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Day-ahead gas reaches lowest price in over six years

Losses in commodity markets created a bearish trend in the GB energy market in August, with nearly all gas and power contracts seeing falls.

Seasonal gas prices decreased 5.3% on average, following a slip in oil prices. Winter 16 gas experienced the largest drop, at 6.1%, to average 42.0p/th. Summer 17 gas decreased 5.8% to 38.0p/th. Seasonal gas prices remained below their levels last year; and the first shale gas shipment is reportedly set to arrive in the UK from the US in September, which could reduce prices further. Centrica announced that it will make 20 wells available at Rough gas storage facility from 1 November 2016. This has improved the supply outlook for the coming winter and pulled the winter 16 price down to a two-and-a-half month low of 39.8p/th on 31 August.

Day-ahead gas moved 10.2% lower to average 31.1p/th. Prices were pushed down by supply generally outweighing demand and flows mostly above the seasonal norm. On 31 August the contract reached its lowest price in over six years, at 26.0p/th.

Seasonal baseload power contracts on average decreased 3.9% in August, following their gas counterparts lower. Winter 16 power fell 2.8% to £45.8/MWh. Summer 17 power went down 3.2% to £39.0/MWh. Day-ahead power also followed its gas counterpart, down 4.4% to £36.7/MWh.

Oil price lowers as demand growth slows and oversupply continues

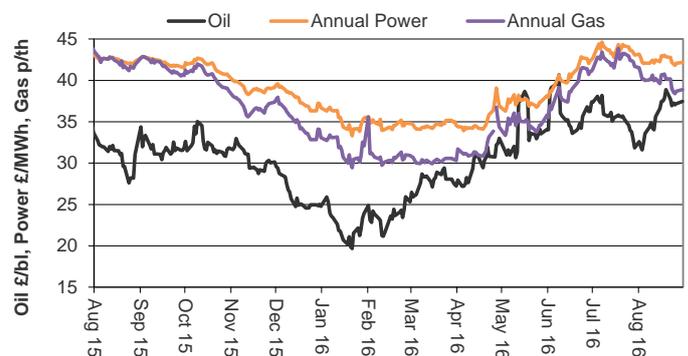
Brent crude oil prices lost 0.2% to average \$46.7/bl in August. Prices have fallen

from their near eight-month high of \$52.2/bl in early June. This was caused by concerns of oversupply in the market and uncertainty surrounding global markets. Higher OPEC production, US oil rig additions and reduced Chinese demand all pushed prices down further. Prices also fell on doubts that upcoming producer talks would not combat market oversupply.

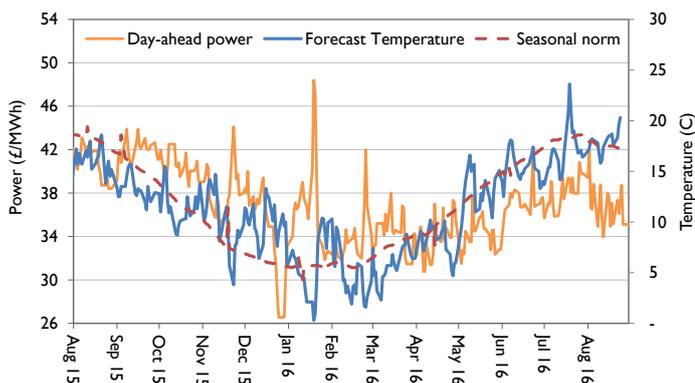
Mid-way through the month, the International Energy Agency released its *Oil Market Report*. The report said that oil demand growth was likely to slow from 1.4 mb/d in 2016 to 1.2 mb/d in 2017, and could cause a longer period of low prices.

API 2 coal lost 1.3% to average \$58.3/t. However, prices have shown a significant recovery since reaching a low point of \$36.6/t in February 2016. EU ETS carbon gained 1.7% to average €4.7/t. On 2 August the price fell to €4.4/t, the lowest level since March 2014.

Crude oil and annual wholesale gas and power prices



Spot power prices and temperatures



The month ahead: Low prices expected to continue

The IEA projects that oil demand is likely to slow, which could cause a longer period of low oil prices. Carbon Pulse reported that analysts cut EUA price forecasts by up to 15% as a result of uncertainty surrounding the UK's decision to leave the EU.

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

Annual gas prices



All seasonal gas prices decreased in August. The annual October 16 gas contract lost 6.0% to 40.0p/th.

Winter 16 gas experienced the largest drop, at 6.1%, to average 42.0p/th. Summer 17 gas decreased by 5.8% to 38.0p/th.

Centrica announced that it will make 20 wells available at Rough gas storage facility from 1 November 2016. This has improved the supply outlook for the coming winter and pulled the winter 16 price down to reach a two-and-a-half-month low of 39.8p/th on 31 August.

Spot gas prices

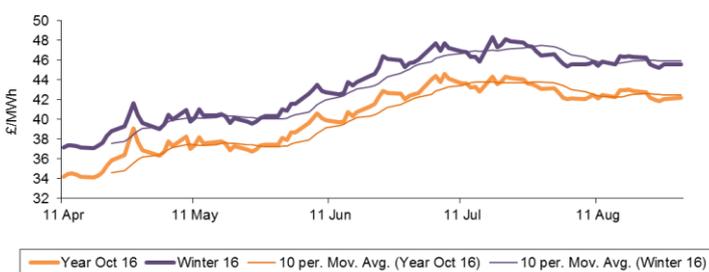


Day-ahead gas moved 10.2% lower to average 31.1p/th. On 31 August the contract reached its lowest price in over six years of 26.0p/th.

The month-ahead contract declined 13.9% to average 32.0p/th.

Gas-fired generation provided 45.8% of GB's energy mix during the month, while coal only produced 2.8%, as cheaper gas prices have made it the dominant fuel.

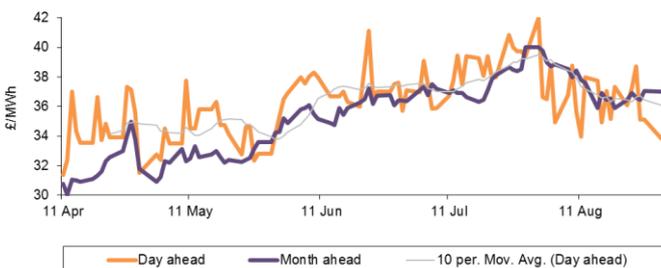
Annual power prices



The annual October 16 baseload power contract fell 3.0% to average £42.4/MWh, following the gas market lower.

Winter 16 power lost 2.8% to average £45.8/MWh. The contract followed its gas counterpart lower, which dropped on news that the Rough gas storage facility would have some available capacity for the coming winter. Summer 17 decreased 3.2% to £39.0/MWh.

Spot power prices



Spot power prices moved 4.4% lower to average £36.7/MWh. The contract followed its gas counterpart lower.

The day-ahead contract started the month at a six-month high of £42.0/MWh before declining as the month progressed to £33.1/MWh on 31 August.

The month-ahead contract dropped 5.6% to average £37.6/MWh during August.



Energy Element / September 2016

Key market indicators: 31/08/2016

	Gas (p/th)		Electricity (£/MWh)		Coal	Carbon	Brent crude
	Day-ahead	Year-ahead	Day-ahead	Year-ahead	(\$/t)	(€/t)	(\$/bl)
This month 31 Aug 16	25.95	38.49	33.05	41.88	59.00	4.51	48.06
Last month 29 Jul 16	35.75	41.70	39.40	43.08	61.00	4.41	42.26
Last year 28 Aug 15	38.80	42.78	39.13	42.35	53.15	8.09	47.66
Year-on-year % change	(33%)	(10%)	(16%)	(1%)	11%	(44%)	1%
Year high	45.00	48.38	48.40	45.65	60.50	8.64	66.01
Year low	27.00	29.88	26.56	32.84	36.55	4.69	27.83

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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Governments falling short on energy goals, say businesses

Successive UK governments have failed to meet the key objectives of UK energy policy, according to a major survey of company directors.

Issued on 19 August, the poll of nearly 1,000 business chiefs, conducted by the Institute of Directors (IoD), revealed that around seven in 10 (68%) believed that governments had consistently failed to deliver competitively-priced energy for consumers.

Energy security concerns

Meanwhile, nearly two-thirds (63%) felt that policy-makers had been unsuccessful in ensuring security of supply, compared to 14% who believed the opposite. The IoD suggested that the establishment of the new Department of Business, Energy and Industrial Strategy represented an ideal moment at which to re-evaluate the direction of policy in this area.

IOD survey results

	Increasing renewables	Reducing carbon	Delivering security of supply	Delivering competitively priced energy
Strongly agree	8.12%	2.81%	1.70%	1.00%
Tend to agree	50.40%	42.28%	13.03%	8.92%
Neither agree nor disagree	15.63%	21.54%	19.54%	19.44%
Tend to disagree	15.33%	19.94%	33.87%	39.28%
Strongly disagree	6.57%	8.02%	28.76%	28.56%
Don't know	4.01%	5.41%	3.11%	2.81%

Source: IoD

While the IoD has consistently supported building new nuclear power plants, firms are divided on the benefits of the Hinkley Point C project, which the government is now reviewing ahead of a final decision. A narrow majority (53%) thought Hinkley made strategic sense, but less than half thought it would make the UK more economically competitive.

Green action

However, directors did feel that energy policy had been more successful in increasing the use of renewable sources (59% agreed) and reducing carbon emissions (45%), since British politicians first focused on the issues shortly after the turn of the millennium.

Dan Lewis, senior infrastructure policy adviser at the IoD, said: "Government policy at the moment is creating all sorts of bizarre outcomes. Instead of accelerating moves to safely frack for gas and oil in the UK, we are importing coal and oil from Russia and gas and oil from Norway, with the extra costs and emissions involved. Instead of building

cleaner gas plants to meet demand when renewables can't, the government has been subsidising polluting diesel-fired plants."

The report rightly highlights some of the contradictions in the UK's existing policy framework, and suggests that now might be an appropriate moment for a fundamental re-think.

IoD

National Grid ends service to encourage demand-side response

The operator of Britain's electricity system announced on 22 August that it would not be making use of one of its key tools for balancing supply and demand on the electricity system this winter.

Demand Side Balancing Response (DSBR) was a service designed to support National Grid in balancing the system if there were insufficient power supply in the market to meet demand. The service was designed for commercial and industrial energy consumers, who volunteered to reduce their electricity demand between 4pm-8pm on winter weekday evenings in return for a payment. Demand reduction could be delivered by firms reducing or shifting load, by running on site backup generation, or by running small on-site generators.

But National Grid said it was clear that changes made to the scheme following a consultation last year had proved unsuccessful in incentivising interest, and that "minimal volume" would be available next winter.

The decision has been criticised by industry stakeholders. David Cockshott, chief commercial officer at energy consultancy Inenco Group, said: "It is already widely acknowledged that business flexibility will have a crucial role to play [...] Withdrawing a scheme three months before it comes into effect risks undermining business confidence [...]."

National Grid

Hinkley Point C unnecessary, says think tank

Technologies including energy efficiency, windfarms and gas-fired power stations could be delivered faster and at less cost than the planned new nuclear power station at Hinkley Point C, according to the Energy and Climate Intelligence Unit (ECIU).

EDF Energy announced a Final Investment Decision on the 3.2GW Hinkley Point plant in Somerset at the end of July. However, the government then decided that it would conduct a final review of the project before signing the final agreement that would give EDF the go-ahead for construction.

The decision was made amid continuing concerns about Hinkley's cost. The contract agreed with the government guarantees that EDF would receive £92.50/ MWh for the electricity generated by the plant: more than double the current wholesale price.

Alternatives

In its report, ECIU found that replacing all of Hinkley's peak-time output with gas-fired units could save the UK £16bn in infrastructure costs.

The UK could also bring as much electricity into the grid as Hinkley would generate by building as few as four big windfarms – additional to those already set for construction – or by developing three further interconnector cables.

Infrastructure upgrade

ECIU energy analyst Jonathan Marshall said: "The UK's energy infrastructure is ageing and increasingly unreliable, so clearly we need to replace bits of it; and there's no doubt that nuclear reactors generally supply low-carbon electricity reliably [...]. But electricity systems are changing rapidly across the world, and it's striking that figures such as the former head of National Grid and his Chinese counterpart have said recently that "always-on" baseload generation is the way of the past."

The government is coming under significant pressure to renege on its commitment to new nuclear power, and instead put its resources towards new and decentralised energy technologies.

ECIU

Gas customers mischarged after mix-up on meter reads

Energy regulator Ofgem has written an open letter to gas suppliers to highlight an error that has been identified in the charging of some customers.

E.ON UK notified the regulator that it was aware of a mismatch between the units recorded by some customer meters and the units recorded in its systems - resulting in significant under- or over-charging.

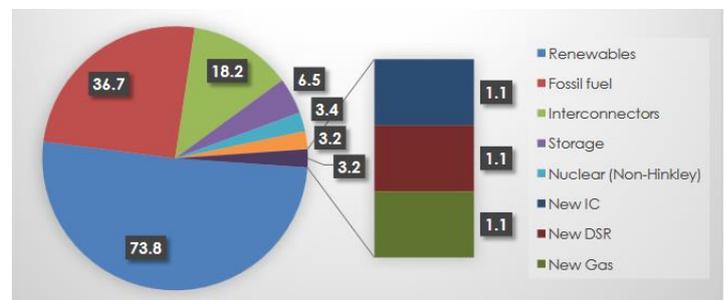
The issue reportedly affects only a "very small proportion" of residential and SME gas customers, but Ofgem said it expected all suppliers to outline how they would identify affected meters and provide redress to customers. The issue is thought to be linked to a combination of human error and poor data flows upon meter installation and change of supplier.

Trade association Energy UK has estimated that 11,000 customers were charged the wrong amount for their gas owing to the incorrect recording of imperial and metric meters: less than 0.05% of the total 23mn gas accounts in the UK.

In a fact sheet, the organisation explained that people affected by the error would be contacted directly by their suppliers, who would repay any overcharging, including an appropriate interest payment. Those who have been undercharged will not be asked for any repayment.

Energy UK

UK generation mix 2030 in GW (Hinkley alternatives enlarged)



Source: ECIU



Battery storage projects awarded landmark contracts

Battery storage will, for the first time, play an important role in balancing supply and demand on the power system, after several projects were awarded key contracts by National Grid.

New service

In order to effectively balance supply and demand, National Grid must ensure that the frequency of the electricity system is maintained at 50Hz. But the pace of change in the system – and in particular the growing level of intermittent renewable projects – is forcing the company to develop innovative ways to ensure that the frequency remains stable and that power flows to where it is most needed.

As a consequence, National Grid launched an “Enhanced Frequency Response” tender, which aims to bring forward new technologies to support decarbonisation by providing a fast response solution to system volatility.

Previously, the fastest frequency response was delivered in around 10 seconds, but technological developments mean that the response can now come in under a second. National Grid estimates that this enhanced ability to control variations in frequency will cut costs by £200mn and will streamline services to make them more efficient.

Auction

The outcome of the first EFR auction was announced on 26 August. National Grid received bids from 37 providers, the majority of which were from battery assets. Of these, eight bids were accepted, and these have received four-year contracts from the system operator.

The auction has been regarded as a success by industry groups, as while National Grid was only seeking to procure 200MW of capacity, around 1.4GW actually pre-accredited for the auction – suggesting that the battery storage industry might be stronger than had been anticipated.

On the same day, analysts at Cornwall Energy issued new research that showed that the costs of battery storage had fallen dramatically in recent years (see graph above).

The auction provided further evidence that battery storage could be set to play a very significant role in the low-carbon transition.

National Grid

Government sharpens incentives for energy intensives to meet climate goals

The government is considering raising the costs faced by energy intensive users who fall short of their emissions reduction goals.

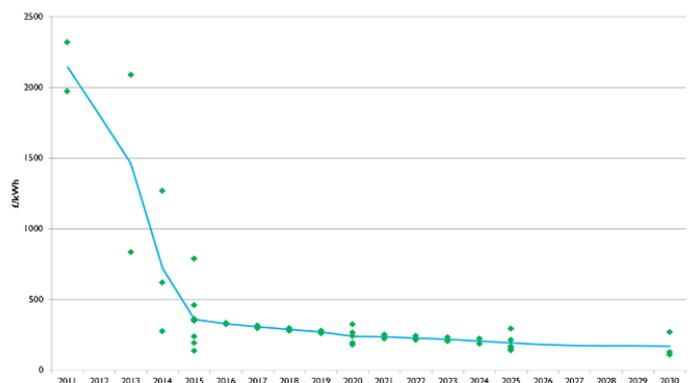
Climate Change Agreements (CCAs) are voluntary commitment made by firms in various UK industries to reduce their energy use and CO2 emissions. CCAs were established to allow energy intensive businesses to reduce the cost of the Climate Change Levy scheme, in return for improving their energy efficiency. Participants who fall short of their goals must pay a “buy-out” price.

The government has said it is minded to increase the buy-out price, broadly in line with the Retail Price Index, to £14/tCO2e for target periods 3 and 4 of the scheme, falling between 2017-20. It said that this would provide a stronger incentive for businesses to abate, while also remaining mindful of the financial impact on companies.

Responses to the government’s proposals are invited by 23 September.

Government

Projected lithium-ion battery storage cost reduction (£/kWh)



Source: Cornwall Energy



Government approves world's largest offshore windfarm

The 1.8GW Hornsea Project Two offshore windfarm has been granted development consent by the government.

The windfarm would create up to 1,960 construction jobs and 580 operational and maintenance jobs. If built to full capacity it would become the world's largest wind project, with an overall investment of around £6bn. The government is planning to award over £700mn in subsidies to offshore wind projects before the end of the decade.

Business and energy secretary Greg Clark said: "The UK's offshore wind industry has grown at an extraordinary rate over the last few years, and is a fundamental part of our plans to build a clean, affordable, secure energy system. Britain is a global leader in offshore wind, and we're determined to be one of the leading destinations for investment in renewable energy, which means jobs and economic growth right across the country."

Government

Energy efficiency regulations will increase rents, say landlords

The government's decision to remove financial support for landlords seeking to make homes more energy efficient will inevitably result in an increase in rents, an industry group has said.

New laws, introduced in 2018, will make it illegal to rent out property with an energy efficiency rating of F or G, and the Residential Landlords Association (RLA) argues that the cost of the work involved will have implications for tenants.

Previously, the government supported landlords in implementing energy efficiency through the Green Deal and a tax allowance. But these programmes have now ended, and the RLA has told landlords that they could face costs of up to £5,000 to improve properties.

RLA Policy Consultant, Richard Jones, said: "Whilst we all want to see improvements in the energy efficiency of homes to rent, that cannot come at the expense of driving up rents."

RLA

Nottinghamshire AD plant receives investment

A fund backed by the Green Investment Bank (GIB) has committed £6.6mn to the development of a new anaerobic digestion (AD) plant in Nottingham.

The support, delivered by the Foresight-managed Recycling and Waste Fund, will be matched by funding from the SQN Asset Finance Income Fund, taking overall investment in the project to £13.2mn. Construction of the 2.2MW facility, operated by Future Biogas, is currently underway. The facility will use poultry litter, straw, and other agricultural feedstock from adjacent farms to fuel a combined heat and power (CHP) plant, supplying electricity and heat to local businesses.

GIB's Edward Northam said: "AD is widely recognised as one of the most effective ways of processing organic waste. AD facilities have an important role to play in the development of a circular economy in the UK."

GIB

Good Energy empowers businesses to buy green power

Good Energy has selected Open Utility's Piclo software to enable its business customers to buy local renewable energy directly from generators.

The multi-year agreement, announced on 23 August, follows a six-month trial, and will see Good Energy's business customers using the service "for enhanced [...] control of their energy supply", with the ability to match their demand with local renewables generators. Good Energy will manage all aspects of market roll-out, customer recruitment and programme administration.

Good Energy CEO Juliet Davenport said the company wanted to see a decentralised energy system, where control was "in the hands of the people and businesses who use it."

Good Energy
