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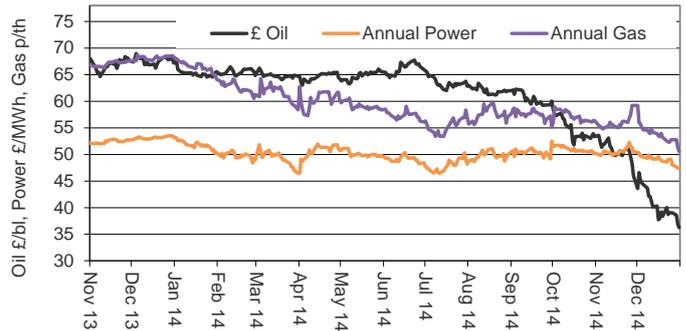
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Falling commodities weigh on prices

Throughout December, Brent crude oil continued its sharp falls as OPEC producers – especially Saudi Arabia – reiterated that they would not cut production levels, leaving the market in a continued state of oversupply. As a result Brent crude fell 21.3% over the month to reach \$56.4/bl, its lowest level in over five years, filtering through into long-term UK gas and power prices.

Long-term contracts down on weaker commodities

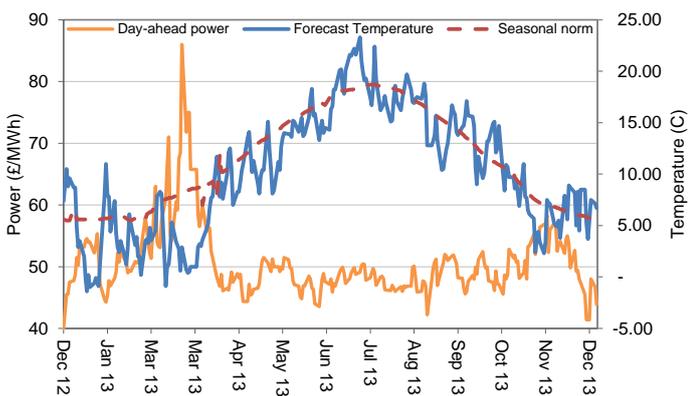
Crude oil and annual wholesale gas and power prices



Sharp falls in oil, as well as continued reductions in coal prices, pulled long-term contracts down over December. Summer 15 gas dropped 3.4% to average 50.1p/th, ending the year 19.5% lower than levels seen at the start of 2014. Long-term power prices followed, with the summer 2015 contract dropping 1.6% month-on-month to average £47.1/MWh. Annual April 2015 power was down 2.2% to average £49.2/MWh.

In similar fashion to long-term contracts, UK spot prices were bearish over the month due to the effects of mild weather and high wind generation reducing demand. Day-ahead gas dropped 0.6%, averaging 53.9p/th, reversing gains seen over the previous four months as the system was comfortable throughout the month. Day-ahead power lost 10.5% to average £43.1/MWh and hit a five-month low of £36.0/MWh on 31 December as a result of consistently high wind generation, which reached a record level of 7.3GW on 7 December.

Spot power prices and temperatures



The month ahead: Oil prices may begin to bottom out

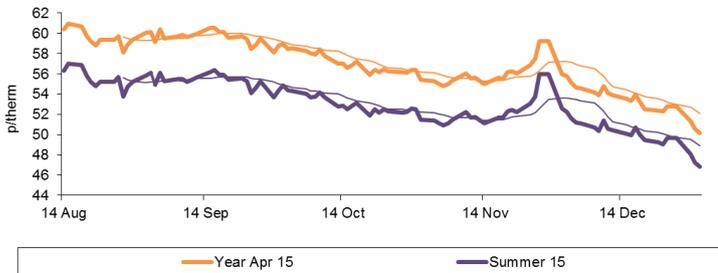
Some analysts have suggested that oil prices may begin to bottom out as prices fall to near the production costs of US shale oil, which has become the fastest growing area of non-OPEC supply over recent years. However, further falls in oil could make US fields unprofitable and could stabilise the global market from its current slide as US oil fields close and supply decreases.

The successful restart of three nuclear reactors over December, which were taken offline in August, has increased market confidence that a fourth reactor at Heysham will also return successfully. Higher nuclear

production power should improve supply margins for the rest of winter and could reduce power prices.

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.

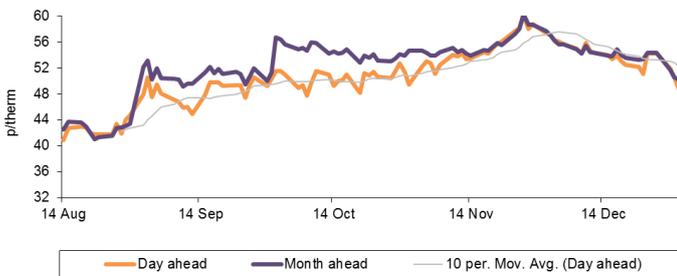
Annual gas prices



Long-term gas contracts were impacted by continued sharp falls in Brent crude oil prices, which dropped as OPEC maintained production levels throughout December, despite falling demand. This left the market in a continued state of oversupply.

Summer 15 gas dropped 3.4% to average 50.1p/th. The annual April contract fell 4.1% to average 53.4p/th.

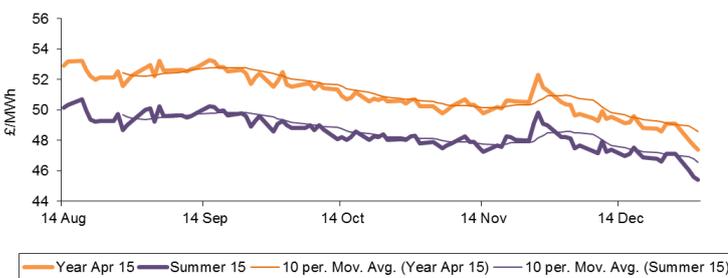
Spot gas prices



The spot gas market also dropped in December owing to falling demand as milder weather swept across the UK. High wind generation helped reduce demand for the fuel in power generation over the month. A strong GB gas supply picture also influenced.

Day-ahead gas dropped 0.6%, averaging 53.9p/th, reversing gains seen over the previous four months.

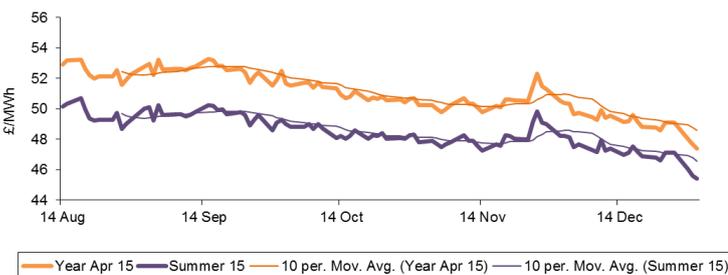
Annual power prices



In December long-term power prices followed the continued falls in oil, coal and gas. The return of nuclear power plant for the rest of the winter demand season also boosted supply margins.

Summer 2015 power dropped 1.6% month-on-month to average £47.1/MWh. Annual April 2015 power was down 2.2% to average £49.2/MWh.

Spot power prices



Like their gas counterparts, spot power prices dropped in December, as high wind output, below average demand and a continued weak outlook for commodities weighed on contracts.

Day-ahead power lost 10.5% to average £43.1/MWh and hit a five-month low of £36.0/MWh on 31 December.



Energy Element / January 2015

Key market indicators: 31/12/2014

	Gas (p/th)		Electricity (£/MWh)		Coal (\$/t)	Carbon (€/t)	Brent crude (\$/bl)
	Day-ahead	Year-ahead	Day-ahead	Year-ahead			
This month 31 Dec 14	48.80	50.16	36.00	47.40	66.00	7.35	56.40
Last month 1 Dec 14	57.35	55.98	49.00	50.50	71.75	6.95	68.50
Last year 1 Jan 14	67.15	66.13	43.85	55.50	82.15	4.91	111.11
Year-on-year % change	(27%)	(24%)	(18%)	(15%)	(20%)	50%	(49%)
Year high	70.90	66.35	56.30	55.95	87.30	7.42	115.20
Year low	34.70	48.61	34.00	46.50	65.50	4.27	56.40

<p>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.</p>	74	68	60	55	88	8	90
	70	66	56	54	84	7	85
	66	64	52	53	80	6	80
	62	62	48	52	76	5	75
	58	60	44	51	72	4	70
	54	58	40	50	68		65
	50	56	36	49	64		60
	46	54	32	48			55
	42	52		47			
	38	50		46			
	34	48					

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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Low-carbon policies to drive energy bill rises

Policies to support cleaner low-carbon electricity could push up business energy bills by up to 45% between 2013 to 2030, the Committee on Climate Change (CCC) has estimated.

Rising costs

Energy costs currently represent a small share of total business operating costs (0.5% of costs in the commercial sector and around 2% of costs in the industrial sector). But in its third assessment of the impact of carbon budgets on energy bills, published on 10 December, the CCC said between 2004 and 2011 energy bills for commercial users had increased by around 90%-110%.

This trend largely reflected increases in wholesale energy prices and network costs – which accounted for 3.3 p/kWh of the total 4.8 p/kWh increase. But 33% of the rise, according to the CCC, can be attributed to low-carbon policies – with 0.8p/kWh reflecting increased support for low-carbon generation (the EU Emissions Trading Scheme and the Renewables Obligation), and 0.6p/kWh due to the Carbon Reduction Commitment (CRC) energy efficiency scheme. The rate of the Climate Change Levy paid on electricity also increased by 0.1p/kWh over the period.

Future outlook

The *Energy Prices and Bills – Impacts of Meeting Carbon Budgets* report also predicted that the trend of rising prices will continue. It said commercial and industrial users could see their final delivered energy costs rise 9%-17% from 2013 to 2020 and a further 12%-25% to 2030, due to low-carbon policies.

The CCC expects that electricity prices for the commercial sector (including the CRC) will increase by 4p/kWh (45%) in real terms, from 9.1p/kWh in 2011 to 13.1p/kWh in 2020. Around 2.7p/kWh of this rise is expected to result from the costs of low-carbon policies.

Annual household energy bills have risen by £490 over the past decade with most of the increase due to rising wholesale gas prices. But the report also expected support for low-carbon technologies to increase annual energy bills by around £100 by 2020 (a 10% increase on the 2011 bill) for an average dual fuel household.

Efficiency opportunities

But the transition to a low-carbon economy would, the report argued, also present significant opportunities for businesses. The CCC estimated that, by the end of the decade, energy efficiency measures could reduce electricity consumption by 9% and gas consumption by 18%. Together these would reduce combined energy bills by around 10%.

Opportunities to improve energy efficiency could help to offset the impact on rising bills. But the report cautions that stronger demand-reduction policies will be required if this potential is to be realised.

CCC

Outlook for average commercial electricity price (2011 and projected in 2020)



Source: CCC

Global oil prices continue to slide

Crude oil prices have fallen significantly over recent weeks as demand has weakened with a stagnant Eurozone, slowing demand from China and a glut of global supplies.

On 19 December, Brent and US crude tumbled to four year lows of below \$60 and \$55 a barrel respectively. Some of the fall in prices has been attributed to the decision of intergovernmental oil organisation OPEC to

maintain its level of supply, despite a weakening demand picture. The move is interpreted by analysts as an attempt to drive US and Russian producers out of the market place.

Winners and losers

The fall in prices has provided a welcome boost to business, and PricewaterhouseCoopers said it “should be a net benefit to our economy as a whole”. Cheaper oil will mean lower manufacturing and transport costs, which will feed into an enhanced economic outlook.

However, as a mature and relatively high cost basin, a sharp fall in prices is seen as being likely to damage longer-term prospects for companies operating in the

UK North Sea. Robin Allan, chairman of the independent explorers’ association Brindex, said: “It’s a huge crisis. This has happened before, and the industry adapts, but the adaptation is one of slashing people, slashing projects and reducing costs wherever possible.”

Down and then down?

Oxford energy specialist Dieter Helm published a paper on 3 December that argued that recent events raised further questions about the political consensus on continually rising prices and peak oil. *The Price of Oil* called for politicians to avoid basing their policy choices on the “self-serving assumption that prices can only go up”, and to instead assume that markets work and will eventually right themselves. He also said that the lower prices would further expose the lack of competitiveness of the current generation of renewable technologies.

While the oil price has fallen for now, it will inevitably rise again in the future. Businesses should welcome the relief in prices, even if it proves temporary.

Energy Futures Network

Smart Grid would boost economy: Smart Grid GB

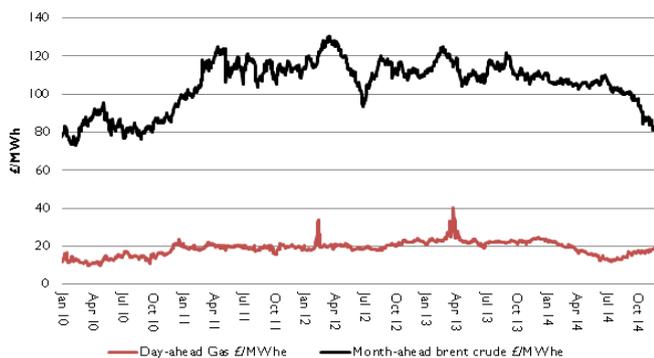
Politicians should ensure plans for smart grid development are incorporated into their wider energy policy platforms in the run up to the general election in 2015, stakeholder group Smart Grid GB has said.

A smart grid is an electricity supply network that uses digital communications technology to detect and react to local changes in usage. In *Making Smart Choices for Smart Grid Development*, which was published 15 December, the organisation claimed implementing smart grid technologies would have an “overwhelmingly favourable benefit to cost ratio” and could contribute £2.8bn to the economy by 2030.

But the group said that, for these benefits to be realised, the government and the energy regulator Ofgem must urgently investigate the costs and benefits of smart grid investment, while policy-makers must place emphasis on the development of a smart grid when designing policies.

Smart Grid GB

UK gas and oil price trends



Source: Cornwall Energy



Autumn Statement boosts oil and gas

On 3 December chancellor George Osborne presented the *2014 Autumn Statement* to Parliament, pledging new measures to support the UK's oil and gas industry.

North Sea boost

The government re-affirmed its commitment to the development of a UK shale gas industry and to reforming the fiscal regime of the North Sea through an immediate reduction in the rate of the tax paid by the industry. It is hoped that this will incentivise investment in UK production, in turn bolstering energy security.

Osborne also confirmed that, from 1 April 2015, fossil fuels used in combined heat and power plants to generate electricity that is self-supplied would be excluded from the carbon price support rates.

Tax relief changes

The Statement said that, from 1 April 2015, research and development tax credits for small and medium-sized companies would be increased to 230%, while credits for large firms would rise to 11%. But to better target the tax reliefs, the government announced that, from April 2015, it will exclude companies benefiting from renewables subsidies (such as feed-in tariffs) from also benefiting from tax-advantaged venture capital schemes such as Social investment tax relief, the Enterprise Investment Scheme, and the Seed Enterprise Investment Scheme.



The government also assured that it was working to bring private capital into the Green Investment Bank through a new fund for investment in operational offshore wind assets and wider options. It will report on progress at Budget 2015.

Infrastructure investment

A day earlier, the Treasury's *National Infrastructure Plan* described some of the government's priorities for the development of Electricity Market Reform. It confirmed that the government would fulfil its intention of making interconnection eligible for the capacity market this year, and that negotiations would be opened with the developer of a proposed tidal lagoon in Swansea Bay, with a view to establishing whether it was an affordable option for the country. The Treasury also said that it had reached an agreement with NuGen with a view to providing support for its proposed Moorside nuclear power plant.

This year, at least for the energy sector, the Statement contained little information.

Government

Smart meters reach new installation high

The smart meter roll-out is continuing to advance at a significant pace, according to the latest government statistics. Published on 18 December, the statistics showed that in the third quarter of 2014, 700 smart meters and 15,300 advanced meters were installed in smaller non-domestic sites. This means that 18.9% of all smaller non-domestic sites operated by larger suppliers now have smart or advanced meters installed.

Separately on 11 December, the energy regulator Ofgem supported a recommendation, by a committee of MPs, that it should, along with the government, set out how it intends to minimise the cost of the roll-out and ensure that savings are passed on to end users. Ofgem said it would monitor measures to protect and empower consumers in the roll-out of the technology, but that costs would most effectively be reduced through increased competition in the market.

Government

Ofgem



Regulator alters contract renewal process

The energy regulator Ofgem is to standardise the micro-business contract renewal process as well as increase the amount of information in renewal letters. Micro business consumers are defined as those which: consumes less than 293,000 kWh of gas a year; consumes less than 100,000 kWh of electricity a year, or have fewer than ten employees and an annual turnover or annual balance sheet total not exceeding €2mn.

The changes, confirmed on 28 November, will amend the gas and electricity supply licences to require suppliers to allow micro-business consumers to give notice to terminate a contract no more than 30 days before a contract ends. Suppliers will also be required to provide information on current prices and annual consumption details on renewal letters. In terms of fixed-term contracts, the supplier must acknowledge a termination notice from a micro-business consumer within five working days of receipt, or as soon as practical after that.

The changes will be implemented from 30 April.

Ofgem

Government electricity market auction clears

The government has agreed to pay companies £19.40/kW under the capacity market programme to keep fossil fuel power plants available to meet peak electricity demand.

The capacity market is one of the key parts of the government's Electricity Market Reform package. The aim of the market is to ensure that there is sufficient electricity generation capacity available at all times to meet projected levels of future demand. To do this the government will provide a subsidy to power generators and end users in return for guaranteeing power generation capacity or demand reductions. To ensure this is provided at the lowest possible cost to consumers, an auction was run in which a range capacity providers could bid to provide this service in winter 2018-19.

The results of the auction were confirmed on 2 January. CCGT was the most successful technology, representing 45% of the capacity procured, followed by coal-fired plant and nuclear power. Energy and climate change secretary Ed Davey said that the outcome was "fantastic news" for bill-payers.

Government

Engineers analyse impact of blackouts

A significant power outage would have "severe economic consequences", but the likelihood of such an outage remains low, according to a new report from Royal Academy of Engineering (RAENG).

Counting the Cost: the Economic and Social Costs of Electricity Shortfalls in the UK, which was published on 27 November, examined the impact of a significant interruption to UK electricity supply. It said any such outage would have severe economic consequences – costing millions of pounds for an outage lasting up to two hours and billions of pounds for an outage lasting more than 12 hours. RAENG also outlined a number of measures, which it said could mitigate the impact and likelihood of outages. Most notably it said fully utilising demand-side response will help "reduce whole-economy costs by allowing industry to choose what to switch off and thus avoiding product damage". Other recommendations put forward included improving communications technology and increasing the use of social networks.

RAENG

E.ON in restructuring move

E.ON announced on 30 November that it is to restructure its business, spinning off some elements into a separate company.

E.ON will continue to focus on distribution networks, renewables and customer solutions whilst the new company will take responsibility for the global energy trading, conventional generation, exploration and production businesses. The company said the move will secure jobs and help drive innovation. E.ON SE CEO Johannes Teyssen said "the existing broad business model can no longer properly address these new challenges".

E.ON
