

Deloitte.



Newsletter

Power & Utilities in Europe

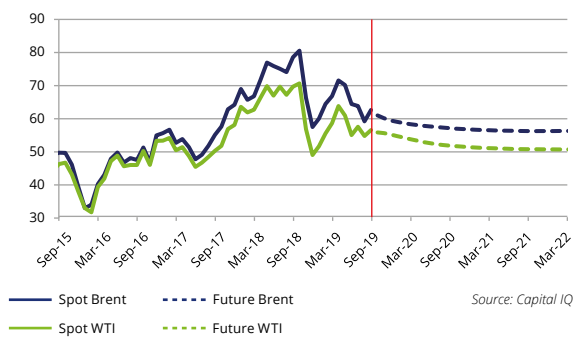
November 2019

Newsletter Power & Utilities in Europe

Commodities



Crude oil (\$/bbl)



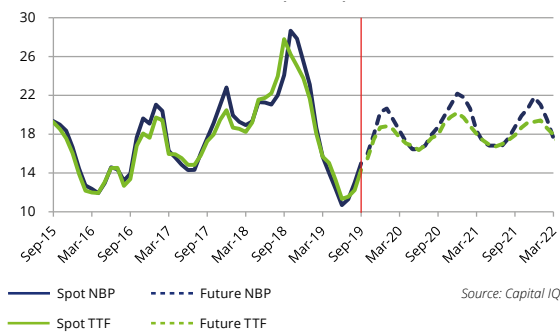
In the third quarter of 2019, crude prices fell amid volatility, with Brent settling at \$62.7/bbl and WTI at \$56.6/bbl on average in September; a rise of 2.8% and a fall of 2.7% respectively over three months. Opposing demand and supply pressures throughout the quarter led to a notable level of fluctuation in prices.

Supply-side shocks applied upward pressure on crude prices across the quarter. A series of drone attacks on Saudi oil facilities, culminating in September 2019, coupled with the seizure of British and Liberian oil tankers in the Gulf of Oman and the Hormuz strait in June, dampened supply. Saudi is the second largest producer of crude oil behind the US, comprising 12% of global oil production as of 2018, so supply risks were particularly pronounced during Q3 2019.

Release of some US strategic reserves and downward demand-side pressures mitigated the impact of supply shocks on oil price. The weak demand-side fundamentals observed year-to-date in relation to global economic growth continued in the third quarter, applying downward pressure on the oil price. Furthermore, fresh tariffs announced in August 2019 by both the US and China escalated the current 'trade war' between the two nations, heightening uncertainty with regards to both demand and supply.



Gas (€/MWh)



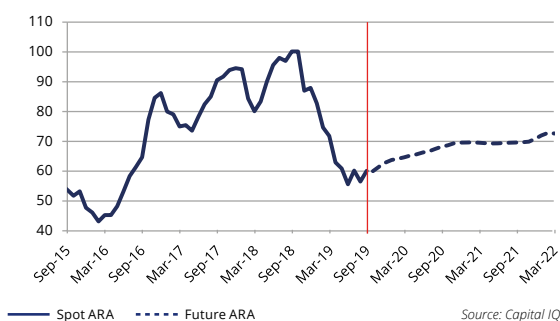
NBP and TTF gas prices staged significant increases of over 40% and 26% respectively across the third quarter following substantial decline in the 6-7 months to June 2019. The UK's NBP benchmark rose steadily across the quarter, reaching an average \$15/MWh by September. Meanwhile, Dutch TTF rose steadily to an average \$14.3/MWh by September.

The European natural gas glut continued across the quarter, applying downward pressure on the gas price while markets struggled to clear persistent oversupply. However, uncertainty remained during the quarter due to ongoing tensions surrounding the upcoming Nord Stream 2 Russia-Germany gas pipeline, which circumvents Ukraine's existing infrastructure channeling gas across Europe. The level of supply of pipeline gas relative to LNG therefore hinges on permission granted by EU stakeholders, causing some uncertainty in the market during the third quarter of 2019.

The observed increase in gas prices is partly attributed to seasonality. Despite subdued demand-side fundamentals, moving beyond the traditionally lower demand summer months may have signaled increased demand for natural gas heating across Europe towards the end of the third quarter, increasing the gas price albeit to lower levels seen at the same time over the last two years.



Coal (\$/metric ton)



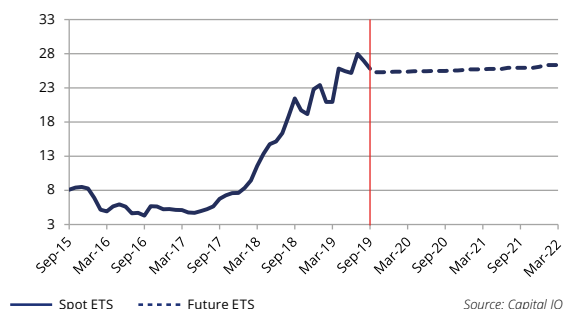
Average monthly coal prices broke the downward year-to-date trend in the third quarter, rising 8.2% from June yet fluctuating month-on-month. An 8.3% increase from June to July was offset by a 6.1% fall from July to August before a final rise of 6.4% to \$60.1/t in September 2019.

Downward demand pressures on the price of coal persisted throughout the quarter despite the observed price movements. The increasing level of renewable generation and the rising price of carbon credits are potential influences contributing to the observed price fluctuations for coal. Furthermore, the ongoing glut of natural gas in Europe may have contributed to an enhanced propensity to substitute away from coal-based power generation, applying further downward price pressure, though this is limited by relatively fixed power generation capacity infrastructure in the short run.

Seasonal effects contributed to upward pressure on coal prices in the third quarter of 2019. That said, this was partially offset by downward price pressures arising from the supply-side. In July, news emerged that the international miner BHP Group entered the final stages of the sale of Australian subsidiary South32, while China sought to restrict Australian coal imports following political tensions surrounding Huawei's provision of 5G services in the country, coinciding with the observed fall in price from July to August.



Carbon (€/ton)



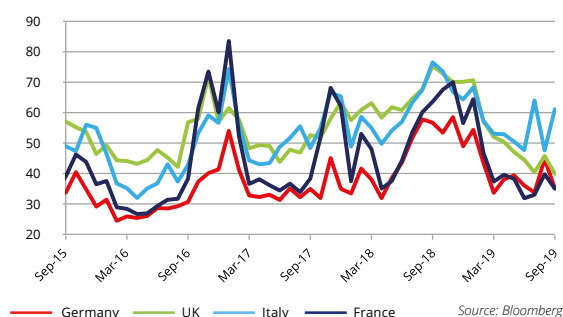
Exchange-traded carbon allowance prices in the European Union Emissions Trading Scheme (EU ETS) continued an upward trend in the third quarter, rising to its highest historical level in July 2019, averaging at €28/ton across the month, before falling to €25.8/ton by September – an increase of 2.5% across the quarter.

The overall price trend is readily explained by the continued impact of 2018's Market Stability Reserve (MSR) instrumentation, which reduced supply of credits and hence continues to boost the price of EU Allowances (EUAs). This significant upward pressure is observed in the year-to-date, though this was partly mitigated by both long – and short-term influences.

Volatility may have stemmed from political uncertainty relating to the UK's exit from the European Union. As the 31st October deadline began to approach, the impact of market fundamentals risked increasing suppression as uncertainty mounted, which likely confounded price trends. Carbon prices across each quarter are intertwined with Brexit. In the event of a no-deal exit, the UK Government's Department of Business, Energy and Industrial Strategy (BEIS) has planned to implement a portfolio of carbon policies aiming to substitute the existing EU ETS scheme with a future UK equivalent, whilst launching an additional carbon tax of £16/ton to the existing £18/ton Carbon Price Support (CPS) instrument. The uncertainty regarding the future demand and supply dynamics of EU ETS is likely to have impacted pre-emptively on the third quarter EUA prices.



Baseload Spot Day Ahead (€/MWh)

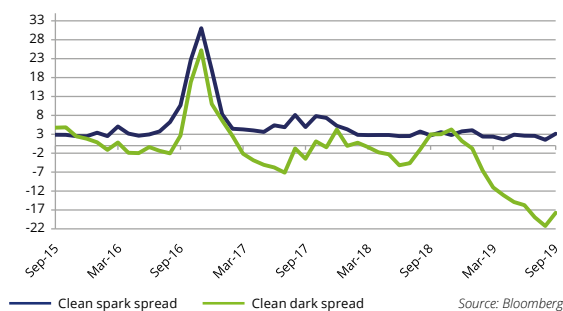


Baseload prices fluctuated across Europe in the third quarter. Germany's baseload price moved closely in an opposite direction to coal prices despite the fuel comprising over a third of German baseload generation. France largely tracked prices in Germany, whilst the UK's gas-led baseload power generation fluctuated less than its continental counterparts. Italy was the outlier of the European panel; the baseload price followed an opposite trend to Germany, France and the UK across the quarter.

The fluctuations observed across the third quarter were driven by seasonal and fuel-price-driven trends. Germany's price trends were largely driven by the changes in EU ETS prices, while UK baseload's lesser volatility was driven by the more stable gas prices. Meanwhile, significant heatwaves in Italy's across July and September, placed greater demands on baseload for cooling and hence placing upward pressure on electricity prices during these months.



UK clean dark & spark spreads (£/MWh)



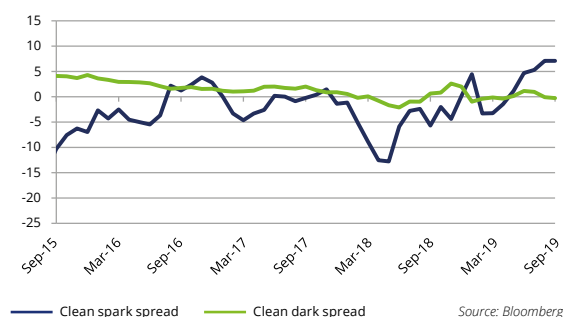
UK clean dark spreads continued to fall in the third quarter in line with the rise in the EU ETS prices, dropping by £5.5/MWh from June to August before rebounding £3.4/MWh by September, reaching £17.8/MWh. Clean spark spreads moved directionally with gas across the quarter, peaking at £3.2/MWh in September 2019.

The downward trend observed year-to-date for clean dark spreads was expected as the EUAs became increasingly expensive relative to the amount of energy generated by coal. This is particularly important given the relative decline of coal-driven energy output with respect to cleaner fossil fuels and renewables.

Clean spark spreads suffered far less of an impact from increasing carbon prices, given the greater carbon-efficiency of gas relative to coal.



German clean dark & spark spreads (€/MWh)



The German clean spark spread rose in the third quarter, rallying to €7.1/MWh in September; it's highest monthly average since January 2010. Meanwhile, clean dark spreads remained relatively stagnant, falling from €1.1/MWh in June to €-0.3/MWh in September.

The observed trends stemmed from Germany's relatively heavy exposure to continental European fundamentals with respect to the UK. The summer's clean spark spread rally continued due to exposure to natural gas oversupply, which was incompletely offset by increasing carbon price at the start of the third quarter.

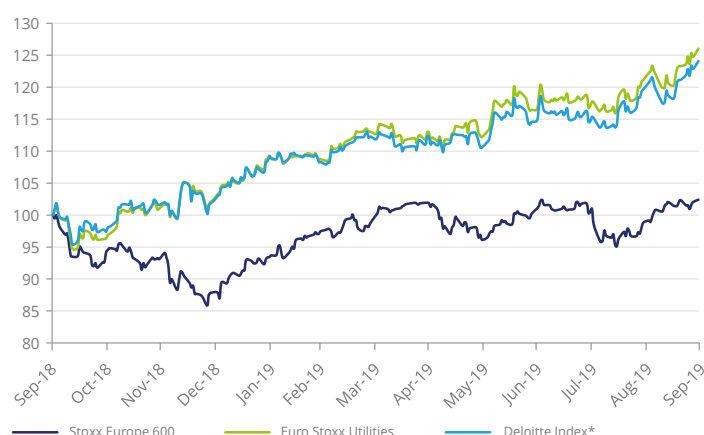
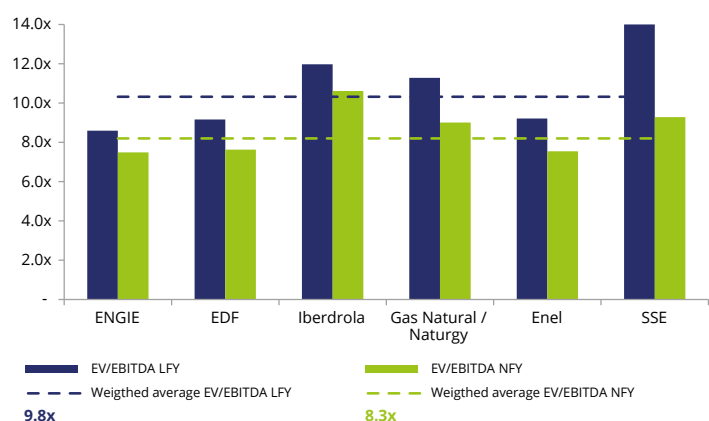


Spotlight on Power and Utilities market

Capital market overview

	Deloitte Index ⁽⁴⁾	Enel	Iberdrola	ENGIE	EDF	Naturgy	EON	RWE	Centrica
Market cap. ratios									
Currency		EUR	EUR	EUR	EUR	EUR	EUR	EUR	GBP
Market Cap (Sep 19) ⁽¹⁾		67 486	59 319	34 066	31 859	23 160	22 942	16 825	4 191
3m stock price performance	7%	9%	7%	10%	-7%	-1%	-9%	29%	-18%
YoY stock price performance	24%	56%	50%	19%	-31%	4%	2%	37%	-52%
Market multiples ⁽²⁾									
EV/EBITDA 2018	9.9x	9.4x	12.0x	8.6x	9.2x	11.3x	8.8x	n/m	4.9x
EV/EBITDA 2019	8.8x	7.7x	10.6x	7.5x	7.6x	9.0x	7.5x	15.6x	5.5x
P/E 2018	17.1x	14.1x	19.7x	33.0x	27.1x	n/m	7.1x	n/m	22.9x
P/E 2019	15.1x	14.3x	17.8x	13.7x	12.0x	16.5x	15.3x	26.5x	10.1x
Price/book value 2018	2.0x	2.1x	1.6x	1.0x	0.7x	2.1x	5.7x	2.2x	2.0x
Profitability ratios ⁽²⁾									
ROE forward 12m	9%	15%	9%	7%	6%	13%	n/m ⁽³⁾	n/m ⁽³⁾	13%
ROCE forward 12m	5%	9%	6%	5%	4%	n/m	n/m ⁽³⁾	n/m ⁽³⁾	10%
EBITDA margin 2018	18%	20%	25%	14%	20%	15%	n/m ⁽³⁾	n/m ⁽³⁾	8%
EBITDA margin 2019	19%	23%	27%	15%	23%	18%	n/m ⁽³⁾	n/m ⁽³⁾	7%
EBIT margin 2018	11%	13%	15%	8%	7%	8%	n/m ⁽³⁾	n/m ⁽³⁾	5%
EBIT margin 2019	11%	14%	16%	9%	9%	11%	n/m ⁽³⁾	n/m ⁽³⁾	3%

- (1) One-month average weighted by volume
- (2) All multiples reported take into account the implementation of IFRS 16 except for SSE and National Grid
- (3) Due to the large asset swap between E.ON and RWE, financials and multiples are irrelevant
- (4) Deloitte Index is composed of Engie, EDF, EON, Iberdrola, RWE, Gas Natural, Enel, SSE and Centrica



Key messages from brokers and analysts

"Power and utilities: commodities were less of a hot topic than we expected."

(Morgan Stanley – September 16, 2019)

"Utility P/E at the highest level since the Eurozone crisis"

(UBS – September 10, 2019)

"UK Utilities: Back to school – Political, regulatory and commodity headwinds largely priced in."

(J.P.Morgan Cazenove – September 5, 2019)

"After delivering robust growth in H1 and constructive messaging around FY19, analysts continue to forecast similar growth for the sector as the market over the next 2 years"

(Deutsche Bank – August 16, 2019)

"Near term, gas glut will persist for longer. We see 26-33% downside to European 2020-21 forward gas prices."

(Morgan Stanley – July 22, 2019)

M&A Trends

Transactions involving power and utilities companies

UK-based **Energean Oil and Gas** agreed to acquire 100% of **Edison Exploration and Production** (Edison E&P) from Italian energy group **Edison**, part of **EDF**, for an aggregate value close to **\$1bn**. (*City AM* – July 5, 2019)

Ovo Energy, the UK's leading independent energy supplier, agreed to acquire **household supply arm of SSE**, the third-largest supplier in the GB energy market, for £500m. The deal is expected to complete this year or early in 2020. (*The Times* – September 14, 2019)

Snam, the Italian natural gas pipeline operator, agreed to acquire **49,07% stake** in the share capital of **OLT** (Offshore LNG Toscana), the company which has built and manages the offshore regasification terminal, from Italian multi-utility **Iren Group**, for approximately **€345m**. (*Trend News Agency* – September 21, 2019)

Enel Russia, a unit of Italy's **Enel**, sold its largest coal power plant, **Reftinskaya GRES**, to Russian energy supplier **JSC Kuzbassenergo**, owned by Russia's largest coal company **Siberian Generating Company** (SUEK), for at least **\$323m** (21bn roubles). (*IJ Global* – June 21, 2019)

American engineering company **Jacobs** has agreed to buy British multinational company **John Wood Group's** (JWG) **nuclear business** for approximately **\$300m**. (*MarketLine News and Comment* – August 20, 2019)

INGKA Holding B.V., which owns most Ikea stores, acquired an **80% stake in seven wind farms** with a combined generating capacity of 171 MW from **Vestas Wind Systems**, a Danish wind turbine manufacturer, in southeastern Romania, for **€136m**. (*SNL Energy Finance Daily* – September 16, 2019)

Spanish energy major **Repsol** acquired two wind projects and one solar PV power plant with a combined capacity of 794 MW situated in Spain, from three Spanish energy companies **Forestalia Renovables**, **Iberen Renovables** and **Dosa Renovables**, for an undisclosed amount. (*Financial Deals Tracker* – July 3, 2019)

EDF Renewables, acquired pipeline of wind farm projects with total installed capacity of **300 MW** under development situated in Germany, from **Altus AG**, a developer of wind and photovoltaic projects, for an undisclosed price. (*Financial Deals Tracker* – September 14, 2019)

Quadran, **Total's** French renewables subsidiary, acquired a French renewables developer **Vents d'Oc** with a renewable energy project pipeline of more than **200 MW** from **Windwärts Energie GmbH**, a subsidiary of German energy supplier **MVV Energie AG**, for an undisclosed amount. (*SNL Energy Finance Daily* – August 30, 2019)

Transactions involving equity funds

Green Investment Group Ltd, a unit of Australia's **Macquarie Group Ltd**, completed project financing for the acquisition of **40% stake in East Anglia One wind farm** in UK from **ScottishPower Renewables (UK) Limited**, a subsidiary of **Iberdrola**, for **£1.63bn**. The total installed capacity of the power plant will be **714 MW**. (*Financial Deals Tracker* – September 7, 2019)

Copenhagen Infrastructure Partners acquired **stake in Gordon Butte pumped storage hydro project** situated in US, from **Absaroka Energy LLC**, an American hydro power generation company. The total cost of the power plant with total capacity of 400 MW is expected to be **\$1bn**. (*Financial Deals Tracker* – June 27, 2019)

Brookfield Renewable Partners LP, a Canadian publicly traded limited partnership that owns and operates renewable power assets, agreed to acquire a **50% stake** in Spanish solar developer **X-Elio Energy SL** from **KKR & Co** (**Kohlberg Kravis Roberts**) and **Acek Desarrollo Y Gestion Industrial SL**, for about **\$500m**. (*SNL Energy Finance Daily* – August 1, 2019)

Copenhagen Infrastructure Partners (CIP), an investment firm specializing in infrastructure investments, has confirmed the acquisition of **the 374-MW Monegros portfolio of onshore wind projects** in Spain from Spanish renewable energy company **Forestalia Renovables SL**, for an undisclosed sum. The total equity investment in the portfolio is expected to go above **€350m**. (*Renewables Now* – September 11, 2019)

Bulgarian asset management firm **Eurohold** acquired the Bulgarian assets of Czech energy company **CEZ Group**, for **€335m**. (*Reuters News* – June 20, 2019)

Ferroglobe PLC, an English producer of metal alloys, completed the sale of its 100% interest in subsidiary **FerroAtlantica SAU**, an owner of 10 hydroelectric facilities and one ferroalloys plant in Spain, to **TPG Sixth Street Partners**, a global finance and investment firm, for a consideration of **€170m**. (*Financial Deals Tracker* – September 4, 2019)

Macquarie European Infrastructure Fund 5 Led Consortium, agreed to acquire **Ocean Breeze Energy**, an owner of North Sea wind farm **BARD Offshore 1** situated in Germany, with total installed capacity of **400 MW**, from **Unicredit**, an Italian global banking and financial services company, for an undisclosed sum. (*Financial Deals Tracker* – August 12, 2019)



European Power and Utilities companies wrap-up

European utilities delivered strong growth in H1 2019 thanks to better generation and higher power prices compared to H1 2018, and despite adverse hydro conditions and weak commodities prices.

Major events of the semester relate to (i) **the European Commission decision to approve Innogy takeover by E.ON** that should result in a significant change in German Power & Utilities landscape and (ii) increased delays and costs overruns **for EDF's EPR projects in France and in the UK**.

Analysts foreseen an acceleration in H2 2019 which enable most of **European Utilities to upgrade or at least to confirm their guidance for FY19**.





Share Price Perf. Sep. 2018 Sep. 2019



Key Reported Financials

In billion of €	HY19	HY18**	Var.
Sales	36.5	35.0	+4%
EBITDA	8.3	8.1	+2%
Operating Income	3.7	3.6	+3%
Recurring net income Gr	1.4	1.7	-18%
Net Income Gr Share	2.5	1.7	+47%
Operating CF	2.5	3.7	-32%
Net Capex	-6.4	-6.3	+2%
Net debt	-37.4	-33.4*	+12%

* As of Dec. 31, 2018

** Figures NOT restated of IFRS16 impacts and restated the impact of presenting Edison's E&P operations as discontinued operations

In billion of €	HY19	HY18**	Var.
Sales	33.0	30.2	+9%
EBITDA	5.3	5.3	+0%
Operating Income	3.2	3.1	+3%
Recurring net income Gr	1.5	1.5	+0%
Net Income Gr Share	2.1	0.9	n.m
Operating CF	2.7	3.5	-23%
Net Capex	-3.0	-2.6	+15%
Net debt	-26.1	-23.3*	+12%

* As of Dec. 31, 2018

** Figures restated of IFRS16 impacts

HY19 Highlights

- Ebitda amounted to €8.3bn, +2% vs HY18 (+0% on an organic basis), due to:
 - Positive impacts of favourable market conditions in France and a very strong performance by EDF Trading.
 - These impacts were partly offset by (i) a negative impact of unfavourable trend in French distribution tariff indexation and (ii) increase in expenses for contributions to the Electricity Equalisation Fund in French regulated activities, and by (iii) the deterioration of conditions in the UK (introduction of a cap on standard variable tariffs (SVTs), suspension of capacity revenues and downturn in nuclear generation).
- The net income totalled €2.5bn, +47% vs HY18, notably due to an improvement of €1.5bn of the financial result. This resulted primarily from the positive variation in the fair value of the portfolio of dedicated assets in line with the performance of the equity and bond markets in the first half of the year.
- Operating cash flow amounted to €2.5bn, -32% vs HY18, the consequence notably of an increase in investments and a lower contribution from the variation in the working capital requirement.
- Signing of a binding agreement to sell Edison's Exploration and Production activity for an amount up to c. US \$1bn.
- An increase of £1.9bn to £2.9bn compared to the previous estimate for the completion cost of Hinkley Point C project.

- Revenues amounted to €33.0bn, +9% vs HY18 (+8% on an organic basis), due to:
 - (i) A positive foreign exchange effect, mainly due to the appreciation of the US dollar and (ii) positive scope effect in Client Solutions and in Supply.
 - These impacts were partly offset by (i) an adverse exchange rate, mainly Argentinian peso and Brazilian real and (ii) the disposals of the business Supply activities in Germany at the end of 2018 and of the stake of Glow in Thailand and Laos in March 2019.
- Ebitda reached €5.3bn, +0% vs HY18 and + 2% on an organic basis, due to:
 - Positive impacts of (i) GEM's good performance in market activities, (ii) strong results in Latin America and Nuclear activities.
 - These positive factors are partly offset by (i) headwinds in French gas Networks activities, (ii) lower hydroelectric power generation in France, (iii) lower margins in French Supply activities and (iv) the suspension of capacity remuneration mechanism in the UK since October 1, 2018.
- The net income Group Share amounted to €2.1bn, compared to €0.9bn in HY18 due to: (i) Income from disposals and (ii) lower impairment losses.
- Net debt stood at €26.1bn, up €2.8bn vs FY 2018, mainly due to:
 - Positive impacts of (i) capital expenditures over the period (€5.5bn), (ii) dividends paid to ENGIE SA shareholders (€1.8bn) and to non-controlling interests (€0.3bn) and (iii) other elements (€0.4bn)
 - These factors are partly offset by (i) cash flow from operations (€2.7bn) and (ii) the impacts of the portfolio rotation program (€2.7 bn).

FY 2019 Outlook

- FY 2019 targets for Ebitda and debt ratio upgraded:
- Ebitda: €16 -16.7bn vs €15.3 - 16bn previously
 - Cash flow excluding HPC and Linky: >€600m vs >0 previously

FY 2019 guidance confirmed

e-on

RWE

Share
Price Perf.
Sep. 2018
Sep. 2019Key Reported
Financials

In billion of €	HY19	HY18**	Var.
Sales	16.1	15.4	+5%
EBITDA	2.7	2.8	-4%
Operating Income	1.7	1.9	-11%
Recurring net income Gr	0.9	1.1	-18%
Net Income Gr Share	0.4	2.7	-85%
Operating CF	0.5	1.4	-64%
Net Capex	-1.3	-1.4	-7%
Net debt	-20.2	-16.6*	+22%

* As of Dec. 31, 2018

** Figures NOT restated of IFRS16 impacts

In billion of €	HY19	HY18**	Var.
Sales	7.0	6.7***	+4%
EBITDA	1.1	0.8	+38%
Operating Income	0.6	0.4	+50%
Recurring net income Gr	n.m	0.1	n.m
Net Income Gr Share	0.8	0.2	n.m
Operating CF	-1.1	1.9	n.m
Net Capex	-0.7	-0.3	n.m
Net debt	-8.0	-4.4*	+82%

* As of Dec. 31, 2018

** Figures NOT restated of IFRS16 impacts

*** Figure adjusted mainly due to changes in the recognition of revenues from derivative transactions

HY19
Highlights

- Sales amounted to €16.1bn, +5% vs HY18 due to:**
 - An (i) improvement of €0.6bn in Customer Solutions' sales primarily because of higher power and gas sales volume in Germany, and higher sales prices in Italy and the Czech Republic and higher sales volume in Italy, the Czech Republic, and Hungary, (ii) an increase in Renewables' output due to the commissioning of new onshore and offshore wind farms.
 - Partly offset by a slight decline in Non-Core Business sales because of the expiration of supply contracts at PreussenElektra.
 - First-half operating income decreased by €0.2bn** primarily due to a decline in Customer Solutions. This decline is primarily owing to (i) a narrower gross margin in the power and gas sales business in Germany, (ii) the regulatory price cap that took effect in 2019 and a smaller customer base in UK, and (iii) lower earnings in Sweden and Hungary.
 - The net income totalled €0.4bn, -85% vs HY18 due to:**
 - A decrease of €0.2bn in financials results mainly because of valuation effects relating to non-current provisions that are reported under non-operating earnings
 - A significant decline of net book gains
 - Higher restructuring expenses consisted primarily of expenditures in conjunction with the planned acquisition of innogy in 2019
 - The marking to market of derivatives resulted in a negative effect of €0.3bn (prior year: +€0.8bn). Negative items resulted primarily from hedging against price fluctuations, in particular at Customer Solutions.
 - Increase of the net debt of €3.6bn** due primarily to the initial application of IFRS 16 (+€0.8bn) and an increase in pension provisions due to significantly lower actuarial interest rates (+€1.8bn).
 - The European Commission has approved E.ON's takeover of Innogy on September 17, 2019.**
- Sales increased by 4% to €7bn vs HY18:**
 - This is due to (i) higher prices in electricity wholesaling and in direct business with industrial customers realised by RWE Supply&Trading, and (ii) gas revenue advanced by 8% to €0.8bn, mirroring the positive development displayed by gas supply volumes.
 - By contrast, the reduction in wholesale volume had a counteracting effect.
 - EBITDA amounted to €1.1bn, 38% more than in HY18.** The main reason for this is the performance in the trading business.
 - The increase of €0.6bn in net income is mainly due to:**
 - Positive impact of the IFRS accounting regulations.
 - Partly offset by a decline of non-operating result mainly caused by temporary effects on earnings from the valuation of derivatives and inventories.
 - Net CAPEX increased by €0.4bn due to (i)** the construction of the British offshore wind farm Triton Knoll and the Australian solar farm Limondale and (ii) more expenditure on maintenance at power stations.
 - Operating cash flow: heavy burdens due to realisation of commodity forward transactions.** Their influence on cash flows is temporary, however, and reverses once transactions are realised.
 - Significant increase of net debt due to negative operating cash flow and adoption of IFRS 16 (+€0.4bn).**

FY 2019
Outlook

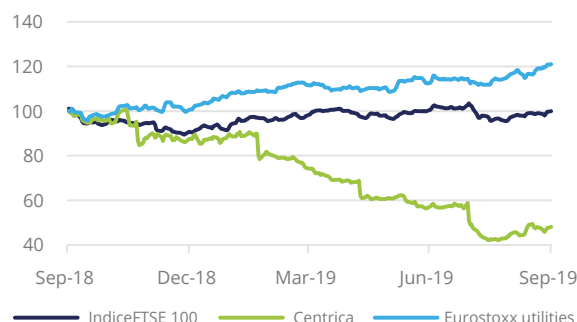
2019 guidance confirmed

FY 2019 targets for Ebitda upgraded:

- Ebitda: €1.6 -1.9bn vs €1.4 – 1.7bn previously
- EBIT: €0.6 -0.9bn vs €0.4 – 0.7bn previously
- Net income: €0.5 -0.8bn vs €0.3 – 0.6bn previously



Share
Price Perf.
Sep. 2018
Sep. 2019



Key Reported
Financials

In billion of €	HY19	HY18**	Var.
Sales	39.0	36.0	+8%
EBITDA	8.9	7.9	+13%
Operating Income	5.2	4.9	+6%
Recurring net income Gr	2.3	1.9	+21%
Net Income Gr Share	2.2	2.0	+10%
Operating CF	4.6	4.4	+5%
Net Capex	-4.2	-3.1	+35%
Net debt	-45.4	-41.1*	+10%

* As of Dec. 31, 2018

** Figures NOT restated of IFRS16 impacts

In billion of €	HY19	HY18*	Var.
Sales**	13.8	14.0	-1%
EBITDA	1.1	1.3	-15%
Operating Income	0.4	0.7	-43%
Recurring net income Gr	0.1	0.4	-75%
Net Income Gr Share	-0.6	0.2	n.m
Operating CF	0.7	1.1	-36%
Net Capex	-0.1	-0.5	-80%
Net debt	-3.4	-2.9	+17%

* Figures NOT restated of IFRS16 impacts

** Figures restated of energy derivative contracts and re-presented prior period accordingly

HY19
Highlights

- **Sales amounted to €39bn, +8% vs HY18**, mainly attributable to (i) distribution, especially in South America, as well as (ii) to renewables in North and South America and conventional generation in Italy and Chile.
- **Ebitda increased to €8.9bn, +13% vs HY18 due to:** (i) the performance of distribution in South America, which benefited from the performance of Enel Distribuição São Paulo and regulatory changes in Brazil and Argentina, and (ii) the growth in renewables and efficiency gains in conventional generation.
- **Operating income amounted to €5.2bn, +6% vs HY18:**
 - Mostly driven by the increase in Ebitda
 - Partly offset by higher depreciation, amortisation and impairment losses, as well as the depreciation of the rights of use for leased assets in application of IFRS 16.
- **Group net income amounted to €2.2bn, an increase of €0.2bn (+10%) compared to HY18 due to:**
 - The increase in operating income.
 - Partly offset by the increase in net financial expense and charges connected with equity investments measured using the equity method.
- **Increase of the net debt of €4.3bn compared to FY 2018:**
 - Principally attributable to the increase of capital expenditure for the period, the payment of dividends, the acquisition of a number of companies from Enel Green Power North America Renewable Energy Partners, LLC ("EGPNA REP") and initial application of IFRS 16.
 - Partly offset by positive cash flows from operations

- **EBITDA amounted o £1.1bn, -15% vs HY18 due to:**
 - The implementation of the UK residential energy supply default tariff price cap.
 - The lower achieved gas sales prices reflecting the falling UK NBP price.
 - Extensions to outages at the non-operated Hunterston B and Dungeness B nuclear power stations.
 - Warmer than normal weather in both the UK and North America.
- **Operating income decreased by £0.3bn to £0.4bn**, mostly driven by the same items mentioned above.
- **Operating cash flow is down by £0.4bn to £0.7bn due to:**
 - Increased working capital requirements relating to warm weather and changing commodity prices
 - Partly offset by the benefit of structural working capital improvements.
- **Increase of the net debt of £0.5bn due primarily to the application of IFRS 16 (+£0.4bn).**

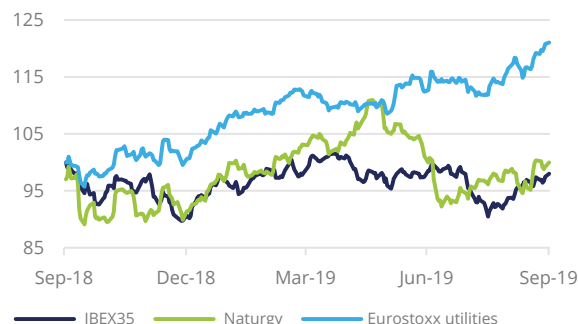
FY 2019
Outlook

2019 guidance confirmed

2019 guidance confirmed



Share Price Perf. Sep. 2018 Sep. 2019



Key Reported Financials

In billion of €	HY19	HY18**	Var.
Sales	18.3	17.6	+4%
EBITDA	5.0	4.4	+14%
Operating Income	3.0	2.5	+20%
Recurring net income Gr	n.m	1.4	n.m
Net Income Gr Share	1.6	1.4	+14%
Operating CF	3.3	3.2	+3%
Net Capex	-3.1	-2.5	+24%
Net debt	-36.8	-34.2*	+8%

* As of Dec. 31, 2018

** Figures NOT restated of IFRS16 impacts

In billion of €	HY19	HY18**	Var.
Sales	11.6	12.2	-5%
EBITDA	2.2	2.0	+10%
Operating Income	1.3	-3.2	n.m
Recurring net income Gr	0.7	0.5	+40%
Net Income Gr Share	0.6	-3.3	n.m
Operating CF	2.5	1.2	n.m
Net Capex	-0.7	1.4	n.m
Net debt	-14.8	-15.3*	-3%

* As of Dec. 31, 2018, and IFRS16 adjusted

** Figures NOT restated of IFRS16 impacts

HY19 Highlights

- **Sales amounted to 18.3bn, +4% vs HY18**, mainly due to business growth in Networks (+€0.4bn) and Generation and Supply (+€0.2bn).
- **Ebitda amounted to €5.0bn, an increase of 14% vs HY18:**
 - Mainly driven by (i) the tariff improvements in Brazil alongside the efficiencies achieved and the increase in demand, (ii) the increase in offshore wind production thanks to Wikinger's contribution, (iii) a greater installed capacity in Mexico and Brazil, and (iv) the strong performance of the Generation and Supply business in Spain.
 - Comfortably offsetting by (i) the decline of hydroelectric production in Spain, and (ii) less demand in the UK and lower prices due to the imposition of the cap on certain electricity and gas tariffs.
- **Net income up 14% to 1.6bn**, mainly due to the increase in Ebitda.
- **Net investment in the period increased by 24% to €3.1bn:** 88% was focused on the Networks and Renewables businesses.
- **Net financial debt increased by 8% to €36.8bn**, primarily because of (i) the application of IFRS 16 (+€0.4bn), (ii) the exchange rate effect (+€0.3bn), and (iii) the major investments drive by the Company.

- **Group revenue decreased by 5% to €11.6bn:**
 - Mainly due to (i) lower energy prices and (ii) volumes sold in the liberalized businesses
 - Partly offset by the growth in the infrastructure activity.
- **EBITDA amounted to €2.2bn, +10% in respect to HY18** due to (i) solid performance in the infrastructure businesses, (ii) the new commercial strategy in supply activity and (iii) efficiency gains.
- **Net income amounted to €0.6bn, +3.9bn vs HY18:**
 - Due primarily to non-recurrent impacts of the asset impairment (-€4.8bn) on 2018 following the approval of the new Strategic Plan 2018-2022.
 - Partly offset by increase of income tax expenses (+€1.1bn)
- **Operating cash flow amounted to €2.5bn, +€1.3bn vs HY18 due to:** (i) the stronger operating results, (ii) a positive evolution of the working capital, thanks to an increased focus on working capital management, and (iii) other seasonal circumstances occurring in the period.
- **Net Capex amounted to €0.7bn** mainly reflecting ongoing investments in renewable projects as well as investments in remunerated networks.
- **Net debt amounted to €14.8bn, -3% vs FY 2018:**
 - Mainly due to the increased focus on cash flow generation of the company
 - Partly offset by the (i) €0.6bn dividend payment and (ii) €0.3bn in shares bought back during the first half of the year.

FY 2019 Outlook

2019 guidance confirmed:
Net profit: low double-digit percentage growth rather than the high single-digit increase previously

2019 guidance confirmed

Talking point September 2019

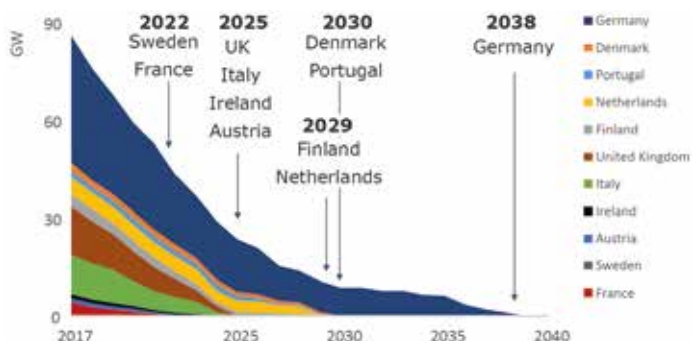
Opportunities and challenges for natural gas in the European coal phase-out

The European Union and its member countries have tabled ambitious Nationally Determined Contributions (to reduce CO₂ emissions) at COP 21 and later, in 2016, committed to the Paris Agreement. Decarbonisation is ever since an energy policy priority. Coal burn in the electricity sector accounts for nearly a quarter of the EU's CO₂ emissions and 70% of the power sector emissions. **Coal-fired power generation is thus the second biggest source of emissions in the EU after oil-use in transport.**

Pursuing efforts to lower their CO₂ emissions, eleven European countries have announced, over the last two years, that they will refrain from using coal in power generation in the coming decades. The first two countries to shut down their coal-fired fleet are Sweden and France by 2022; these are minor installed capacities (Figure 1). Much more significant, in terms of capacity closures, is what happens in the timeframe to 2025 when Austria, Ireland, the UK and Italy stop using coal in the power sector. Some of the plants that will be closed are quite new. Italy is a case in point, the Torrevadalliga station with a capacity of nearly 2000 MW will have run for only 17 years when it is slated to close in 2025.

The situation in the Netherlands is even more drastic. By 2029, two power plants – Maasvlakte and Eemshaven – with a combined capacity of 3.3 GW will have run for less than 15 years when the country exits coal power (and the Dutch government has since been debating whether to phase out even earlier). Yet, in terms of size, the most important impact might come from Germany, with the recommendation of the “coal commission” to close nearly 40 GW of coal in the period to 2038. Even though the recommendations of the “coal commission” are not legally binding, the phase out scheme that the German government is implementing is likely closely aligned with its main messages. Administered coal phase-outs are so far largely a Western European phenomenon but the rhetoric on coal use has also been changing in Central and Eastern Europe.

Figure 1: Plans to phase out coal in the European Union



There are 150 GW of coal fired power plant installed in the EU. The European coal fleet is ageing and, assuming a typical technical lifetime of 50 years, some 90 GW would reach the end of their useful life by 2030 and would need to be replaced.

The policy-driven coal phase accelerates the closures markedly: in addition to the 90 GW of ageing plant an additional 40 GW would be closed early by 2030, suggesting that around 130 GW of firm capacity needs to be replaced over the 2020s. Moreover, in some EU countries, nuclear phase out policies have either been implemented (Germany) or are in various stages of realization (Belgium, Switzerland...).

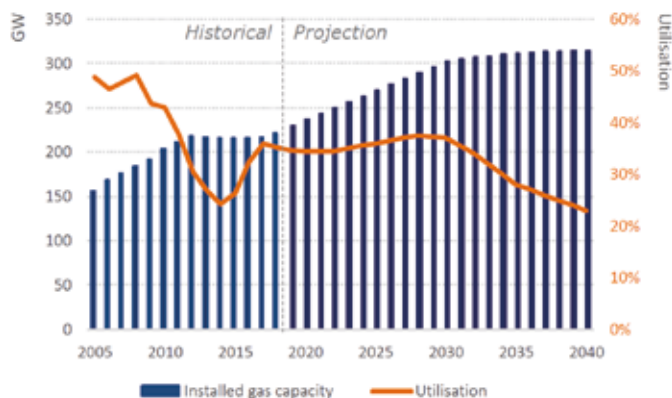
This implies that there is a strong need for new firm power generation capacity in the decade to come. Of course, network expansion can reduce some of the capacity needs and new storage technologies and renewables will take their share too. Yet, network expansion takes time, the business models of some new storage technologies remain questionable and additional renewables contribute little to system adequacy. There is thus little doubt that major new investments in dispatchable power plant are soon needed. Significant contributions from new nuclear power can be discarded: the technology prospects are bleak and recent experience in Europe has shown that nuclear projects can easily take a decade or more to realise. This leaves pretty much only gas-fired technologies to fill the void.

Indeed, Deloitte power system modelling shows that up to 80 GW of new gas plant could be needed in the period to 2030, requiring investments of some 65 billion Euros. In terms of magnitude, this is comparable with the massive investment wave in new Combined-cycle Gas Turbines (CCGTs) seen in the first decade of the 2000s.

The signs of this happening are scarce: Edison's Marghera CCGT investment decision in spring 2019 is a pointer in this direction but, one swallow doesn't make a summer. Especially since many questions around market design remain unresolved – the recent temporary suspension of UK capacity market is a prominent example – and as such, incentives remain limited to invest in new capacities. Why?

The first part of the answer is in Figure 2: rapidly expanding renewables reduce the load factors of gas plants after 2030, confining gas-fired power plants to a role of flexibility provider in the long term. Whether the remuneration from the energy-only market for such a role is adequate, is questionable.

Figure 2: Installed gas-fired capacity in the European Union and utilisation of the gas fleet to 2040 in a scenario with planned coal plant closures



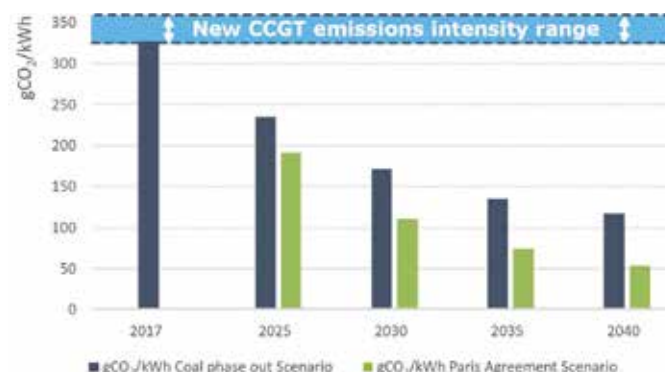
The second part of the answer is in Figure 3. The current emissions intensity of the EU power sector is around 320 gCO₂/kWh.

Our modelling shows that replacing coal with gas and expanding renewables can help slashing the emissions intensity by almost two thirds to 2040. However, this is unlikely to be sufficient to achieve the goals of the Paris Agreement – for this, the emissions intensity would need to drop to somewhere near 50 gCO₂/kWh in 2040.

But, no matter whether the European power system is on a Paris compliant pathway or not, the emissions intensity of a new CCGT – ranging between 330 gCO₂/kWh and 350 gCO₂/kWh – is above the average emissions intensity of the European power sector.

So, clearly, once gas has replaced coal, gas itself becomes too emissions intensive to remain a major component of the electricity mix and needs to be phased-out if emissions are to be reduced further. These prospects entail a significant stranded asset risk for investors.

Figure 3: CO₂ intensity of electricity generation in the EU and new CCGT emission intensity range in a scenario with planned coal plant closures and a scenario that complies with the objectives of the Paris Agreement



Replacing coal plants promises higher electricity prices and better load factors for gas plants during the 2020s than today.

Whether a 'golden decade' for gas in Europe is sufficient to incentivize investments is unclear. Two aspects are critical: the risk appetite of investors (likely low after several years of poor profitability of existing gas plants) and policy measures to reduce investor uncertainty (i.e. market designs that complement the energy-only market). Against this backdrop, what is needed, is a conscious policy decision to create an environmental case and a business case for new gas-fired power plant in Europe or a decisive push to rapidly bring down the cost of alternative technologies such as electricity storage or low-carbon hydrogen. Failure to do so could slow down the coal exit and jeopardise efforts to decarbonise the energy sector.

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?

Three recommendations from the European Commission to put the clean energy transition into practice

Key features	Insights
<p>The European Commission adopted on September 25, 2019 a set of recommendations to help Member States in their path to the energy transition, with special focus on energy efficiency.</p> <p>These recommendations, embraced under the energy efficiency directive, transposing energy savings obligations implement new metering and billing provisions and assess the potential for efficient heating and cooling.</p>	<p>Energy efficiency is one of the key objectives of the European Union, as energy savings are straightforward measures to reduce both costs for consumers and greenhouse emissions.</p> <p>The EU has set mandatory targets to reduce European energy consumption through energy efficiency improvements by at least 32.5% by 2030, relative to a <i>business as usual</i> scenario.</p> <p>The European Commission provides these recommendations to help Member States to develop and transpose the European Directive on Energy Efficiency. These recommendations specifically address the following aspects:</p> <ul style="list-style-type: none"> • The practical implementation of the energy savings obligation for the period January 1, 2021 to December 31, 2030 through the <i>Commission recommendation on transposing the energy savings obligations under the energy efficiency directive</i> • The revised metering and billing provisions for thermal energy through the <i>Commission recommendation on the implementation of the new metering and billing provisions of the energy efficiency directive</i>. • Efficiency in heating and cooling, through the <i>Commission recommendation on the content of the comprehensive assessment of the potential for efficient heating and cooling under Article 14 of the energy efficiency directive</i>.
	<p>Next steps</p> <p>Member States must bring into force the laws, regulations and administrative provisions necessary to comply with the amended Energy Efficiency Directive by June 25, 2020, and for the new provisions on individual metering and billing by October 25, 2020.</p>

Link: [Three recommendations from the European Commission to put the clean energy transition into practice](#)

European Commission published the recommendations and assessment of Member States' Draft National Energy and Climate Plans.

Key features	Insights
<p>During the last days of June, the European Commission published the assessment regarding Member States' National Energy and Climate Plan (NECPs) drafts. Member States are required to analyze Commission's recommendations during the second half of 2019.</p> <p>This European Commission's assessment aims at pushing Member States to be more ambitious so the objectives of Paris Agreement can be met.</p> <p>In this sense, European Commission finds draft NECPs fall short both in terms of renewables and energy efficiency contributions.</p>	<p>The European Commission is providing feedback to the different Member States regarding their drafts of the NCEPs. Member States are required, under the new Regulation on the Governance of the Energy Union and climate action, which entered into force on December 24, 2018, to establish a 10-year national energy and climate plan for the period 2021-2030.</p> <p>The Commission's recommendations require Member States to improve their draft plans in several ways:</p> <ul style="list-style-type: none"> • Regarding energy efficiency and renewable contributions, some Member States are asked to increase efforts and better exploit their national potential. • Member States are also required to set measurable, achievable, realistic and time-related objectives regarding the energy transition's five dimensions (<i>Energy efficiency first; a fully integrated internal energy market; decarbonisation of the economy; energy security, solidarity and trust, research, innovation and competitiveness</i>). • Most States are also called upon to further substantiate the achievement of their national targets and contributions by providing more concrete additional policies and measures regarding the aforementioned five dimensions. • The European Commission has found draft NECPs short both in terms of renewable and energy efficiency contributions. Regarding renewables, the gap is estimated as 1.6 per cent. For energy efficiency, the gap is estimated 6.2 per cent (if considering primary energy consumption). Final NECPs shall ensure the level of the agreed EU targets (32% for renewables and 32.5% for energy efficiency).
	<p>Next steps</p> <p>Member States shall improve their NECPs based on the European Commission's recommendations prior to final submission (scheduled by the end of 2019).</p>

Link: [European Commission published the recommendations and assessment of Member States' Draft National Energy and Climate Plans.](#)

Frans Timmermans, nominated as Executive Vice-President for the European Green Deal

Key features	Insights
Ursula von der Leyen, President-elect of the European Commission, has nominated Frans Timmermans as Executive Vice-President for the European Green Deal.	<p>Ursula von der Leyen's Mission letter, which the President-Elect used to officially inform Mr. Timmermans of its designation. According to this letter, Mr. Timmermans will lead the work on the European Green Deal, which should be presented in the first 100 days of the Commission's mandate. Some of the tasks of the nominated Vice-President are the following:</p> <ul style="list-style-type: none"> • Increasing the ambition regarding 2030 emission reduction target to at least 50% by 2030, up from the 40% currently agreed. • Leading international negotiations to increase the level of ambition of other major emitters by 2021. • Coordinating the work on the new Just Transition Fund, which will provide support for industrial, coal and energy intensive regions. • Coordinating the work on the Biodiversity Strategy for 2030. • Coordinating the Commission's work on its zero-pollution ambition. • Coordinating the work on reducing the carbon footprint of the European transport sector as well as ensuring the blue economy contribution to decarbonisation. • Coordinating the Commission's work on the circular economy, as well as on the new Farm to Fork strategy for sustainable food. • Ensuring that tax policies enable the European Union to deliver on its climate ambitions. <p>Additionally, the nominated Vice-President shall propose the first European Climate Law and focus on developing a new climate culture in Europe. The basis for this should be a new European Climate Pact.</p>
	Next steps
	<p>After the hearing by the Committee on Environment, Public Health and Food Safety of the European Parliament, the committee prepares an evaluation letter on the candidate, Mr. Timmermans. Parliament is expected to vote on the new Commission as a whole on 23 October.</p>

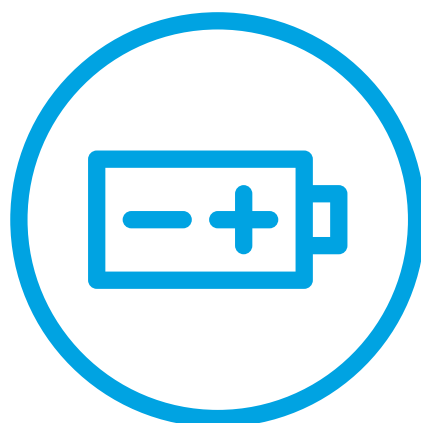
Link: [Frans Timmermans, nominated as Executive Vice-President for the European Green Deal](#)

Quarterly reporting on changes in the Policy and Regulation framework

Period: September 2019

United Kingdom			
Topic	Key features	Insights	Next Steps
Consultation on the future of the energy retail market	<ul style="list-style-type: none"> The UK government has published the joint review between BEIS and Ofgem and opened a consultation. This review investigates what policy, legal and regulatory changes will be needed to ensure the energy retail market is fit for the future. This review includes how the regulatory framework could be changed to facilitate the launch of new products and services that will support decarbonisation. Furthermore, it identifies areas of the market that can be reformed to improve the markets functionality and details how the retail market can deliver a good deal for all consumers. 	<ul style="list-style-type: none"> The review seeks to complement the existing programme of reform which includes policies such as the rollout of smart meters by complementing these reforms to enable a wider range of new business models, service and products to enter the market over the next ten years. The review considers how the remit of sectoral regulation could be changed as the UK market sees more bundled services. It also discusses a modular approach to regulation to facilitate greater consumer choice in the longer term. To protect customers, the review notes the proposals from the Competition and Markets Authority on interventions to limit instances of the 'loyalty penalty'. This is part of wider consideration to increase competition and protect consumers who do not search for a better deal. 	The consultation closed on the 16 th September. The government intends to consider amendments to the Capacity Market (CM) rules ahead of the auctions held in 2020.
Consultation on capacity market emissions limits	<ul style="list-style-type: none"> In July 2019, the Recast EU Electricity Regulation came into effect as part of the EU's Clean Energy Package. This introduced carbon emission caps for capacity mechanisms. In response to this Regulation, the UK government introduced amendments to the Capacity Market Rules with respect to new-build capacity and unproven DSR (Demand-Side Response). The government opened a consultation to gather views on how to effectively implement carbon emission caps on existing capacity mechanisms. Specifically, the government is seeking views on when the emission limits for existing generation should take effect, what length of agreement should be awarded to power generation that will not meet the emission limits in the T-3 and T-4 auctions, and how best to deal with false or inaccurate emission declarations. 	<ul style="list-style-type: none"> The emission limits on capacity generation are 550g of CO₂ of fossil fuel origin per kWh. Any new capacity generation plants that will produce emissions above this threshold are now banned from being built, and existing capacity plants that emit above this level will be banned from operating from 1st July 2025. The emission limits will affect coal, diesel and old inefficient gas generation power plants. These will need to be refurbished or decommissioned to meet emission limits. The government does not believe that it is appropriate to invest in these capacity mechanisms. The consultation sought views on whether the emission limits for existing power generation should take effect on 1st July 2025 or 1st October 2025. 	The consultation closed on the 13 th September. The government will use responses to develop thinking around the reforms later this year.

United Kingdom			
Topic	Key features	Insights	Next Steps
Ofgem – Notification – default and pre-payment price caps	<ul style="list-style-type: none"> Ofgem has published its latest update of the default and pre-payment price caps that will apply from 1st October 2019. The price caps for these customers has decreased in response to lower wholesale energy prices. Customers on default (including standard variable) tariffs will see a reduction in their bill by £75 to £1,179 for the winter period (October – March). For customers using the pre-payment meters, the price cap will fall by £25 to £1,217 for the winter period. This is partly due to the pre-payment price cap methodology being brought into line with the default price cap in a decision made by the Competition and Markets Authority. 	<ul style="list-style-type: none"> Ofgem adjusts the level of the price caps twice a year in advance of the winter and summer periods. This is to reflect the estimated costs of supplying electricity and gas to homes during these six-month periods. Wholesale energy prices have fallen sharply due to a combination of factors including low winter demand and strong gas supply. Approximately £75 of the default cap was as a result of lower wholesale energy costs. Costs such as VAT and supplier profits decreased, although this was negated by rising operating costs and environmental schemes. In July, the Competition and Markets Authority decided to bring the methodology for calculating the pre-payment cap in line with the default tariff cap. This has resulted in the pre-payment meter cap being higher than the default tariff cap, which reflects the higher cost of providing energy to these customers. 	<p>The price cap was introduced by Ofgem on 1 January 2019 and will be updated every six months from 1 April 2019.</p> <p>The price cap is likely to stay in place for at least the next three years.</p>
Results from CfD Auction Round 3	<ul style="list-style-type: none"> The Contracts for Difference (CfD) scheme is the government's mechanism for supporting means of low-carbon electricity generation such as offshore wind. Technologies such as Advanced Conversion Technology (ACT) and offshore wind were included in the latest auction. The results of Round 3, published by BEIS on 20th September 2019, showed the successful applicants at a strike price between £39.65/MWh and £41.61/MWh, with offshore wind power prices dropping by approximately 30 percent since the second auction in 2017. Furthermore, a record amount of renewable capacity was secured in this auction, spanning across 12 renewable power generation projects. 	<ul style="list-style-type: none"> The record-low strike price of sub-£40/MWh reached in the auction indicates a sharper fall in offshore wind than many analysts had expected. The lower-than-expected results are the outcome of the supportive Contracts for Difference regulatory framework set out in 2014. The results show that offshore wind is now at the price point whereby subsidies may not be required, leading to the question of whether it should be considered a mature technology like onshore wind and solar PV. 	<p>The UK government has announced that Round 4 is to be held in 2021 and will award at least 7GW of seabed rights for offshore wind projects.</p>



France			
Topic	Key features	Insights	Next Steps
Consequences of "PACTE" law for Utilities	<ul style="list-style-type: none"> • French parliament voted the "PACTE" law for business growth and transformation on May 22, 2019 • The law has consequence for Utilities namely regarding (i) Energy saving certificates and (ii) billing. • In addition the law encourages self-consumption namely through broaden definition of collective self-consumption. 	<ul style="list-style-type: none"> • Scope of energy savings certificates is extended by including facilities classified for environmental protection and subject to greenhouse gas emission trading systems. • Online billing for residential customers is facilitated and lays down certain obligations for suppliers, particularly to ensure that e-invoices are received by the customer. • Articles contemplating to put an end to regulated electricity sales tariffs (except smallest businesses) and regulated gas sales tariffs, were ruled contrary to the French Constitution. 	<ul style="list-style-type: none"> • The law should enter in force starting 2020
Validation by the Parliament of the law on energy and climate	<ul style="list-style-type: none"> • The law on energy and climate strength previous objectives of France's energy policies (national low-carbon strategy and the Multi-Year Energy Programme) • The law sets a maximum operating life for power plants generating the highest pollution, in order to limit greenhouse gas emissions in the electricity generation sector from January 1st, 2022. • The law contemplates a reform of the ARENH mechanism for Regulated access to historic nuclear power in order (i) to increase volumes purchased by EDF's competitors and (ii) to provide a fair compensation to EDF. • The law sets the terms for regulated sales tariffs <ul style="list-style-type: none"> – Gas: for all consumers, to bring French law into line with European Union law. – Electricity: the decision transpose the EU directive on the internal electricity market which requires end of regulated tariffs for business customers except the very smallest business types by December 31, 2020. 	<ul style="list-style-type: none"> • Previous energy policies targets are modified as follow: <ul style="list-style-type: none"> – Target of "dividing greenhouse gas emissions by four between 1990 and 2050" is replaced by the objective of "achieving carbon neutrality by 2050, by reducing greenhouse gas emissions by a factor of more than six between 1990 and 2050"; – Target of "reducing primary fossil fuel energy consumption by 30% by 2030" is replaced by the objective of "reducing primary fossil fuel energy consumption by 40% by 2030"; – The time horizon for reducing the nuclear share of France's electricity output to 50% is no longer 2025 but 2035 • The law should result in the closure of coal-fired plants by January 1st, 2022. • Subscription of new natural gas contract at regulated sales tariffs is now forbidden. Existing regulated tariffs will be discontinued for small businesses within one year, and for all consumers by July 1st, 2023. 	<ul style="list-style-type: none"> • The law is applicable but some articles are focused on medium term

Spain			
Topic	Key features	Insights	Next Steps
CNMC continues the Public Audience procedure regarding the last 10 of the total new draft regulations in the Electricity and Gas Sectors	Spanish Regulator (CNMC) has submitted to Public Audience the last 10 new draft regulations after submitting the first 4 ones (see Q2 2019 Newsletter). This set of 10 pieces of regulation deals with several regulated activities, concerning both electricity and gas sectors.	<p>Although the Public Audience of the 10 pieces of draft regulation has concluded in September 2019, they are still under development process. In this sense, interested parties (e.g. Ministry, companies) have expressed their comments regarding some aspects included within these draft pieces.</p> <p>One of the key concerns regarding these regulation pieces is the reduction of electricity and gas networks' remunerations (expected cuts range between 7% and 21.8%, depending on the activity).</p> <p>Other significant aspects included within the 10 draft regulations are the following:</p> <ul style="list-style-type: none"> • A new calculation method or Financial Remuneration Rate of electricity and gas regulated activities, based on a WACC method, following other European countries' schemes. • For the first time, an explicit methodology for both Electricity and Gas System Operators remuneration. • The development of remuneration methodologies that ensure overall efficiency regarding gas and distribution systems. 	<p>Although the Public Audience procedures have been closed before publishing this Newsletter, the development of these pieces of regulation is still undergoing as several involved parties have shown their public disagreement. According to current regulation, the 14 pieces of regulation shall be published before January 1, 2020.</p>
Ministry for the Ecological Transition publishes a series of reports regarding CNMC's draft proposed regulations	<p>The Ministry for the Ecological Transition has published the assessment reports concerning draft regulations proposed by CNMC.</p> <p>The evaluation from the Spanish Government is focused on several aspects such as:</p> <ul style="list-style-type: none"> • Regulation topics. • Impact on consumers. • Clarity of proposed remuneration methodology. • Impact on the industry and other economic sectors. 	<p>Despite the Ministry has expressed a general positive opinion about CNMC proposals, it has shown its disagreement with some aspects regarding electricity and natural gas networks' remuneration methodology.</p> <p>In this sense, in opinion of the Ministry for the Ecological Transition, CNMC proposals:</p> <ul style="list-style-type: none"> • Do not follow some of the Spanish Government's energy policy guidelines (see Q2 2019 Newsletter), regarding national energy and climate commitments. • Do not consider some financial ratios regarding electricity and natural gas' grid owners. In this sense, the Government expresses its concern regarding the apparently high leverage ratios of regulated companies. • Overcome CNMC regulated competences in certain aspects, such as the establishment of the maximum investment amount for grids. • Regarding the proposal for a new remuneration methodology for natural gas transport and distribution activities, the Ministry finds that the proposed changes do not provide the system with the required predictability and stability. <p>In order to solve detected discrepancies in 7 of the proposals, the Ministry for the Ecological Transition finds necessary convening a Cooperation Committee between this entity and the Regulator, CNMC.</p>	<p>Currently, the energy and gas Sector is awaiting the decision of the CNMC regarding the allegations presented by the different agents of the electricity and gas sectors, as well as by the Ministry for the Ecological Transition through the Secretary of State for Energy.</p> <p>According to current regulation, the 14 pieces of regulation shall be published before January 1, 2020.</p>

Snapshot on surveys and publications – October 2019

Deloitte

Moving organizational energy use toward 100 percent renewables – October 2019

The US clean energy movement is gaining strength—more organizations are aiming to increase renewables in their energy mix and reduce carbon emissions. The Deloitte 100 Percent Renewable Transition Survey looks at what this means for organizations on this journey to 100 percent renewables.

[Link to the survey](#)

2019 Global Human Capital Trends: Energy, Resources & Industrials – September 2019

The top human capital issues facing the Energy, Resources, and Industrials (ER&I) industry are arising in a whole new context: the social enterprise. This paper provides an ER&I industry-specific perspective on the 2019 Global Human Capital Trends report across ER&I's sectors including Power & Utilities.

[Link to the survey](#)

Sustainable finance: Can Sukuk become a driver of solar and green energy growth? – July 2019

This report, which is jointly produced by Deloitte Middle East and ISRA, highlights the importance of renewable and alternative energy by presenting the experiences of selected countries in this field. The report also emphasizes the role of Sukuk in sustainable development and renewable energy projects, particularly solar projects.

[Link to the survey](#)

Agencies or research institutes

International Energy Agency

Cooling on the Move – September 2019

This report explores the current global energy consumption from mobile air conditioning systems, along with the resulting greenhouse gas emissions from the energy consumption and the leaking refrigerants.

[Link to the survey](#)

Exploring Clean Energy Pathways – July 2019

This report analyses the implications for the global energy system of CO₂ storage facilities not being developed at the scale and pace needed to follow the optimised pathway of the CTS. By limiting CO₂ storage availability to 10 Gt CO₂ over the scenario period, the analysis provides insights into the additional measures and technologies that would be required in the power, industrial, transport and buildings sectors in order to achieve the same emissions reductions by 2060 as the CTS.

[Link to the survey](#)

Clean Energy Investment Trends 2019 – July 2019

This report maps out the evolution in the renewable power industry and investment landscape. It also takes stock of the impact of a recent policy measure – the imposition of safeguard duties on solar PV cell and module imports – on the pace of project awards. Further, this report contextualises emerging challenges facing the solar park model.

[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

EU environment and climate change policies – September 2019

This study reviews the state of play of on-going EU environmental and climate legislation and pinpoints key challenges for the next five years. Challenges arise from the plans released by the president-elect, such as a new European Green Deal, the completion of work started in the previous term, by reviews of legislation foreseen for the next term and the need for action where indicators show that current EU environment targets may not be achieved.

[Link to the survey](#)

Assessing the effectiveness of EU policy on large combustion plants in reducing air pollutant emissions – September 2019

This report is a retrospective assessment of the European policy on combustion plants, with a focus on the LCPD (Large Combustion Plants Directive). In addition, the report explores the causal association between the observed changes, and the LCPD and broader EU policy landscape, by means of various methods, including a statistical technique known as decomposition analysis

[Link to the survey](#)

Eurelectric

Power Barometer 2019 – September 2019

Electricity is a key solution towards Europe's decarbonisation. This report explores how the power of electricity can transform our world. It shows that with the right measures, electricity can become the solution to other sectors' decarbonisation.

[Link to the survey](#)

Oxford institute for Energy

LNG in Transition: from uncertainty to uncertainty – September 2019

In four sections, the publication examines the uncertainties facing LNG demand and supply, how LNG pricing structures are evolving and the growth in LNG trading, before discussing LNG shipping, plant costs and the evolution of floating liquefaction.

[Link to the survey](#)

Floating LNG Update – Liquefaction and Import Terminals – September 2019

This paper provides an update on the floating liquefaction (FLNG) and storage and regas (FSRU) industry over the last 3 years since the publication of the first papers in 2016 and 2017.

[Link to the survey](#)

The electricity market design for decentralized flexibility sources – July 2019

This paper aims to deconstruct the complexity of electricity market design in light of the growing importance of decentralized flexibility and related current developments.

[Link to the survey](#)

European traded gas hubs: a decade of change – July 2019

This Insight provides a further update on the maturity and development of European traded gas hubs, with particular reference to both the liquidity and pricing aspects of the hubs.

[Link to the survey](#)

Gas Production from the UK Continental Shelf: An Assessment of Resources, Economics and Regulatory Reform – July 2019

This paper not only provides an assessment of the resources still available in UK waters and the economics of their production, but also assesses regulatory issues and government policy that could promote increased output in future.

[Link to the survey](#)

Newsletter contacts



Felipe Requejo

Partner
Global Power & Utilities Leader
and Energy & Resources Leader
in Spain
frequejo@deloitte.es



Oliverio Álvarez

Partner
Energy and Markets Regulatory
Affairs Leader
in Spain
ovalvarezalonso@deloitte.es



Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms. In France, Deloitte SAS is the member firm of Deloitte Touche Tohmatsu Limited, and professional services are provided by its subsidiaries and affiliates.

Deloitte
185, avenue Charles-de-Gaulle
92524 Neuilly-sur-Seine Cedex
Tél. : 33 (0)1 40 88 28 00 - Fax : 33 (0)1 40 88 28 28

© 2019 Deloitte & Associés - Une entité du réseau Deloitte - All rights reserved
Studio Graphique Neuilly