



### Highlights

- Longer-term energy prices started to decline from their two-year highs as Q1 progressed, although concerns over supply during future winters continued to support gas and power prices.
- The quarterly average price for the ICIS Power Index (IPI) over Q1 2017 was up by 32% year on year, while average gas prices have risen by 42%.
- Supply concerns have eased after system performance this winter, and more renewable energy production could pressure long-term electricity prices in particular over the summer.

### Price trends

Long-term UK power and gas prices fell over Q1 2017, as concerns over supply shortfalls started to ease for the current winter, which in turn helped

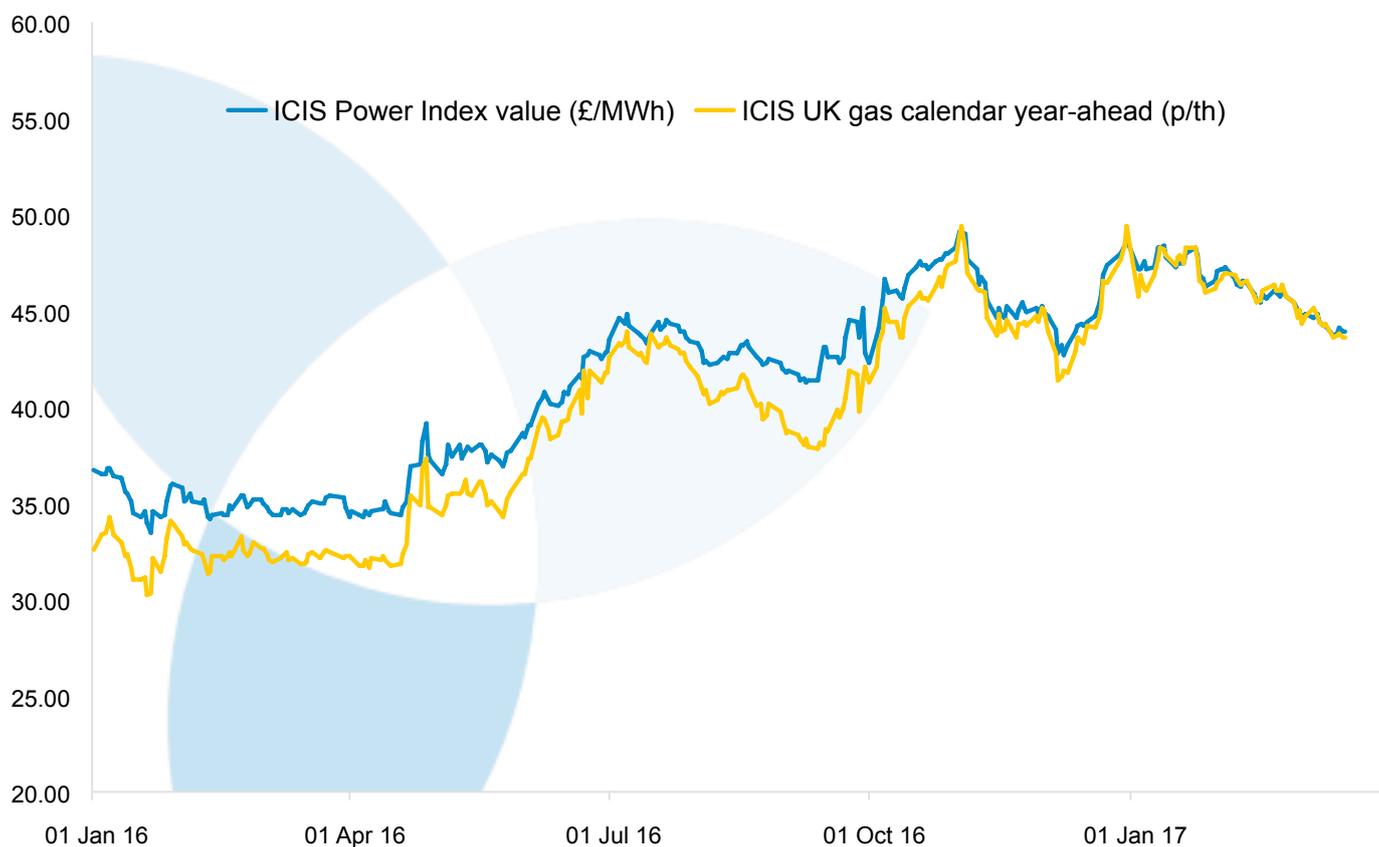
market participants to relax over supply prospects for winter 2017.

However, energy prices remained higher year on year, because of the scale of the rises seen from Q2 to Q4 last year. Back in Q1 2016, power prices averaged nine-year lows, while gas prices averaged their cheapest in a decade.

So, while the average price for the ICIS Power Index (IPI) over Q1 was up by 32% from the same period in 2016 at £46.192/MWh, power prices have recovered to similar levels seen two years ago.

The same movement on the value of gas to be delivered over the next calendar year was even more pronounced, rising 42% to 46.071p/th, but again, levels are now similar to 2015.

This same phenomenon was seen again in looking at daily values of the IPI and the year-ahead gas contract.





The final Q1 value, on 31st March 2017, was £45.283/MWh, a rise of 34% from 31 March 2016. Meanwhile the value of gas delivered over the next calendar year rose by 34% to finish at 43.175 pence per therm (p/th).

The rise reflects the market's expectations of higher wholesale prices to be delivered in 2018.

During the quarter, the highest price recorded was £48.368/MWh – close to the highs seen during Q4 2016, but not quite surpassing them.

Daily price movements can be quite pronounced, with the values of long-term contracts on which the IPI is based changing more than 2% day on day, up to £1.40/MWh. So the average price for a daily index over the quarter gives a more stable feel for the long-term trend.

### Price drivers

While supply shortage concerns whirled late in Q4 2016 ahead of January as the coldest month, in the event, both gas and power systems coped under the strain of winter demand.

From February onwards as the weather warmed up, concerns that had been propping up prices for long-term delivery, fearing very high short-term prices in the next winter, eased to the point that participants were more comfortable selling gas and power volumes for delivery the following year, bringing long-term prices down.

### Gas availability

Despite the highest demand for winter gas in the UK in four years and gas stocks at their lowest point since the UK gas market was liberalised, the system coped.

Higher short-term UK gas prices helped to attract gas imports from other markets via the Interconnector pipeline with Zeebrugge in Belgium, and the UK made up the shortfall by importing record gas volumes.

Short-term prices spiked when temperatures dropped towards the end of February, but supply continued to meet the demand.

The most significant factor was supplies from Norway, which ramped up by 22% year on year, reaching 22bcm to meet almost half of the UK's winter demand of 51 billion cubic metres (bcm).

The interconnector with the Zeebrugge gas hub in Belgium also played a key role for UK gas supply flexibility. For the last two winters, the UK has exported, with net export volumes reaching 2.7bcm in 2015/16. However, this winter, the UK was a net importer, receiving 1.7bcm.

In fact, the total additional gas from this swing from exports to imports was equivalent to 9% of the UK's total winter demand.

Exports from the Netherlands via the BBL pipeline over the winter period fell 13% year on year as long-term capacity contracts expired and costs went up, but as the 2.9bcm of net imports was smaller, the impact was less.

Finally, storage volumes continued to meet at least some of the UK's demand, despite setbacks.

Technical issues at Britain's largest long-term gas storage facility, Rough, have prevented gas injections to the facility since mid-2016, leaving stocks low. The facility accounts for around three-quarters of the UK's total storage capacity, and met around 10% of peak demand in the coldest months in 2015.

However, what was available was possible to withdraw, and other smaller gas storage sites almost doubled their activity, injecting at times of low demand such as weekends and the Christmas holiday period, ready to withdraw over higher periods. Net withdrawals rose 89% to 659mcm over the winter.

By the end of Q1, gas storage across Britain was 24% full, hosting 1,085 mcm, back to average seasonal levels.



## LNG

One indicator of a more relaxed supply situation in the UK than expected was a fall in the number of liquefied natural gas (LNG) cargoes coming to Britain, with the most pronounced fall in supply from Qatar.

UK gas prices were not high enough to justify LNG deliveries in the first quarter, although gas prices in southern Europe rose to a global premium, which attracted more volumes.

Cargoes to the UK halved year on year according to ICIS' analytics platform LNG Edge – during Q1 2017, 11 cargoes arrived, eight of these from Qatar, compared with 23 cargoes over the same period a year earlier, of which 20 originated from Qatar.

Instead, flexible Qatari cargoes were attracted by higher prices in Asia, with nuclear outages in South Korea, as well as an increase in supply commitments to supplying Pakistan and Egypt.

## Power

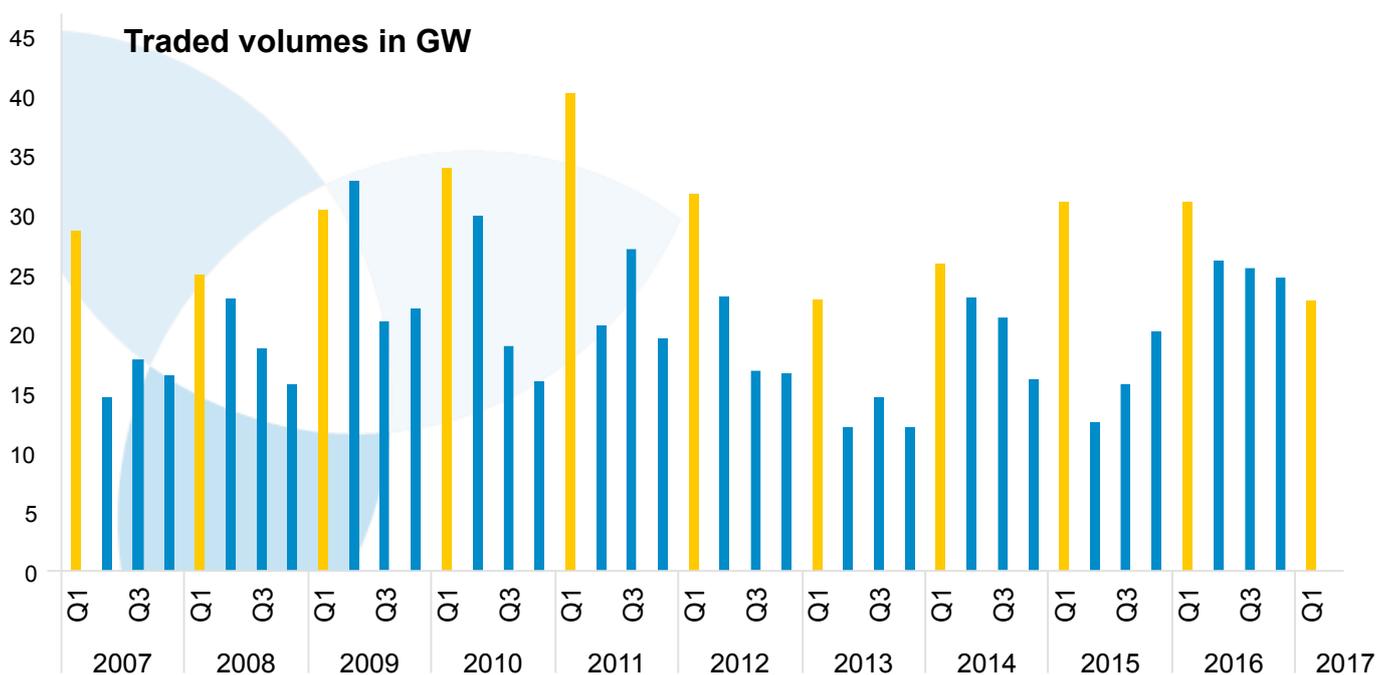
Power availability was also shaping up to be cause for alarm, again with very tight supply margins and some forecast shortfalls during November. But once again, the additional measures against shortages helped to maintain the system.

Part of the higher demand for gas during Q1 was driven by power generation – gas continues to be the more profitable form of power generation over coal, and the proportion of gas-fired production has outstripped coal for two years now.

Gas-fired generation met 42% of demand over Q1, data from market operator Elexon shows, and remained profitable over the same period.

As a result, UK power generation during Q1 continued to be heavily influenced by the downward move in gas prices in particular.

Short-term power prices during Q4 were strongly influenced by French nuclear outages, with safety investigations prolonging maintenance beyond the expected timeframe, causing higher prices in France and cutting the usual imports to the UK.





The situation continued into January, but the French nuclear safety authority ASN approved the last nuclear unit for restart in late February, and more supply brought prices lower. In a further boost to power availability in the UK, the IFA interconnector with France returned from half to full 2GW capacity at the start of March, adding another 2% to supply available to meet the UK's peak demand. The 500MW East-West interconnector with Ireland returned from an unplanned outage in late December, adding an additional source for UK supply.

But concerns over tight supply margins into next winter remain, despite the emergency capacity market held in February. The 'reverse auction', bidding for the lowest additional premium, cleared at £6.95 per kW per year for winter 2017, compared with £18.00/kW/year for winter 2019.

While 54GW of installed capacity qualified, the low price caused many market participants to doubt whether the premium was enough to tempt generation previously removed from the market because of low profit margins to return, keeping the supply margin tight and encouraging the risk premium for wholesale prices to remain in place.

## Liquidity

With winter supply concerns making for volatility on short-term contracts during Q4 and early into Q1, trading on the longer-term contracts making up the IPI was also boosted as traders rushed to adjust positions in a fast-moving market. However, as worries over short-term availability faded in February and March, there was less volume traded year on year.

The total volume traded for delivery over the next two seasons was 22.7GW in Q1 2017, down by 27% year on year.

## Outlook

Key factors affecting the values of long-term contracts making up the IPI will be fuel prices, including gas but also coal.

- Market expectations for long-term gas prices remain bearish, given the system's ability to cope with strongly curtailed storage levels. However, technical issues at the Rough storage facility remain. British energy regulator Ofgem in March approved a request from Centrica Storage Limited not to sell storage capacity at Rough for the next year from April 2017, although shorter-term storage may be made available later. The underlying concern is for the usual build in stocks over the summer in preparation for higher winter demand – this year there is no ability for market participants to build stocks at Rough until at least the end of June, in contrast to 2016, when gas had already been injected into storage during spring.

Otherwise, domestic production looks to remain flat with the start-up of new fields offsetting declining mature fields. However, the UK remains a net importer, and Norwegian flows continuing to play a key role into next winter.

- The outlook for the LNG market is more bearish, with new production at Gorgon in Australia and Sabine Pass in the US now ramping up. Global gas and LNG prices are now almost at parity. ICIS expects more Qatari cargoes to come to Europe in April as East Asian demand falls and there is more supply in the Atlantic Basin as a whole. This will mean an increase in deliveries to the UK and also to France and Belgium, which could support injections into gas storage sites early in the summer.
- For power, influences include the possibility of more renewable capacity over the summer, particularly as many flexible plants choose the summer to perform maintenance as prices are lower. Despite suggestions of low wind levels for a winter quarter, wind generation is accounting for more of the UK's generation, meeting more than 10% of the UK's power demand in Q1 2017 for the first time ever.

Solar is also expected to increase to more record highs, although one of the UK's most



popular subsidy schemes, the Renewables Obligation, is being phased out in favour of contracts for difference, while subsidies for smaller scale assets have been cut, which has led to fewer installations over the last year while producers adjust.

Ultimately, more renewable energy is likely to continue to pressure long-term prices lower, although longer-term concerns remain over whether the capacity mechanism has incentivised significant new gas-fired capacity to add to the UK's generation mix, which is helping to keep a premium on longer-term contracts in the UK.

- Macroeconomic influences include the oil price, currently trading in a relatively tight range as the market eyes whether the agreement that was struck between Organisation of the Petroleum Exporting Countries (OPEC) and independent producers to limit production and reduce oversupply actually holds.
- Global coal prices, another potential driver for UK power, are at multi-year highs, after Chinese attempts to cut overcapacity went too far over the winter. These have also been influenced by oil in recent months, and sentiment remains broadly bearish - in spite of price spikes after recent floods in Australia - as China has signalled a relaxation in its earlier policy.



### About the IPI

The ICIS Power Index (IPI) gives homes and businesses an insight into price trends on the UK wholesale electricity market.

Robust energy markets are vital to the UK economy, and the IPI makes electricity price trends and activity more visible and accessible to household consumers and commercial buyers, as well as media and policy-makers.

The IPI is published daily by ICIS, an independent authority on UK electricity market pricing, and is available at:

[www.icis.com/energy/electricity/icis-power-index/](http://www.icis.com/energy/electricity/icis-power-index/)

### About ICIS

ICIS is an independent price reporting agency focusing on global energy, petrochemical and fertilizer markets, and we have covered the complex UK electricity market for nearly two decades. Every day, we assess electricity contracts for more than 40 different delivery periods in the UK market alone. The analysis and data that we produce is widely used as a reference price in energy contracts.

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