CATALYST ENERGY SOLUTIONS

Energy Element / March 2020

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Record high wind and coronavirus pressures prices

High wind generation as a result of multiple named storms pushed near-term gas and power prices down to unseasonably low levels in February. Adding to the pressure on GB power and gas contracts was the movements in the Brent crude oil, EU ETS carbon and Asian LNG prices, all of which dropped month-on-month in February and were impacted by disruptions caused by the spread of the coronavirus.

Gas prices entered February having already been pushed lower from suffering global markets and an oversupplied LNG market in January. These factors weighed further on prices for much of February, with record low spot Asian LNG prices and high levels of wind generation adding further pressure, particularly to near-term contracts. Despite showing some rebound later in the month, gas prices have stayed at their low levels due to comfortable supplies, low oil prices and concerns over consumption levels due to the coronavirus. Seasonal gas prices dropped 10.2% on average last month.

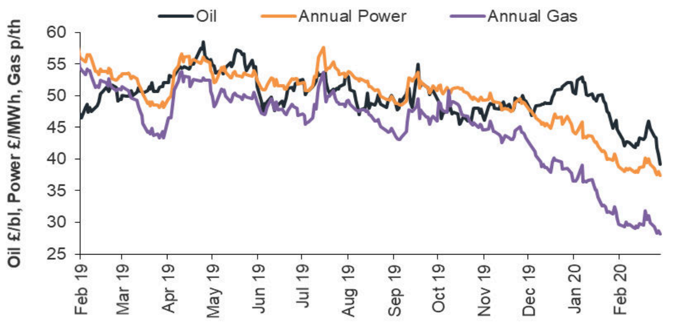
Falling gas and commodity markets fed through to the GB power market, with seasonal contracts falling 6.6% on average. Added pressure came from storms Ciara and Dennis which brought high wind generation levels, causing the day-ahead power contract to fall 10.6% to average £32.05/MWh. This was reflected in the generation mix as wind output averaged 30% of all energy generation in February, leading day-ahead power prices to drop to a record-low of £26.15/MWh on 14 February.

Oil prices stay low, but saw some respite as global markets temporarily resurged

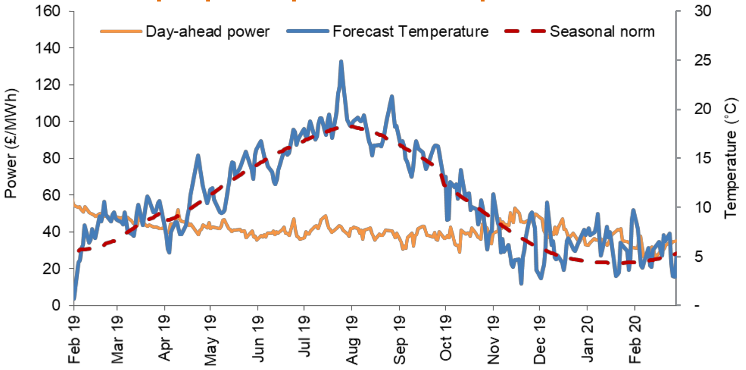
Averaging $55.49/bl in February, Brent crude oil prices fell in the first half of the month, continuing the trend seen in the previous month, where market fears over future oil consumption growth was rocked by the outbreak of the coronavirus in China. Prices steadied at just under $55/bl as market fears began to ease. Following this, the price of crude oil began to lift, as attention shifted from the coronavirus to stifled oil production in Libya, where army forces have placed blockades on oil terminals in the country. This has seen output from the country drop by more than 1mn bpd (1% of global supply). However, market focus shifted back towards the decline in crude oil demand due to the coronavirus – prices dslid to over a 2.5 year low of $50.36/bl on 28 February.

EU ETS carbon prices fell in February to average €23.99/t, mirroring the movements seen in global markets in the month. Prices generally followed oil lower, with additional losses stemming from the imminent resumption of UK auctions on 4 March, increasing volume of supply of allowances. API 2 coal prices rose slightly to average $59.18/t, with major news being that the UK plans to phase-out all coal-fired generation by 2024, rather than 2025.

Crude oil and annual wholesale gas and power prices



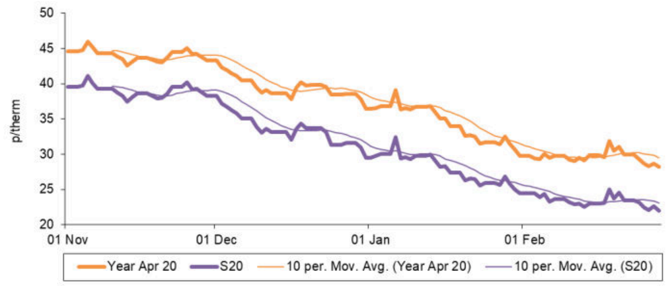
Spot power prices and temperatures



The month-ahead: Colder temperatures to provide some support, but coronavirus continues to weigh

Temperatures are currently forecast to fall closer to seasonal normals at the start of March, which will support near-term gas and power prices. However, gas, power and commodity prices will continue to be weighed on by hampered global markets, while oil prices will face added uncertainty as OPEC weigh a decision to make further cuts to oil supply. The resumption of UK auctions for EU ETS allowances could pressure carbon prices.

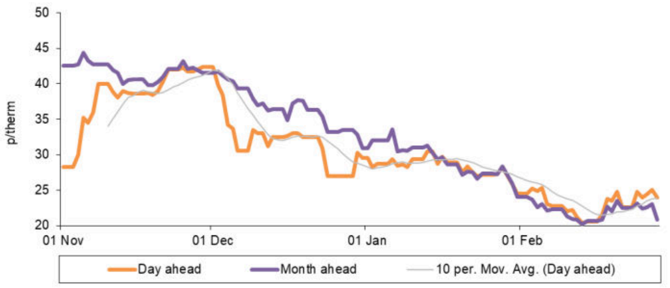
Annual gas prices



All seasonal gas contracts continued the trend and dropped in February relative to January. The summer 20 gas contract lost 16.2% to average 23.32p/th, while the winter 20 gas contract dropped 11.8% to average 35.75p/th. Contracts were weighed on by lower oil prices, a comfortable gas supply outlook amid a globally oversupplied LNG market, and concerns surround consumption levels with the ongoing coronavirus outbreak.

The annual April 20 gas contract dropped 13.6% to average 29.53p/th.

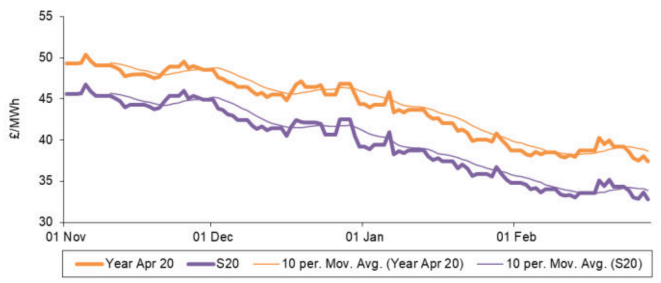
Spot gas prices



Day-ahead gas prices fell 17.3% to average 23.31p/th in February, hitting a five-month low of 20.40p/th on 13 February. Month-ahead gas prices also dropped, with March 20 and April 20 gas falling 22.1% and 26.4% respectively to 22.06p/th and 21.69p/th.

With LNG send-out lower than in previous months, despite remaining high, much of the losses came from high wind generation. This forced gas-fired power plants to reduce output, consequently lowering gas demand.

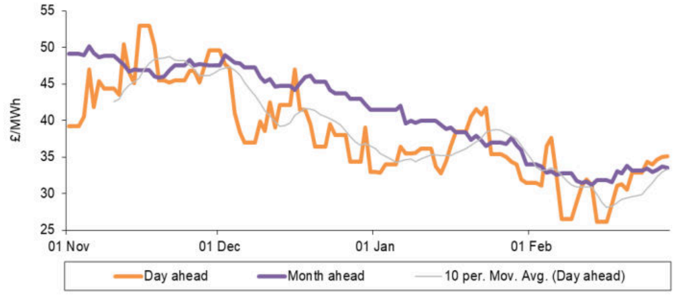
Annual power prices



Seasonal power contracts moved down 6.6% on average, with summer 20 power declining 9.7% to £33.78/MWh. The contract finished the month at £32.75/MWh, the lowest value traded for the contract since April 2016. The winter 20 power contract dropped 7.4% in value to average £43.15/MWh.

The April 20 power contract slipped 8.4% to average £38.46/MWh last month. This is 26.3% lower than the value the contract was trading at last year, which averaged £52.17/MWh in February 2019.

Spot power prices



Day-ahead power declined a further 10.6% to average £32.05/MWh in February as lower gas prices and high wind generation again weighed heavily on the contract. Day-ahead prices dropped to a record low of £26.15/MWh on 14 February. March 20 power lost 12.9% throughout the month to average £32.71/MWh, while April 20 power declined 10.2% to average £32.85/MWh.

Multiple named storms in February saw baseload power contracts lose significant value. High wind speeds from the storms translating to high wind generation saw the GB grid well supplied, as wind took a 30% share of the generation mix in February.

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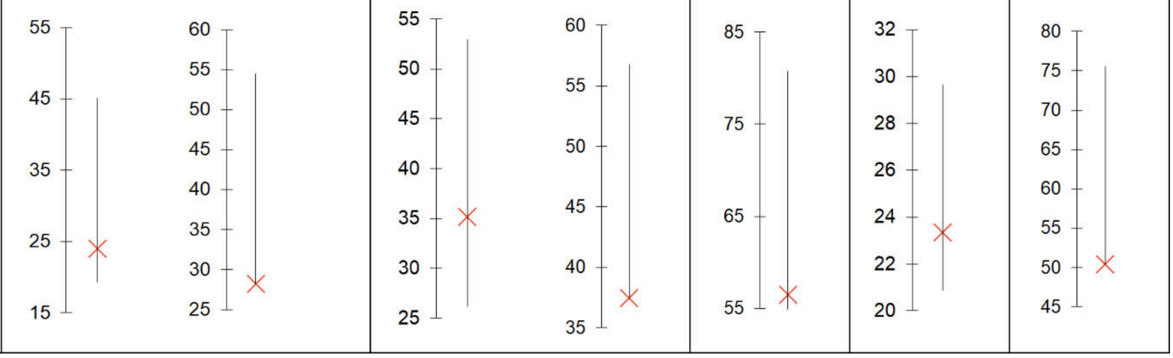
Key market indicators: 28/02/2020

		Gas (p/th)		Electricity (£/MWh)		Coal	Carbon	Brent crude
		Day-ahead	Year-ahead	Day-ahead	Year-ahead	($/t)	(€/t)	($/bl)
This month	28 Feb 20	24.00	28.19	35.15	37.45	56.50	23.33	50.36
Last month	31 Jan 20	24.55	29.74	31.50	38.75	59.25	23.53	58.34
Last year	28 Feb 19	45.10	51.46	48.70	51.37	80.30	20.87	65.77
Year-on-year % change		(47%)	(45%)	(28%)	(27%)	(30%)	12%	(23%)
Year high		45.10	54.45	53.00	56.79	80.75	29.66	75.54
Year low		19.30	28.19	26.15	37.45	52.70	20.87	50.36

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

Chancellor resigns and Sharma to head BEIS and COP26

As part of Prime Minister Boris Johnson's 13 February reshuffle, Chancellor Sajid Javid resigned and Andrea Leadsom was sacked as Business Secretary.

Javid was replaced as Chancellor with Rishi Sunak, who was formerly Chief Secretary to the Treasury – this is Sunak's first cabinet role. In an interview with the *BBC*, Javid said he resigned because the Prime Minister ordered him to fire all his special advisers.

Javid published his resignation letter on the same day. He said: "I regret that I could not accept the conditions attached to the reappointment. It is crucial for the effectiveness of government that you have people around you who can give you clear and candid advice, as I have always sought to. I would urge you to ensure the Treasury as an institution retains as much credibility as possible."

His replacement, Sunak, tweeted: "I am honoured to be appointed as Chancellor of the Exchequer. My predecessor and good friend Saj [sic] did a fantastic job in his time at the Treasury. He was a pleasure to work with and I hope to be able to build on his great work going forward."

On 18 February, Sunak announced that he is "Cracking on with preparations" in order to announce the Budget for 11 March. "It will deliver on the promises we made to the British people – levelling up and unleashing the country's potential," he added.

Also, as part of the reshuffle, Andrea Leadsom was sacked as Business Secretary, replaced by former International Development Secretary Alok Sharma. Leadsom had held the role since July 2019. Her replacement, Sharma, was also appointed as Minister for COP26, filling the post left vacant for two weeks after the sacking of Claire Perry O'Neill.

Liberal Democrat Acting Leader Sir Ed Davey said: "The government's running of COP26 has so far been a shambles. They sacked Claire O'Neill as COP President, only to have both David Cameron and William Hague decline the job. That is why Liberal Democrats are calling for a COP oversight committee to scrutinise the preparations and outcomes of COP26, led by NGOs and charities. The Tories have shown they are simply not up to the job. COP26 could be the last opportunity to persuade the world to take the action we need. The Prime Minister cannot waste this chance."

This reshuffle has created waves of uncertainty around the Energy White Paper – the policy document which is expected to set out the government's strategy concerning energy policy – due in Q120.

Government *BBC* Sajid Javid

Government could shift energy policy costs onto taxpayers

On 7 February, the BBC reported the government is looking to shift clean energy costs to taxpayers rather than energy consumers, as part of the UK's net zero transition. Up to £10bn per annum is presently invested in the growth of clean technology, where consumers pay approximately £5.5bn. A government spokesperson told the BBC: "We are definitely considering the way that costs are distributed. The Treasury is looking at the costs of transition to net zero emissions by 2050. "This will include how costs may be distributed across different groups to create a fair balance of contributions."

Speaking with the BBC, Centrica Chief Executive, Iain Conn called on the government to "move the funding to income tax, which would mean a typical low income worker would save £100 a year," or for government to means-test households, adding that moving costs from bill payers to tax payers would create minimal disruption to overall annual costs.

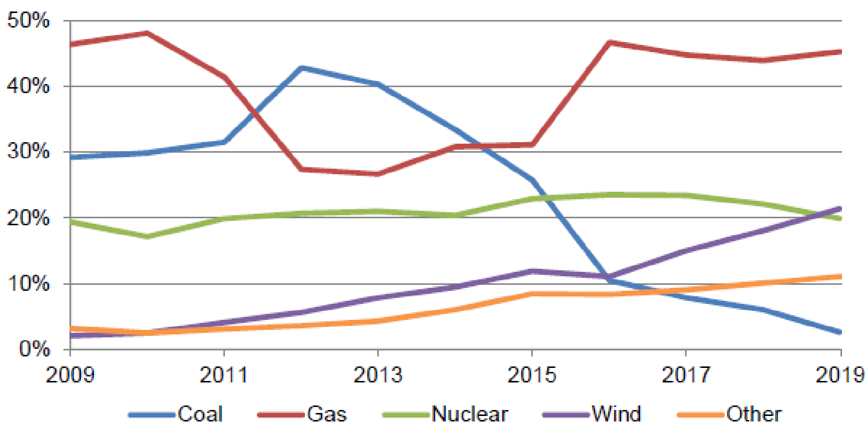
BBC

Low carbon generation in 2019 provisionally reaches record high

The Department for Business, Energy and Industrial Strategy (BEIS) published provisional statistics showing that, in 2019, low carbon generation (renewables and nuclear) may have reached a record high of 51.6% of total energy supply in the UK. The statistics are based off of data from Major Power Producers, which excludes data from some other sources.

Published on 27 February, the statistics show that this 51.6% share was up from 2018's 49.6%, following record outputs from wind, solar and bioenergy, due to increases in capacity for all three technologies. Renewables (bioenergy, wind, solar and hydro) accounted for a record high of 31.8% of electricity supplied, up from 27.5% in 2018. Nuclear accounted for 19.8% of electricity share, down from 22.1% in 2018. Gas accounted for 45.3%, up from 43.9% in 2018, while coal accounted for just 2.5% (a record low), down from 5.9% in 2018.

Electricity – share of generation from major power producers



Source: BEIS

Renewables production rose by 4.9%, with an increase in bioenergy output of 2.1%, and an increase in wind, solar and hydro output of 11% to a record high level due to increased wind and solar capacity. Nuclear output was down by 14% to the lowest level since 2008 due to outages at stations during 2019 and production of coal fell by 14% to a new record low. Primary energy production in the UK fell by 0.6% on a year earlier to 129.2mn tonnes of oil equivalent. BEIS noted that this decrease, the first since 2014, follows four successive years of growth. Energy production in 2019 is around 43% of the UK's peak production in 1999. A more detailed analysis will be published by the government on 26 March.

Had it not been for the nuclear outages that took place during some of 2019, the low carbon share would be even higher. Capacity increases for wind, solar and bioenergy show that this share is going to continue growing.

BEIS

Drax Power Station to end the use of coal by March 2021

Drax has announced that following close to 50 years of power generation from coal at its power station in North Yorkshire, the power station is expected to close in March 2021, ahead of the UK government's 2025 deadline.

Published on 27 February, the decision comes after a comprehensive review of its operations. "Ending the use of coal at Drax is a landmark in our continued efforts to transform the business and become a world-leading carbon negative company by 2030," commented Drax CEO, Will Gardiner. "Drax's journey away from coal began some years ago and I'm proud to say we're going to finish the job well ahead of the Government's 2025 deadline." Whilst the company does not expect to use coal after March 2021, it will ensure its two remaining coal units remain available until September 2022 in line with its existing Capacity Market agreements. Drax Power Station first started generating electricity using coal in the 1970s. Once the second half of the power station was built in the 1980s, it became the largest power station in the UK with the capacity to generate electricity for six million households.

Drax

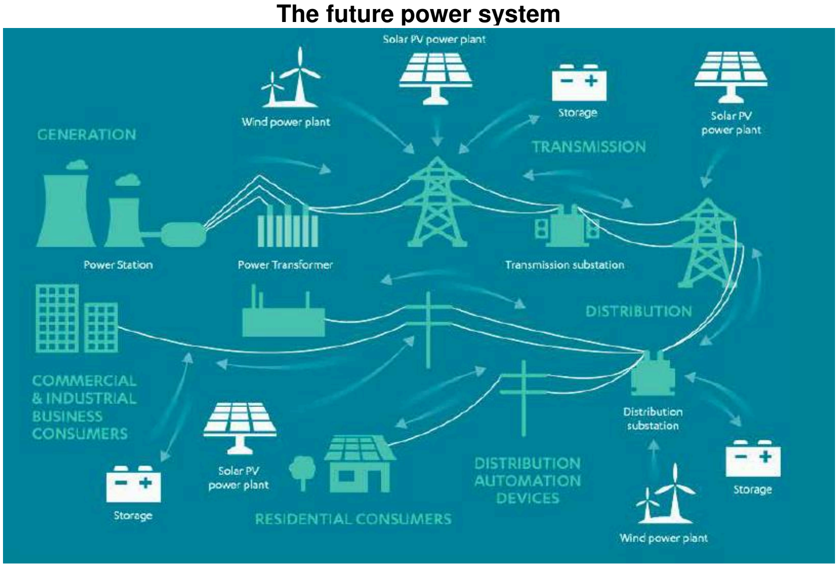
NIC: 2020 must be "year of action" for energy infrastructure

The National Infrastructure Commission (NIC) has urged the government to deliver the National Infrastructure Strategy in 2020 and use it to set out the pathway for a flexible energy system to help achieve net zero at lowest cost. A more flexible energy sytem could enable energy users such as businesses to take advantage of onsite generation or cheapr electricity through time of use tariffs.

The NIC said this in its *Annual Monitoring Report 2020*, published on 26 February. 2020 "must be a year of action" for infrastructure, the body said. It bemoaned the continued absence of a government response to the 2018 National Infrastructure Assessment, saying that the first step in 2020 must be the publishing of the National Infrastructure Strategy.

The government setting the 2050 net zero target was a major development between this year's and last year's monitoring report, the NIC said. The body will shortly publish its updated power system analysis reflecting the net zero target, which it said found the Assessment recommendations to be consistent with this new target. The NIC praised the progress achieved by the government and Ofgem in increasing the capacity of flexible technologies deployed on the networks since the publication of its *Smart power* report in 2016.

The future power system



Source: NIC

However, the NIC said there remains much more to do in 2020:

- Maintaining access to future interconnector projects in EU negotiations, and prioritise retaining access to EU power markets and market coupling to ensure interconnector can be used effectively.
- Amend the *Electricity Act 1989* to define battery storage as a distinct subset of generation.
- Set out a clear level of ambition for overall system flexibility, including a transparent framework to monitor it.

NIC

Survey finds 67% of SMEs are concerned about energy bills

Carbon Trust published a survey of SMEs to better understand attitudes to energy efficiency and the actions taken to reduce energy consumption. Published on 4 February, the results showed that 80% of SMEs are taking action on energy efficiency and 51% of SMEs want to do more on energy efficiency; and reduce costs. 87% of SMEs were aware of the climate emergency and in support of it and activism had led to businesses being more likely to be asked to reduce their environmental impact by customers.

The main benefits of energy efficiency were perceived to be reduced costs, lower energy consumption and improving the environment. Concern about energy bills rose to 67% in 2019, up from 46% in 2016, whilst cost reduction was also cited by 71% of SMEs as the main benefit of energy efficiency projects. The survey also found 68% of SMEs do not have a consistently documented and implemented energy policy, with lack of time and money cited as the number one barrier.

Carbon Trust

Government proposes 2035 ban on new petrol, diesel and hybrid vehicles

The Department for Transport (DfT) launched a consultation on bringing forward the date of the proposed ban on new internal combustion engine (ICE) vehicle sales from 2040 to 2035. Launched on 20 February, the consultation seeks views on the phase out date, the definition of what should be phased out, barriers to achieve the above proposals, the impact of these ambitions on different sectors of industry and society and what measures are required to achieve the earlier phase out date. This consultation closes at 11:45PM on 29 May.

Additionally, Transport Secretary Grant Shapps revealed on BBC Radio 5 Live on 12 February, that the ban could be brought forward to 2032.

DfT *BBC*

BP unveils its ambition to become net zero by 2050

On 12 February, BP revealed plans to become a net zero company by 2050 "or sooner". The company's ambitions will be governed by several areas of focus: to reach net zero across its operations by 2050; to reach net zero on carbon in its oil and gas production; to ensure a 50% cut in the carbon intensity of the products BP sells and to reduce methane intensity of operations by 50%.

The company will also look to raise the proportion of investment into non-oil and gas businesses over time. Additionally, it will deliver increased active advocacy for policies that support net zero, including carbon pricing; aim to be recognised as a leader for transparency of reporting, including supporting the recommendations of the TCFD and to launch a new team to help large companies decarbonise.

BP

Government proposes new protections for consumers on heat networks

The government launched an open consultation regarding policy options for the development of a regulatory framework for heat networks to protect consumers and ensure fair pricing, support market growth and the creation of low carbon networks.

Issued on 6 February, the consultation proposes increased levels of investment; policy options for establishing a market framework to deliver consumer protections; proposals relating to the choice of regulator; proposals for developing technical standards to improve the quality, cost and reliability of heat networks. Additionally, the consultation includes proposals for giving heat networks equivalent rights and powers compared with other utilities, alongside proposals to drive the decarbonisation of heat networks. The consultation will close on 1 May.

Government

More than 1,000 organisations announce support for the TCFD

The Task Force on Climate-related Financial Disclosures (TCFD) announced on 12 February that it has officially reached more than 1,000 supporters globally for its recommendations, acknowledging that climate change presents a financial risk. The Task Force provides recommendations to enable markets to address the financial impact of climate change by increasing transparency on climate-related risks and opportunities to promote more informed financial decision-making. Its 1,027 supporters are headquartered in 55 countries, span the public and private sectors and include organisations such as corporations, national governments, central banks, regulators, stock exchanges and credit rating agencies.

TCFD