Mid December 2023

Energy Market Insights

Twice Monthly Independent Market Analysis

ELECTRICITY

ANNUALS DIVE 14-15% AS ROUT CONTINUES

Strong renewable generation, a softening gas market and falling carbon prices have all helped to pull UK power values lower during the opening two weeks of December, continuing a downtrend that started in late November as the supply risk priced into periods covering the remainder of the winter – and beyond – has unwound at pace. April '24 Annual Baseload is now firmly in double digit territory, having tumbled 15% since the end of last month to £85/MWh. It has been a similar story for the October '24 and April '25 Annuals, which have both shed 14% – to £84/MWh and £82/MWh respectively.

Wind farm generation has been buoyant with the UK fleet producing more than 15 GW on average on the 7th – the first time this threshold has been reached since February – while output over the entire fortnight has averaged 8.5 GW, about 8% higher than during the latter half of November. In recent days wind generation has consistently been above 10 GW and forecasts suggest this will continue through the remainder of December.

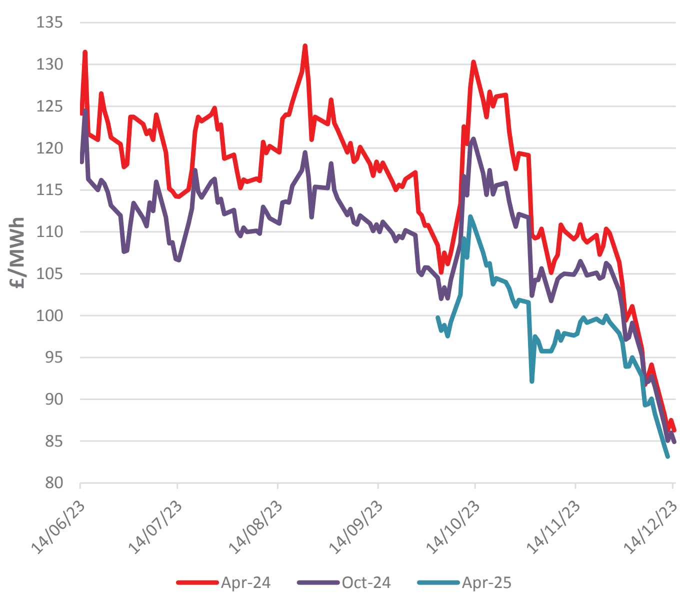
On the other hand, electricity demand has crept up by around 7% while imports have been almost 40% lower, meaning thermal generation has had to step up to fill the void. Gas-fired plants have delivered around a fifth more power, although falling gas and carbon values have reduced the cost of this type of generation and helped to pressure short-term electricity prices. UK Day-ahead Baseload has now moved below £80/MWh, shedding 25% through the month so far. It has been a similar story on January '24 – the front month – which has jettisoned 20% of its value since the end of November, slipping below £80/MWh at the time of writing.

On the continent French nuclear generation output has increased by 5% compared to the previous couple of weeks, while hydro production has risen by 10% and wind farms have delivered a third more power. In contrast German wind generation has been a fifth lower, meaning the increase in French nuclear and renewables drove higher exports to Germany (at the expense of the UK). Improved nuclear availability in France – as well as weaker gas and emissions prices – have pulled German front year power into double digit territory.

The period – a key benchmark for mainland Europe – is currently around EUR 88/MWh, having lost about 14% through the opening half of December. The same period in France is now slightly cheaper than in the German market – after ending November several euros more expensive – in a sign of increasing market confidence that EDF will deliver on its (elevated) nuclear output targets there for 2024.

Elsewhere UK carbon continues to plumb new depths with the Dec '23 UKA benchmark now just under £34/TCO2e, losing around 11% in the last two weeks. It has been a similar story on the continent – EUAs have dipped nearly 8% – with anaemic economic conditions a key factor pressuring the cost of emissions on both sides of the channel. The perception that Brussels will be more aggressive than Westminster in addressing climate change has maintained the EUA premium to UK carbon. Meanwhile month-ahead coal has slipped about 8% lower to $108/tonne, driven in part by declining demand for the fuel.

UK Annual power prices (six-month view)



ELECTRICITY: OUTLOOK

An unplanned outage has struck at the Staythorpe gas-fired power plant, taking 400 MW of capacity offline until December 19th.

RENEWABLES

Generation outlook remains strong for December with high wind and mild temperatures forecast.

China has started commercial operations at the world's first gas-cooled nuclear reactor, according to the country's National Energy Administration. The aim of the modular reactor is to provide steam (or process heat) – as well as electricity – for industrial applications that currently use natural gas or coal.

Uniper has said it plans to retrofit a UK-based, 1.3 GW gas-fired power plant with carbon capture and storage (CCS) technology capable of sequestering more than 2 million tonnes of emissions per year. Carbon produced by the Grina facility will then be transported to the Acorn project in Scotland and stored below the seabed using repurposed gas pipelines.

CARBON

Carbon prices have risen by around 5% since our last Market update.

Testing for Intra-day and Day-ahead capacity sales on the 1.4 GW Viking interconnector between the UK and Denmark has started, with the cable set to start delivering commercial volumes at the end of the month, with 800 MW available initially. The Viking Link connects the UK to the west Denmark power bidding zone, which is called DK1. Over the majority of days since the beginning of November, Day-ahead DK1 prices have been below the UK market, suggesting flows on the Viking Link would have been predominantly towards the UK over this period.

TAXING OF IMPORTS

UK announces new Carbon Border Adjustment Mechanism from 2027, to tax imports of certain goods from countries with no/low carbon pricing.

KEY POWER INDICATORS:

Long-term UK (£/MWh)				Short-term UK (£/MWh)				European power (£/MWh)			
Apr '24 Annual	chg	Oct '24 Annual	chg	Month-ahead	chg	Day-ahead index:	chg	Germany Cal '24	chg	France Cal '24	chg
86.30	-13.90	84.90	-12.50	82.79	-9.93	79.00	-62.34	90.63	-11.70	90.13	-14.75

KEY OTHER INDICATORS:

Coal ($/MT) '24	chg	Oil (Brent) $/bbl	chg	UKA '23 (£/TCO2)	chg	EUA '23 (€/TCO2	chg	EUA '24 (€/TCO2)	chg	EUA '25 (€/TCO2)	chg
102.33	-10.55	76.89	-6.07	33.69	-6.56	66.85	-3.70	69.73	-3.99	72.15	-4.75

All changes (chg) are compared to last report

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GAS

MARKET SINKS LOWER DESPITE DEMAND LIFT

Gas prices have been spiralling downwards through the opening two weeks of December – despite some cold weather at the start of the month – as forecasts of milder conditions to round out the year, robust renewable generation and resilient storage levels have helped to weigh on values. UK April '24 Annual gas has touched new lows, with the period currently below 94 p/th after sliding 15% since the end of November. October '24 and April '25 Annuals have dipped 11-14% to 95 p/th and 93 p/th, respectively.

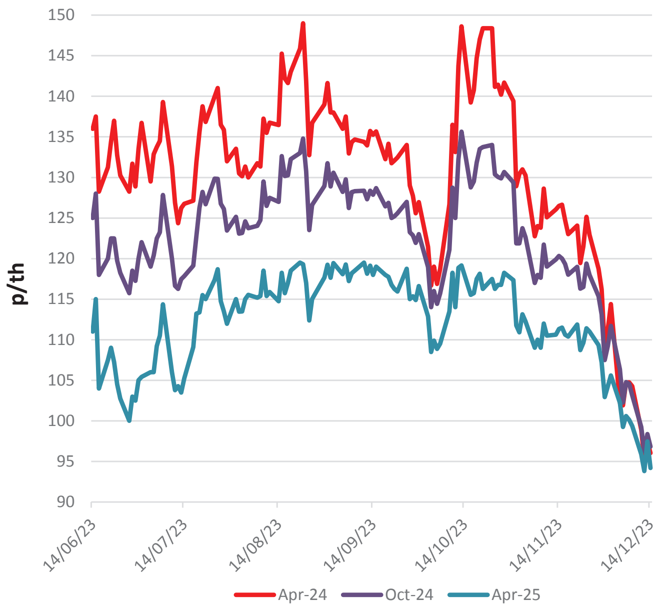
Low temperatures – particularly in the first week of December – have meant gas demand has been above seasonal averages for a sustained period for the first time this winter. Over the opening half of the month gas use has been about 10% higher than normal for the time of year – after being 4% lower during the previous two weeks – although now forecasts predict gas consumption will slip back below the seasonal average over the latter part of December. UK supply has coped comfortably with output from LNG terminals rising by 55%. This has meant that – despite the cold – short-term gas prices have been sinking with the UK Day-ahead crashing almost 30% to below 75 p/th. January '24 has been slightly more restrained but is still down by more than a fifth, to less than 84 p/th.

Exports to the continent have crept up to around 10 million cubic metres (mcm) per day – compared to less than 2 mcm during the previous fortnight – which has also helped to lift demand. The rise in flows has been underpinned by higher short-term prices on mainland European markets with UK Day-ahead gas closing on average EUR 0.8/MWh below the same period in the Netherlands through December to date. Month-ahead UK gas is currently close to parity with the Dutch market and the price difference will need to widen before there is clarity on the direction of flows for January. The UK traditionally imports through its pipelines with Belgium and the Netherlands during Q1 although this was not the case this year.

EU storage withdrawals have jumped more than 60% compared to the previous two weeks, although fullness remains at historic levels with sites just above 90% of capacity currently, compared to about 80% on average between 2018-22. In addition, congestion in the Panama Canal is reportedly making Europe a more profitable destination than Asia for US LNG cargoes that will be loaded in January and delivered in February, providing additional supply side security for Q1. This has helped front quarter Dutch gas to decline by 20% during December to EUR 34/MWh.

Elsewhere oil has been ticking upwards these past few days following news that US crude inventories have fallen, while indications that the Federal Reserve will cut interest rates from next year have led to optimism on the economic front. However, crude values are still down compared to the end of November – and are substantially below the peaks above $90/bbl seen in September – with month-ahead North Sea oil hovering around $77/bbl currently, about 2.5% lower than levels seen a fortnight ago.

UK Annual gas prices (six-month view)



Norwegian export capacity into the UK through the St Fergus network is due to be curtailed by nearly 6 mcm from December 25th until the end of January, according to the Gassco maintenance schedule.

LNG CARGOS

11 LNG cargoes due to dock in UK ports before year end.

GAS STORAGE

Gas storage levels across Europe remains above 90%

EU member states will have the power to block imports of Russian gas under terms of a provisional deal agreed late last week. Governments will be able to temporarily limit bids for grid and LNG terminal capacity by organisations based in Belarus and Russia. EU imports of Russian pipeline gas and LNG fell to 80 billion cubic metres (bcm) last year and are projected to drop to 40-45 bcm this year. In addition, the joint buying gas platform – introduced last year to help reduce energy costs for member states – is set to become permanent and will include hydrogen purchases through a five-year pilot scheme.

Algeria has said it expects to increase gas production by 4 bcm this year to around 106 bcm – following the start of operations at new fields – while exports to Italy will rise to the maximum permitted capacity of 30 bcm annually, up from 21 bcm in 2022.

OIL PRICES

Increasing tension in the middle east has seen oil prices rise as shipping diverted from the Red Sea.

KEY GAS INDICATORS:

Long-term UK (p/th):				Short-term UK (p/th):				European gas (€/MWh):		Crude Oil:	
Apr '24 Annual	**chg**	**Oct '24 Annual**	**chg**	**Month-ahead index:**	**chg**	**Day-ahead index:**	**chg**	**TTF 2024:**	**chg**	**Oil (Brent) $/bbl:**	**chg**
96.03	-15.25	96.81	-12.41	88.76	-14.85	82.50	-24.33	36.10	-6.43	76.89	-6.07

All changes (chg) are compared to last report

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