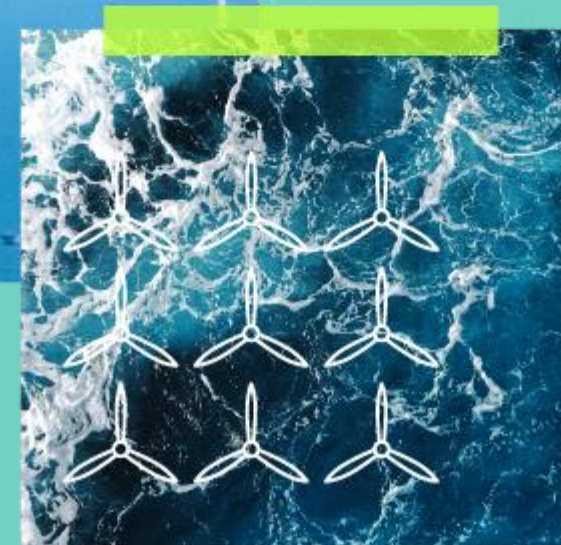
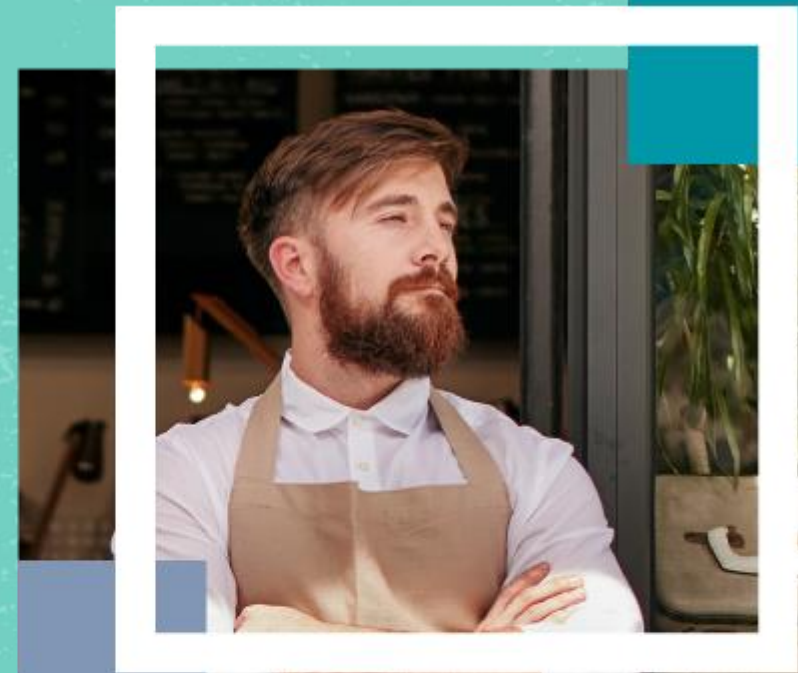


Monthly Market Review Report

May 2023

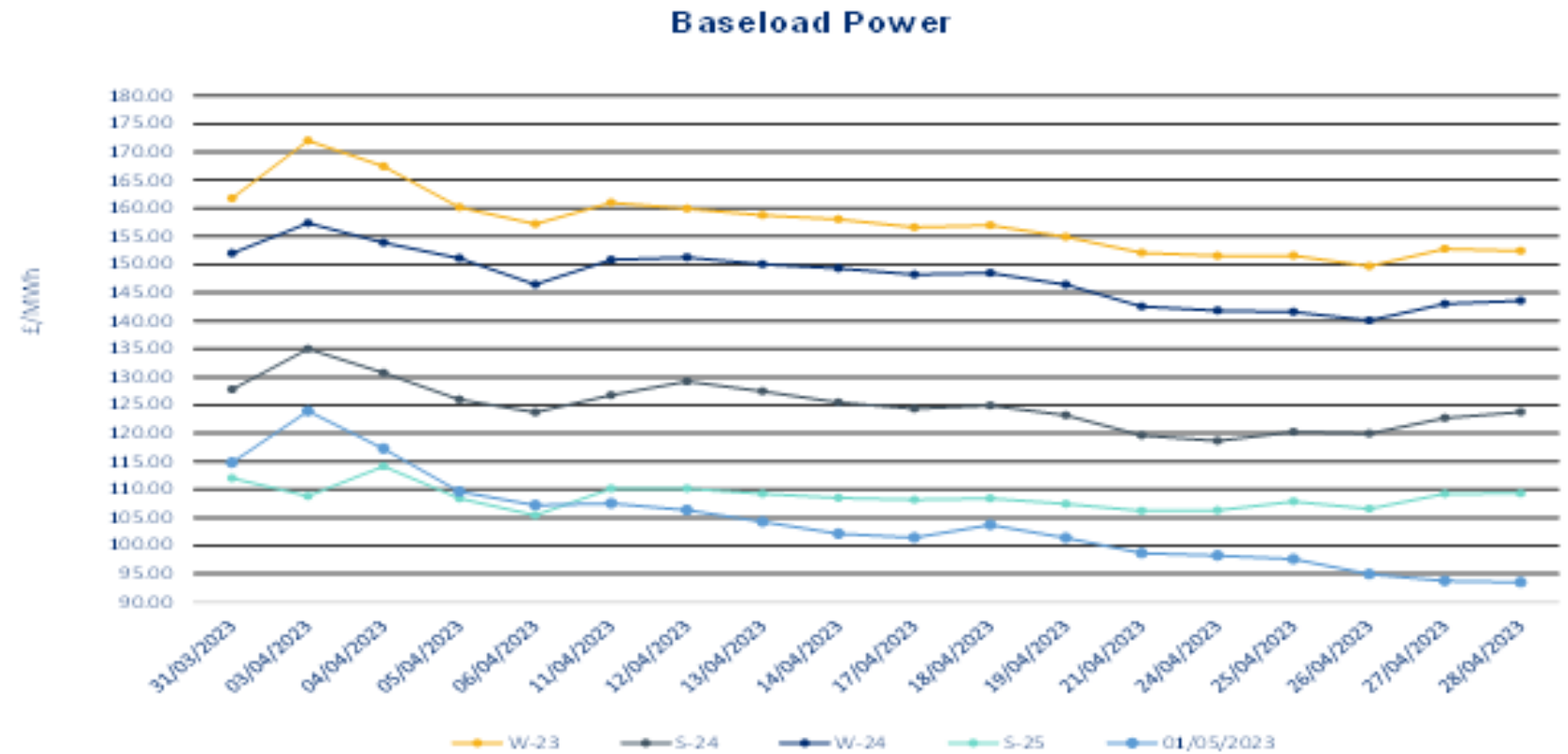


Monthly Report

Market Update – Power and Gas

Review: Mild temperatures and above average renewables output contributed to a decrease in prompt and front month power prices over the course of the month. Clean spark levels (the margin for gas fired power plants accounting for the difference between the power price, the cost of generation and the necessary emissions allowances required to produce it) out-turned at c.-£2.50/MW over the course of the month. The N2EX Day Ahead Auction outturn for April was £102.22, the lowest monthly outturn since July 2021.

An unseasonably early heatwave is currently affecting Spain. If heatwave conditions were to extend northwards that would potentially impact river levels in France and curtail nuclear output. For Winter 23 the main price risk continues to be driven by uncertainty around the levels of French nuclear plant availability. This is reflected in the near £100 premium of French prices over GB for the coming winter.

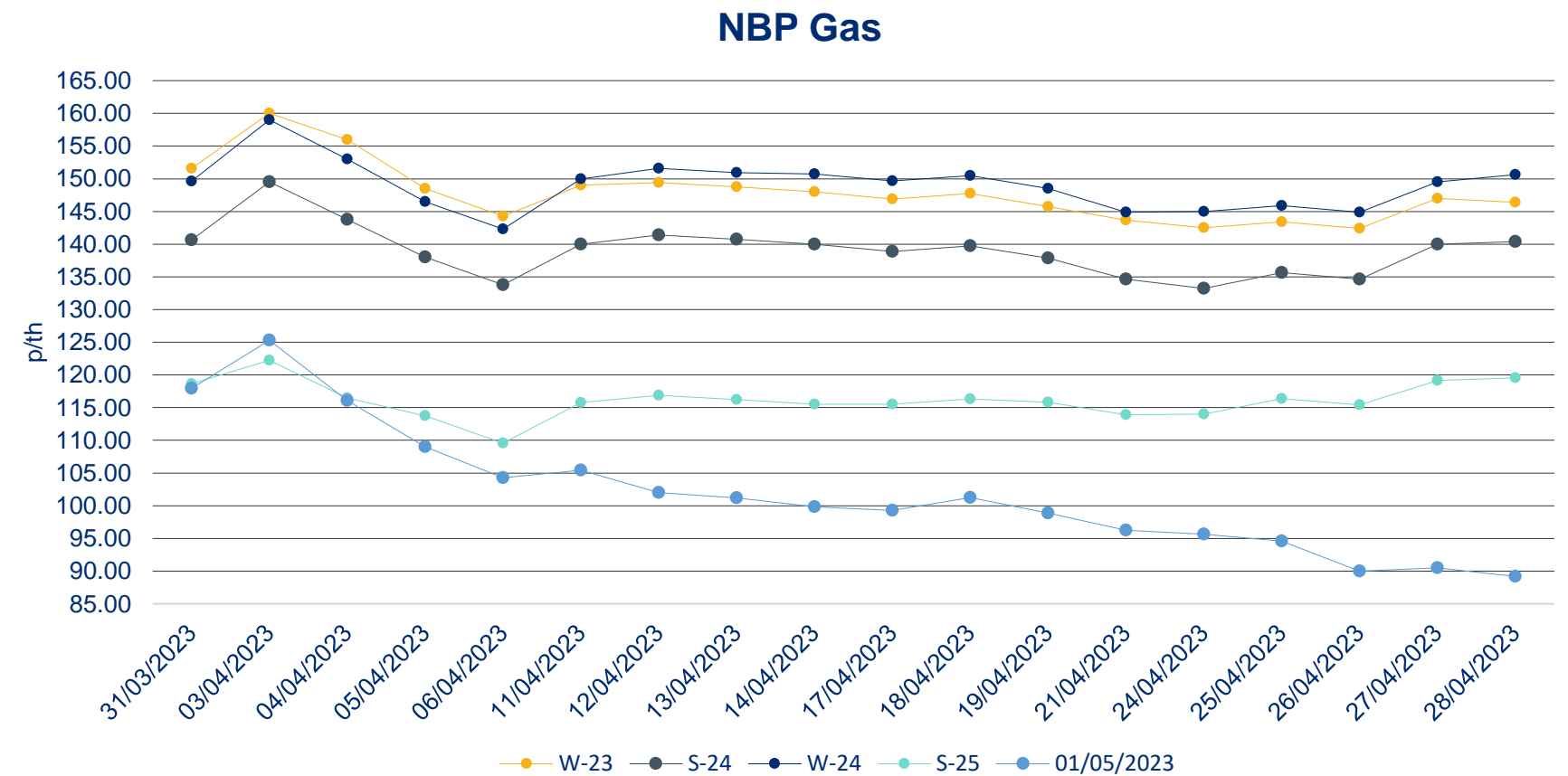


Power Bld (£/MWh)	31-Mar-23	28-Apr-23	Change	High	Low	Average
May-23	114.75	93.49	↓ -21.26	123.94	93.49	104.23
Winter 23	161.79	152.41	↓ -9.38	172.04	149.70	157.50
Summer 24	127.78	123.74	↓ -4.04	134.99	118.62	124.96
Winter 24	152.00	143.56	↓ -8.44	157.34	140.04	147.66
Summer 25	112.00	109.26	↓ -2.74	114.13	105.38	108.67

Monthly Report

Market Update – Power and Gas

Review: Both prompt and curve gas markets saw a 10 p/th increase at the start of the month. Higher oil prices, the result of an unexpected Opec+ production cut, increased the cost of production and many gas contracts remain index linked to the price of Brent Crude. Prompt and front month prices dropped steadily as the month progressed as temperatures increased and the flow of LNG cargoes continued to head to Europe, rather than the Far East, where Chinese economic growth has been slower than anticipated thus dampening demand. The price spread between the EU and Asian markets remains fairly flat, which indicates a continued flow of LNG over the shorter route to the EU from the US. Norwegian field maintenance is now underway with large outages expected until the end of May. However, EU storage levels remain well ahead of the 5 year average for the time of year and continue to build.

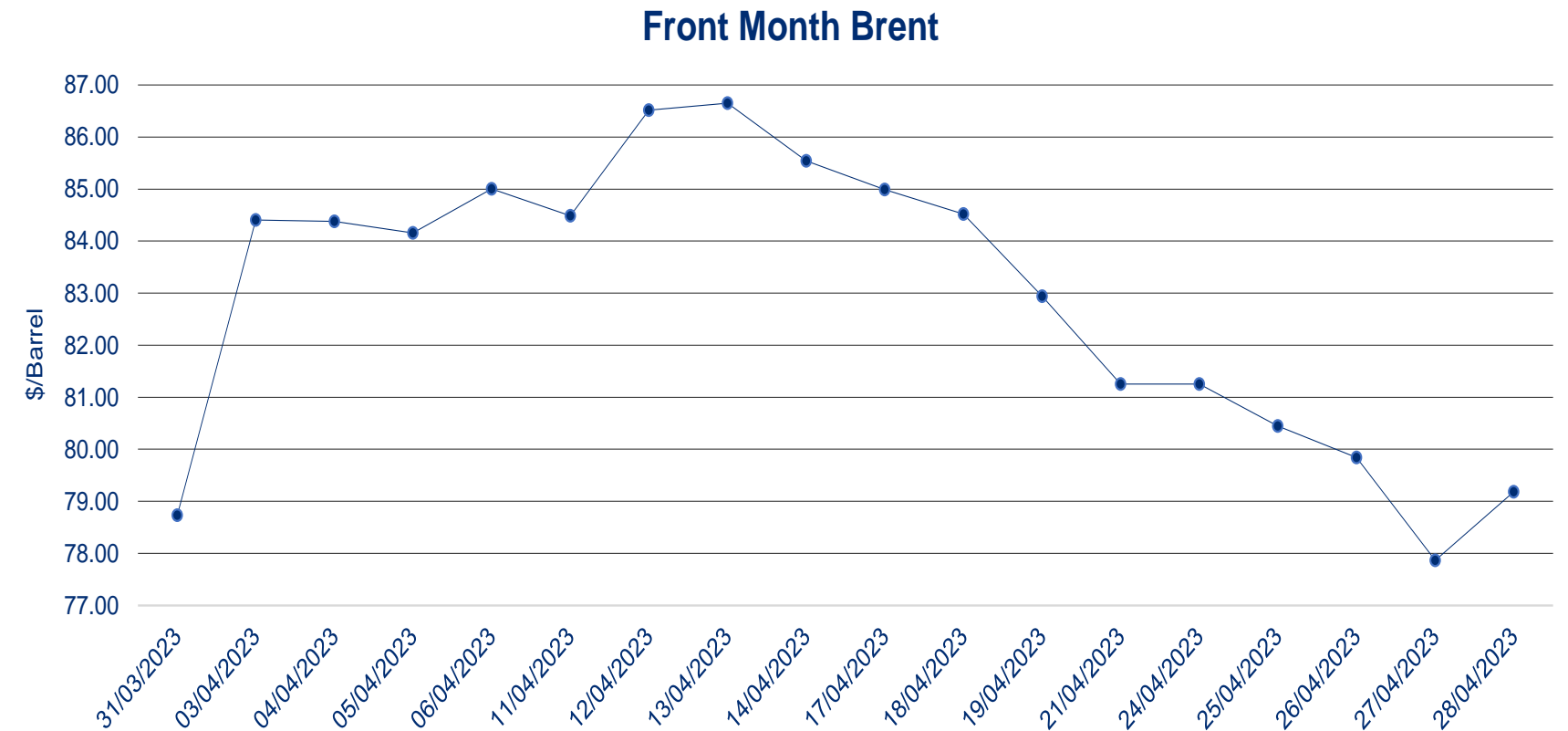


Gas NBP (p/th)	31-Mar-23	28-Apr-23	Change	High	Low	Average
May-23	117.92	89.20	↓ -28.72	125.30	89.20	102.04
Winter 23	151.60	146.40	↓ -5.20	160.00	142.40	147.85
Summer 24	140.65	140.40	↓ -0.25	149.50	133.25	139.05
Winter 24	149.60	150.65	↑ 1.05	159.00	142.30	149.07
Summer 25	118.65	119.55	↑ 0.90	122.25	109.55	116.18

Monthly Report

Market Update – Oil and Carbon

Review: At the start of the month crude prices rose over \$7/barrel following the shock announcement by the OPEC+ group of a 1 million barrel per day cut. The gains were all but wiped out by the end of the month as economic risks persist on both sides of the Atlantic that may continue to dampen demand. Central banks are considering further potential interest rate hikes as inflation continues to soar. News that China’s manufacturing activity dropped unexpectedly in April was a further bearish signal, given that many analysts believe that China is the biggest factor driving global oil demand growth this year.

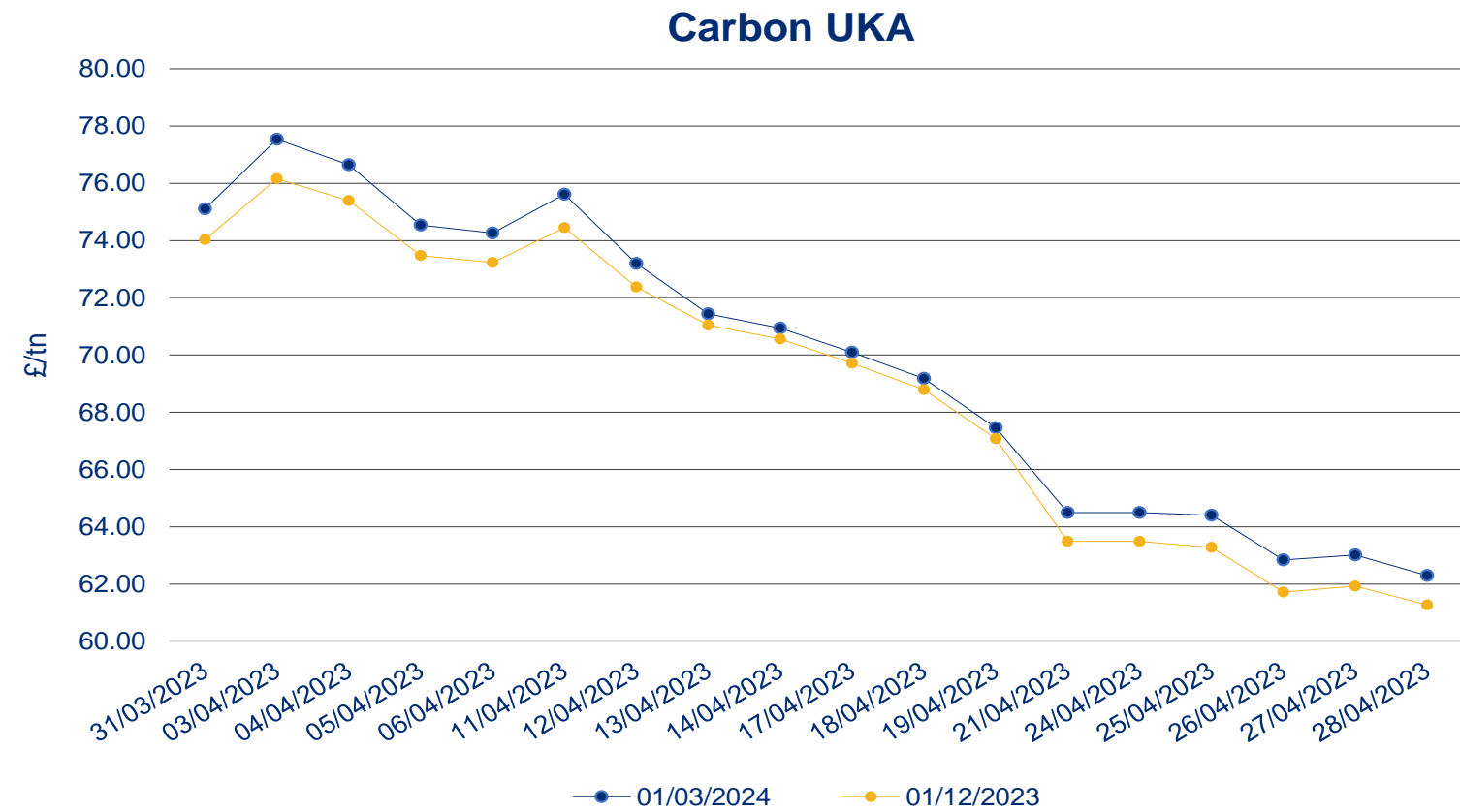


Brent (\$/Barrel)	31-Mar-23	28-Apr-23	Change	High	Low	Average
Front Month	78.73	79.185	↑ 0.45	86.65	77.865	82.90

Monthly Report

Market Update – Oil and Carbon

Review: Higher winds and temperatures helped to boost renewables output throughout the month and ease demand for UKAs leading to a month on month drop of nearly £13/tn on the Dec-23 contract. UKAs are now sitting at an 18 month low, as macro-economic uncertainty and lower demand for allowances weigh on the market.



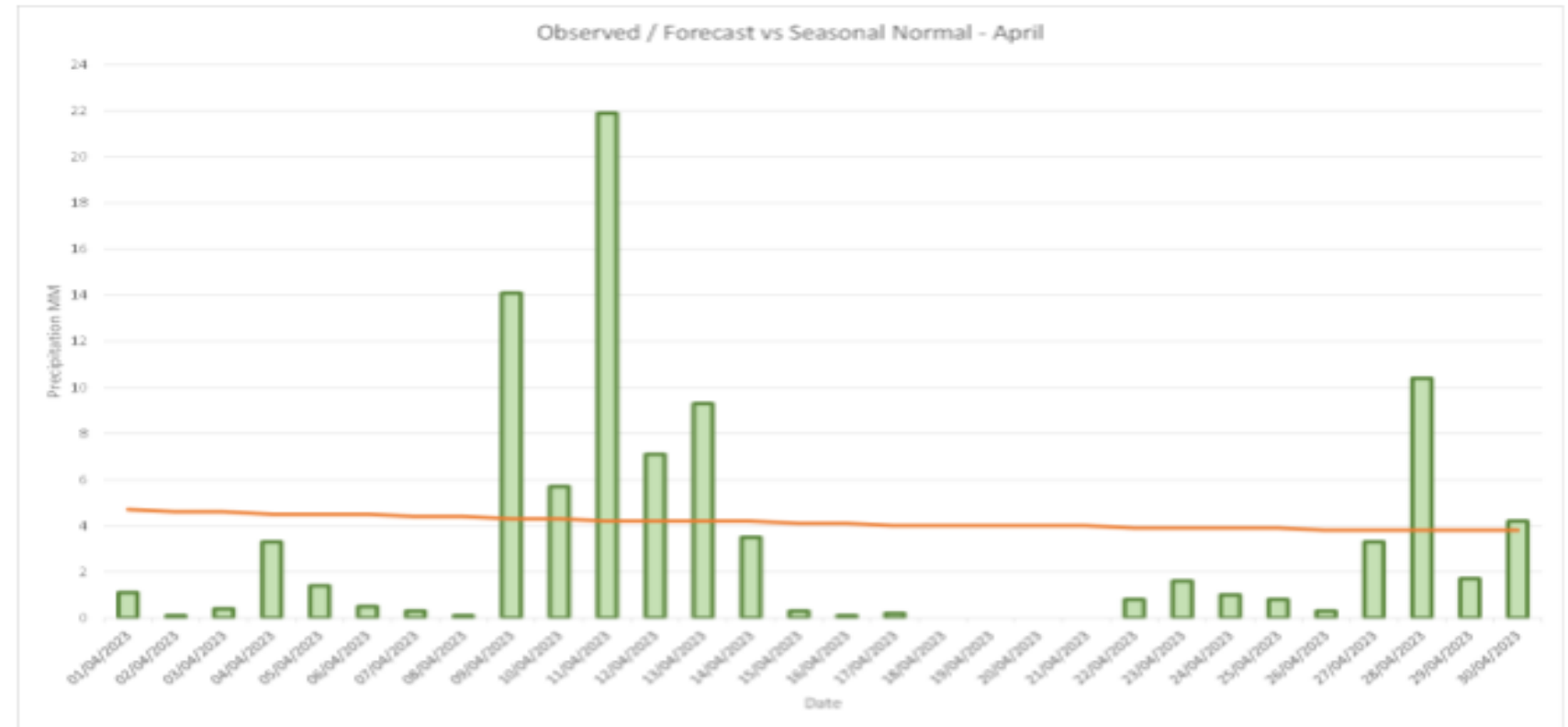
Carbon (£/ton)	31-Mar-23	28-Apr-23	Change	High	Low	Average
Dec-23	74.03	61.27	↓ -12.76	76.2	61.3	69.0
Mar-24	75.11	62.30	↓ -12.81	77.5	62.3	69.9

Monthly Report

Weather Review

Review: The first half of April was generally unsettled with low pressure systems bringing some heavy rain at times. Temperatures were changeable but cool for the UK with Scotland mostly above average thanks to some good westerly winds. Around the middle of the month, the pattern shifted. High pressure was more frequent which helped bring in pulses of drier Arctic air. For the hydro catchment areas in Scotland, barely any precipitation fell between the 15th and the 27th, and there was some late-season snow in northern Scotland along with a sharp, widespread frost across the UK in late April on the 24th-25th. A trend to a milder, wetter pattern for the final few days of the month, was not enough to change the averages significantly. Wind levels, precipitation, and solar all came in below average for the UK, but Ireland faired a little better and had near normal winds.

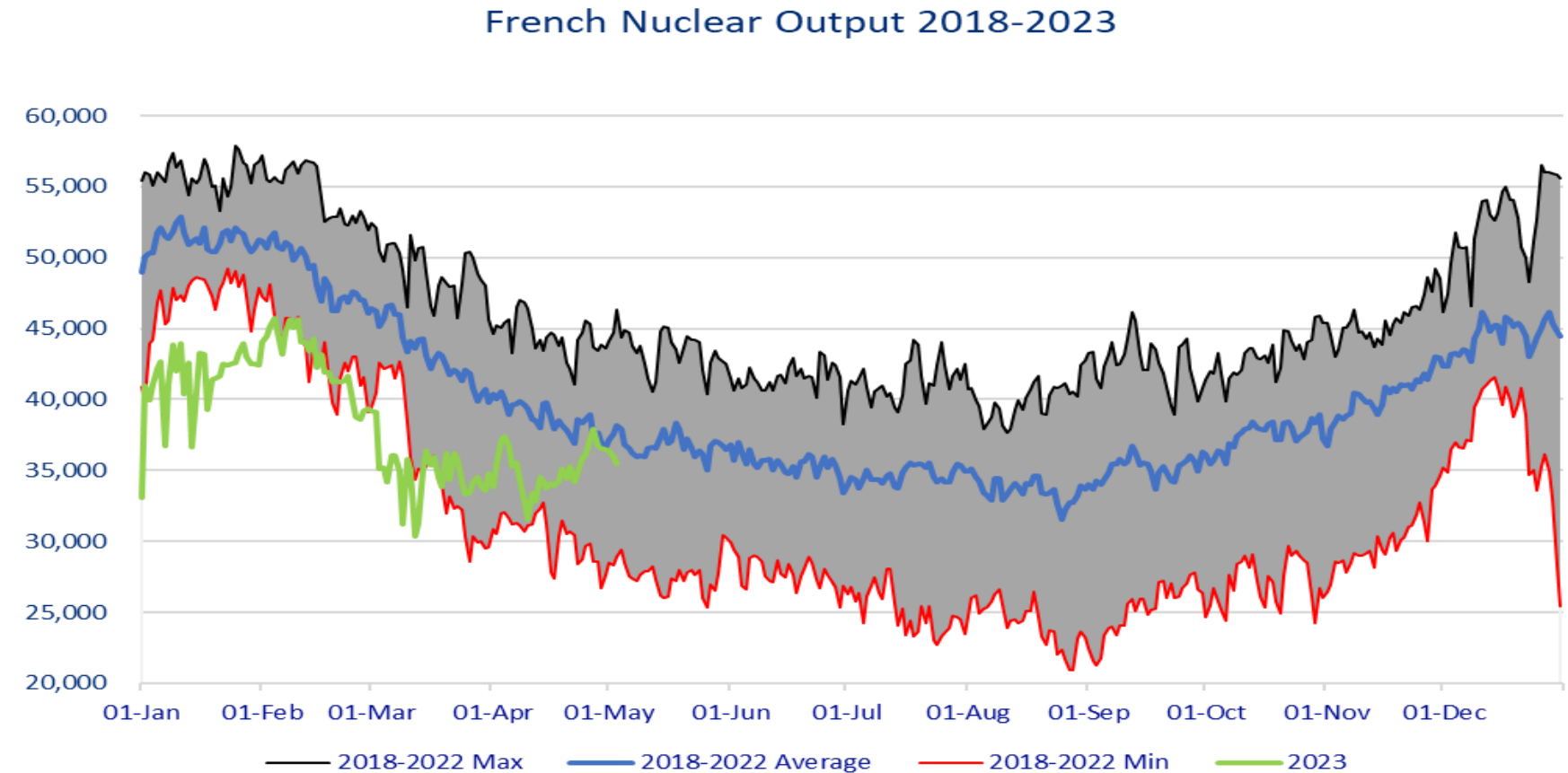
Outlook: For the next few weeks, low pressure should remain in charge in NW Europe bringing some wetter and cloudier weather to the UK. Temperatures are likely to be changeable, but often near or above average with winds blowing from the south. Risk of high pressure grows as we head into the back half of the month, but the best signal for drier, sunnier, and warmer weather holds off until early June.



Precipitation for SSE Catchment areas during April

Market Theme – French Nuclear Return to Service

As highlighted in the commentary, the return of French nuclear output is a key risk for prices across Europe ahead of the coming winter as plant gradually returns to service. A series of outages last year prompted an emergency maintenance programme after the discovery of corrosion issues at multiple reactors. By mid-summer over half of the nuclear fleet was offline and output at a 30 year low. This led to France becoming a net importer of power from the UK and its continental neighbours for the first time. The winter power price traded above €1,000/MW and in August French prices were briefly at £700 premium to the UK price, amid fears of a shortage of power heading into the winter with the potential for rolling blackouts. This scenario didn't ultimately play out as plant slowly returned and the winter was benign, both in terms of weather and demand. However, as the graph shows with current plant availability still only at around 60% output remains below average. EdF have forecast nuclear output will be 300-300TWh this year, but any delays to the return to service for remaining plant is significant risk that will factor in the W23 price on both sides of the Channel.



Monthly Report

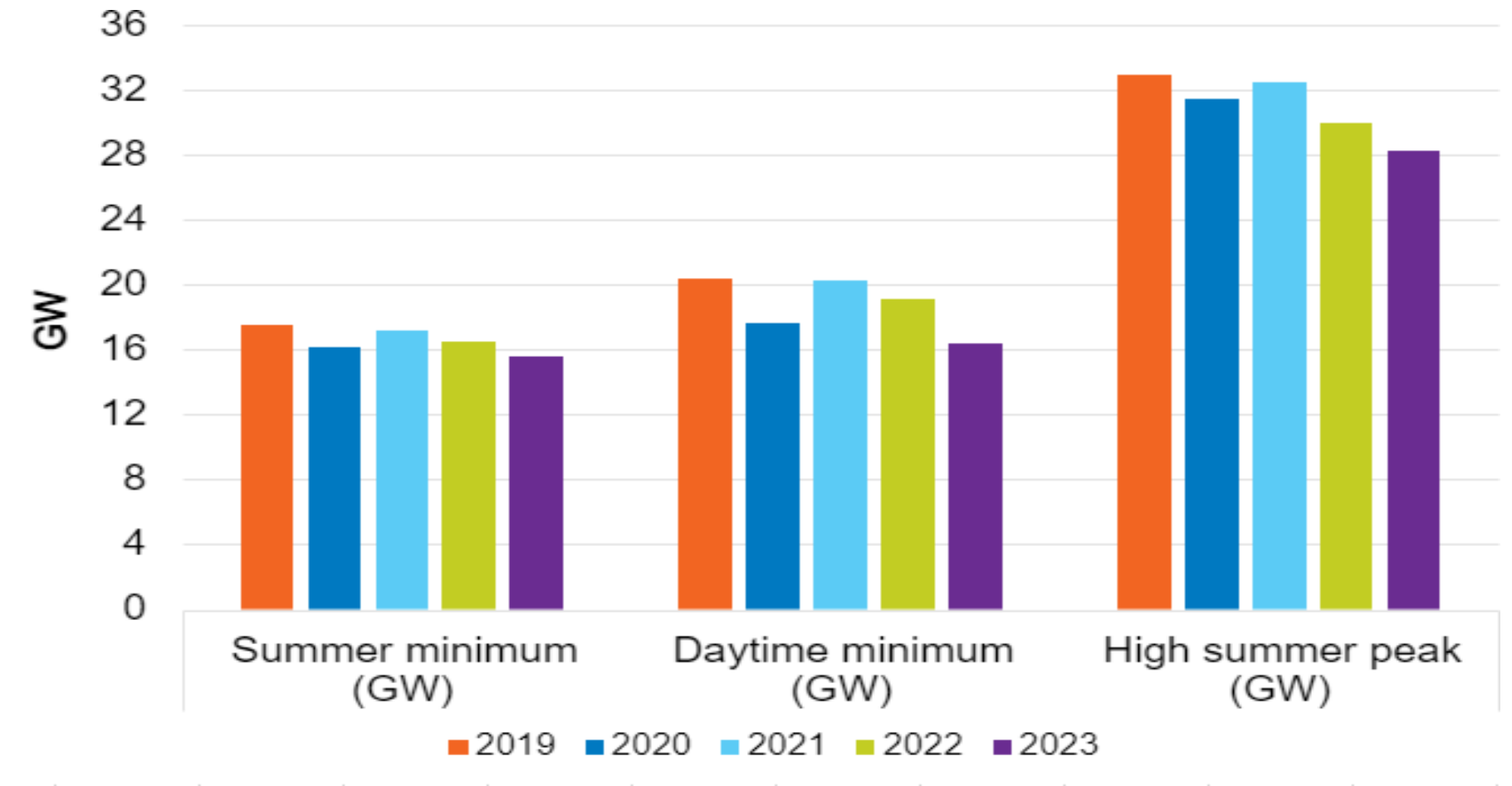
Market Theme – National Grid Summer Outlook

National Grid has released its Summer Outlook Report for 2023. The report, issued annually, provides the System Operator’s view of managing the electricity system covering the period April – October.

The main headlines from the report:

- The UK is expected to have sufficient energy to meet demand throughout the period
- The System Operator is confident that existing tools will enable it to manage system operability this summer
- Balancing costs are likely to be lower compared to last summer owing to the fact that wholesale power prices, whilst still high, are significantly lower than last summer
- Confident that exports to neighbouring Europe countries can be supported if needed (likely to be lower than last summer)

The graph shows that the weather corrected Summer minimum, Daytime minimum and Peak demands are all forecast to be lower than last summer. The forecast is based on seasonal normal weather, accounting for average weather variables modelled over the past 30 years. The forecast also accounts for a daily amount of embedded wind and solar generation.



Source: National Grid ESO Summer Outlook 2023 Report - <https://www.nationalgrideso.com/document/278876/download>