

## ELECTRICITY

### Double-spike on Ukraine invasion

UK and European power and gas prices have spiked, swung lower and then spiked again since Russia launched its invasion of Ukraine last week, shattering a relative calm that had settled over the market over the previous week amid weak physical demand and strong renewable output. Prices first moved higher as Russia officially recognised the independence of two breakaway regions in eastern Ukraine, before roaring skywards as Russia started attacks on other parts of the country on February 24<sup>th</sup>, when UK Baseload front month, season and Annual prices all surged at least 30%. They then slumped around 25% the following day but have been extremely volatile since, amid uncertainty and confusion over the invasion's progress and how the conflict and sanctions might affect energy supplies in Europe, particularly as physical gas flows from Russia actually rose at the same time. At the time of writing prices were soaring again as Russia's assault and Western sanctions talk intensified, driving several gas periods to record price levels.

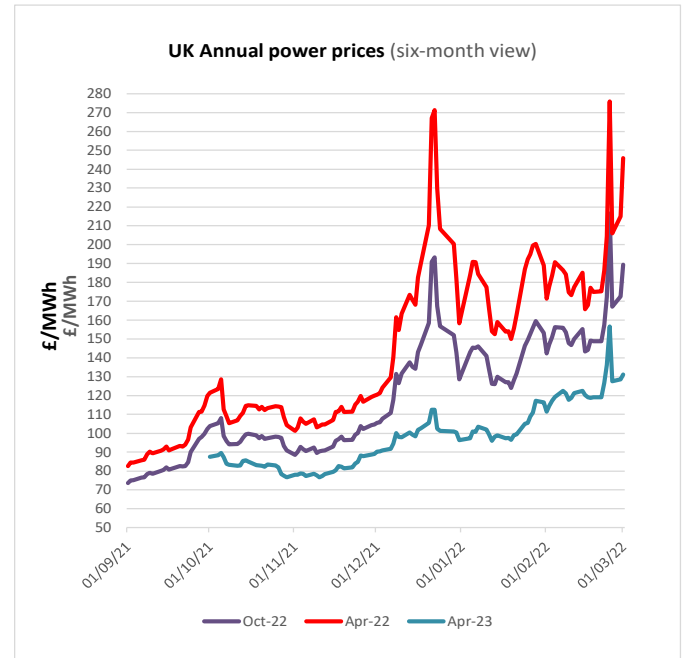
While the US, EU and UK have imposed "massive" sanctions on Russia, exemptions have been made for the Russian energy sector. For instance, the US placed restrictions on Sberbank and VTP – Russia's largest banks – but excluded transactions related to crude oil, natural gas and other petroleum-related products. This being said the exclusion from the international Swift payment system appears to be making it harder for Russian energy trading while many western companies are now "self-sanctioning" – refusing to purchase any Russian oil or gas. Expectations that official sanctions may expand to include energy sales are also helping to shore up sentiment across forward power and gas markets.

April '22 Annual Baseload power dipped below £170/MWh as the second half of February got underway, rocketed to £276/MWh as the invasion began, then slumped back down to £206/MWh last Friday – before soaring to an estimated £300/MWh at the time of writing – a record level for any UK power annual. Forward trading has however been thin, with the extreme volatility driving UK power traders to the market's sidelines.

The invasion came against a backdrop of weak UK fundamentals as several storms battered the country, with wind farms delivering 36% of power across February, up from 24% in January. The UK was a net importer from France with about 1 GW delivered each day in the latter half of February, compared to net exports of 259 MW in the first half. French nuclear generation dropped as more capacity came offline for maintenance, but the impact was offset by renewables – particularly wind.

The switch to imports and buoyant wind generation were pushing down short-term prices before the market bounced following the invasion news. The UK Day-ahead Baseload power index shifted from £173.5/MWh to a low of £134.85/MWh, before first ballooning above £200/MWh late last week and then smashing through £300/MWh today. Just after the middle of February UK month-ahead Baseload power dropped as low as £169/MWh – but at £320/MWh is now nearly double this level.

Long-term power was initially supported by strength in carbon markets too, although UK and EU emissions prices decoupled from energy commodities and tracked losses in equity markets in late February. UKAs had reached £88/TCO2e – a record high – before crashing below £73/TCO2e in early March. Ukraine was a factor due to the expected economic impact, while reports some EU countries were handing out 2022 free allowances early pressured EUAs – and the UK market in turn.



Source: Marex Spectron

### Outlook:

↑ On the 6<sup>th</sup> of March maintenance will take 660 MW of capacity offline at the Heysham nuclear plant until the 9<sup>th</sup> of April. A 506 MW restriction at another reactor at Heysham is expected between the 9<sup>th</sup> of March and the 17<sup>th</sup> of July.

During March another 9.8 GW of French nuclear capacity will come offline for maintenance lasting at least a month, meaning UK supply is likely to be called upon more frequently.

→ The T-1 Capacity Market (CM) auction cleared at a record price of £45/kW/year – the highest ever recorded. CM participants are paid to ensure power assets are available at times of system stress to ensure security of supply. Outages at several nuclear plants and the removal of the Severn Power and Sutton Bridge combined cycle gas turbines from the process reportedly lifted the clearing price. At least 13 battery storage companies had assets cleared, up from just two at the previous auction.

↓ From the 15<sup>th</sup> of March the full 1.4 GW capacity will become available on the North Sea Link power interconnector between the UK and Norway, when the 350 MW currently offline is restored. Commercial operations on the North Sea Link started on the 1<sup>st</sup> of October last year and since then the UK has imported 654 MW on average each day. In the last week of February power flows on this link were consistently close to the current maximum capacity of just over 1 GW.

Key Power indicators:				Short-term UK (£/MWh)				European power (€/MWh)			
Long-term UK (£/MWh)		Oct'22 Annual		Month-ahead index		Day-ahead index		Germany Cal '23		France Cal '23	
Apr'22 Annual	chg	172.50	17.25	180.74	1.74	247.74	74.24	147.50	0.35	172.73	6.45
215.00	30.00										
Coal (\$/MT) '23	chg	Oil (Brent) \$/bbl	chg	UKA '22 (£/TCO2)	chg	EUA '22 (€/TCO2)	chg	EUA '23 (€/TCO2)	chg	EUA '24 (€/TCO2)	chg
150.25	34.25	100.65	6.16	79.58	-4.17	82.66	-9.42	84.11	-9.57	86.30	-9.48

All changes (chg) are compared to last report.

## GAS

### Annual price hits record 400 p/th

UK gas prices skyrocketed in early March as the market scrambled to assess the impact of the Russian invasion of Ukraine and the West's retaliatory response on European supplies, after strong renewable output and mild temperatures had started to lead periods down during the latter half of February. At the time of writing the front Annual was testing 400 p/th – as both Summer and Winter '22 traded at this level – comfortably above the previous record level seen in late 2021. It had dropped as low as 172 p/th in mid-February, and has roared higher and lower since.

Day-ahead and Month-ahead price tags have meanwhile broken above 400 p/th today, with April '22 trading up to a record 464 p/th – although at the time of writing it was back down at 377 p/th, in very choppy trading.

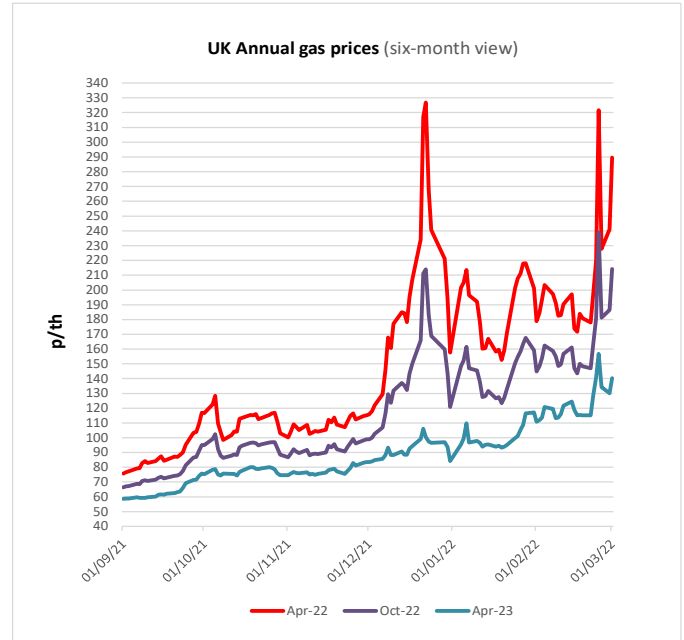
Since the invasion launched physical Russian gas flows via Ukraine have increased, with volumes delivered through this route and into Slovakia at around 80mcm/day since the 25<sup>th</sup> – up from an average of 41mcm/day this year prior to that date, with some analysts suggesting the rise has been driven by buyers that hold long-term supply contracts with Russian producer Gazprom increasing off-take nominations through those contracts, rather than Russia itself actively pushing more gas into Europe in an attempt to mollify Continental anger and anxiety.

These deals are priced under several different formulas – with some indexed to the value of periods on specific European markets – normally the Dutch gas month-ahead – while others are linked to global crude prices, or a mixture of both. For long-term contracts that are crude-indexed the formula for the cost of the gas is normally connected to where oil prices were six-to-nine-months previously. When UK gas prices shot up following news of the invasion, volumes sold via long-term gas contracts linked to oil would have been invoiced on crude prices around \$65-70/bbl – compared to close to \$110/bbl now (the highest price since 2014) – well below current Dutch gas market prices.

Looking at fundamentals in the UK, demand has been about 22mcm/day below the seasonal average over the last fortnight with mild temperatures limiting gas use for heating and strong renewable output reducing the pull from the power sector. Gas plants accounted for just 21% of UK electricity supply, down from 25% in the opening fortnight of February and 39% in January.

On the supply side LNG imports remained high and terminals accounted for just over a fifth of the UK total, while pipeline volumes – both domestically and from Norway – were ticking higher. This pushed UK Day-ahead gas from just over 188 p/th to a low of 160.15 p/th, before the price ticked up slightly and then ballooned over the last few days.

Elsewhere the long-term market was partially supported by gains on crude while coal strength also added support. Year-ahead coal smashed through previous record highs – hitting \$150/tonne before rallying to more than \$250/tonne, again on Russian supply fears.



Source: Marex Spectron

### Outlook:

↑ German energy companies are reportedly shunning new deals with Gazprom Marketing & Trading – the trading arm of the Russian producer that is based in London – to avoid potential sanctions. Crude oil buyers are also said to be avoiding purchases of Russian barrels, with the supply crisis leading the International Energy Agency (IEA) to release 60m barrels from its emergency reserves.

UK TSO National Grid is seeking clarity on whether to bar Russian LNG cargoes from the Isle of Grain terminal following a government order that all ports block Russia-linked ships from docking.

→ The UK's National Policy Statement (NPS) for new energy infrastructure does not go far enough in supporting net zero ambitions, according to a policy review by the House of Commons business, energy and industrial strategy select committee. The review called for onshore wind to be included in the updated document after its removal in 2016, as well as new carbon capture and hydrogen projects.

↓ Wind output is expected to be robust in the coming weeks, with an Exelon forecast pointing to generation averaging at least 10.5 GW between the 8<sup>th</sup> and 16<sup>th</sup> of March, compared with an average so far this winter of 8.4 GW, which will reduce the need for gas-fired production.

Temperatures through most of Europe are forecast above average throughout March – according to the EU Copernicus service – paving the way for early storage injections, if prices come down.

Key Gas indicators:				Short-term UK (p/th)				European gas (€/MWh)				Crude Oil	
Long-term UK (p/th)		Oct'22 Annual		Month-ahead index		Day-ahead index		TTF 2023		Oil (Brent) \$/bbl			
Apr'22 Annual	chg		chg		chg		chg		chg		chg		chg
241.08	43.96	186.44	25.28	250.76	59.70	250.19	61.35	5.55	100.65	6.16			

*All changes (chg) are compared to last report.*

The information in this market review is intended for MARKET PULSE subscribers only. Unauthorised onward transmission or copying is strictly forbidden. The contents are intended for informational purposes only and are not to be used or considered as an invitation to trade or an offer in respect of any of the products or services mentioned. Marex Spectron does not represent or endorse the accuracy or reliability of any of the information or content. Under no circumstances will Marex Spectron have any liability for any loss or damage caused by reliance on any information contained herein.