CATALYST ENERGY SOLUTIONS

Energy Element / December 2014

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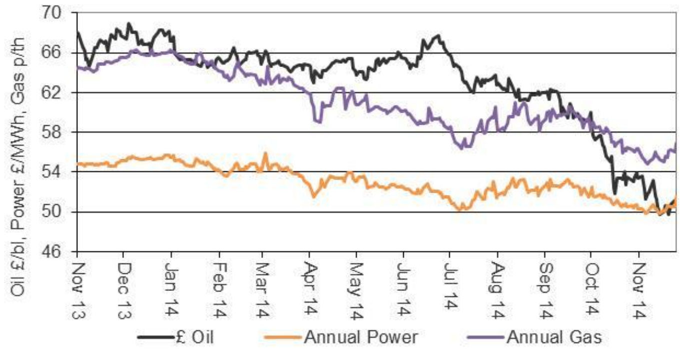
Low commodity prices continue to influence

Oil prices saw further declines through November as OPEC nations continued to keep supply volumes high – despite forecasts indicating lower demand for 2014-15. The resulting oversupply in the global market pulled oil prices to a new four-year low of $78.1/bl and filtered through into long-term UK gas and power prices.

Crude oil and annual wholesale gas and power prices



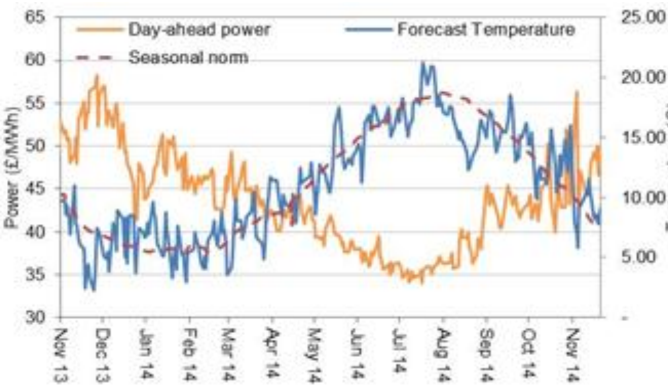
Long-term contracts follow commodities lower

Reductions in oil, as well as continued falls for coal, pulled long-term contracts down over the month and offset the impact of ongoing tensions between Russia and Ukraine.

The summer 15 gas contract dropped 2.1% to average 51.8p/th and ended the month 16% lower than levels seen at the start of 2014. Long-term power prices followed, with the summer 15 power contract losing 1.3% to average £47.9/MWh. Annual April 15 power dropped below £50/MWh for the first time in November.

In contrast to long-term contracts, UK spot prices were bullish due to the combined effects of tight supply margins and higher demand. Day-ahead gas rose 7.5% to average 54.2p/th and hit an eight-month high of 58.2p/th on 25 November as higher demand and unplanned outages for continental pipelines squeezed short-term supplies. Day-ahead power followed higher, and exhibited a £10/MWh range over the month as temperatures became increasingly volatile. The contract rose 7.1% to average £48.1/MWh and spot prices are now 65% above their summer lows.

Spot power prices and temperatures



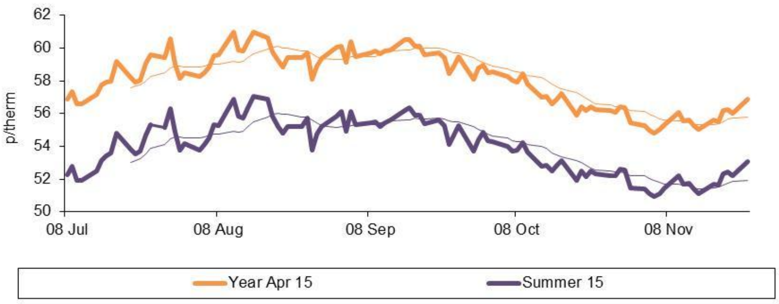
The month ahead: oil set to tumble while gas demand expected below average

Having fallen below $80/bl, several analysts are now forecasting that $70/bl Brent crude oil is a distinct possibility in the near future. Recently, ratings agency Moody's cut its oil price projections by $10/bl for 2015 to $80/bl. Prices in 2016 were cut by $5/bl to $85/bl. As the bearish outlook for oil continues, long-term gas and power prices in the UK will continue to be affected.

Gas supplies remain in a strong position for winter, putting further downward pressure on prices. The Rough gas storage facility, the UK's largest, is now 100% full. Supplies look to remain high for the rest of 2014, with the Met Office predicting warmer and windier weather through to the New Year. This is likely to suppress gas demand for heating and also raise wind output, reducing the need for gas in electricity generation.

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 prices saw a second consecutive month of falls as the continued slump in Brent crude oil prices influenced the market. The gas supply picture for the winter-ahead remains strong.

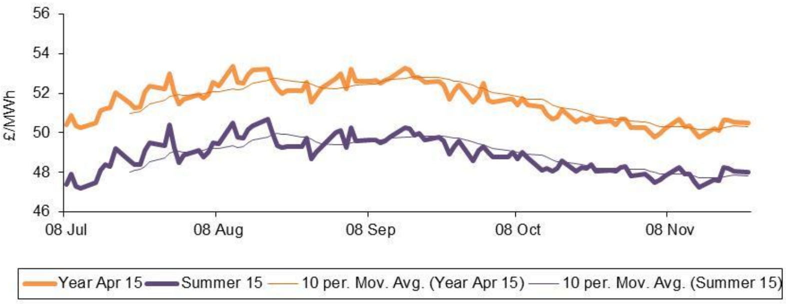
Summer 15 gas dropped 2.1% to average 51.8p/th. The annual April contract fell 2.6% to average 55.7p/th.

Spot gas prices

In contrast to long-term trends, the spot gas market climbed higher in November owing to increased gas demand and unplanned supply outages. Colder temperatures and higher levels of gas-fired generation pushed gas demand to eight-month highs.

Day-ahead gas rose 7.5%, averaging 54.2p/th, and the contract hit an eight-month high of 58.2p/th on 25 November.

Annual power prices



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

Summer 2015 power dropped 1.3% month-on-month to £47.9/MWh. Annual April 2015 power was down 1.5% to £50.3/MWh and dropped below £50/MWh for the first time since the contract began on 5 November.

Spot power prices

Like their gas counterparts, spot power prices continued recent rises in November. Tight supply margins continued over the short term and led to more expensive gas-fired generation on the grid.

Day-ahead power climbed 7.1% to average £48.1/MWh and hit an annual high of £56.3/MWh on 4 November.

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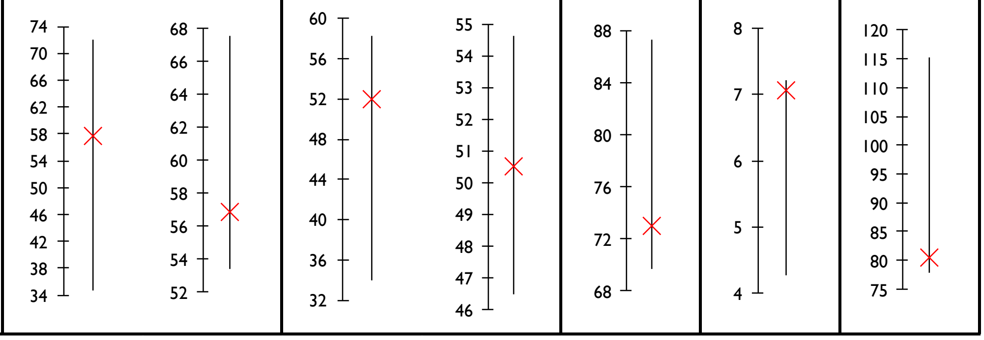
Key market indicators: 24/11/2014

	Gas (p/th)		Electricity (£/MWh)		Coal	Carbon	Brent crude
	Day-ahead	Year-ahead	Day-ahead	Year-ahead	($/t)	(€/t)	($/bl)
This month 24 Nov 14	57.65	56.88	52.00	50.50	73.00	7.06	80.40
Last month 24 Oct 14	50.65	56.26	42.85	50.55	73.00	6.38	86.12
Last year 25 Nov 13	69.65	65.20	56.85	54.55	82.35	4.40	108.90
Year-on-year % change	(17%)	(13%)	(9%)	(7%)	(11%)	60%	(26%)
Year high	71.95	67.53	58.30	54.63	87.30	7.22	115.20
Year low	34.70	53.38	34.00	46.48	69.65	4.27	77.91

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.

Government estimates business energy costs to rise

Energy policies are adding less than 1% to businesses' overall operating costs, the government has claimed.

Policies pushing up bills

In its *Estimated Impacts of Energy and Climate Change Policies on Energy Prices and Bills* report, published on 6 November, the government said that energy costs for medium-sized businesses were on average around 28% higher in 2014 as a result of policies.

By 2020 the report predicted that energy policies would add £450,000 (33%) to the average bill, which would stand at £1.8mn overall. By 2030, policies would add 39% (£610,000) to an average bill totalling £2.2mn. But the report maintained that energy costs typically formed a relatively low proportion of overall costs for the non-domestic sector as a whole – including across the manufacturing sector – averaging 3%. The report said this means that the increase of 28% in 2014 represents around a 1% increase in business operating costs.

Estimated average impact of policies on medium-sized business users – CRC participant

Real 2014 prices, £	2014	2020	2030 (See footnote)
Average gas bill without policies	420,000	460,000	550,000
Average gas bill with policies	480,000	450,000	560,000
Impact of policies on average gas bill[79]	60,000 15%	-10,000 -1%	10,000 2%
Average electricity bill without policies	820,000	900,000	1,020,000
Average electricity bill with policies	1,100,000	1,350,000	1,620,000
Impact of policies on average electricity bill	290,000 35%	450,000 50%	600,000 59%
Average energy bill without policies	**1,240,000**	**1,360,000**	**1,570,000**
Average energy bill with policies	**1,580,000**	**1,800,000**	**2,180,000**
Impact of policies on average energy (gas plus electricity) bill	**350,000 28%**	**450,000 33%**	**610,000 39%**

Source: government

Size matters

Small-sized businesses had, according to the report, lower overall energy bills than other business users, reflecting their lower energy consumption. But these consumers will typically pay higher costs per unit of energy than larger users, reflecting less potential for economies of scale on certain fixed elements of baseline costs. Given that small-sized businesses also do not participate in the Carbon Reduction Commitment (CRC) energy efficiency scheme, the overall impact of policies on bills is lower than for medium-sized business.

In 2014, energy bills for small businesses were about £8,000 (11%) higher as a consequence of policies, standing at £79,000 in total. By 2020, it is expected that bills for these users will reach an average of £89,000, 16% (£13,000) higher than would have been the case without policies. By 2030, the government expected policies would add 18% to the average energy bill of £105,000 for a small business.

For energy-intensive industries, policies were said to account for around 12% of delivered energy costs. The report said that policies had the potential to add 1% and 50% to gas and electricity bills respectively for these users by the end of the decade. But the government said it had introduced a number of measures to help mitigate the impact of its policies – and that factoring these into its projections would in fact see policies reduce the average gas bill by 2% (£2.4mn), while adding only 7% to the average electricity bill (£7.6mn).

Households to benefit

The report also evaluated the impact of policy costs on households. It claimed that, by 2020, policies would save households £92 (7%) on average, relative to a scenario in which they were not implemented. The interventions would, the report said, result in an average household bill of £1,319 by the end of the decade in today's money, as opposed to the £1,411 average bill that would otherwise have been the case. Policy costs on household energy bills were estimated to increase to an average of around £188 on dual fuel bills in 2020.

Between 2010-11 and 2012-13 large UK non-domestic electricity users saw their electricity costs rise from around £100/MWh year to nearly £140/MWh year. Given the government expects this trend to continue, the most effective way for businesses to cut energy costs is to increase energy efficiency.

Government

Electricity margins to be “tighter but manageable” this winter

The government and the electricity system operator National Grid agree that the UK electricity market is facing “unprecedented challenges” as levels of spare electricity capacity are expected to fall to seven-year lows. But they reassure that contingency plans are in place to ensure consumers do not face blackouts this winter.

Winter Outlook – key statistics

Gas		
	Non- storage supply capacity	488 mcm/d[4]
Cold Day Demand	Cold day storage deliverability	129 mcm/d
	Cold day demand	400 mcm/d
	Surplus	217 mcm/d
1 in 20 Demand	1 in 20 storage deliverability	129 mcm/d
	1 in 20 peak gas demand forecast	499 mcm/d
	Surplus	118 mcm/d
Electricity		
	Mid-winter generator capacity[6]	71.2 GW
ACS Demand	De-rated generation availability[7]	58.2 GW
	ACS demand	55.0 GW
	Reserve	0.9 GW
	Margin	2.3 GW
	% Margin	4.1%
	Loss of load expectation (Reliability Standard = 3 Hours)	1.6 hours
ACS Demand with New Balancing Services	Additional de-rated capacity	1.1 GW
	% Margin	6.1%
	Loss of load expectation (Reliability Standard = 3 Hours)	0.6 hours

Source: National Grid

Better Balancing

In its *Winter Outlook 2014-15* report, which was published 28 October, the electricity system operator said planned generator closures and the effect of breakdowns could result in electricity capacity margins falling to their lowest levels since 2006-07 this winter.

The capacity margin is the proportion by which the total available power generation exceeds the maximum expected level of electricity demand, at the time at which that demand occurs. This margin is important as an insurance against unexpected losses of power or surges in demand. National Grid said it expects the average cold spell margin to be 4.1%. The fall is attributed to planned generator closures, breakdowns and new plant not coming online as quickly as had been anticipated. Despite this narrowing margin the system operator expects this winter to stay within the loss of load expectation Reliability Standard at 1.6 hours.

National Grid acknowledged that uncertainty remains regarding further plant closures and the planned maintenance at key power stations. But it assured that the market was prepared for this challenge. Director of market operation Cordi O’Hara said: “as system operator, we have taken the sensible precaution to secure additional tools to bolster our response to tighter margins”.

Gas supply stays strong

Gas is said to be in a strong position this winter, with supplies, storage and network capacity in excess of anticipated maximum demand. But the report noted that enduring tensions between Russia and Ukraine could lead to curtailment of gas supplies into Europe, potentially impacting UK imports. It concluded that under average winter conditions gas demand under both low and high levels of disruption can be met through increased LNG imports, but said that this was likely to require significantly higher prices than the current winter forward prices. Only the most extreme scenario with cold winter conditions and full disruption of gas from Russia would trigger a need for further market actions.

Challenges ahead

The same day, a separate report by the government and Ofgem assured that the market “continues to function well with sufficient capacity and the ability to deliver to meet demand”. But it cautioned that security of supply can be significantly affected by unforeseeable factors. This risk, it said, when combined with plant closures, had left the GB market facing “unprecedented challenges”. But the report said that there had been a significant policy response and that both the gas and power markets had the ability to deliver to meet demand both this winter and in the years to come.

Although National Grid, Ofgem and the government do not expect blackouts this winter, increases in demand or problems with supplies in electricity or gas could result in higher wholesale prices as the colder weather sets in.

National Grid DECC

Labour to up energy efficiency for business to cut costs

The Labour Party has released a green paper detailing the policies it would enact, if in government, to increase the energy efficiency of Britain's homes and businesses.

Certainty and simplicity

In the *An End to Cold Homes: One Nation Labour's Plans for Energy Efficiency* paper, which was published on 10 November, the party noted recent estimates from business lobbyist the CBI that suggested energy efficiency measures could save businesses £1.6bn. But it said poor awareness, misaligned incentives and a lack of financing meant that this energy-saving opportunity could be missed.

Labour said, if elected to government at next May's General Election, it would introduce minimum energy performance standards to provide "a powerful signal to improve the worst-performing and most wasteful non-domestic buildings". It would also act to streamline existing regulations and implement a long-term strategy to support investment in energy efficiency in non-domestic buildings.

Loans for small businesses

The paper also criticised the government's Green Deal energy efficiency scheme, stating that its "disappointing uptake" was a consequence of its high interest rates. As such the party pledged, if elected to government next year, to reduce the interest rate to 0%. Labour also said it would "urgently explore" how to improve the pay-as-you-save loan model for small businesses looking to invest in energy efficient technologies as a means to boost the take up of insulation measures.

The party pledged to "set out a clear path over the next parliament and beyond for further reductions in central government greenhouse gas emissions, and for the role of local government and other parts of the public sector to reduce their energy use.

Views on the plans are being sought until 22 December.

This manifesto reiterates party leader Ed Miliband's pledge to ensure energy efficiency is designated as a national infrastructure priority

Labour

CBI cautions that politics risks progress

The government must ensure that the UK has an infrastructure strategy fit for the future, a report by the CBI has said.

Taking the Long View: A New Approach to Infrastructure, which was released on 3 November, found over 60% of businesses expect the UK's infrastructure to worsen over the next five years. With generation capacity margins expected to fall this winter the CBI said: "there is still a very real perception that we are experiencing an energy crisis." The solution, according to the organisation, is to "attract sustained investment in a balanced and diverse energy mix". Although 95% of those surveyed said that the government's energy policies are likely to facilitate investment in energy, when asked what stands in the way of progress, 96% said political intervention is part of the problem, rather than part of the solution.

To increase confidence in the sector, the report urged the government to facilitate the creation of an independent body to assess the UK's long-term infrastructure needs – a possibility that 89% of the businesses surveyed backed. The CBI also called for increased focus on energy efficiency, arguing that energy saving had been "overlooked" for too long and needed to move up the political agenda. It further said the government must ensure that all aspects of the Electricity Market Reform package are fully implemented.

CBI

Qualification deadline for energy-saving scheme approaches

From next year around 10,000 large businesses will be required to calculate their annual energy use under the government's Energy Saving Opportunities Scheme (ESOS).

The first deadline under ESOS, which aims to increase energy efficiency in the non-domestic sector by highlighting quick-wins for businesses, is on 31 December 2014. By this date businesses must determine whether they qualify for the scheme and, if necessary, contact the scheme's administrator (the Environment Agency) between 1 January 2015 and 5 December 2015, confirming compliance. Large organisations that employ at least 250 people, or have an annual turnover of above £40mn and a balance sheet above around £34mn are required to participate.

Whilst the scheme's administrator – the Environment Agency – has said it will approach enforcement of ESOS with a "light touch", there is provision for enforcement notices and civil penalties to be issued in cases of non-compliance.

Government

Relocated solar projects to keep FiT

Businesses and factories could be allowed to move solar photovoltaic (PV) installations between buildings without losing the feed-in tariff (FiT) payments, under new government proposals.

A consultation issued by the government on 25 November said that the current arrangements, in which a FiT installation becomes ineligible for support if it is moved, was acting as a barrier to the development of building-mounted solar PV. To address these concerns the government has set out plans to allow solar PV installations of 50kW and above to be moved without loss of FiT payments. For an installation to qualify it must remain the same size, continue to be classed as a building-mounted system, t secure planning permission and have a grid connection agreement before the move.

Junior energy minister Amber Rudd said: "There's potential for significant growth in this area so it's vital that we remove the barriers which prevent businesses from benefiting."

Views on the plans are invited until 2 January 2015.

Government

Smart meter DCC programme faces fresh delays

The government's plan to roll-out smart energy meters to homes and small businesses across the UK is at risk of further delays, after the Data and Communications Company (DCC) warned it would not be ready in time.

The DCC, which is responsible for providing communication services for the new devices, launched a consultation on 19 November on proposals to delay its planned go-live date of the third quarter of 2015, having concluded that there is "no feasible way to maintain the [current] timescales".

Two plans are proposed: one would see DCC live in July 2016, and the other would add a further three months to this timescale. The changes could add up to £90mn to the cost of the roll-out.

Views are invited until 16 December.

DCC

Trade association urges renewed focus on energy security

The Energy & Utilities Alliance (EUA) has set out a raft of measures that it says the next government should implement in order to improve the UK's security of energy supply.

The organisation launched on 17 November its manifesto for the 2015 election, detailing a 21-point energy plan for the incoming government. Amongst other proposals, the paper said that policy-makers should review the case for strategic investment in long-term gas storage, and should seek to extend the gas grid by a minimum of 20,000 properties per year. The organisation also said that the next government must commit to completing the smart meter roll-out by 2020.

EUA