# Energy Element / May 2016

CATALYST ENERGY SOLUTIONS

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## Power prices rise following gains in gas and commodities

There was a general bullish trend in the energy markets during April with most gas and power contracts experiencing gains.

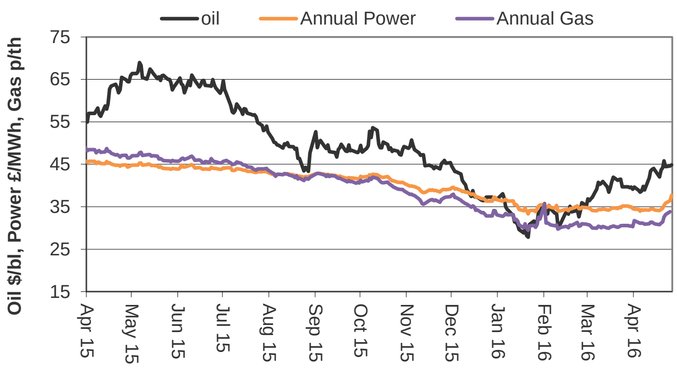
Seasonal gas prices moved away from the seven-year lows of last month, gaining 2.9% on average, as all contracts improved. Winter 16 gained 0.7% to 33.5p/th. Summer 17 lifted 1.3% to 30.5p/th. Winter 18 saw the largest increase, up 4.4% to 37.2p/th. Prices were supported by rising oil prices. Day-ahead gas moved 2.1% lower to average 29.0p/th as warmer weather reduced demand.

Seasonal power contracts all improved during April. Winter 16 power followed its gas counterpart higher, lifting 0.7% to a four-month high of £37.9/MWh, amid tightening supply margins. Summer 17 power rose 2.9% to £36.6/MWh. Summer 18 saw the biggest gains, climbing 5.9% to £31.8/MWh. Day-ahead power followed its gas counterpart lower, losing 1.2% to average £33.9/MWh.

### Oil prices gain as non-OPEC production falls

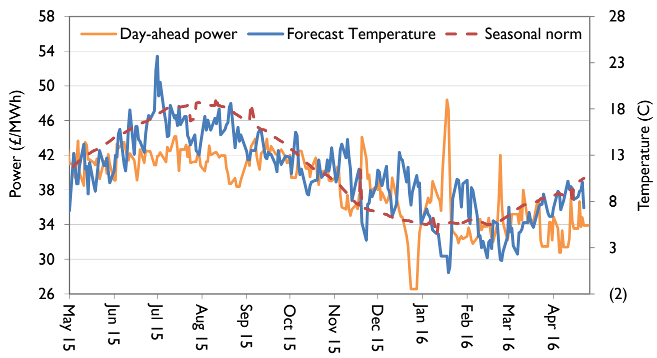
The cost of Brent crude oil increased 7.3% to average $42.5/bl in April, reaching a five-month high of $46.8/bl on 27 April. The price of oil rose despite the failed supply freeze talks between OPEC producers and Russia on 17 April. A fall in non-OPEC production, particularly in the US, helped to support prices. Non-OPEC production is currently at a 25-year low.

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




API 2 coal grew 6.4% to average $43.3/t. Coal markets remained oversupplied throughout April. However, a number of high profile bankruptcies, most notably Peabody (the world's largest private coal producer), has pressured prices higher as production levels dropped. Forecasters at ING predict that API 2 coal could rise to $60/t by the end of the year.

**Spot power prices and temperatures**




EU ETS carbon jumped 13.6% to average €5.6/t, hitting a near three-and-a-half month high of €6.9/t on 27 April. However, despite the large rise, prices are 21.4% lower than last year's levels (€7.1/t). Researchers from think-tanks Mercator Research Institute, the Potsdam Institute, and the Berlin Technical University recommended the EU imposes a minimum price to create more certainty for investors.

### The month ahead: tightening supply oil margins

Non-OPEC production is forecast to keep falling in the months ahead. The International Energy Agency suggests that the market will move towards re-balancing by the second half of this year. The price of oil may continue to rise in response.

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.

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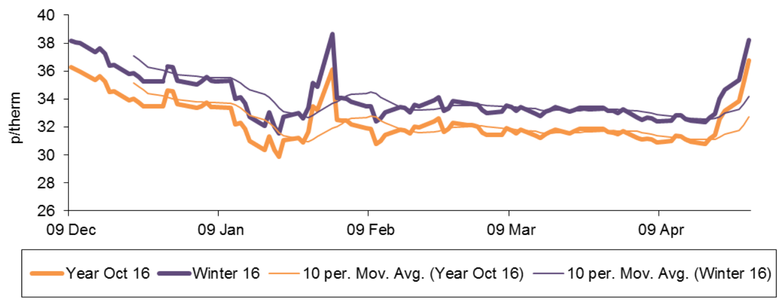
## Annual gas prices

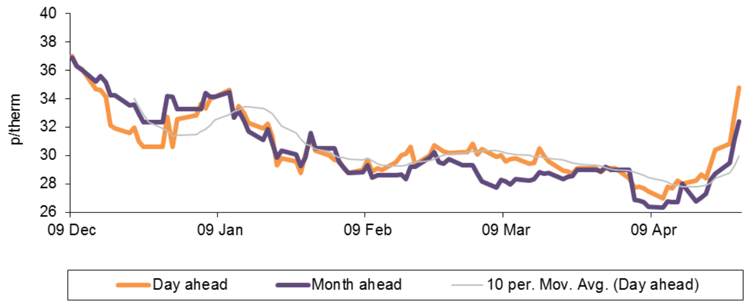



All seasonal gas prices increased during April, following a rise in oil prices.

The annual October 16 gas contract gained 1.0% to average 32.0p/th. Winter 16 was 0.7% higher, averaging 33.5p/th. Summer 17 gained 1.3% to 30.5p/th.

Seasonal gas contracts have followed oil prices higher, moving away from the seven-year lows seen last month.

## Spot gas prices

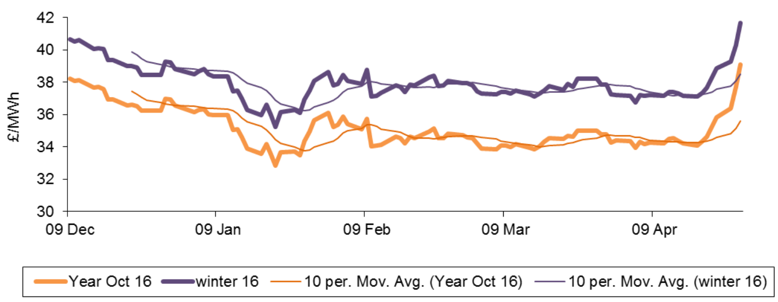



Day-ahead gas moved 2.1% lower during May to average 29.0p/th, hitting a 7 year low of 27.0p/th on 11 April.

Reduced demand amid milder weather pressured prices lower. Prices did move upwards towards the end of the month as a number of pipeline outages reduced supply, but this was not enough to raise the contract on average.

The month-ahead gained 0.7% to average 28.8p/th.

## Annual power prices

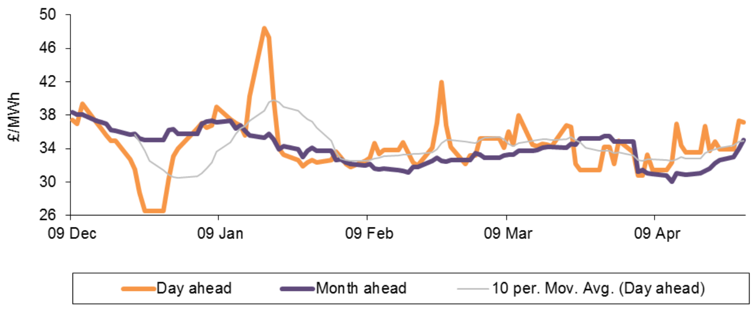



The annual October 16 baseload power contract improved 1.8% to average £35.0/MWh following both gas and commodity markets higher.

Winter 16 power rose 0.7% to £37.9/MWh as tighter capacity margins continued to push prices higher. Summer 17 lifted 2.9% to £36.6/MWh.

The summer 18 contract experienced the largest gains, up 5.9% to average £31.8/MWh.

## Spot power prices




Day-ahead power followed its gas counterpart lower, losing 1.2% to average £33.9/MWh.

Milder weather at the start of the month helped to reduce demand, which, in turn, supressed power prices.

The month-ahead contract grew 0.4% to average £31.8/MWh during April.

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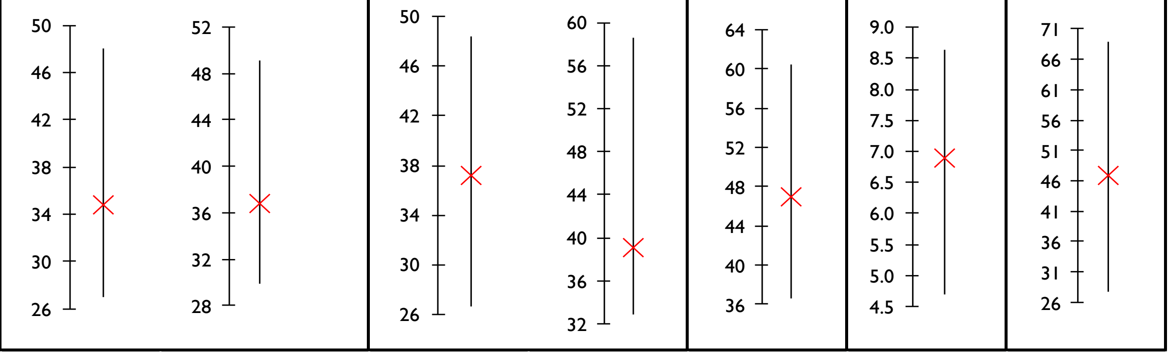
## Key market indicators: 27/04/2016

| | | Gas (p/th) | | Electricity (£/MWh) | | Coal | Carbon | Brent crude |
|---|---|---|---|---|---|---|---|---|
| | | Day-ahead | Year-ahead | Day-ahead | Year-ahead | ($/t) | (€/t) | ($/bl) |
| This month | 27 Apr 16 | 34.80 | 36.75 | 37.15 | 39.08 | 47.00 | 6.89 | 46.78 |
| Last month | 29 Mar 16 | 28.85 | 31.64 | 34.24 | 34.78 | 40.80 | 4.78 | 39.47 |
| Last year | 28 Apr 15 | 44.75 | 47.74 | 42.55 | 45.30 | 57.15 | 7.18 | 64.50 |
| Year-on-year % change | | (22%) | (23%) | (13%) | (14%) | (18%) | (4%) | (27%) |
| Year high | | 48.00 | 49.17 | 48.40 | 58.65 | 60.50 | 8.64 | 68.94 |
| 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.

# Businesses to help balance energy system this summer

**The operator of Britain’s electricity system has said that firms will be given the opportunity to assist in ensuring supply matches demand this summer.**

In its annual *Summer Outlook* report, issued on 7 April, National Grid explained that it was becoming increasingly challenging to operate the system during periods when demand from consumers was low. This was due in part to the rise of intermittent forms of generation, such as wind and - especially in the summer - solar power.

## Demand-side measures

In order to help address this challenge, National Grid has been developing so called “demand-side response” measures, as part of which businesses can offer to vary their electricity demand in return for payments. An example of this is National Grid’s new Demand Turn-Up service: this incentivises participants with energy-intensive processes, like pumping and heating, to shift them to off-peak times.

By increasing demand when there is too much electricity coming onto the grid, this service helps to match supply and demand on the system.

National Grid also said that it might be necessary to ask intermittent generators to cut their electricity output in order to prevent excessive levels of power coming onto the grid.

## Lower demand

Peak electricity demand on the system over this summer is forecast to be 35.7GW - down from 37.5GW last year and the lowest level on record - while the minimum demand is projected at 18.1GW, down from 18.4GW in 2015.

This reduced demand is largely driven by the increase in “embedded generation” – projects that are not connected to the national power grid. The use of more efficient appliances in homes and businesses is also an important factor.

Based on forward pricing, National Grid said that the UK would be a net importer of electricity through its interconnectors this summer.

**The report highlights some of the major changes occurring in the electricity system, not least the increasing importance of services that are able to offer forms of flexibility.**

National Grid

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# Suppliers get six more months to install advanced meters

The government had decided to extend the window during which energy suppliers can continue to install advanced meters in business properties.

Last March, the government consulted on ending the advanced meter exception, but has now explained that it will be extended by six months.

Suppliers are required to offer all smaller non-domestic customers a smart meter by 2020. These meters offer a range of advanced features that will increase the accuracy of billing - as well as intelligent connective features. Advanced meters lack some of these more sophisticated features, but do offer improved accuracy.

The government had earlier suggested that allowing the exception to expire this April would force suppliers to roll-out the benefits of smart meters to customers more quickly. However, a clear majority of respondents to its consultation disagreed; they argued that, as there were too few smart meters available to meet the 2020 target, this would in fact delay some of the benefits to consumers.

The exception is now set to end on 28 April 2017 for larger suppliers, and 17 August 2017 for smaller ones.

Government

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## UK could save billions in integrated EU electricity market

**The UK will share in savings of up to €40bn a year by 2030 if the EU's electricity market is fully integrated, an assessment by the Treasury has found.**

Published on 18 April, the report said that the integrated market would allow the free flow of energy across the continent, removing regulatory and technical barriers. This would increase the EU's energy security, sustainability and competitiveness - potentially lowering consumers' bills in the process.

### EU benefits

The government estimated that a fully-fledged energy union in both the gas and electricity markets could save £50bn a year across the EU by 2030.

The report also highlighted the ability of the UK government to offer significant domestic support - including exempting energy-intensive industries from renewables policy costs - within the existing framework of EU legislation.

### Domestic goals

The UK would, the report argued, see few benefits from leaving the EU. Some analysts have suggested that Brexit could reduce the cost of green policies; however, the Treasury noted that the UK had its own legislation – namely the *Climate Change Act 2008* – committing it to ambitious emissions reduction goals, and this would not be impacted by a vote to leave the EU.

At the launch of the paper, energy and climate change secretary Amber Rudd said: "As the document today explains, one of the most valuable benefits of EU membership for Britain is the single market […] It matters because 80% of our GDP comes from the services sector, and 80% of our workforce are employed in the services sector."

**The Brexit issue can be expected to dominate the debate about the UK energy sector over the next couple of months. Analysts argue that a vote to leave the EU would have uncertain consequences.**

Treasury

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## Small businesses concerned by energy market reform proposals

The Federation of Small Businesses (FSB) has said it is "bitterly disappointed" that an investigation into the energy market appears to have opted against further regulation of third party intermediaries (TPI).

The FSB published its response, on 7 April, to the provisional remedies emerging from the Competition and Markets Authority's investigation into the energy sector. The organisation said that a properly-regulated TPI market could be of significant benefit to microbusinesses, but that recent malpractice had resulted in declining confidence in these intermediaries.

The government's competition watchdog had found that microbusinesses were, on average, overpaying by around £230mn/ year between 2007-14, as a result of a lack of consumer engagement. Among the measures that it initially proposed to address this, the CMA suggested that a code of practice could be established to boost businesses' confidence in energy brokers. However, in the investigation's provisional remedies, this idea was dropped.

However, the FSB welcomed a number of the CMA's other recommendations - particularly its call for the publication of additional tariff information and the scrapping of auto-rollover tariffs. The response argued that, if all suppliers had to publicise the tariffs they have arranged with other businesses, SMEs could make much more informed decisions in a sector that generally lacked transparency.

The CMA's final report is due to be issued in June.

CMA

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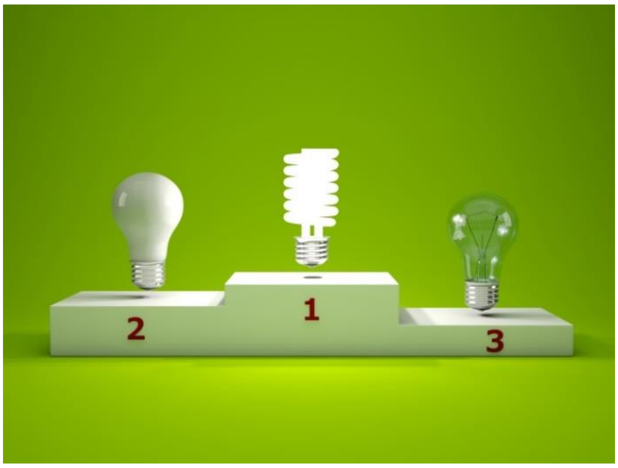
# Energy-saving measures could cut bills by a fifth

**Businesses taking advantage of a new government energy initiative could save 20% on their bills, research by the Carbon Trust has shown.**

### Bill savings

The company published analysis on 31 March of the work that it had undertaken with businesses on the new Energy Savings Opportunity Scheme (ESOS). It found that, on average, businesses could save £360,000 off an annual energy spend of £1.8mn by implementing the energy-saving measures identified by ESOS.




The scheme is compulsory for all businesses with a turnover of above €50mn or over 250 staff. They are required to assess their energy use every four years, identify possible improvements, and submit an assessment to the Environment Agency.

The deadline for the first assessment was last December, though the Environment Agency added a grace period during which it said it would not expect to pursue enforcement measures.

### Energy management

The Carbon Trust said that almost every company with which it had worked could do more to improve their energy management. More than 40% of the organisations that achieved compliance under ESOS had estimated their usage, showing a “clear deficiency in the measurement practices that underpin good management of energy”. Furthermore, less than 4% were meeting international best practice through the ISO50001 energy management standard.

Of the roughly 9,000 organisations eligible for ESOS, the Carbon Trust found that a “significant” number were still not compliant - even under the extended grace period. If they wish to avoid enforcement action, their only option will be to achieve certification under ISO 50001.

The most popular recommendations for manufacturing, construction and office-based companies were energy management, lighting, heating and metering improvements. The Carbon Trust was concerned that many firms were still not taking advantage of well-established technologies such as LED lighting.

**The ESOS scheme is not the only government policy of late to have been met with a less-than-enthusiastic response from its intended beneficiaries. But these figures boost the case for firms to take action.**

Carbon Trust

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# Pubs concerned about energy tax reforms

Policy changes announced in the Budget could mean pubs see their annual energy bills increase by about £900, according to an industry group.

The British Beer & Pubs Association (BBPA) wrote to energy secretary Amber Rudd on 21 April to raise concerns about planned changes to the Carbon Reduction Commitment (CRC) and Climate Change Levy (CCL). These, the BBPA said, would result in additional costs for firms in the sector of around £44mn overall.

The CRC, which is a mandatory carbon reporting and pricing scheme for large organisations, is set to be abolished as it is thought to impose too great an administrative burden on businesses. The lost revenue to the Treasury will be recovered through increases to the Climate Change Levy (CCL) rates, which are a tax paid on the electricity and gas consumed by industrial, commercial, agricultural and public services firms.

BBPA chief executive Brigid Simmonds said: “There are many changes coming down the tracks. It is important that both large and small businesses are given clarity and a fair deal.”

BBPA

## Government increases ambition on interconnectors

The government has bolstered its plans for ensuring Britain's energy security by almost doubling the amount of interconnector capacity it would like to see installed over the coming years.

The raised ambitions were confirmed on 13 April, when the government published its response to a report on *Smart Power* recently published by the National Infrastructure Commission (NIC). The NIC's report outlined the benefits, to GB consumers, of increasing existing levels of interconnection, which are relatively low by European standards.

The government said it now supported the market delivery of at least 9GW of additional interconnection capacity - up from the 5GW for which it had previously expressed support. It said its assessment of the level of beneficial interconnection might rise further as more potential projects were assessed later this year.

The government also backed the NIC's call for a review of the regulatory framework for energy storage: it will publish a call for evidence on a smart systems route map shortly, and will set out proposals for reform by next spring.

Treasury

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## Energy companies to explore opportunities in water sector

Energy suppliers could seek to move into the water supply business when the market opens for non-domestic customers in April 2017, an industry expert has said.

Speaking on 19 April, the CEO of Market Operator Services (MOS) Ben Jeffs highlighted the “multi-utility opportunity” available to energy companies. MOS is the body that has been established to oversee the extension of retail competition into the water sector.

At present, only the very largest organisations in England and Wales are able to choose their water supplier. However, since 2008, all Scottish businesses have benefited from a competitive water market, and those firms south of the border will follow suit next year.

No link

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## New green business fund announced

The Carbon Trust has introduced a fund to provide energy efficiency grants to smaller businesses.

Funding of £7mn will be made available on a first-come, first-served basis, and this is expected to help between 1,000-2,000 companies. The Green Business Fund will seek to offer more than purely capital support, and also encompasses cost-savings assessments, implementation advice and energy efficiency training for staff.

Eligible companies can apply for a capital contribution to cover up to 15% of an energy efficiency project or equipment replacement cost, up to a maximum of £10,000.

Carbon Trust

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## Back-billing reforms save 7% on microbusiness bills

The voluntary imposition, by energy suppliers, of limits on energy back-billing has saved microbusiness customers 7% on their energy spend, according to Ofgem.

The energy regulator published an open letter on 31 March detailing the effectiveness of suppliers' commitments to reduce the period of time over which they back-bill customers. Specifically, suppliers have limited the period for which they will back-bill to one year when the fault is their own - which applied to 94% of all back-billing cases.

Ofgem said it had no intention of regulating back-billing in the immediate future given the success of these voluntary commitments. However, it did express an expectation that suppliers would continue to improve their performance, and did not rule out restricting back-billing periods in the future. It also said it planned to monitor and publish non-domestic suppliers' back-billing policies in order to improve transparency.

Ofgem

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