Energy Element / February 2020

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Continued mild weather keeps gas prices low

Gas prices saw little movement in January and finished the month relatively unchanged as mild weather muted any demand gains. In contrast, shorter-term power prices were volatile in January, though ultimately finished the month lower than they started, with the day-ahead contract ending the month at £31.50/MWh.

Day-ahead gas prices started the month relatively low for the time of year opening at 28.25p/th. Prices rose above 30p/th on 13 January, reaching a peak of 30.50p/th on 14 January despite temperatures being above the seasonal normal levels usually seen at this time of year. The latter half of January saw day-ahead gas prices slowly decrease due to continued mild weather and a decline in oil prices. Prices closed the month at 24.55p/th, the lowest price seen since 31 October 2019 and 53.7% lower than on the same date last year.

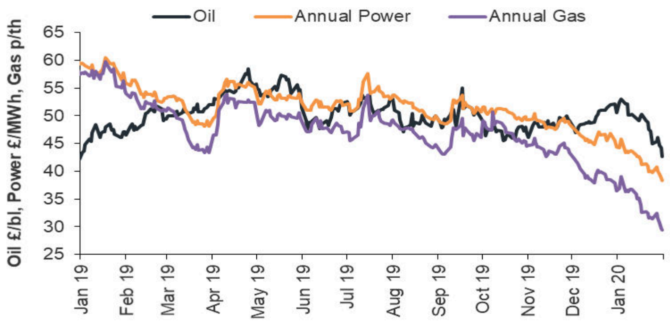
Day-ahead power prices averaged £35.86/MWh in January, a 10.7% decrease on the prices seen in December 2019. Power prices continue to be heavily dependent on wind generation and reached a three-month low of £32.75/MWh on 14 January as Storm Brendan began to pass over the UK. This brought wind speeds of up to 80mph, generating up to more than 560GWh on 16 January. Prices rose to over £40/MWh as wind generation dropped significantly, before dropping back down and closing the month at £31.50/MWh.

Oil prices rise and then plunge due to coronavirus, coal and carbon relatively stable

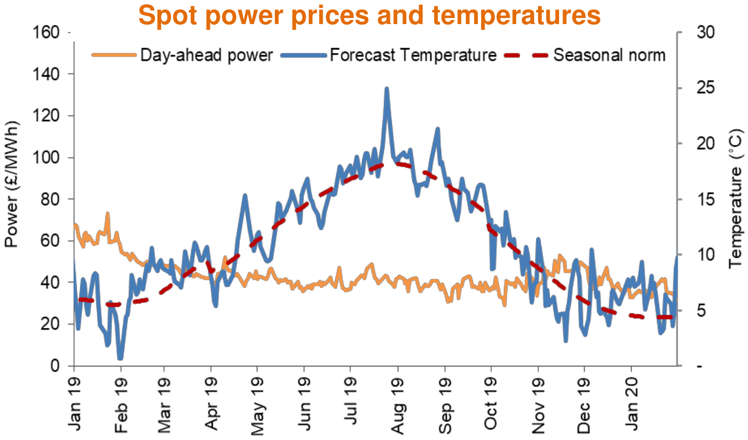
Geopolitics and a pandemic outbreak saw a turbulent month for oil prices, which averaged $64.00/bl in January, 1.3% lower than in December. Initially, prices rose to a peak of $69.75/bl on 6 January due to heightened tensions between Iran and the US. Investors remained cautious over the future of oil supply, with the Iranian-controlled Strait of Hormuz a key passage for oil tankers to deliver cargoes. The alliviation of tensions soon-after resulted in an oil price drop to near $65/bl as there appeared to be small risk of major disruption to future Brent crude production. Prices remained flat in the middle of the month, failing to lift on the signing of a Phase One trade agreement between the US and China. Prices then plunged towards the end of the month on reports that the coronavirus was spreading at an accelerating rate. Investors feared potential disruption to oil consumption growth in China. Despite the virus only reducing oil consumption by 0.3% of daily global supply, the commodity fell by over 10% in two weeks to end the month at $58.34/bl.

EU ETS carbon saw a relatively flat month in January, averaging €24.50/t. Prices were lifted in the month by strong auction volumes, though never stabilised and fell back below €25/t, following oil prices lower as the coronavirus outbreak was felt in global markets. API 2 coal also saw little movement last month, averaging $58.15/t.

Crude oil and annual wholesale gas and power prices



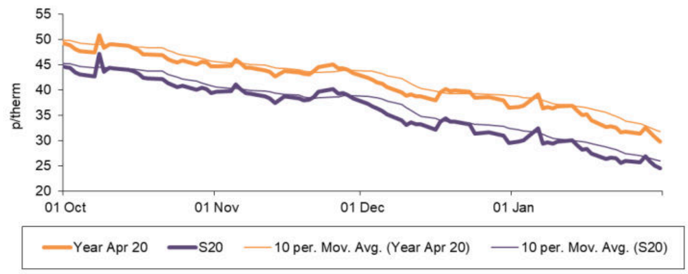
Spot power prices and temperatures



The month-ahead: Continued mild weather to hamper demand

Forecasts of continued mild weather will likely fail to lift gas prices significantly in February and could be pushed down further should oil continue to fall. A small upside for gas prices may be seen if oil values rebound. Power prices will depend heavily on consistent wind generation and in part the movement of gas prices, whilst EU ETS carbon prices could see greater directionality following the departure of the UK from the EU.

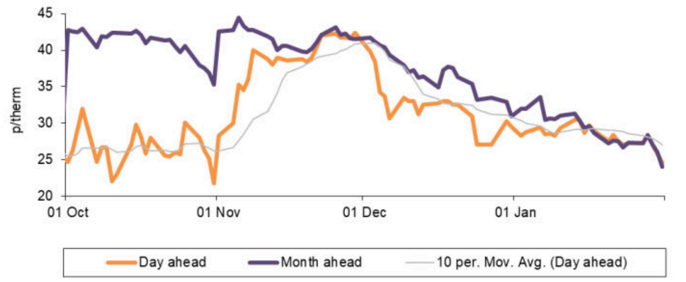
Annual gas prices



All seasonal gas contracts continued the trend seen in recent months and declined in January, down 8.8% on average. Summer 20 gas was 17.2% lower, averaging 27.81p/th and winter 20 gas was down 10.7% to finish the month at 40.56p/th. Future gas contracts continue to lose value owing to the current LNG supply glut, with the gap between supply and demand set to widen further in 2020.

The annual April 20 gas contract dropped 13.5% to average 34.19p/th, 36.6% lower than in January 2019 when it averaged 53.94p/th.

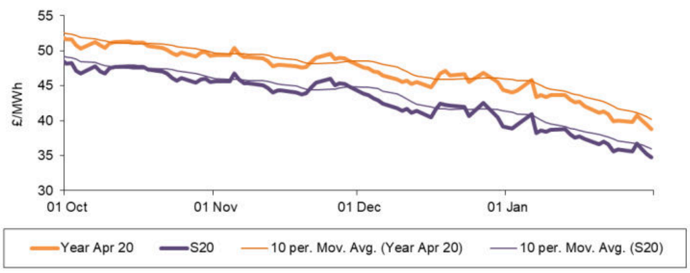
Spot gas prices



Day-ahead gas prices fell 13.1% to average 28.18p/th in January, finishing on a three-month low of 24.55p/th on 31 January. The month-ahead contracts also declined, with February 20 and March 20 losing 22.7% and 18.7% respectively to average 29.03p/th and 28.34p/th in January.

The lower than seasonally normal levels of demand seen in December carried into January as mild temperatures prevailed, reducing UK demand for gas. Also pushing gas prices down in January was a decline in oil, carbon and LNG prices, the latter of which reached a 10-year low in the final week of the month.

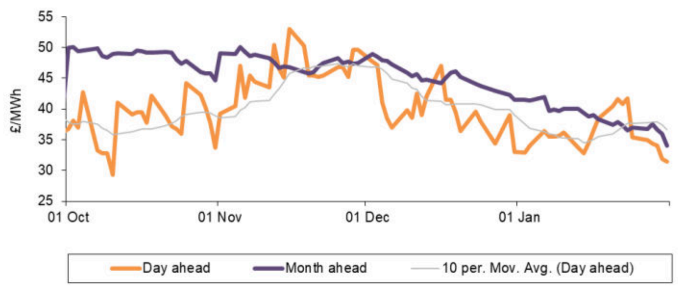
Annual power prices



Seasonal power contracts moved down 6.1% on average, with summer 20 power declining 10.6% to £37.40/MWh, finishing on a near four-month low of £31.50/MWh. The winter 20 power contract slipped 7.6% to £46.62/MWh, 19.0% lower than in January 2019.

The annual April 20 power followed its gas counterpart again and lost 9.0% in January, averaging £42.01/MWh to continue the trend seen in the final quarter of 2019. This was 22.9% lower than in January 2019, when the contract averaged £54.49/MWh for the month.

Spot power prices



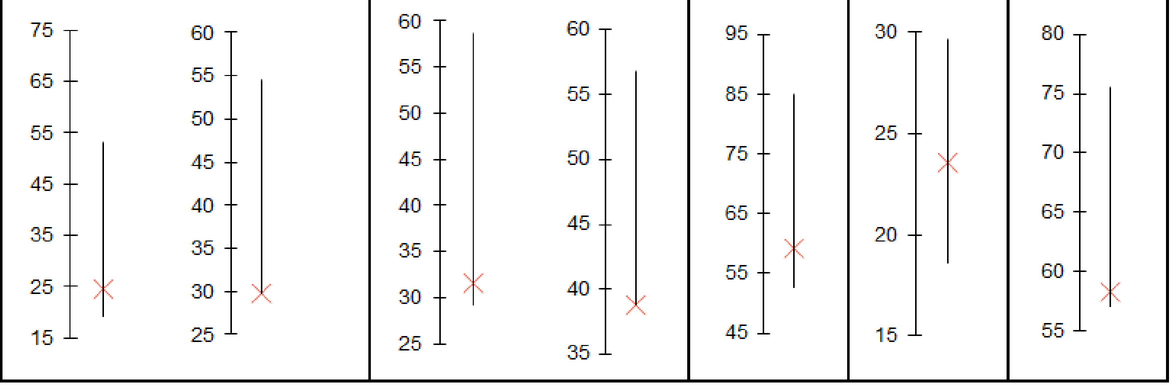
Day-ahead power declined 10.7% to average £35.86/MWh in January as high wind generation throughout the month weighed on prices. February 20 power lost 16.4% throughout the month to average £38.49/MWh.

Similar to gas prices, all power contracts ultimately lost value at the close of January. Additional volatility was added to power prices as Storm Brendan passed over the UK, resulting in varying levels of wind generation which caused prices to fluctuate between £31/MWh and £45/MWh.

Key market indicators: 31/01/2020

		Gas (p/th)		Electricity (£/MWh)		Coal	Carbon	Brent crude
		Day-ahead	Year-ahead	Day-ahead	Year-ahead	($/t)	(€/t)	($/bl)
This month	31 Jan 20	24.55	29.74	31.50	38.75	59.25	23.53	58.34
Last month	31 Dec 19	29.55	36.48	33.00	44.38	56.60	25.44	66.76
Last year	31 Jan 19	53.00	53.51	58.60	53.63	85.00	22.22	61.99
Year-on-year % change		(54%)	(44%)	(46%)	(28%)	(30%)	6%	(6%)
Year high		53.00	54.45	58.60	56.79	85.00	29.66	75.54
Year low		19.30	29.74	29.25	38.75	52.70	18.60	57.09

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

Network price controls led to consumers paying £800mn extra

The National Audit Office (NAO) has concluded that electricity networks, under Ofgem's regulation, have provided a good service, but the costs for consumers have been too high. The NAO is a Parliamentary body which is responsible for auditing government departments.

In a report, published on 30 January, the NAO examined how effectively regulator Ofgem has used price controls. The NAO found that consumers in GB experience fewer power cuts than in most other EU countries and networks have met almost all their RIIO-1 price control targets. However, the NAO criticised RIIO-1 for resulting in too high a rate of return for network companies. Ofgem designed RIIO-1 so that returns depended on performance, with the expectation that networks would make real-terms returns of between roughly 2.5% and 10.5%. It was expected that only the best-performing companies would hit the upper end of that range. The latest available information shows that three of the nine network companies are forecasting returns of around 10% and the average forecast return is 9.2%. In comparison, Ofgem estimated that FTSE-listed companies on average provide returns of 5.25%-5.75%.

Ofgem, when designing RIIO-1, estimated the level of risk for network companies' shareholders as too high, the NAO found. As a result, it set the baseline rate of return too high. The NAO estimated that, if Ofgem had made better use of evidence, consumers could have paid £800mn less.

The report recommended Ofgem to:

- Do more to demonstrate that regulation is working for consumers, by developing and publishing summary indicators of the overall value for money of networks over time and across price control periods.
- Improve the evidence base on the empirical impact of regulatory decisions on investor confidence and cost of capital and use this evidence to inform major decisions in future.
- Assess the extent to which cost targets set in RIIO-1 were too generous in the light of likely outturn expenditure.

The government should:

- As part of its review on industry governance, investigate the benefits strategic coordination in the energy system.
- Bring forward further heat decarbonisation policies that ensure the achievement of emissions targets in the 2020s.

Citizens Advice said: "Ofgem has made good progress towards a tougher settlement next time around. The regulator must hold its nerve, resist the efforts of networks to water down its proposals and deliver a price control that works for consumers."

NAO   Citizens Advice

47% of businesses do not have a plan in place to meet net zero

New research by Mitie Energy has found that over a third (36%) of UK businesses now have (or are currently planning) a strategy to reach net zero carbon emissions, according to their energy decision-makers.

Published on 16 January, the survey noted that when it comes to cutting carbon, there is ambition among UK companies. On average, businesses working towards net zero carbon expect to reach it by 2029 – 21 years ahead of the government's 2050 target for the whole of the UK. Close to half (48%) of those surveyed believed they will achieve this milestone by 2025 and a further fifth (21%) by 2030. 10% expect to be net zero by the end of 2020.

Despite this, 47% of businesses working towards net zero do not have a plan in place to reach their targets. For businesses without a net zero carbon strategy, 18% stated that they do not have the time or resources to create a net zero plan, while 15% do not have the expertise in-house.

Additionally, the research found that the top five most common activities that are being used by businesses with a carbon reduction strategy are: reducing and reusing resources (56%); reducing energy/carbon consumption in offices (52%); staff education (44%); procuring green energy (39%) and reducing the amount of travel (39%).

Miltie Energy

Nuclear policy, fuel poverty action and more criticised in debate

Business Secretary Andrea Leadsom led a debate on a Green Industrial Revolution in the Commons on 15 January, defending her government's record and plans on climate action.

The Business Secretary praised the power sector's rapid decarbonisation and the setting of the 2050 net zero target. She said: "Our target of net zero by 2050 has been set on the basis of its [the Committee on Climate Change's] recommendations so that we can grow our economy, sustain our future and contribute to tackling global climate change in a way that is sustainable for the UK, with the creation of green growth, so I am confident in that regard. We will bring forward more measures throughout the year to help us to meet that target of net zero."

Shadow Business Secretary Rebecca Long-Bailey made several criticisms of government policy and action. She said that the 2050 net zero target is not good enough, arguing that the UK needs to be ahead of the curve. She highlighted that the UK is still off track to even meet the old target of an 80% reduction in emissions by 2050.

The Shadow Business Secretary also criticised the Queen's Speech, highlighting that most of the climate section looks backwards to the government's record over the past 12 months. She continued: "There is reference to £400mn of funding for electric vehicle (EV) charging infrastructure, but this was first announced in the 2017 Budget."

On EVs, Long-Bailey said: "They are not cheap and most people cannot afford them, so we have a duty to create the market by providing incentives."

Concerning carbon capture and storage (CCS), the Shadow Business Secretary said: "There are, of course, welcome features in the Queen's Speech, such as the commitment to invest £800mn to develop the UK's first carbon capture and storage cluster by the mid-2020s. But I remember the time in 2010 when the coalition made a £1 billion commitment to CCS before scrapping it again in 2015."

SNP spokesperson for Energy and Climate Change Alan Brown criticised the current barriers to onshore wind. He said: "When we consider renewables and wind in particular, it is a reminder that the transmission charging regime is a straitjacket around Scotland. The punitive charges, especially in the north of Scotland, can be a deal breaker for some developments."

He continued: "The charging system needs a complete overhaul to allow deployment of renewable energy for maximum benefit."

Brown also criticised the government's "nuclear obsession", highlighting the National Infrastructure Commission's recommendation that only one new nuclear power station should be built due to the costs of renewables coming down.

Hansard

Chancellor: the next UK Budget will deliver "a decade of renewal"

On 7 January, Chancellor of the Exchequer Sajid Javid announced that the next UK Budget will be held on 11 March, which will outline ambitious plans to "usher in a decade of renewal" and prepare the UK economy for the decade ahead.

During a visit to the new £350mn Trafford Park tram line project in Manchester, the Chancellor set out plans to use the government's first Budget to deliver essential change. Javid will also provide an economic update to Cabinet colleagues before updating Parliament during Treasury oral questions.

At the Budget, the Chancellor will also update the Charter of Fiscal Responsibility with new rules, taking advantage of low interest rates to invest properly and responsibly, while keeping debt under control. Additionally, the Budget will prioritise the environment and build on recent announcements to boost spending on public services and tackle the cost of living.

Alongside the Budget, the government will also publish the National Infrastructure Strategy, setting out priorities for UK infrastructure.

Treasury

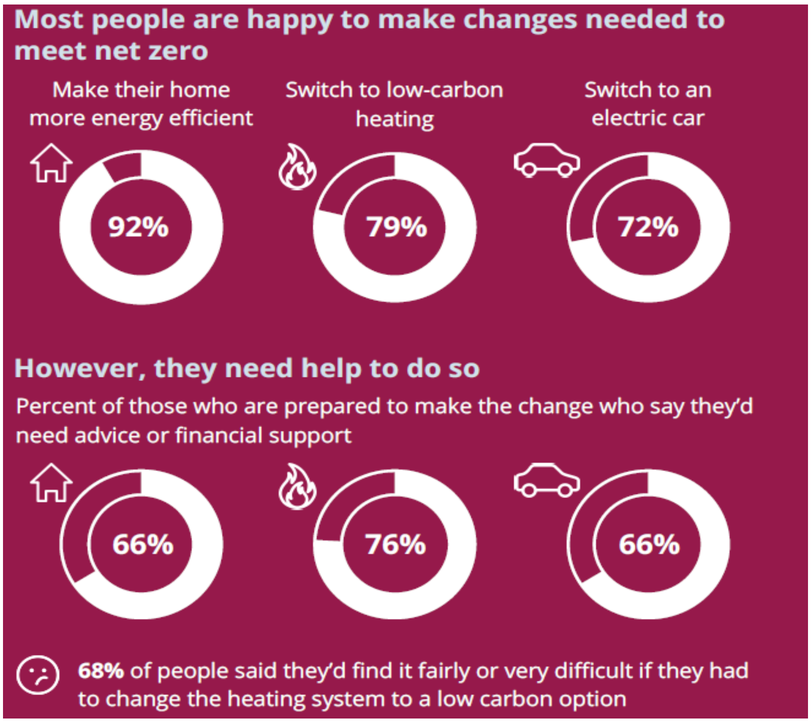
Citizens Advice: get public onboard or risk the net zero target

Citizens Advice urged the government to include the public in the net zero process, otherwise it risks "fatally undermining" the 2050 target.

The charity carried out a public survey on actions to help meet net zero as part of a new report, *Zero sum*, published on 23 January.

The survey, which asked 2,002 adults, found discrepancies between the action needed to achieve net zero by 2050 and the percentage of the public that were willing/able to help. Figure 1 shows what people are willing to do.

Figure 1: Results of Citizens Advice's survey



Source: Citizens Advice

Citizens Advice argues that today's protections are not ready for net zero:

- Consumer protection codes – the charity argues that there are too many codes. Consumers need "one, easy to understand system".
- Energy and prepayment price caps – turn today's "temporary protection into enduring protection" for vulnerable customers.
- Complaints handling – there should be a standard for complaints handling. Citizens Advice argues for tougher and more flexible set of standards that cover a range of companies, including those offering new energy products and services, to ensure complaints are well handled.
- Supplier of Last Resort and safety net – it argues that bundled products and services may mean that supplier failures incur costs for customers related to products and could be moved to a new contract which does not match their needs. Companies need to bear more of the responsibility for protecting credit.
- Heat Network Voluntary codes for standards of service – the charity urges upcoming heat network regulations to enforce standards.

Citizens Advice

Thinktank: up green infrastructure investment to avoid recession

A new report from the New Economics Foundation (NEF) has urged the government to increase green infrastructure investment through a Green New Deal to help the UK prevent a recession.

In the report published on 13 January, NEF argues: "the policy response to the next recession should contain within it the largest green stimulus in zero carbon infrastructure that is feasibly possible." NEF says that the likelihood of another recession is at its highest at any time since 2007, with the most recent forecasts estimating that there is a 30-40% chance of recession within the next few months.

The report recommended significant investment in areas such as home retrofits, electric vehicles and charging infrastructure, renewable energy projects and network infrastructure. Total sizes of stimuli range from 2%-3% of GDP over the next one-24 months and 2.5%-4% of GDP over the coming five years, depending on the size of the recession.

NEF

Government publishes building energy use calculator

The Department for Business, Energy and Industrial Strategy (BEIS) released the Whole Life Cost of Energy (WLCoE) calculator on 24 January, enabling building owners and operators to understand the full financial cost of the energy their buildings use.

BEIS said the calculator uses a levelised cost approach which enables comparison between different generation types with different capital and operational profiles. The power sector uses this approach widely to compare the unit costs of wind, solar, nuclear and other means of electricity generation on a consistent basis.

For building owners looking to connect to a local energy network, the whole life cost generated by the calculator can be a "useful starting point to appraise any offers received for heat and / or cooling supply".

BEIS

Business organisations launch net zero taskforce

The Association for Consultancy and Engineering (ACE) and Environmental Industries Commission (EIC) have joined forces in a new net zero taskforce.

Announced on 28 January, the taskforce is to run a new campaign to analyse whether UK infrastructure can be redesigned to enable the UK to achieve net zero by 2050.

The taskforce's initial activity will culminate in two reports to be launched during the COP26 climate conference in November. The first report will showcase the role the respective business members will have to play if we are, as a society, to meet net zero targets, while another is aimed at helping SMEs to adapt to the requirements of net zero.

EIC

Sainsbury's announces 2040 net zero target

Sainsbury's is committing £1bn over 20 years to become net zero by 2040, ten years earlier than the government's UK target. Announced on 28 January, Sainsbury's will use the investment to implement a programme of changes, with a focus on reducing carbon emissions, food waste, plastic packaging and water usage and increasing recycling, biodiversity and healthy and sustainable eating.

It will work with the Carbon Trust to assess emissions and set science-based targets for reduction, publicly reporting on progress every six months. The targets will align the business with the goal to limit global warming to 1.5°C.

Sainsbury's will work with suppliers to set their own net zero targets, in line with the Paris Agreement goals.

Sainsbury's

UKGBC: commercial offices should cut energy consumption by 60%

On 15 January, the UK Green Building Council (UKGBC) released new energy performance targets for commercial businesses intending to reach net zero carbon in operation.

To facilitate the UK's transition to net zero by 2050, UKGBC recommends that the office sector should reduce its energy consumption by 60%. These targets were developed alongside the UKGBC's 2019 report *Net Zero Carbon Buildings: A Framework Definition*, which sets out a framework for buildings seeking to reduce their energy demand for construction and operation.

The new energy targets put forth a trajectory for tightening energy performance requirements over the next 15 years. The UKGBC called for offices seeking zero carbon for operational energy to meet the energy performance targets, then to meet demand as far as possible through renewable energy and offset any remaining carbon. The data should then be independently verified and publicly disclosed annually to showcase how the net zero balance has been achieved.

UKGBC