing in the country regulation ?

Germany				
Торіс	Key features	Insights	Next Steps	
The Act on the phase-out of coal- fired plants (Coal Phase-out Act)	• The Bundestag and Bundesrat have decided to phase out coal in Germany by 2038 at the latest. The law provides for a gradual phase-out of climate-damaging coal-fired power generation.	 The Coal Phase-out Act consists of different measures: Lignite plants are subject to an agreement with the Federal 	 The Bundestag and Bundesrat passed the legislative package on 03.07.2020. 	
 The law provides for the gradual reduction of fossil, climate-damaging coal-fired power generation and its termination by 2038 at the latest. Individual old blocks will be shut down by 2022. The aim of this law is in particular to reduce the specific reimbursed for the gradual reduction of fossil, climate-damaging coal-fired power generation and its termination by 2038 at the latest. Individual old blocks will be shut down by 2022. 	• The Coal Phase-out Act is an article law which contains the KVBG as article 1 (and otherwise amends other laws such as the KWKG, EnWG,			
	generation of electricity from coal in Germany gradually and as steadily as possible to zero by the end of 2038 at the latest, thereby reducing emissions. This serves to achieve the sectoral target for the energy industry in 2030 and to contribute to closing the emissions reduction	accentedecomissioned capacitymany• As from 2031 hard-coal plantsare subject to an obligatory,ducingnon-reimbursed decomissioningdetermined by the age (cod) andotiongrid-related system relevance	 The Act shall enter into force on the day following its promulgation in the Federal Law Gazette. 	
	gap in 2020.	 Plants with cod as from 2010 could be subject to a reimbursement scheme according to a "hardship clause" 		
Structural stren- gthening for coal regions	 In addition to the Coal Phase out act, the federal government has drafted the Act on the structural strengthening for coal regions The Federal Government has established a substantive and financial framework for structural assistance for the regions concerned until 2038. On this basis, the Federal Government has launched the draft of the Structural Strengthening Act for Coal Regions with the character of a comprehensive support and expenditure law. 	 The German government sees structural change in the coal regions as part of the transformation process, which is intended to achieve the national and international climate targets and whose national implementation framework they have defined in the German Sustainability Strategy 2017 and the Climate Protection Plan 2050 from 2016 has decided. In order to compensate for differences in economic power and to promote economic growth, the Federal Government supports the states of Brandenburg and Nordrhein-Westfalen, the Freistaat 	• The Bundestag and Bundesrat passed the legislative package on 03.07.2020.	
		 Sachsen and the state of Saxen- Anhalt in certain assisted areas. Within the framework of the objectives of the aid, the financial aid is intended in particular to manage structural change and safeguard employment in the course of the phasing-out of lignite mining and Conversion of lignite into electricity. 		

Germany					
Торіс	Key features	Insights	Next Steps		
Draft law on the development of a building- integrated charging and supply infrastructure for electric mobility («GEIG»)	 The Federal Government wants to push ahead with the nationwide establishment of charging points for electric cars and, in doing so, place greater responsibility on industry. With the draft of a law for the development of a building-integrated charging and line infrastructure for electric mobility ("GEIG"), the Federal Government wants to take a further step in the area of charging and line infrastructure in Germany. The planned GEIG is intended to create the conditions for accelerating the expansion of the line and charging infrastructure for electromobility in the building sector. The draft law transposes Art. 8 (2) to (6) of the so-called EU Buildings Directive into national law. In order to achieve the objectives of the Buildings Directive, the Act addresses residential and non-residential buildings with large parking spaces. 	 In a residential building to be constructed or in the case of a major renovation of a residential building which has more than ten parking spaces, all parking spaces must in future be equipped with the line infrastructure for electric mobility (Section 6 and 8 GEIG). A major renovation is - according to the definition of the GEIG - the renovation of a building in which more than 25% of the surface of the building shell undergoes renovation (Section 2 no. 5 GEIG). In the case of new construction or major renovation of a non-residential building with more than ten parking space, every fifth parking space must be equipped with the line infrastructure for electric mobility. In addition, at least one charging point must be set up (Section 7 and 9 GEIG). 	• The GEIG is expected to enter into force in September 2020		
		residential building with more than twenty parking spaces must also be equipped with at least one loading point (Section 10 GEIG).			
Building Energy Act ("Gebäudeener giegesetz" – GEG)	 The previously parallel regulations on the Energy Saving Act (EnEG), the Energy Saving Ordinance (EnEV) and the Renewable Energies Heat Act (EEWärmeG) are to be merged in future into one law, the so-called Building Energy Act (GEG). The aim of the Federal Government is to simplify and reduce bureaucracy with this law the anarry caving law for buildings. 	 In the interests of climate protection, the conservation of fossil resources and the reduction of dependence on energy imports, the Act is intended to contribute to the achievement of the Federal Government's energy and climate policy goals while observing the principle of economic efficiency. 	The GEG was adopted by the Bundestag on 18 June. It is possible that the 2nd and 3rd reading in the Bundesrat will take place before the summer break in July. With the usual transition period after		
	 The purpose of the GEG is to use energy in buildings as sparingly as possible, including increasing use of renewable energies to generate heat, cooling and electricity for building operation. 	• These goals include, in particular, achieving an almost climate- neutral building stock by the year 2050, increasing the share of renewable energies in final energy consumption for heating and cooling, and a sustainable development of energy supply.	publication, the GEG could then enter into force on 1.10.2020.		
		 The new draft contains among other things changes, which had become necessary due to the resolutions of the climatic cabinet. 			

Spain

pic

Key features

grid).

context.

legislation.

Promoting an orderly development

of renewable energies (in relation to

Driving the growth of new business

hydrogen) in an energy transition

Alleviating the crisis impact on energy

economic balance and liquidity within

market players as well as ensuring

Adjusting energy-efficiency related

the electricity sector.

procedures of access and connection to

models (e.g. energy storage, renewable

MeasuresThis new rule intends to mitigate therelated tosocial and economic impact of COVID-19energy andpandemic by re-starting crucial economicother sectorssectors, with special focus on the energyto promotefield. Some of the most important measureseconomicare the following:recoveryfield. Some of the determine

Insights

The decree focuses on the **relevant role** of the energy sector as a driving force of the economic recovery.

First, this rule aims at serving as a lever to achieve the goals set by the proposal of the Spanish National Energy and Climate Plan. In this sense, this law sets the guidelines to enhance an orderly development of renewable technologies by:

- Regulating grid access and connection procedures. The rule aims at strengthening this process' technical viability requirements.
- Approaching a new remuneration scheme for these technologies. This scheme shall serve as a stable and predictable framework to enhance economy de-carbonization, boost investments and reduce electricity cost.

Other main goal of this rule is the development of new business models through the promotion of energy storage, independent energy aggregators, renewable energy communities, high capacity EV charging infrastructure or regulatory sandboxes, among others. In parallel, the law adopts several measures to alleviate the pandemic's impact on the energy sector, such as:

- Improving grid operators' capital expenditure limits so these agents may maintain the required investment pace to achieve the renewable energy growth goals.
- Allowing the use of the electricity system surplus to cover both temporary annual and monthly imbalances.

Next Steps

This piece of law came into force on June 24, 2020.

Several regulatory developments associated to this rule will be conducted in the upcoming months.

Spain				
Торіс	Key features	Insights	Next Steps	
Project of future Climate Change and Energy Transition Law	 The Spanish Government initiated a public consultation process in 2018 (see Q4 2018 Newsletter) and a preliminary version was launched in 2019 (see Q1 2019 Newsletter). 	This Law Project is based on sustainability principles, social justice, resilience, caution and non-reversion of achieved	This Law Project will be under legislative development in the following months.	
	 This Law Project aims at facilitating the Spanish economy de-carbonization by 2050, following the European Union and the Paris Agreement determinations. progress, Public Health protection, competitiveness improvement of productive sectors and cooperation among Public Entities. The main aspects covered by the Lat Project are: 			
		 Climate neutrality goals, which shall only be revised upwards. Climate action tools. Renewable energies and efficiency. New auctions scheme for renewable technologies. Building renovation. Sustainable mobility. EV charging station gradual implementation. Fossil-based energy product divestment. 		
Public consultation process regarding	Both the Storage Strategy and the Renewable Hydrogen Roadmap are crucial to achieve the goals set by the proposal of the Spanish	Spanish MITECO has launched both consultation processes together due to the synergies between energy	Both consultations have been opened until the end of June 2020.	
Strategy and the Renewable Hydrogen Roadmap	 Regarding energy storage, the proposal considers this technology as an essential driver to allow the development of a system based on large amounts of renewable variable generation. 	The consultation process also points out the positive impact that national development of both technologies could bring into the Spanish economy, in a context of recovery after COVID-19 pandemic.	Spanish MITECO will carry on the with the documents' elaboration in the upcoming months.	



• Regarding renewable hydrogen, the proposal sets this technology as a driver that can: (i) generate electricity, (ii) cover the demand at high temperature industrial processes and (iii) contribute to

transport's de-carbonization.

	United Kingdom				
Торіс	Key features	Insights	Next Steps		
Final policy proposals for active suppliers and exit arrangements	 Ofgem has been reviewing its approach to supplier licensing, with new market entry requirements came into effect in July 2019, and Ofgem further consulted on new ongoing requirements for active suppliers and exit 	 Ofgem's review to supplier licensing aims to ensure that appropriate protections are in place against poor customer service and financial instability. 	 Ofgem is inviting stakeholders to provide comments on the consultation by 20 August 2020 		
(Ofgem)	 arrangements in October 2019. Following a review of the consultation responses, Ofgem has now set out its final policy proposals. It has published a consultation on the licence modifications to implement the proposed changes to reducing the likelihood and impact of disorderly supplier market exits: Promoting more responsible risk management Improved governance and accountability Increased market oversight In the event of a supplier exit, Ofgem also proposes steps to ensure administrators are held to the same standards as suppliers, and for suppliers to notify Ofgem if they are engaging in a customer book sale. 	 These new regulations should protect consumers, but put additional requirements on energy suppliers who are active in the market. Ofgem is looking to strike a balance between costs and benefits of additional regulations on suppliers – we expect further consolidation to take place over the coming years. 			
Reviewing the Consolidated Segmental Statements - Our initial proposals (Ofgem)	 Ofgem is consulting on proposals to revise a supply licence condition on 'Financial information reporting', which requires submission of a Consolidated Segmental Statement (CSS) for 'Relevant Licensee' holder (ones that have a minimum number of customers and also hold a generation licence). Ofgem's consultation document sets out its preferred options for improving the transparency of energy supplier profitability through the CSS. Ofgem is proposing to: extend the requirement to cover suppliers that are not vertically integrated lowering the threshold to 50,000 customers removing the annual audit requirement, but maintain the right to require an audit 	 The regulations currently apply to a 'Relevant Licensee' holder of an electricity or gas supply licence (or any Affiliates) granted, or treated as granted, who supplies electricity or gas to more than 250,000 domestic or non-domestic customers and (or any Affiliates) is also a holder of a generation licence. The changes are being proposed given that the energy retail market has changed significantly since the CCS requirements were introduced in 2009. Smaller energy suppliers that were previously not covered by these financial reporting requirements will need to comply with these requirements if the proposals are implemented as per Ofgem's 	• The consultation is open until 12 August 2020 and companies have an opportunity to submit their views until then for Ofgem to consider.		

United Kingdom				
Торіс	Key features	Insights	Next Steps	
Consultation for protecting energy consumers with prepayment meters (Ofgem)	 The current pre-payment meter (PPM) cap was designed by the UK's Competition and Markets Authority (CMA) as part of the Energy Market Investigation Remedies and was implemented by Ofgem in April 2017. The CMA further reviewed the cap in 2019 and altered the methodology, largely aligning it with the default tariff cap. On 31 December 2020, the PPM cap is due to expire, so Ofgem is consulting on its proposals to extend the PPM cap, but doing this by introducing a as part of the existing default tariff level cap . In March 2020, we issued a policy consultation on protecting consumers with prepayment meters after the PPM cap expires. We have now considered stakeholders' responses and are publishing a statutory consultation with our proposals. 	 The PPM cap currently protects around four million energy consumers that have a PPM. Energy suppliers had an opportunity before the end of June 2020 to comment on the proposed approach and methodology for the PPM cap. If introduced as planned on 1 October 2020, energy suppliers that have PPM customers will need to make sure that their tariffs are in line with the proposed revised PPM cap. The implementation of the proposed change to the PPM cap could be delayed until 1 April 2021 if Ofgem chooses to refine its methodology for calculating the PPM cap. 	 Ofgem is considering responses to this consultation and will publish its final decision in Q3 2020. 	

Italy				
Торіс	Key features	Insights	Next Steps	
Implementation of UE Directive regarding Energy performance of buildings end energy efficiency.	 The main targets of this decree are: to speed up the efficient and economic restructuring of existing buildings through the installation of self-regulating and control devices of the technological systems installed in building, also as an efficient alternative to physical inspections; to integrate the long-term renovation strategies and to monitor the construction industry through the definition of an action plan for the promotion of nearly zero-energy buildings; to promote smart technologies and well-connected buildings in order to ensure the buildings to operate and to consume in a more efficient way by providing for the introduction of a "readiness" level indicator of the building to the use of smart technologies, to bring the already existing classification of the building based on energy performance; to promote the development of electromobility with the integration of the charging structure on the buildings with the installation of a minimum number of recharging points for all non-residential buildings with more than twenty parking 	This decree establishes the "National Portal on energy efficiency on buildings" with the aim to provide the citizens, enterprises and public entities with information regarding energy efficiency interventions in order to improve the energy performance of buildings. ENEA (the National Agency for New Technologies, Energy and Sustainable Economic Development) will manage this portal. These measures are set in order to improve the energy performance of the existing buildings and the development of the electro mobility in order to reduce energy consumption	Within 10 July 2020 (ordinary deadline), the Ministry of Economic Development will adopt the "National strategy to support the restructuring of the residential and not residential buildings, both public and private", in order to obtain the decarbonization of the buildings and their energy efficiency by 2050. Detailed modalities regulating the introduced "National Portal on energy efficiency on buildings" are expected by September 8, 2020	

spaces.

Snapshot on surveys and publications

Deloitte

Navigating the energy transition from disruption to growth - May 2020

Despite immediate financial pressures, this research suggests that energy and industrials companies will likely continue to prioritize moving to cleaner energy sources in the longer term.

Link to the survey

Addressing Compliance Program Challenges for Energy Organizations Amidst the COVID-19 Outbreak – April 2020

As the impact of the COVID-19 crisis continues to disrupt business as usual, many energy organizations are realizing they may not be fully prepared in the face of the current environment. There are immediate concerns related to risk and compliance that professionals across energy organizations should consider with attention to three main areas: connectivity, assessing and evaluating, and proactively monitoring with integrity.

Link to the survey

Agencies or research institutes

International Energy Agency

Energy Technology Perspectives 2020 - Special Report on Clean Energy Innovation - July 2020

The report quantifies the needs for technology innovation and investment for a cleaner and more resilient energy sector at net-zero emissions. It identifies key technology attributes that can help accelerate innovation cycles. *Link to the survey*

Gas 2020 – June 2020

This report provides a detailed analysis of recent natural gas market developments, assesses the impact of the Covid 19 crisis on the short to medium terms and discusses the main drivers and uncertainties to future gas supply and demand to 2025. *Link to the survey*

World Energy Investment 2020 - May 2020

The worldwide economic shock caused by the Covid-19 pandemic is having widespread and often dramatic effects on investments in the energy sector. This report assesses which areas are most exposed and which are proving to be more resilient.

Link to the survey

Renewable Energy Market Update - May 2020

This report provides an early analysis of the drivers and challenges since last October, and covers renewable capacity additions for all technologies and transport biofuel production expected during 2020 and 2021. An update on renewable heat technologies is also included.

Link to the survey

Global Energy Review 2020 - April 2020

This study has tracked energy use by country and fuel over the past three months and in some cases – such as electricity – in real time. This analysis not only charts a possible path for energy use and CO2 emissions in 2020 but also highlights the many factors that could lead to differing outcomes. It draw key lessons on how to navigate this once-in-a-century crisis. Link to the survey

In order to gain access to studies and analysis from IEA you have to create an account to be able to download the above publications.

European Commission

The socio-economic impacts of the closure of the Groningen gas field - June 2020

This study reports on the assessment of the regional socio-economic impacts deriving from the closure of the gas field planned by 2022. This analysis served as a framework for evaluating the impacts and as an information tool for the local authorities on how to plan the steps towards a successful transition and a new socio-economic development.

Link to the survey

Upgrading the gas market – Regulatory and administrative requirements to entry and trade on gas wholesale markets in the EU – May 2020

This study identifies existing administrative and regulatory requirements to enter and trade on the EU wholesale gas markets. The characteristics, objectives, frequency and impacts of individual trade requirements are described and significant barriers to wholesale gas trading identified. Additionally, legislative options to address and mitigate trade barriers at EU-level are assessed and elaborated. *Link to the survey*

Study on gas market upgrading and modernisation - May 2020

This study identifies and elaborates exiting barriers and gaps that could be addressed in order to ensure optimal use of existing LNG terminals in the EU. Such analysis is especially relevant due to the significant increase of LNG imports to the EU in the recent years. Additionally, the study provides recommendations aiming at addressing and mitigating identified barriers including both potential legislative and non-legislative measures.

Link to the survey

A just transition fund: How the EU budget can best assist in the necessary transition from fossil fuels to sustainable energy – May 2020

This report provides a comprehensive analysis of how the EU can best ensure a 'just transition' in all its territories and for all its citizens with the tools at its disposal. It provides an overview and a critical assessment of the Commission's proposal, and suggests possible amendments based on best practices from other just-transition initiatives. *Link to the survey*

Seasonal impacts of climate change on electricity production - May 2020

This report is part of the PESETA IV project analysing the impacts of climate change. It focuses on energy and more specifically on power production and the impacts of monthly or seasonal climate tendencies on electricity production. *Link to the survey*

Study on energy storage: Contribution to the security of the electricity supply in Europe - May 2020

This study is organised in three main parts: (i) presentation of the current state of play of storage technologies (deployment in Member States and key characteristics), (ii) identification ot the need for various types of flexibility solutions at the 2030 and 2050 horizons, and (iii) the regulatory conditions that should be put in place to enable the market to deliver the appropriate level of energy storage technologies. *Link to the survey*

Impact of the use of the biomethane and hydrogen potential on trans - European infrastructure - April 2020

The aim of this study is to obtain a better understanding of the potential of biomethane and hydrogen to contribute to the decarbonisation of the EU energy system, the impacts this will have on the gas infrastructure and the extent to which gas network operators and regulators are prepared to cope with these impacts. *Link to the survey*

Prospects of LNG Markets in the Eastern Partner Countries - April 2020

The overall objective of this study is to further develop the co-operation and integration between the Eastern Partner Countries and the EU in assessing and developing the potential of LNG in the gas markets of the region. *Link to the survey*

Energy security in the EU's external policy - April 2020

This publication describes how energy affects the EU's relations with the rest of the world. It explains why the EU is dependent on energy imports, which are the main supplier countries, what kind of relations they have with the EU, and how the EU is trying to address energy insecurity through its external policy.

Link to the survey

Eurelectric

E-quality – Shaping an inclusive energy transition – June 2020

This report provides an answer to the following questions: How do climate policies affect households with different incomes? What can and should be done to address any disproportionate effects? What is the impact of COVID-19 crisis in this process? *Link to the survey*

Impact of COVID-19 on customers and society – Recommendations from the European Power sector – April 2020

This report provides an overview of measures taken by EU governments and energy companies to reduce the impact of COVID 19 on customers and society.

Link to the survey

Oxford institute for Energy

Blue hydrogen as an enabler of green hydrogen: the case of Germany - June 2020

In Germany decarbonization of the electricity sector by fostering renewables and now phasing out coal-fired power is on track to reach the 2050 de-carbonisation targets, while decarbonising non-electric energy consumption is proving to be more difficult. This paper describes an alternative method: the development of "blue" hydrogen (produced by the reforming of methane into hydrogen plus CO2). *Link to the survey*

An empirical study on the drivers of financial leverage of Spanish wind farms - May 2020

For renewable energy projects, financing is a major bottleneck to accelerate the transition towards a decarbonized energy mix. Within this context, this study provides some results that help explain why some projects are more attractive than others from a financial perspective.

Link to the survey



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