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## Power and gas prices see resurgence

Day-ahead gas prices increased for the first time since September 2018, rising 7.1% to average 30.0p/th in July. The contract peaked at 38.3p/th on 15 July, a three-month high as the gas system was undersupplied following an unplanned outage at Aasta Hansteen in Norway and a rise in gas for power demand amid forecasts of lower wind generation. August 19 gas also recovered, rising 4.2% to average 29.8p/th. All seasonal gas contracts rose, up 2.2% on average. Winter 19 gas was up 0.3% to average 51.5p/th, however this remains 12.8% lower than the same time last year (59.0p/th).

Day-ahead power rose for the first time since December 2018, growing by 6.2% to average £41.9/MWh in July. The contract also peaked on 15 July, hitting £48.8/MWh, the highest since 22 February as wind output was forecast below 1.0GW the following day. August 19 power gained 4.8% to average £41.1/MWh, however this a 14.0% reduction from the same time last year (£47.8/MWh). All seasonal power contracts also moved higher, up 3.2% on average, with winter 19 power 2.2% higher at £56.9/MWh.

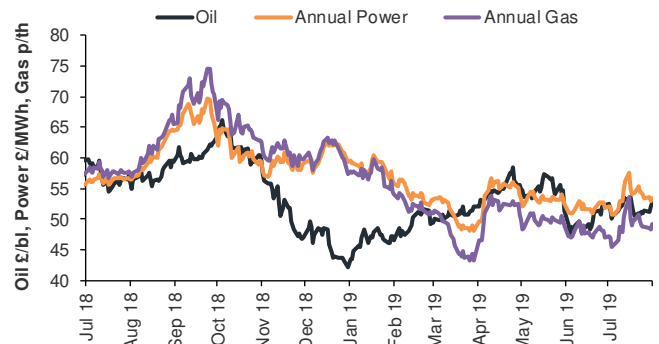
### Carbon sets a 13-year high, while oil and coal also recover

EU ETS carbon prices rose for the first time in three months, gaining 11.2% to average €28.0/t in July. Carbon prices hit a 13-year high of €29.95/t on 24 July, supported by lower wind generation and the forecast of hotter temperatures in north west Europe. Weaker wind output, the unavailability of nuclear plant in France, and higher cooling demand during record breaking temperatures, led to an increase in conventional power generation, pushing up demand for allowances. Certificate volumes in auctions will also halve in August to 33mn and should tighten supplies.

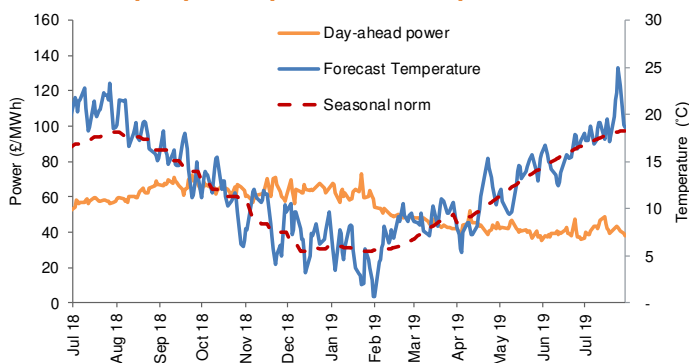
Brent crude oil was up 2.8% to average \$64.7/bl, supported by growing tension in the Middle East between Iran and the US, which has added an insurance premium to oil tankers travelling in the Strait of Hormuz. This, combined with several consecutive weekly declines in US crude stocks and the closure of deep sea wells and production platforms in the Gulf of Mexico following Tropical Storm Barry, pushed prices to \$67.6/bl on 11 July, the highest since 30 May. However, prices were also pressured by growing concerns of weaker global economic growth and a potential reduction in oil demand.

API 2 coal prices recovered slightly, reversing this year's downwards trends by rising 6.3% to average \$68.0/t in July. Coal prices rose above \$71.0/t in the week of Europe's heatwave (w/c 22 July) as coal demand picked up due to forecasts of higher cooling demand across north west Europe.

### Crude oil and annual wholesale gas and power prices



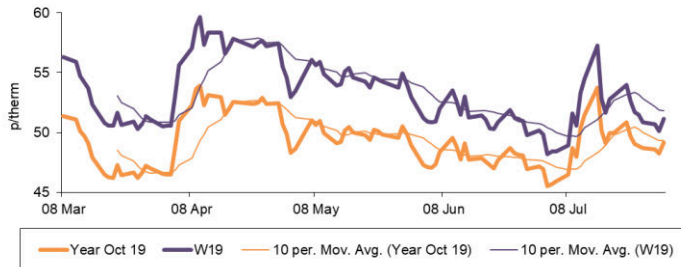
### Spot power prices and temperatures



### The month-ahead: Prices to stabilise

In August, power and gas prices will be likely pressured by weaker summer demand and forecasts of normal temperatures. Although gas supplies might be tighter at times early in the month as planned maintenance at UKCS sites reduces domestic production to 40mcm/d, supplies will remain comfortable, with lower gas for power demand expected following the return of several nuclear units. EU ETS carbon prices will be supported by halving auction volumes in August, while expectations of weaker demand for oil may cap any gains from growing tensions in the Middle East.

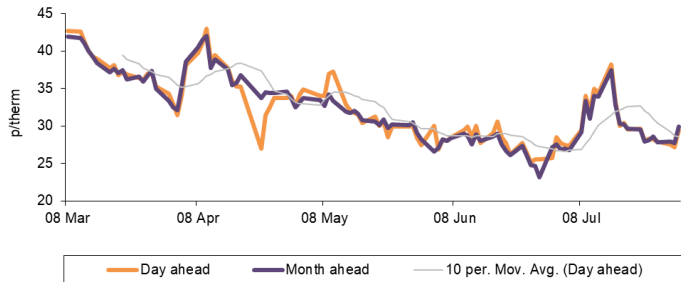
## Annual gas prices



All seasonal gas contracts rose in July, up 2.2% on average. Winter 19 gas was 0.3% higher, averaging 51.5p/th; however, this is 12.8% lower than the same time last year when the contract averaged 59.0p/th in July 2018. Summer 20 gas increased 3.8% from June to average 46.1p/th in July.

The annual October 19 gas contract climbed 1.9% to average 48.8p/th, 7.5% lower than in July 2018 when it averaged 52.8p/th.

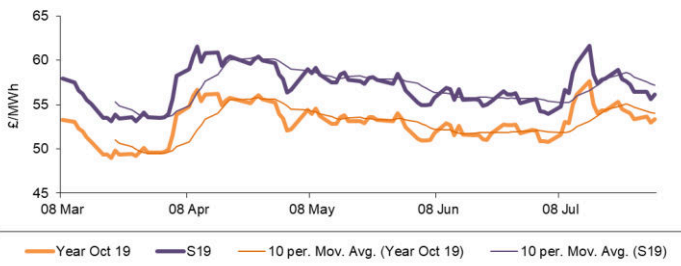
## Spot gas prices



In July, day-ahead gas increased for the first time since September 2018, rising 7.1% to average 30.0p/th in July. The contract peaked at 38.3p/th on 15 July, a three-month high. August 19 gas also recovered, rising 4.2% to average 29.8p/th.

Gas supplies were tighter in July, as only five LNG tankers arrived at UK terminals last month, down from six in June. Supplies were also impacted by an unplanned outage at Norwegian terminals in the middle of the month, which coincided with a rise in gas for power demand amid forecasts of lower wind generation

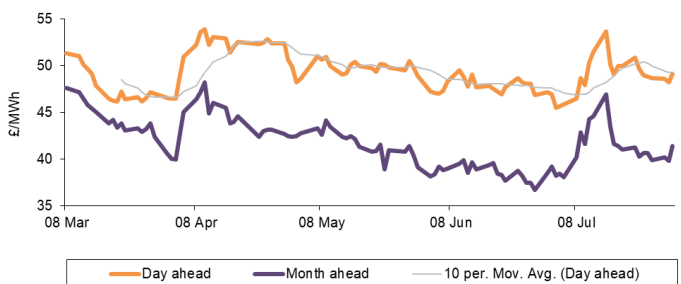
## Annual power prices



All seasonal baseload power contracts also rose, up 3.2% on average. Winter 19 power was 2.2% higher at £56.9/MWh. Seasonal power contracts mostly mirrored their gas counterparts in July, as gas-fired power generation continues to dominate the GB electricity mix.

The annual October 19 power contract went up 3.4% to average £53.6/MWh. This was 3.4% higher than July 2018 when the contract was at £51.8/MWh.

## Spot power prices



Day-ahead power was up for the first time since December 2018, rising 6.2% to average £41.9/MWh in July. The contract peaked on 15 July, hitting £48.8/MWh, the highest level since 22 February. August 19 power gained 4.8% to average £41.1/MWh, however this was 14.0% below the same time last year (£47.8/MWh).

Day-ahead power prices continued to follow their gas counterparts, as CCGT generation remained dominant in the supply mix, providing 49.3% of generation in July, up from 47.3% in June. This rise in CCGT offset a decline in wind output, which fell from 15.8% to 12.8% in July.



# Energy Element / August 2019

		Gas (p/th)		Electricity (£/MWh)		Coal (\$/t)	Carbon (€/t)	Brent crude (\$/bl)
		Day-ahead	Year-ahead	Day-ahead	Year-ahead			
This month	31 Jul 19	29.50	49.14	41.75	53.35	68.25	28.09	65.26
Last month	1 Jul 19	25.75	47.15	37.00	52.13	65.00	26.90	66.50
Last year	31 Jul 18	58.45	53.42	57.70	52.36	85.75	17.19	74.82
Year-on-year % change		(50%)	(8%)	(28%)	2%	(20%)	63%	(13%)
Year high		79.75	65.85	73.00	61.91	100.15	29.66	86.12
Year low		25.15	45.50	35.60	49.00	62.75	15.60	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.

## 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.

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## Government defends net zero 2050 plans

Representatives from the Department for Business, Industry, Energy and Industrial Strategy (BEIS), including then-Interim Energy and Clean Growth Minister Chris Skidmore gave evidence to MPs during a session held on 16 July.

The evidence session was held by the Commons BEIS Committee on the implications of the UK setting a net zero carbon emissions target for 2050, including the rationale behind setting it, potential costs and progress on the adoption of new technologies to help meet it.

Skidmore defended the target after repeated questions including whether it represented a fair contribution from the UK to limiting global warming to 1.5C and how likely the 2050 deadline was to be moved. Although UK emissions represent just a small fraction of the global total, he said the net zero target was intended to demonstrate leadership on the global stage.

He said the government, on the advice of the Committee on Climate Change (CCC), would set its targets within the given carbon budget envelope.

Source: CCC

However, he also suggested a five-year review to allow for the target to be brought forward in the future. He said: "This could be used to move towards 2045 at a later stage if we felt that technologies had advanced and we had the ability to move further, faster." When asked why the deadline would be reviewed every five years, Skidmore said that it would help measure relative progress in cutting carbon compared to other nations.

Skidmore was also asked what his department thought of the claim by then-Chancellor Philip Hammond that achieving net zero by 2050 would cost the UK £1trn. Skidmore replied that he could not confirm the figure and added that money towards the target should be considered an investment rather than a cost.

Additionally, Jeremy Corbyn, during Prime Minister's Questions on 17 July, said that his party's analysis had showed that the government is on target to achieve net zero only by 2099.

**The government has previously promised an Energy White Paper would come out this summer, which would set out its energy policy. Nothing has been released to date, so it is not clear how the government plans to achieve the target and who will bear the brunt of the cost.**

BEIS Committee      Labour

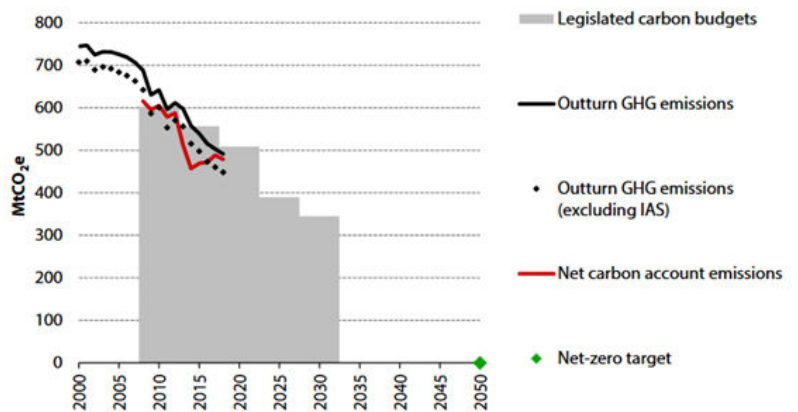
## Government confirms start date of UK carbon tax in no deal Brexit

As part of its preparations for a no deal Brexit, the government has confirmed that a UK Carbon Emissions Tax will come into effect on 4 November, should the UK leave the EU without a deal. The update was released on Monday 29 July, with BEIS saying that if the UK leaves the EU in a no deal scenario, the government would introduce a Carbon Emissions Tax to help meet the country's legally binding carbon reduction commitments under the *Climate Change Act*.

In this scenario, for 2019 a rate of £16 would be applied to each tonne of carbon dioxide emitted over and above an installation's emissions allowance. The tax would apply to all UK stationary installations currently participating in the EU Emissions Trading Scheme – a system which requires large carbon emitters to trade the right to emit carbon with the aim of reducing overall emissions. BEIS said: "The aviation sector would not be subject to the Carbon Emissions Tax. Aviation operators would still be obliged to comply with greenhouse gas Monitoring Reporting and Verification requirements throughout 2019." Additionally, the government will publish a response to its consultation on long-term options for carbon pricing "in due course".

BEIS

Projected UK carbon emissions





### Energy networks urged to more to achieve flexible, smart system

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**On 16 July, the government published a letter from the Department for Business, Energy and Industrial Strategy (BEIS) and Ofgem sent to the Energy Networks Association (ENA), which set out the views of the government and the regulator on work undertaken to date on the Open Networks project.**

The letter analysed the progress made so far by the ENA on its Open Networks project, which aims to deliver a smarter and more flexible energy system for the UK, allowing more energy users including businesses to take part in flexibility schemes. Flexibility enables energy users to change their consumption behaviour in order to access cheaper electricity or use on-site generation to sell electricity to the grid.

In the context of the newly introduced legislation requiring the UK to target net zero greenhouse emissions by 2050, BEIS and Ofgem said that: “To remain fit for purpose in this transforming system, energy networks will need to evolve”, adding that “flexibility would be crucial” in facilitating the necessary deployment of renewables, electric transport and possibly the electrification of heat needed to meet the target. It was stated that by 2050, the plan for a smarter and more flexible electricity system could save the UK an estimated £17-40bn in total.

The government and the regulator said that they were “pleased” with the “proactive approach” taken by the Open Networks project to deliver its goals to date. This includes work done on the Future Worlds project work, which sets out five scenarios for how responsibilities for operating the system could be allocated between the Electricity System Operator, Transmission Operators, DSOs and others. The letter said this project had identified critical capabilities and coordination mechanisms that networks and system operators needed to develop.

It was also noted that the Open Networks project as a whole had helped boost greater efforts across the sector to open up network needs to competition and support network coordination. This included a commitment made at the end of 2018 by the UK’s six electricity network operators requiring all new network infrastructure to include “smart flexibility services” to help support the increasing level of renewable supply on the system.

However, it was added that both the regulator and the government were “keen that progress continues and tangible changes are implemented” and expressed their belief that further efforts to make the necessary changes would be required to deliver what Ofgem and BEIS view as an energy system fit for the future.

To further progress the project, and to answer calls from ENA member network and system operators for a clear direction for working towards the project’s aims, the letter outlined some key areas of focus going forward:

- Standardise flexibility procurement across network and system operators to help open up networks to competition
- Support the development of flexibility platforms and markets by standardising processes and encouraging sharing of best practice
- Provide clear information on current and future system needs
- Show transparency in evaluating flexibility tenders to help address conflicts of interest

**Flexibility has the potential to enable businesses contribute to and benefit from the shift to a cleaner and smarter energy system.**

#### BEIS

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### No company car tax on zero emission vehicles in 2020-21

The government confirmed on 9 July that all zero emission vehicles will not pay company car tax in 2020-21, 1% in 2021-22, and then return to the planned 2% rate in 2022-23. This is designed to encourage the uptake of zero emission models. The Treasury also confirmed that, for cars first registered from 6 April 2020, most company car tax rates will be reduced by 2ppt in 2020-21 before returning to planned rates over the following two years, and that a call for evidence on vehicle excise duty will be published later this year.

However, a small number of company cars with the greatest CO2 emissions (170g/km and over) will continue to attract the maximum percentage of 37% during 2020-21, 2021-22 and 2022-23. Due to the range of Worldwide harmonised Light vehicles Test Procedure impacts on CO2 emissions, some conventionally fuelled cars will be liable to pay an equal amount of company car tax as today, whilst others will pay more, and a small number of models could pay less.

#### Government

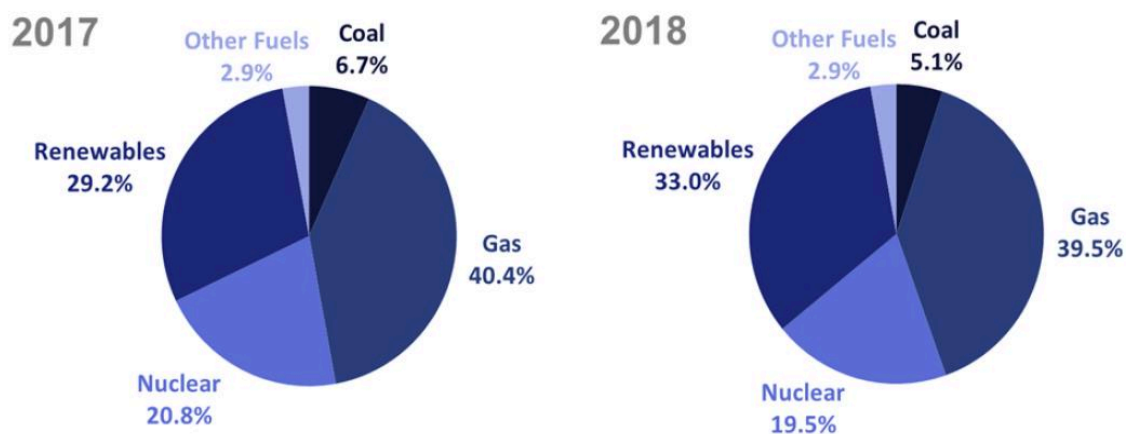


## Low-carbon sources now generate more than 50% of UK electricity

The Department for Business, Energy and Industrial Strategy (BEIS) released its Digest of UK Energy Statistics (DUKES) for 2019, which provides a detailed analysis of production, transformation and consumption of energy in the UK in 2018.

Published on 25 July, it revealed that, between 2017 and 2018, low-carbon (comprised of renewables and nuclear) electricity's share of generation rose to a record 52.6% from 50%, driven by an increase in renewables generation. Electricity generated from renewable sources reached a record 33%.

Electricity generation by fuel, 2017 vs 2018



Source: BEIS

BEIS said this stemmed from a 13.4% increase in renewable capacity. Onshore and offshore wind generation increased by 5.2% and 28% respectively to new records, both boosted by higher capacities, offsetting lower wind speeds. Solar generation rose by 12% and hydro generation dropped 7.0%. Coal-fired generation continued to fall, dropping below 25% of its 2015 level. Its share fell from 22% in 2015 to 5.1% in 2018 following the increase in the price of carbon in April 2015, which made coal generation more expensive than gas, and the government's announcement to phase out coal by 2025. Gas fell slightly from 40.4% cent in 2017 to a 39.5% share of generation. Nuclear's share fell to 19.5% due to maintenance and outages.

Also, power company Drax released statistics showing that, at the end of June, carbon emissions from electricity generation in Britain fell to just 97g per kWh, breaking the previous record of 104g per kWh set in June 2018. Additionally, on 30 June, more than half of Britain's electricity was powered by renewables – 39% from wind, 9% from solar, 8% from biomass and 1% from hydro.

**It is clear that the energy mix is changing and it is getting easier for businesses to source their energy from renewables. It remains to be seen whether this shift is happening fast enough.**

[Government](#) [Drax](#)

## Cabinet reshuffle leads to a raft of departures and new appointments

The appointment of Boris Johnson as the UK's new Prime Minister has led to a number of new appointments affecting the energy sector. Announced on 25 July, Andrea Leadsom has been appointed as Business Secretary and will take over from Greg Clark with immediate effect. Leadsom had previously served as Defra Secretary and as Energy Minister. Similarly, Theresa Villiers will succeed Michael Gove as Defra Secretary.

Energy and Clean Growth Minister Claire Perry has stepped down, but has confirmed her decision to serve as COP26 (UN Climate Change Conference of Parties) President which the UK is set to co-host. MP Kwasi Kwarteng has since been appointed Minister of State at the Department for Business, Energy and Industrial Strategy (BEIS).

[BEIS](#) [Parliament](#) [Twitter](#)



### Businesses invited to apply for electrification funding

The government launched the £80mn 'Industrial Strategy Challenge Fund: Driving the Electric Revolution Challenge' on 25 July. The UK, the government said, will need to switch to electrification across many sectors from automotive to energy distribution in order to meet its carbon reduction targets.

The government said the fund will accelerate the UK's ability to deliver the supply chains required to enable electrification in the automotive, aerospace, energy, industrial, marine, off highway and rail sectors in order to deliver the UK's carbon reduction targets.

Businesses of any size can apply for a share of £19mn, where the competition has two strands: one for larger projects with total costs between £1-3mn, and another for smaller projects with total costs between £250,000-1mn. The competition opened on 29 July and will close on 25 September.

#### Government

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### MPs put pressure on government to release Energy White Paper

The Chair of the Commons Business, Energy and Industrial Strategy (BEIS) Committee, MP Rachel Reeves, sent a letter on 26 July to new Business Secretary Andrea Leadsom, stating that she was looking forward to the publication of the Energy White Paper this summer.

In the letter, sent before Parliament went into summer recess on 25 July, Reeves also pressed Leadsom to ask the Treasury to carry out a funding review of the benefits of net zero, as well as setting out the committee's recommendations: bring forward the ban on new petrol and diesel vehicles to 2032; aim to develop carbon capture, usage and storage projects in at least three clusters by 2025; designate upgrading the energy efficiency of all buildings across the UK as a national infrastructure priority; and lift the ban on onshore wind from the Contracts for Difference support scheme, as well as reviewing planning restrictions.

#### Parliament

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### Major companies save enough energy to power Germany for a year

The Climate Group's first report on its energy efficiency EP100 initiative has reported that, to date, major companies have saved enough energy to power the entirety of Germany for one year.

The EP100 initiative aims to bring companies together to make smarter use of energy. In the first *EP100 Progress and Insights Report*, published on 24 July, it was revealed that smarter energy use has saved 18 companies \$55mn (£49.6mn) in the last year. Additionally, 21 companies avoided over 522mn mega tonnes of carbon emissions since their respective baseline years.

The Climate Group CEO Helen Clarkson said: "Doing more with less energy can unlock faster decarbonisation of the global economy – and the private sector holds the key."

She continued: "From the boiler room to the boardroom, smarter energy use benefits a business at every level, helping to meet the growing expectations of shareholders, customers and employees while generating capital that can be reinvested in clean growth."

#### The Climate Group

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### Closure to leave UK with just four coal-fired power stations

Power company RWE has confirmed plans to close the 1,560MW Aberthaw B coal-fired power station in Wales, citing challenging market conditions.

Announced on 1 August, RWE will transfer Aberthaw Power Station's existing Capacity Market – the scheme which guarantees the UK's security of electricity supply – agreements to third parties and a small proportion to other units within RWE's fleet. In doing so it is assured that the total amount of capacity available under the Capacity Market remains the same. The proposed date of closure is 31 March 2020. The decision will see just four coal-fired power plants in operation across the UK, with the government committing to phase out coal generation by 2025.

#### RWE

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