Energy Element / April 2020

In this issue…

Lockdown sees significant fall in energy demand

The ongoing and increasingly rapid spread of the coronavirus across the world last month saw the UK government implement lockdown procedures, which had large impacts on gas and power demand in GB causing prices to plummet. Huge losses in oil prices last month put additional pressure on gas, power and carbon prices.

Already entering March at seasonally low levels, GB NBP gas prices were weighed on further when the government announced lockdown measures on 23 March, closing many businesses and advising people to work from home where possible. This has resulted in significant declines in commercial and industrial demand levels across gas and power markets. The NBP day-ahead gas contract reached more than a 10-year low of 19.05p/th on 27 March as mild weather added additional weight. Several forward contracts for delivery in spring and summer fell below 20p/th in the final fortnight of March as demand is forecast to remain lower-than-normal while lockdown measures are in place. Furthermore, global oil and LNG prices have also plunged recently, adding pressure to GB gas prices.

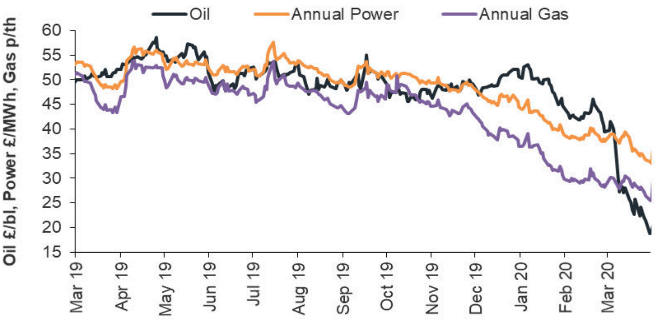
Falling gas and commodity prices, alongside lower power demand, fed through to the GB power market, with seasonal contracts falling 3.8% on average. Similar to gas, the power market was heavily affected when lockdown measures were announced. The day-ahead contract remained below £30/MWh for the final week in the month, but prices were upheld by low wind generation in the month, a stark contrast to February. Near-term power contracts for spring and summer months were the most heavily affected, with all contracts up to summer 20 ending the month below £28/MWh.

Oil price dispute results in 54% drop in prices across March

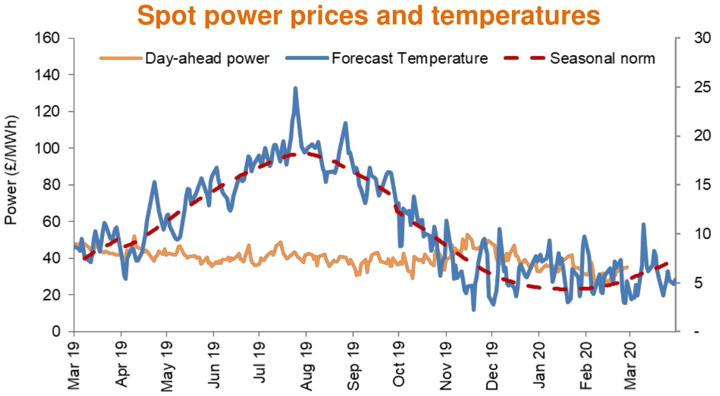
Already falling when they entered the month, Brent crude oil prices suffered their worst daily fall in 29 years on the 9 March. Following a disagreement between Saudi Arabia and Russia over whether to cut production levels to reverse downward price movements (due to the coronavirus), Saudi Arabia took the decision to flood the market will additional oil supply, resulting in prices falling 26.2%. Prices continued to fall throughout the rest of the month, as fiscal stimulus provided by central banks around the world failed to noticeably affect the oil markets in the same manner they did to the stock markets. Brent crude oil prices averaged $34.53/bl in March, ending the month at $23.43/bl.

EU ETS carbon prices also crashed in March, falling to a 16-month low of €15.56/t as low demand saw one EEX autction cancelled. Prices have tumbelled as lower consumptions levels across transport and industrial sectors have resuled in reduced emissions. Coal prices remained relatively stable in March, averaging $56.36/t.

Crude oil and annual wholesale gas and power prices



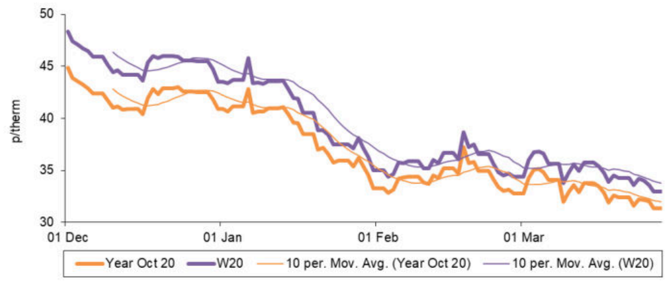
Spot power prices and temperatures



The month-ahead: Prices hinge on future demand

A possible resolution to the oil price dispute has been hinted at in the first couple of days in April, though an actual solution remains to be seen. A recovery in oil prices will give some support to GB gas and power markets, but impacts are likely to be outweighed whilst global and UK social distancing measures remain in place, hampering demand as well as global markets. Low prices are expected to persist due to the long-lasting impacts of recent events.

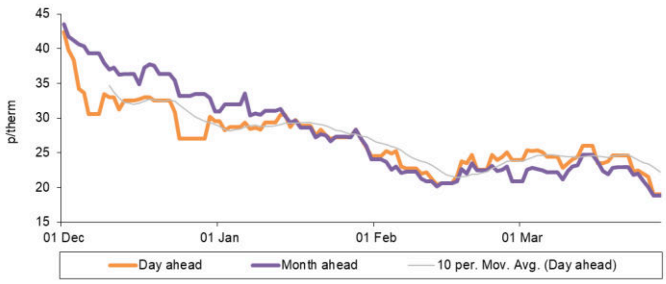
Annual gas prices



All seasonal gas prices dropped in March relative to their average prices in February as the spreading of the coronavirus weighed on near-term demand levels. The summer 20 contract fell 3.9% to average 22.41p/th, but tailed off significantly towards the end of the month, closing at 18.65p/th. This is 56.6% lower than at the same time in 2019.

The annual April 20 gas contract dropped 3.4% to average 28.52p/th.

Spot gas prices



Day-ahead gas prices remained relatively unchanged on average in March compared with February, averaging 23.29p/th across the month. However, the contract dropped to under 20p/th near the end of the month, and so far in April has dropped to 16p/th. Month-ahead contracts were mixed, with April 20 gas rising 0.7% to 21.84p/th, and May 20 gas falling 3.5% to 21.55p/th.

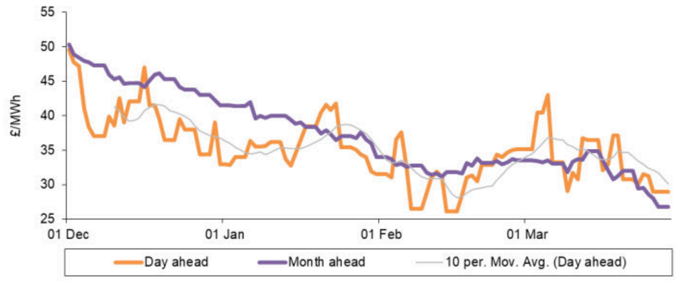
The first half of March saw relatively stable gas prices, before the lockdown measures were implemented. Since restrictive measures have been implemented, gas demand has significantly fallen, resulting in low prices.

Annual power prices

Seasonal power contracts moved down 3.8% on average, with summer 20 power declining 5.7% to £31.84/MWh with market concerns as to the magnitude of power demand in the summer. The winter 20 power contract dropped 4.0% in value to average £41.45/MWh.

The April 20 power contract slipped 4.7% to average £36.64/MWh last month. This is 27.2% lower than the value the contract was trading at last year, which averaged £50.32/MWh in March 2019.

Spot power prices



Day-ahead power increased in value in March on average, rising 4.4% from February to £33.46/MWh. Similarly to gas however, prices dropped off towards the end of the month as the idea of lockdown became reality. The April and May power contracts fell 4.9% and 5.7% respectively to £31.24/MWh and £31.32/MWh.

Despite lower levels of wind generation, power contracts remained subdued in March due to significantly lower demand from the commercial and industrial sectors, and due to a reduction in gas prices. This has been extended into April, with the day-ahead contract dropping to a fresh record low of £18.50/MWh on 3 April.

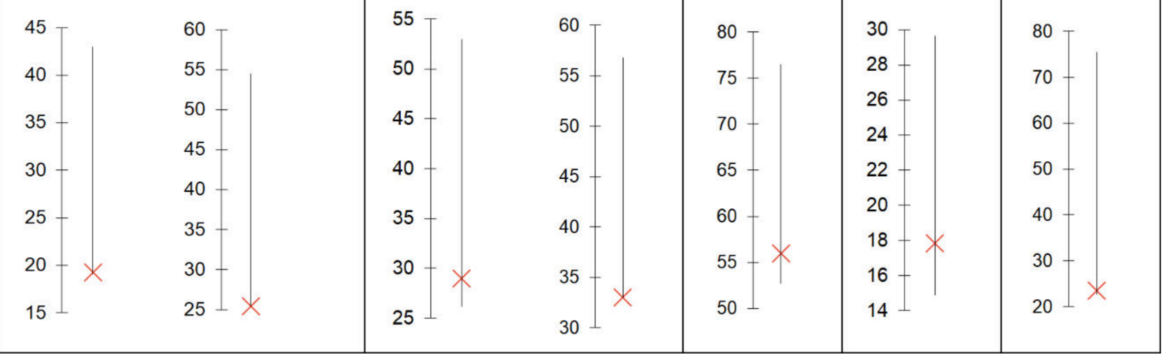
CATALYST
ENERGY SOLUTIONS

Energy Element / April 2020

Key market indicators: 31/03/2020

		Gas (p/th)		Electricity (£/MWh)		Coal	Carbon	Brent crude
		Day-ahead	Year-ahead	Day-ahead	Year-ahead	($/t)	(€/t)	($/bl)
This month	31 Mar 20	19.25	25.43	29.00	33.00	56.00	17.84	23.43
Last month	3 Mar 20	25.25	30.20	40.50	38.88	57.50	23.55	53.25
Last year	1 Apr 19	34.35	47.96	42.10	49.64	72.00	21.21	68.40
Year-on-year % change		(44%)	(47%)	(31%)	(34%)	(22%)	(16%)	(66%)
Year high		43.00	54.45	53.00	56.79	76.50	29.66	75.54
Year low		19.05	25.43	26.15	33.00	52.70	14.90	22.74

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.



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

Government announces new measures to protect PPM customers

New measures are being introduced to protect prepayment meter (PPM) customers during the Covid-19 outbreak, the Department for Business, Energy and Industrial Strategy (BEIS) announced on 19 March.

PPM customers, who may not be able to add credit can speak to their supplier about options to keep them supplied. This could include nominating a third party for credit top ups, having a discretionary fund added to their credit, or being sent a pre-loaded top up card so that their supply is not interrupted. BEIS said any energy customer in financial distress will also be supported by their supplier, which could include debt repayments and bill payments being reassessed, reduced or paused where necessary, while disconnection of credit meters will be completely suspended. BEIS said there was an industry agreement signed by all UK domestic suppliers and it will come into force immediately.

Business Secretary Alok Sharma said: “While friends and family will play a role in helping people impacted by the Coronavirus, we recognise there will be many customers who will need additional support and reassurance, particularly those who are financially impacted or in vulnerable circumstances. The government has committed to do whatever it takes to get our nation through the impacts of this coronavirus pandemic. Today those most in need can rest assured that a secure supply of energy will continue to flow into their homes during this difficult time.”

The government and energy industry have agreed to prioritise those existing customers most in need, while identifying customers whose circumstances may have changed as a direct or indirect result of Covid-19. Ofgem will continue to ensure suppliers meet their regulatory obligations. However, the government also “recognises this will be a challenging time for many supply businesses”.

Energy UK Chief Executive Audrey Gallacher said: “These are extraordinary circumstances and the industry is working closely with the government on a daily basis to ensure there is no disruption to the generation and supply of energy to customers.”

Chief Executive of Energy Networks Association David Smith said: “These are unprecedented times, but the energy industry is working hard to keep gas and electricity flowing, look after our vulnerable customers and keep customers and staff safe. The UK’s electricity and gas network are one of the most reliable in the world and over 36,000 employees are working flat out to continue to provide a safe and reliable supply of energy during this time.”

BEIS

Government launches business support measures

Businesses are now able to access government-backed loans to help them during the Covid-19 outbreak, the government announced on 23 March.

More than £330bn of loans and guarantees will be made available for applications to two new schemes which launched on 23 March. For small and medium-sized businesses, the Coronavirus Business Interruption Loan Scheme will provide loans of up to £5mn, while the Bank of England’s Covid Corporate Financing Facility will be open for applications from larger firms to help raise working capital. A government campaign was also launched as part of the announcement, which aims to ensure businesses are aware of the support available and how to access it.

The Chancellor of the Exchequer, Rishi Sunak, said: “We are working round the clock to do whatever it takes to protect our people and businesses. That means that we are not only taking unprecedented action but doing so at unprecedented speed, because we know that businesses and their employees need help now.

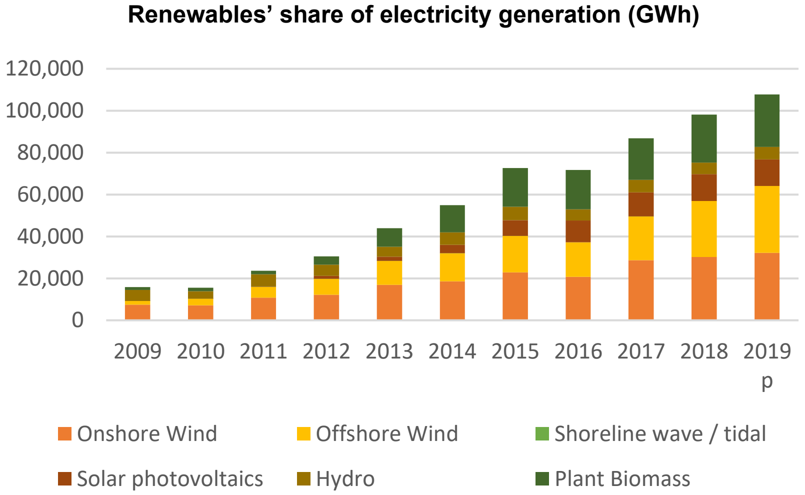
BEIS

Renewables’ share of electricity generation hits 36.9%

Renewables’ share of electricity generation hit a record 36.9% in 2019, new Department of Business, Energy and Industrial Strategy (BEIS) statistics have indicated.

Published on 26 March, the statistics show an increase of 3.8 percentage points (pp) on renewables’ 33% share of electricity generation in 2018.

BEIS attributed this to an 8.5% increase in renewables generation compared to 2018, from 110TWh to 119TWh (see Figure 1). This was largely due to an increase in generation capacity.



Source: BEIS

In 2019, record generation was seen for both onshore and offshore wind. 2019 also saw record generation from bioenergy at 36.6TWh, 5.2% greater than 34.8TWh generated in 2018. BEIS said generation was boosted by Lynemouth power station reopening as a biomass fuelled plant in late 2018. Bioenergy represented 11.3% of renewable generation in 2019. Hydro generation increased 8.5% compared with 2018, which stood out as a relative low year. Generation in 2019 was at similar levels as 2017.

In 2019 12.7TWh of electricity was generated from solar (3.9%), down from 12.9TWh in 2018, a fall of 1.4%. Average sunlight hours were down on 2018, which had been a record-breaking year for solar generation. BEIS noted that offshore wind overtook onshore wind generation in Q319 and continued to have the greatest share in Q419. Both onshore and offshore wind each generated 9.9% of total electricity in 2019, with onshore wind generating 0.3TWh more than offshore wind for the year.

As the end of 2019, the UK’s renewable electricity capacity totalled 47.4GW, an increase of 6.9% (3GW) on the installed capacity at the end of 2018. BEIS noted this was the smallest year on year capacity increase since 2010. Onshore wind represented 29.9GW of all renewables capacity, with 14.2GW. BEIS that this is the first time its share has dropped below 30% since 2016. Solar PV had a 28.7% share, offshore wind had 20.7% and bioenergy had 16.7%.

BEIS

Barclays declares its ambition to become net zero by 2050

Barclays published its *2019 Environmental, Social and Governance* report on 30 March, which has outlined the bank’s new climate policy and ambition to become a net zero bank by 2050.

The company will align all of its financing activities with the goals and timelines of the Paris Agreement, where its portfolio will start with the energy and power sectors. Barclays will also provide transparent targets required to judge its progress and will report on them regularly, starting from 2021.

Barclays

Budget 2020: electricity CCL freeze and Green Gas Levy

Chancellor Rishi Sunak's first Budget on 11 March included some significant announcements around carbon taxation, heat and transport.

The government is raising the Climate Change Levy (CCL) on gas in 2022-23 and 2023-24 (whilst freezing the rate on electricity). The CCL is a tax on business energy users to incentivise energy efficiency. Alongside this, the government will consult on introducing a Green Gas Levy to support biomethane production to increase the proportion of green gas on the grid. The Climate Change Agreement (CCA) scheme will be reopened and extended by two years. Additionally, Carbon Price Support is to be frozen for 2021-22.

There were several heat announcements in the document. The Budget confirmed £96mn for the final year of the Heat Networks Investment Project, which ends in March 2022. After this, the government will invest a further £270mn in a new Green Heat Networks Scheme, enabling new and existing heat networks to be low carbon and connect to waste heat. The government will extend the Domestic RHI in Great Britain until 31 March 2022. It will also introduce a new allocation of flexible tariff guarantees to the Non-Domestic RHI in Great Britain in March 2021, helping to provide investment certainty for the larger and more cost-effective renewable heat projects. The government will consult on introducing a new grant scheme from April 2022 to help households and small businesses invest in heat pumps and biomass boilers, backed by £100mn of funding.

£500mn for electric vehicle (EV) rapid charging hubs was also announced. This will include a Rapid Charging Fund to help businesses with the cost of connecting fast charge points to the electricity grid. To target spending from this fund effectively, the Office for Low Emission Vehicles will complete a comprehensive electric vehicle charging infrastructure review.

The government is considering the long-term future of incentives for zero emission vehicles alongside the 2040 phase-out date consultation. Until then, it will provide £403mn for the Plug-in Car Grant, extending it to 2022-23. The government will also provide £129.5mn to extend the Plug-in Grants for vans, taxis and motorcycles to 2022-23. In addition, the Budget announced the exemption of zero emission cars from the Vehicle Excise Duty (VED) 'expensive car supplement' and the publication of a call for evidence on VED, which will include how it can be further used to reduce vehicle emissions. The Capital Allowances for Business Cars first year allowance on zero emission cars will be extended and eligibility criteria raised.

HM Treasury

ENA outlines its aims to keep energy flowing despite Covid-19

The Energy Networks Association (ENA) outlined its approach to looking after customers and colleagues during the coronavirus pandemic. Published on 25 March, key priorities include ensuring customer and employee safety; keeping energy flowing to homes, hospitals and other vital infrastructure and looking after those most in need.

The ENA will continue to prioritise maintenance work required to guarantee an ongoing safe and reliable energy supply and will focus on power cuts, gas leaks and urgent safety issues, whilst keeping in regular contact with government and the regulator. The association confirmed that it will temporarily reduce the work required under its gas mains replacement programme whilst it also reviews new connection projects for both gas and electricity. For vulnerable customers and those deemed 'at risk' by the NHS, the ENA encouraged those to sign up for the Priority Services Register, which will deliver free additional services to customers if there is a power cut or issues to the gas supply.

ENA

UK's GHG emissions fell by 21% between 2007 and 2017

On 23 March, Defra released statistics associated with the UK's carbon footprint for the period 1997 to 2017. After peaking at 977mn tonnes of carbon dioxide equivalent (CO2e) in 2007, the UK's greenhouse gas (GHG) emissions fell by 21% from 2007 to 2017. Between the years 2016 and 2017 alone, the UK's carbon footprint is estimated to have fallen by 3%. This reduction echoes some decrease in household travel and the reduction in emissions associated with goods and services produced in the UK, as a result of the decarbonisation of the electricity used in manufacturing these products. The key driver of trends highlighted in the report is the shift from UK-based production of goods and services, to imported goods and services. As noted by Defra, the period 1997 to 2017 spans a sectoral shift in the UK from a primarily manufacturing base, towards the services sector. As a result, a larger proportion of goods and services are produced overseas and, owing to this change, emissions associated with UK production were 31% lower in 2017 than in 1997.

Defra

HSBC finds sustainable investments most resilient during Covid-19 outbreak

HSBC published a report on 27 March, which found that environmental, social and governance (ESG) investments. HSBC found that, in the pandemic's early weeks, shares in ESG-aware companies outperformed – with some regional differences. HSBC analysed 613 shares of global public companies valued at over USD500 million where climate solutions generate at least 10 per cent of revenues, plus the 140 stocks with highest ESG scores and values above the global average. And we looked at performance until 23 March from 10 December 2019, the crisis's start, and from 24 February, when high volatility began. The climate-focused stocks outperformed others by 7.6% from December and by 3% since February. The ESG shares beat others by about 7% for both periods.

HSBC

Budget for criticised for lack of action on energy efficiency

In a letter addressed to Energy and Clean Growth Minister Kwasi Kwarteng, Chair of the BEIS Committee (a group of MPS which scrutinises the work of BEIS) Rachel Reeves expressed disappointment that Conservative election manifesto pledges on energy efficiency were not included in the Budget. In the letter, published on 20 March, she described this as not only a "missed opportunity to help millions of people to keep warm and well in their homes, but it would have sent a clear signal to other nations attending this year's crucial UN Climate Summit". The 'able to pay' market was another area of concern listed by Reeves. She said there are over 10mn 'able to pay' owner occupied households with homes rated below EPC Band C in the UK. This, she said, is the market where the biggest carbon savings can be achieved – large enough to close 40% of the current gap to meet the fifth carbon budget.

BEIS Committee

13% fall in GB weekly electricity consumption during lockdown

On 1 April, UK Energy Research Centre (UKERC) published analysis comparing the week beginning 23 March 2020 and a comparable week in April 2019 (in terms of daily average temperatures and at a similar point in the year), finding there has been around a 13% fall in total weekly electricity consumption due to the COVID-19 lockdown. Following the announcement of the UK's lockdown on 23 March there was a marked change in demand between the Monday (23 March) and Tuesday (24 March) as new restrictions were introduced, according to UKERC. The analysis found the increase in domestic demand as a result of the lockdown has been outweighed by the decrease in commercial and industrial demand, shown in demand decreases during the week when commercial and industrial demand is typically elevated.