

Energy Element / June 2019

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Warmer weather pressures wholesale prices

Day-ahead power dropped by 6.0% in May to average £41.1/MWh, its fifth consecutive monthly decline. The contract ended the month at £35.6/MWh, a near two-year low. Prices continued to follow the gas market lower, with periods of high wind and solar generation also pressuring prices. All seasonal power prices fell in May, down 2.3% on average. Winter 19 power moved lower by 1.6% to average £57.8/MWh, 5.5% higher than May 2018 (£54.8/MWh).

Day-ahead gas declined for the eighth consecutive month, losing 10.2% to average 31.9p/th in May. The contract ended the month at a one-month low of 27.5p/th, as warm temperatures dampened demand, leaving the gas system oversupplied. The gas system has continued to remain oversupplied this year due to the influx of LNG to GB terminals. A total of 16 tankers arrived in May, down from 19 in April. All seasonal gas contracts reversed the previous month's gains, falling 3.0% on average, following a decline in Brent crude oil prices. Winter 19 gas decreased 3.1% to average 54.5p/th, 3.3% lower than in May 2018 when the contract average 56.8p/th.

Oil, coal and carbon prices decline amid weaker demand

Brent crude oil declined for the first time this year, down 1.3% to average \$70.5/bl in May. Oil prices ended the month at \$64.9/bl, the lowest since mid-February, amid concerns that the ongoing US-China trade war will lower demand for oil. Concerns of weaker demand are more than offsetting previous worries of a tighter market following OPEC+ production cuts, with the cartel now expected to continue the cuts beyond June 2019.

EU ETS carbon fell for the first time since February, slipping 0.3% to average €25.5/t in May. Carbon peaked at €26.9/t on 9 May, but dropped to €22.9/t on 21 May. Pressure came from high renewables

generation throughout Europe in May, which drove coalfired power plant out of the generation mix and dampened demand for EUAs. Brexit uncertainity continued to be a driver behind carbon price volatility, with Prime Minister Theresa May's announcing of her resignation on 24 May causing greater concerns of the likelihood that the UK will leave the EU without a deal.

API 2 coal prices dropped for a fifth consecutive month, down 5.5% to average \$68.9/t in May. Coal ended the month at a two-year low of \$65.4/t, amid weaker demand as a result of above seasonal normal temperatures and cheaper gas prices across Europe.



Crude oil and annual wholesale gas and power prices



The month ahead: prices fall amid comfortable supplies and low demand

Power and gas demand is expected to fall in line with seasonal norms as warmer temperatures are forecast throughout most of June. Higher renewables is expected to pressure power prices, whilst an oversupplied gas system will keep gas prices relatively low. The expectations that OPEC+ will continue production cuts beyond June may support oil prices. However, concerns of weaker demand amid ongoing trade disputes and slower economic growth, will likely offset any upwards momentum. API 2 coal prices are also predicted to fall as demand continues to decline into summer.

Catalyst Commercial Services' independent approach enables clients to manage their exposure to energy price risk, while at the same time benefiting from a first-class service from a range of major and independent suppliers. Catalyst Commercial Services' procurement solutions make it simple, so contact a member of the team to discuss requirements.



Annual gas prices



Spot gas prices



All seasonal gas contracts fell in May, decreasing 3.0% on average. Winter 19 gas dropped 3.1% to average 54.5p/th. Summer 20 gas lost 2.7%, averaging 45.2p/th in May, a 3.1% increase from the same time last year when it was 43.8p/th.

The annual October 19 gas contract went down 2.9% to average 49.8p/th, 0.5% lower than in May 2018 when it averaged 50.1p/th.

In May, day-ahead gas fell for the eighth consecutive month, dropping 10.2% to average 31.9p/th. The month-ahead (June) gas contract lost 11.8% to average 31.5p/th, down 30% from the same time last year (44.9p/th).

A total of 16 LNG tankers arrived at UK terminals last month, keeping gas supplies comfortable as above seasonal normal temperatures dampened gas demand. GB gas storage levels ended the month at 0.76bcm (54% capacity), rising from 0.65bcm (46%) at the end of April.

Annual power prices



Spot power prices



All seasonal baseload power contracts moved lower in May, down 2.3% on average. Winter 19 power averaged £57.8/MWh, a 1.6% decrease from April. Seasonal power contracts mirrored their gas counterparts, as gas-fired power generation continues to dominate our electricity mix.

The annual October 19 power contract decreased by 1.9% to average £53.3/MWh, up 6.7% from May 2018 when the contract was at £50.0/MWh.

Day-ahead power fell 6.0% to average $\pounds 41.1/MWh$ in May, its fifth consecutive monthly decline. The contract ended the month at $\pounds 35.6/MWh$, a near two-year low. Month-ahead (June) power was down 6.5% to average $\pounds 41.8/MWh$, 15.3% lower year-on-year ($\pounds 49.3/MWh$).

Day-ahead power prices continued to follow their gas counterparts lower, as CCGT generation remained dominant in the supply mix, providing 46.6% of the generation mix in May, up from 45.2% in April.



Key market indicators: 31/05/2019

	Gas (p/th)		Electricity (£/MWh)		Coal	Carbon	Brent crude
	Day-ahead	Year-ahead	Day-ahead	Year-ahead	(\$/t)	(€/t)	(\$/bl)
This month 31 May 19	27.50	48.94	35.60	52.43	65.40	24.72	64.87
Last month 29 Apr 19	33.75	52.42	42.30	55.23	71.40	26.35	71.52
Last year 31 May 18	61.25	49.70	58.25	50.16	87.50	15.30	77.10
Year-on-year % change	(55%)	(2%)	(39%)	5%	(25%)	62%	(16%)
Year high	79.75	65.85	73.00	61.91	100.15	27.43	86.12
Year low	27.00	46.18	35.60	48.76	65.40	14.46	53.82
This table shows the price at the end of this month compared with prices from the previous month and year. The graphs show the position of this month's prices with a red X and the range of prices over the year is represented by the black line.	90 - 80 - 70 - 60 - 50 - 40 - 30 - 20 -	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	80 T 70 - 60 - 50 - 40 - 30 -	65 - 60 - 55 - 50 - 45 -	105 95 85 75 65 55	30.0 T 25.0 + × 20.0 - 15.0 - 10.0 -	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Commodities

Carbon: EU Emissions Trading Scheme carbon is quoted as over-the-counter (OTC) latest opening prices. All carbon prices are in euros per tonne (€/EUA).

Coal: Coal is quoted as OTC latest opening prices. All coal prices are in US dollars per tonne (\$/t).

Electricity: UK power base-load and peak-load are quoted as OTC latest opening prices. All UK electricity prices are in pounds per megawatt hour (£/MWh).

Gas: UK National Balancing Point (NBP) gas is quoted as OTC latest opening prices. All UK gas prices are in pence per therm (p/th).

Oil: Brent crude oil is quoted as OTC latest opening prices. All Brent crude oil prices are in US dollars per barrel (\$/bl).

Language/ terms

Bearish: A bearish market shows a general decline in prices over a period of time.

Bullish: A bullish market shows a general increase in prices over a period of time.

Curve: A graph of forward prices over a future time period.

Margin: The indicated UK imbalance of a given settlement period. It is the difference between the sum of the indicated generation available, and the national demand forecast made by National Grid.

Over-the-counter (OTC): The trade of a commodity directly between two parties, often on standardised terms.

Spark/ Dark spread: The theoretical net income of a gas/ coal-fired power plant from selling electricity having purchased the necessary fuel. The clean spark/ dark spread is this net income adjusted for the cost of carbon.

Disclaimer

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Labour publishes energy networks renationalisation plan

Labour launched its Bringing Energy Home plan on 16 May, setting out its plans for the renationalisation of GB's energy networks. In its plan, Labour would replace National Grid and Distribution Network Operators with publicly owned national, regional and municipal agencies, as well as taking ownership of the UK side of all interconnectors.

While national agencies would own and maintain transmission infrastructure "replacing the National Grid", regional agencies would replace existing Distribution Network Operators (DNOs) and become responsible for decarbonising electricity and heat, guarantee access to affordable energy and spearhead the rolling out of an electric vehicle infrastructure. Additionally, a National Energy Agency (NEA) would provide the overall strategy for the energy transition and would "guide public, collective and private forms of energy ownership".

On day one after nationalisation, Labour said the transmission company owned by the NEA will look near identical to the privatised electricity transmission operator, but in public ownership. The assets and workforce of the gas transmission companies would then be gradually transferred to the NEA, merging electricity and gas networks. Additionally, relevant BEIS staff would also be transferred to the NEA.

The NEA would own and maintain transmission infrastructure, build transmission connections to new large-scale generation, as well as act as system operator. This will include ownership and operation of the UK side of country-tocountry interconnectors and connections that bring to shore generation from new offshore wind farms. In addition, the duties of the NEA would include decarbonisation. It would set and oversee the Regional Energy Agencies' (REA) targets for decarbonisation to deliver a national target of 60% of energy from low carbon or renewable sources by 2030, as well as oversee the rollout of the UK's electric vehicle charging network and development of energy storage capacity. The NEA would also aim to ensure that energy costs are affordable for all households.

Labour cited network costs representing one-quarter of energy bills and large "unjustified" profits for network companies – these profits, Labour said, would be reinvested back into the networks. The party also reasoned that its renationalisation plans would deliver better value for the public, accelerate investments needed to roll out renewable and low carbon energy and provide democratic control over nationally strategic infrastructure.

Responses to Labour's renationalisation plans have been mixed. Energy UK Chief Executive Lawrence Slade stated that the current energy system was responsible for the UK's increased renewable generation and decreasing emissions, while CBI Director-General Carolyn Fairbairn warned that Labour's plans to renationalise the UK's utilities would "profoundly harm" the economy and would cost the country over £175bn. Energy Networks Association (ENA) Chief Executive David Smith said that the proposals would "not only fail to deliver Labour's objectives but they will also be extremely costly to the British public", and that under state ownership, networks were more expensive and less reliable. However, GMB National Secretary Justin Bowden responded by describing it as a "big and bold announcement", but that "any credible energy policy must be affordable to consumers and taxpayers, guarantee security of supply and increasingly rely on zero and very low carbon sources like nuclear, green hydrogen gas and wind as part of a balanced energy mix."

Labour's ambition for ownership change may never be achieved, but the proposals challenge those who believe in the market to deliver decarbonisation, particularly with regards to equity and cost to the consumer.

Energy UK RenewableUK GMB

GB achieves its first coal-powered generation free week since 1882

National Grid Electricity System Operator (ESO) confirmed that GB achieved its first coal-free week since 1882. Announced on Twitter on 8 May, the last coal generator came off the system at 1.24pm on 1 May, meaning that, as of 12PM of 9 May, the UK had achieved 190 hours of continuous coal-free generation. The figures surpassed previous records of 90 hours 45 minutes, achieved in March over the Easter break, and 76 hours and 10 minutes which was reached in April 2018.

"Yet another new record for a coal-free power grid [...] emissions are coming down, while low carbon generation continues to go from strength to strength," said Head of Analysis at the Energy and Climate Intelligence Unit Dr Jonathan Marshall.

Twitter ECIU BEIS



Public support for renewable energy is at 84%

BEIS has released its 29th quarterly wave of the BEIS Public Attitudes Tracker (PAT). Published on 9 May, it explores public attitudes towards BEIS policies, such as energy, climate change and workers' rights, presenting summary headline findings from March 2019.

Increased concerns regarding climate change have led to the highest figures seen since the survey started, 45% found to be fairly concerned and 35% being very concerned. Seven in 10 people (69%) also stated that climate change is already having an impact on the UK. However, the majority thought that the government should have the most responsibility for tackling the effects of climate change in the UK (45%), compared with the general public (27%) and businesses (14%).

Support for the use of renewable energy has also seen a significant increase, rising from 77% in December to 84% in March 2018. The implementation of solar (89%), off-shore wind (83%), wave and tidal (82%) and on-shore wind energy (79%) have also reached their highest levels since the survey started. However, 35% of the public supported nuclear energy, a slight decline from 38% in March the previous year. Support for different forms of renewable energy, 2012 to 2019



Source: BEIS, Public Attitudes Tracker

The utilisation of fracking has also seen increased opposition, rising from 35% in December 2018 to 40% in March 2019, reaching the highest levels since December 2013. Only 12% supported fracking, with reasons for opposing fracking ranging from the loss or destruction of the natural environment (57%) and the risk of earthquakes (45%, up from 40% in December 2018). 45% were also found neither to support nor oppose it. Awareness of fracking has remained consistent at approximately 70% and 80% over the last five years.

The use of innovative technologies, such as carbon capture and storage (CCS) has also gained further traction. Awareness of CCS has remained between 36% and 41% since 2012, but in March 2019, 63% of those who knew a lot or a little about CCS said they supported it, the highest level of support in the survey to date. Only 6% said they opposed CCS in March 2019, with 30% saying they neither supported nor opposed it.

With regards to consumer energy usage, recent findings also highlighted that the public were most likely to trust suppliers to provide a bill which accurately reflects energy use (71%) and could provide a provide a breakdown of the components of their bill (69%). They were less likely to trust suppliers to improve their home to make it more energy efficient (49%) and to inform customers about their best tariff (53%). However, an awareness of smart meters reached a peak of 88% in March 2019, with smart meter ownership reaching its highest point since the survey started (35%). 20% of people also stated that they had switched energy supplier in the last year.

BEIS

Citizens Advice: networks failed to pay out £5.1mn to small businesses and households

A report from Citizens Advice revealed that energy networks have failed to pay out £5.1mn compensation for customer service failures over the last three years. Published on 3 May, the data found that few domestic and small business customers claim the payments they are entitled to when energy network companies fail to meet their obligations. This is due to customers not realising they qualified for compensation, people forgetting to claim, or not applying within the three-month time limit.

Electricity network companies paid out just under £5.4mn in compensation, including voluntary payments. Gas networks also refunded more than £11mn in compulsory and voluntary compensation payments between 2015-18.

Citizens Advice



ADE launches compliance scheme to encourage business flexibility

The Association for Decentralised Energy (ADE) launched its Flex Assure scheme on 15 May. It is a new compliance scheme which is designed to make it easier for businesses to participate in the country's smart energy system and could save UK customers £600mn by 2020 and £2.3bn by 2035.

The ADE said Flex Assure will help businesses to compare the different services offered by aggregators, provide greater transparency and give businesses confidence in the services offered to them. The new voluntary membership scheme is open to all demand-side response (DSR) aggregators and licensed energy suppliers offering DSR services, a form of flexibility which enables businesses to sell electricity through onsite generation and onsite energy storage for export. It also sets common standards across the industry, making it easier for industrial and commercial customers to access the revenue these new energy services can provide.

"Businesses have the opportunity to benefit from the energy system's zero carbon transformation, securing new revenue while helping to deliver our low-carbon ambitions," commented Director of Business Development at the ADE John Bryant. He continued: "Flex Assure will be an important tool for setting industry-wide standards, supporting businesses in accommodating more renewable energy to meet our decarbonisation targets at least cost."

A sixth of the UK's peak electricity requirement – or 9.8 GW - could be provided by businesses being flexible in their energy demand, which could save UK energy consumers £600mn by 2020 and £2.3bn by 2035.

Seven DSR aggregators have so far applied to joined Flex Assure: Centrica Business Solutions, Enel X, ENGIE, Flexitricity, GridBeyond, Kiwi Power and npower Business Solutions. The scheme will be overseen by an independent committee, which will also adjudicate customer complaints, and provide public notifications if any company is in breach".

Flex Assure is supported by the Major Energy Users Council (MEUC) and Make UK (formerly the EEF). "Manufacturers are contacted by many different aggregators and are sometimes unable to assess the quality of what they are being offered. The Flex Assure DSR code of conduct provides certainty and increases trust in the market", added Chief Economist at Make UK Seamus Nevin.

The ADE also referred to National Grid ESO's plans to make GB's electricity grid able to be fully operated with zero carbon by 2025 – the ADE said that DSR is a key element in achieving this goal. Director of ESO Fintan Slye said: "Zero carbon operation of the electricity system by 2025 means a fundamental change to how our system was designed to operate; integrating newer technologies right across the system – from large-scale off-shore wind to domestic scale solar panels – and increasing demand-side participation, using new smart digital systems to manage and control the system in real-time."

With the Committee on Climate Change's report calling for net zero by 2050 still fresh in industry minds, the need to increase GB's electricity capacity without the building of new infrastructure will be an essential tool going forward. Businesses often have the onsite generation and/or the high consumption to make a real difference to the electricity grid.

ADE National Grid ESO

UK solar generation record broken

UK solar generation hit a record high of 9.47GW on 13 May. The Solar Trade Association (STA) said on 14 May that the record was broken around noon, surpassing the previous record of 9.38GW set in May 2017. That record was broken again on May 14 2019, with a generation peak of 9.55GW reached at around 12:30pm.

STA Director of Advocacy and New Markets Léonie Greene said: "Days like these show that the technology can deliver clean, affordable power in abundance. We now need Government to provide a level playing field with other technologies and allow solar to thrive without public support."

The STA said that solar in the UK faces several policy and regulatory challenges, including proposed changes to the way reduced-rate VAT is applied to solar as an energy saving technology. A lack of clear remuneration for small-scale power exports and exclusion from secure government Contracts for Difference (CfDs), as well as increased business rates have also led to opposition.

STA



NIC Chair urges Chancellor to commit to the transformation of energy networks

Chair of the National Infrastructure Commission (NIC) Sir John Armitt has written a letter to Chancellor of the Exchequer Philip Hammond, urging him to use the autumn Spending Review to commit to a "once-in-a-generation transformation" of the UK's energy, transport and technology networks.

In the letter, published on 13 May, Armitt laid down four key tests by which the NIC will judge the credibility of the government's National Infrastructure Strategy, which is expected to be announced at the autumn Spending Review. The key tests are as follows: a long-term perspective; clear goals and plans to achieve them; a firm funding commitment; and a genuine commitment to change. The Commission published the UK's first National Infrastructure Assessment in 2018, which delivered a series of detailed recommendations as to how the government should develop the UK's energy, transport, water and technology networks over the next 30 years. The government is now set to formally respond with its own strategy.

NIC

Regulator report suggests further intervention to protect microbusinesses

Ofgem published a report on 10 May, setting out the results of research on how microbusinesses engage with energy and the implications for the Competition and Markets Authority's Price Transparency Remedy. The report, produced in partnership with Collaborative Research, found that the process for engaging with the market is still perceived by microbusinesses to involve hassle, provide uncertain benefits, and be time-consuming; with other issues including perceived tariff complexity and a high-pressure sales environment. Additionally, wider factors, including perceived tariff complexity and a high-pressure sales environment have contributed to a suboptimal experience for many.

The report recommended that the Price Transparency Remedy be subject to further testing, that guidance is improved and that the level of information required from microbusinesses when comparing prices could be reduced. It also put forward wider suggestions, including simplified tariffs, the addressing of high-pressure sales tactics, the introduction of standards for brokers and further interventions to make the market work better for the unengaged.

Ofgem

LSE urges reformed approach to carbon pricing for UK to reach net zero 2050 targets

A new report by the Grantham Research Institute on Climate Change and the Environment at the London School of Economics (LSE) has recommended a reformed approach to carbon pricing if the UK is to reach net zero by 2050. Published on 22 May, the report urges the implementation of a politically feasible medium-level carbon price that is higher than today's price.

A shadow price (the price used internally to guide decisions) that is consistent with net-zero would start at \pounds 50 (with a range of \pounds 40–100) per tonne of carbon dioxide (tCO2) in 2020, reaching \pounds 75 (\pounds 60–140) in 2030 and \pounds 160 (\pounds 125–300) per tCO2 in 2050, which reflects the likely cost of negative emissions technology. LSE calculated that, if imposed through a tax or the auctioning of emissions allowances, the proposed price levels would raise public revenue of around \pounds 20bn a year until the early 2030s.

LSE

Centrica launches EV offer to help business fleet transition

Centrica Business Solutions has launched an EV Enablement package of solutions to support more businesses transition towards the use of electric vehicles (EVs) in their fleets. Announced on 28 May, the products are designed to enable businesses to meet additional power demands of new charging points through "generating, storing and managing power on site," by combining its charging infrastructure with "solar, battery and storage" to ensure fleets are managed effectively at reduced cost. The EV market could require up to 18GW of additional power by 2050 in the UK alone, an equivalent to an extra 30% on top of today's peak demand. Jorge Pikunic, Global Managing Director for Centrica Business Solutions said: "The adoption of EVs is no longer a question for tomorrow. For businesses, the transition to EV is a big opportunity to become cleaner, more sustainable and more efficient."

Centrica