



Renantis

Energy market report

First quarter 2023 / January-March

04.04.2023

AGENDA

1. Drivers of European power prices

- 1.1. Gas
- 1.2. Carbon emissions
- 1.3. French nuclear availability
- 1.4. Hydro balance – Nordics focus

2. UK market overview

- 2.1. Storage revenues
- 2.2. Power prices and demand

3. Conclusions

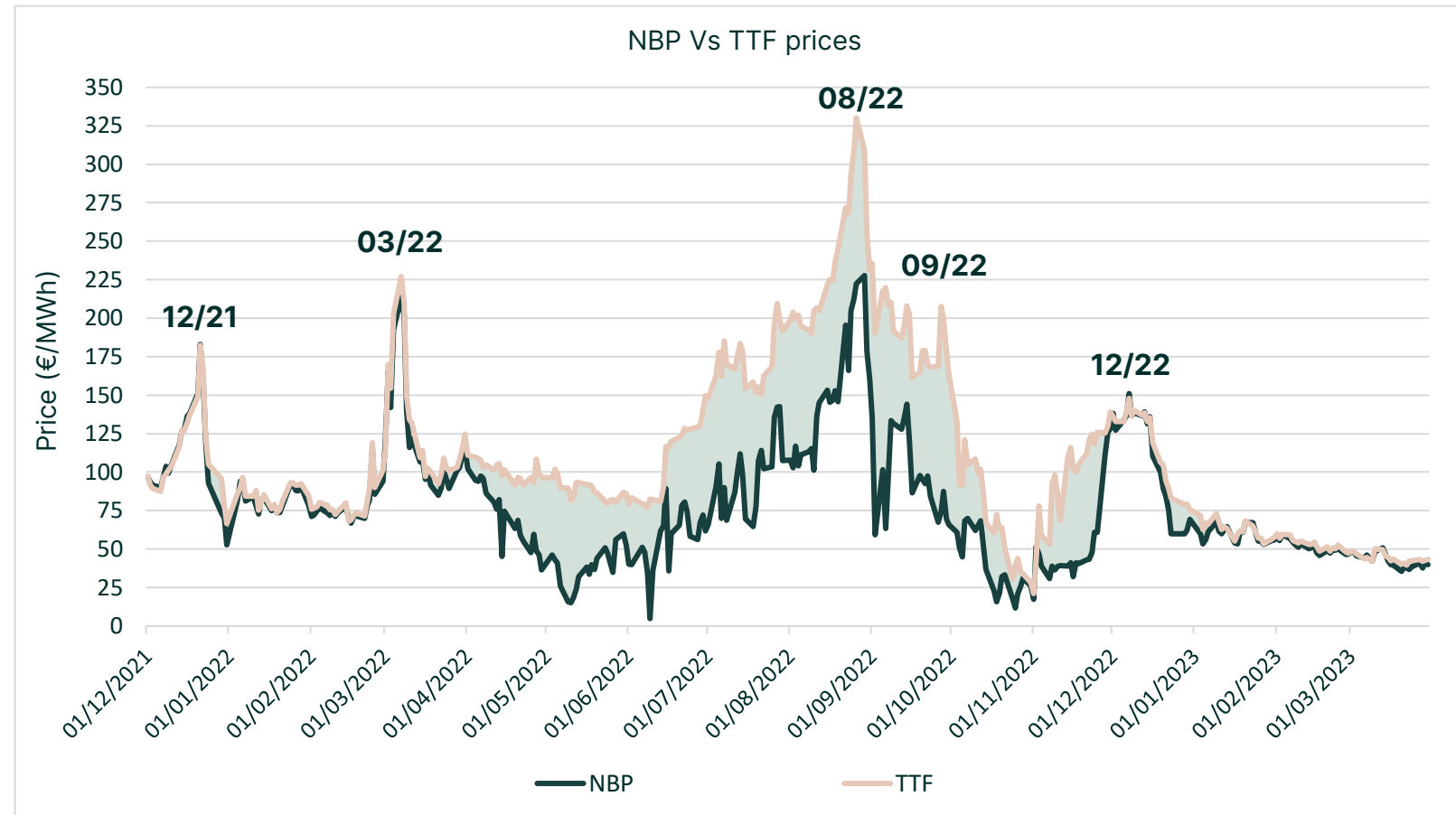
- 3.1. Highlights

A high-angle photograph of three people sitting around a light-colored wooden desk. In the center is a black Dell laptop. The laptop screen displays a line chart with multiple colored lines (red, blue, green, yellow) fluctuating over time, representing power prices. One person's hands are on the laptop keyboard, while another's hand is on the mouse. To the right, a person is holding a pen over an open spiral notebook. The overall scene suggests a collaborative work environment focused on data analysis.

Drivers of European power prices

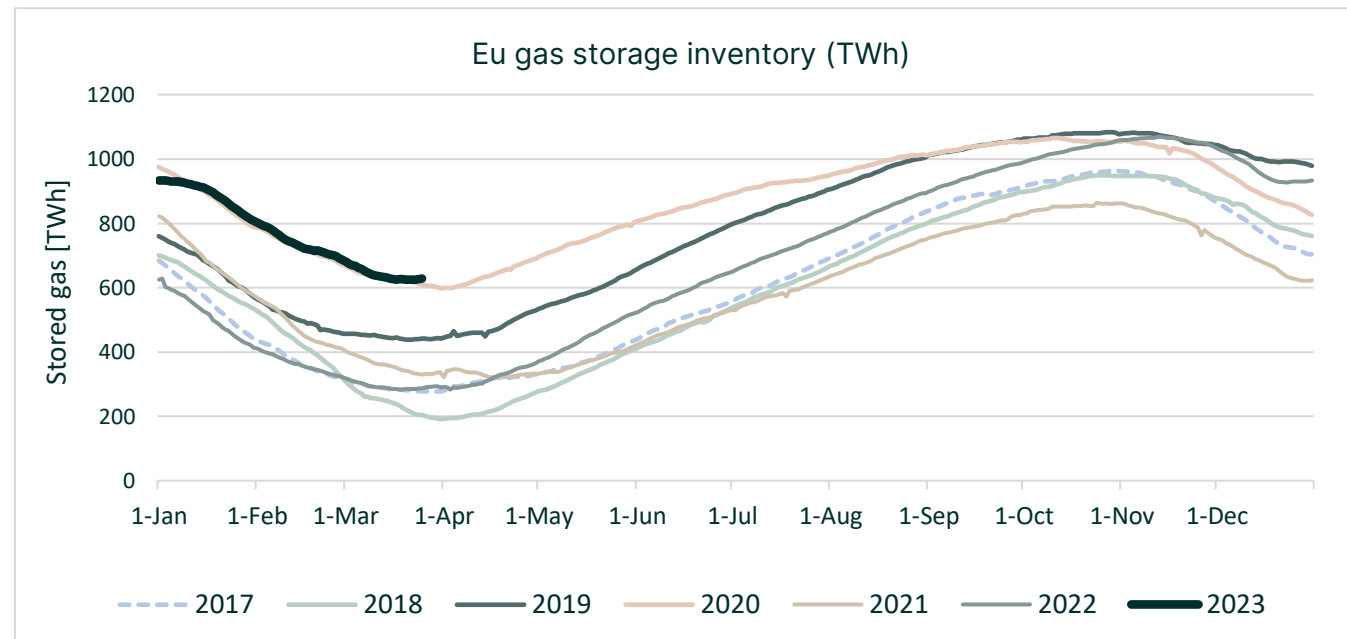
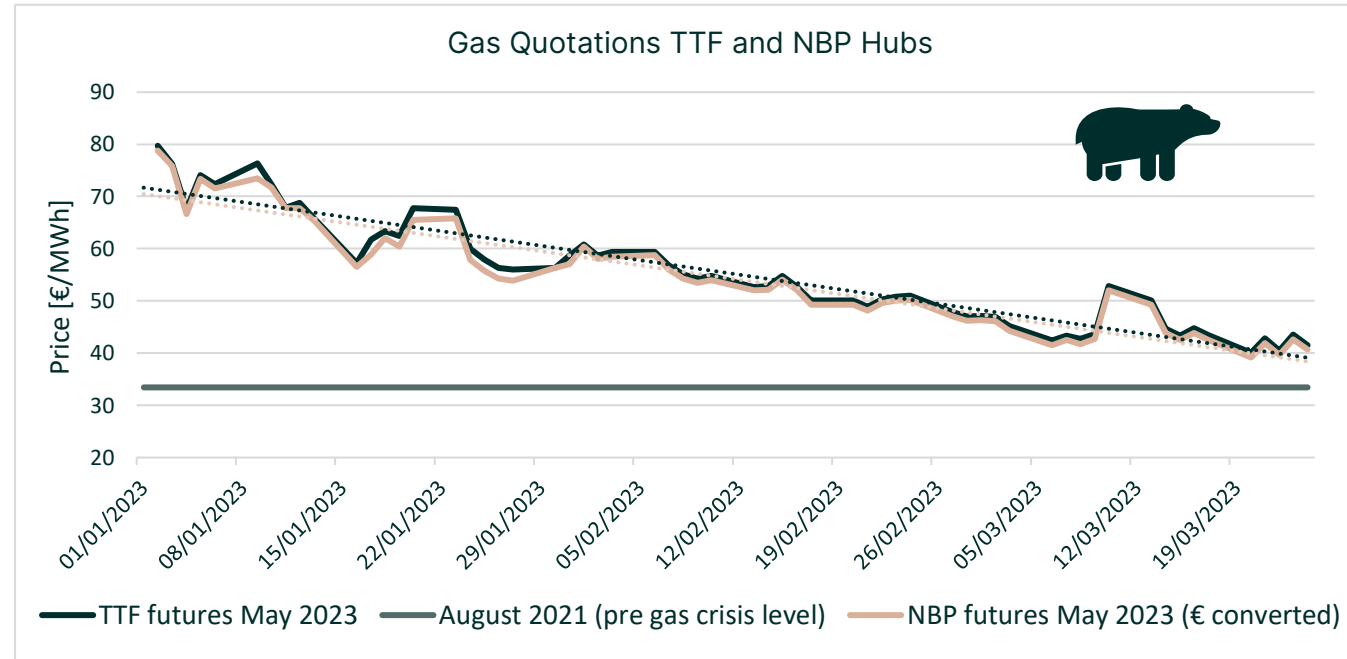
GAS

- Spikes in 2022 because of the war in Ukraine.
- NBP and TTF decoupled in 2022.
- Defining new standards in Q1 2023.



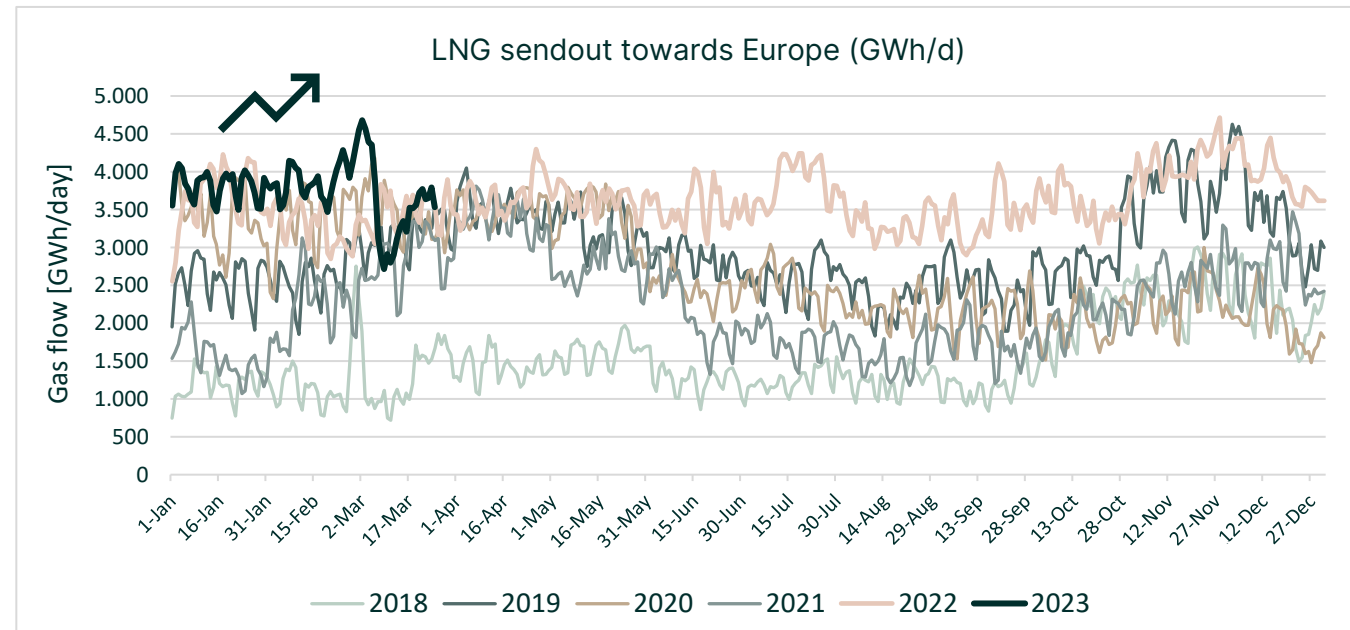
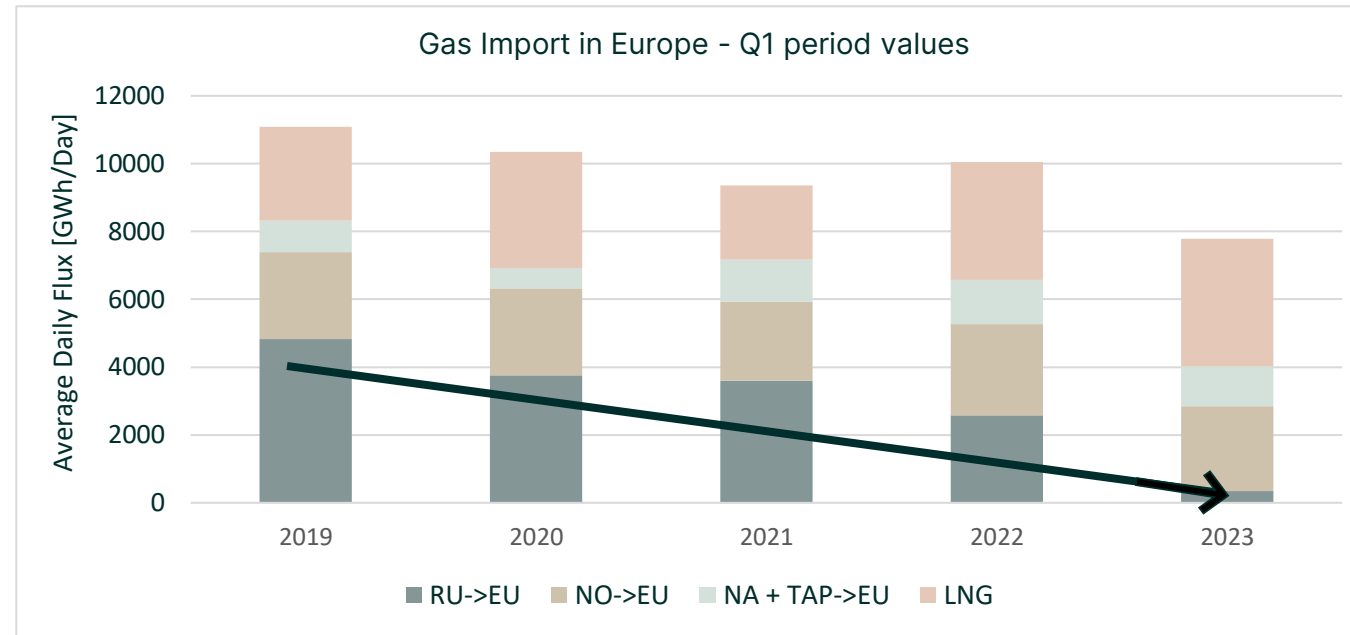
GAS

- TTF and NBP prices decreased by 50% these last 3 months: mild winter, low demand (industrial and domestic) and oversupply the main drivers. Levels still higher than pre gas crisis levels.
- Gas storages level in Europe at the end of the winter: 55%. Same level of Covid Period.
- Injection season started the 1st of April. The actual level of fullness eases the process respect 2022 for next winter.



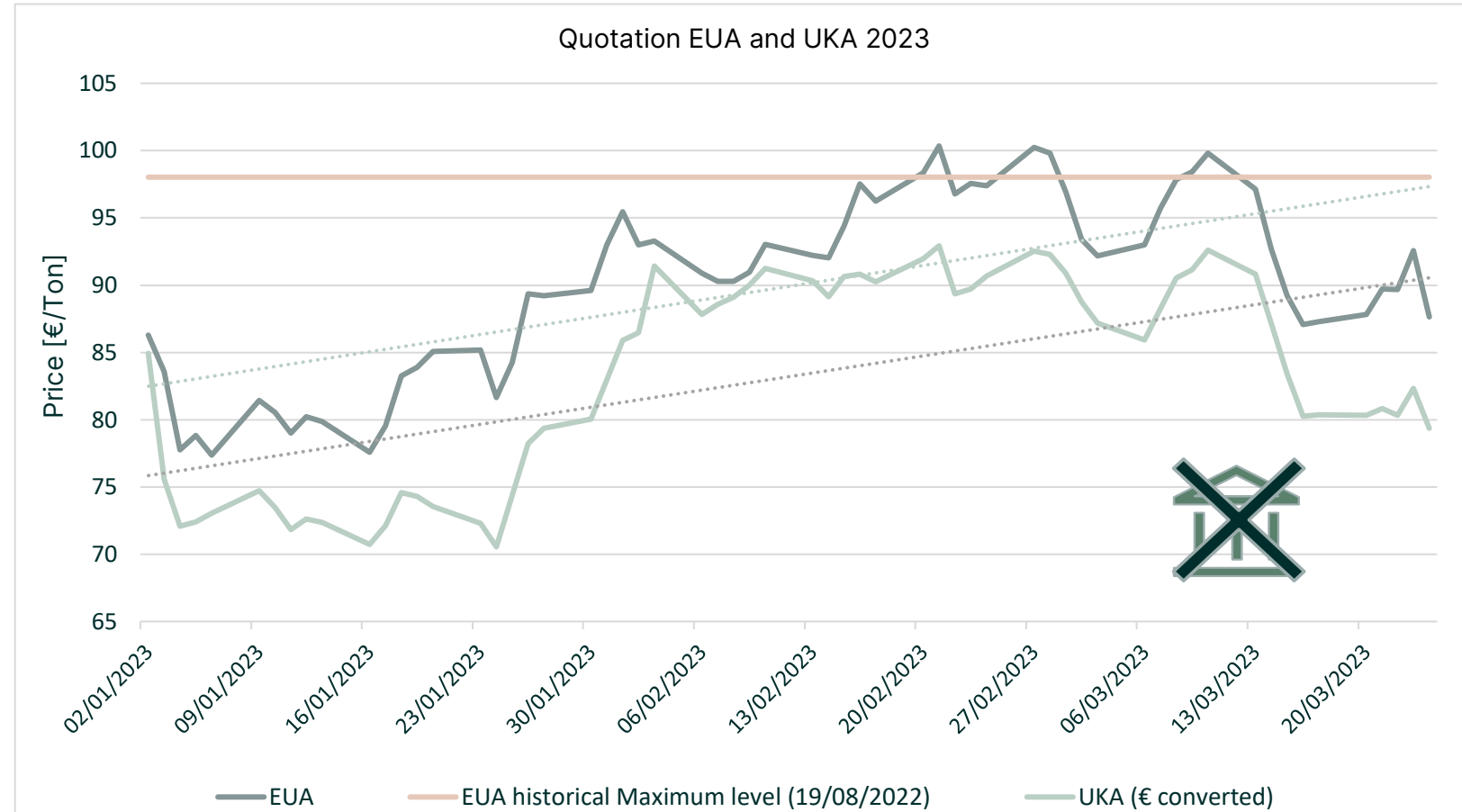
GAS

- Over the last two years LNG substituted Russian gas via pipelines among the incoming fluxes to Europe, in Q1 period. Russian gas flux in 2023 close to zero. Great LNG contribution is expected for the rest of the year.
- LNG Spiked over 4500 [GWh/day] in February, due to new regasification plants activated in Germany.
- French strikes impacted LNG supply in March. Situation already recovered.



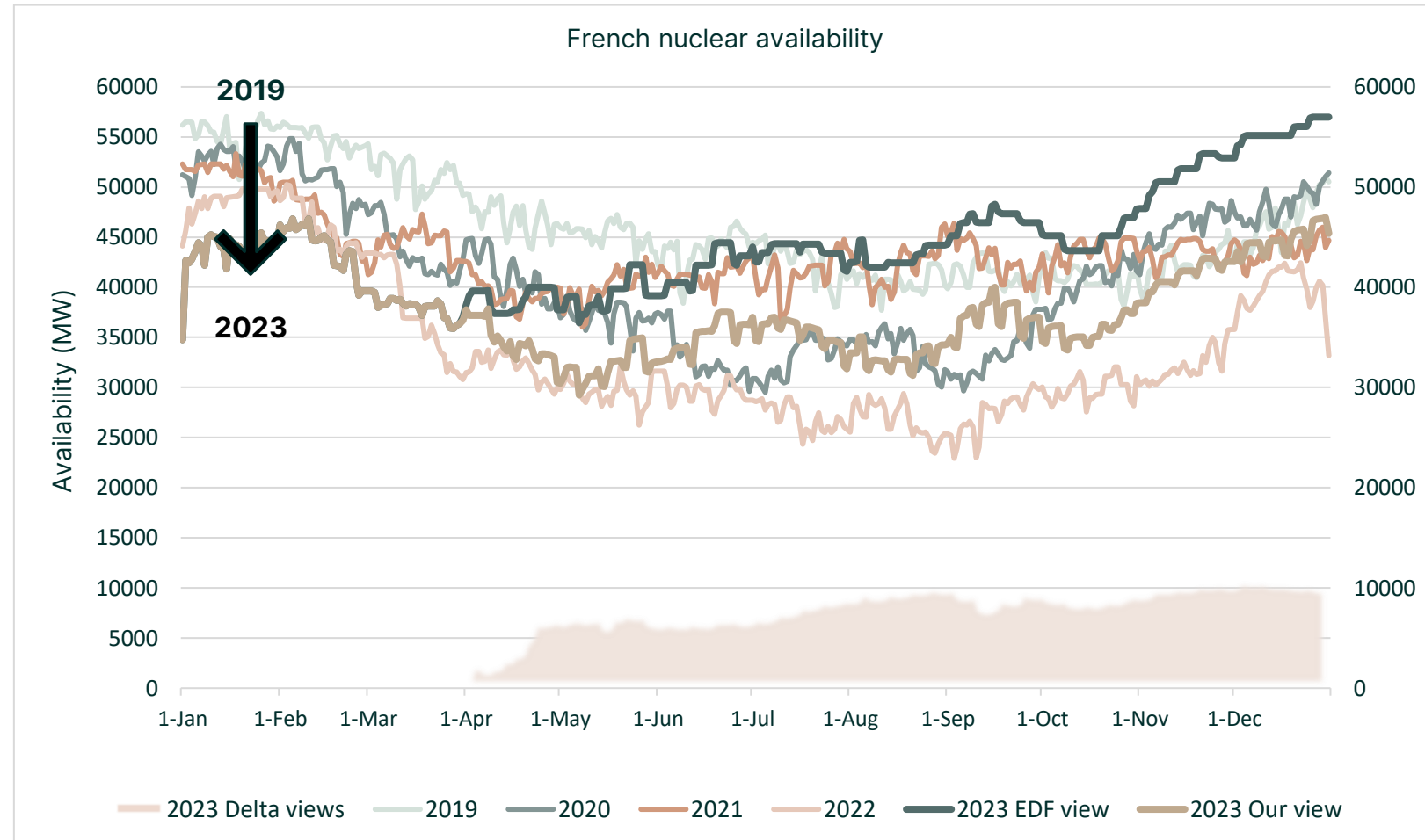
CARBON EMISSIONS

- Driven by signals of European economic recovery in January, EUA started a bullish trend (overcome 100 €/Ton).
- In February, Bank sector crisis and uncertainty about European economy increased volatility.
- Slightly bullish and very volatile trend so far.



FRENCH NUCLEAR AVAILABILITY

- Availability decreases over the years.
- For EDF 2023 has the best availability.
- For us 2023 will be almost as low as 2022.

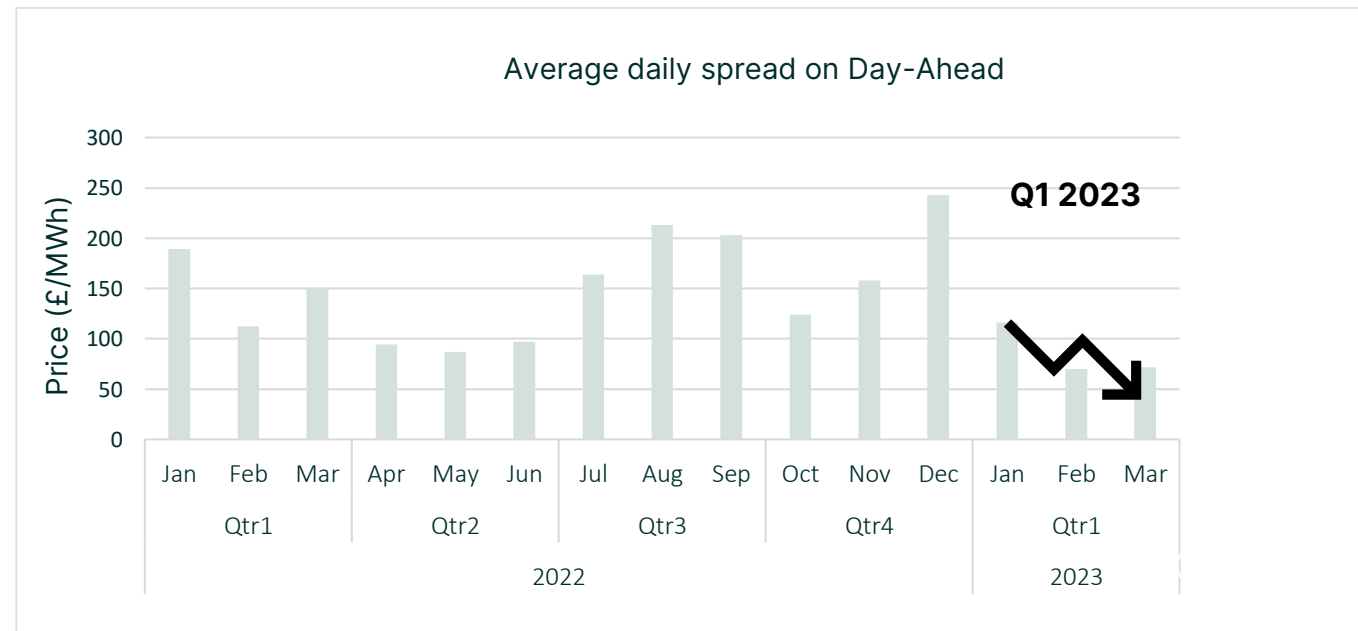
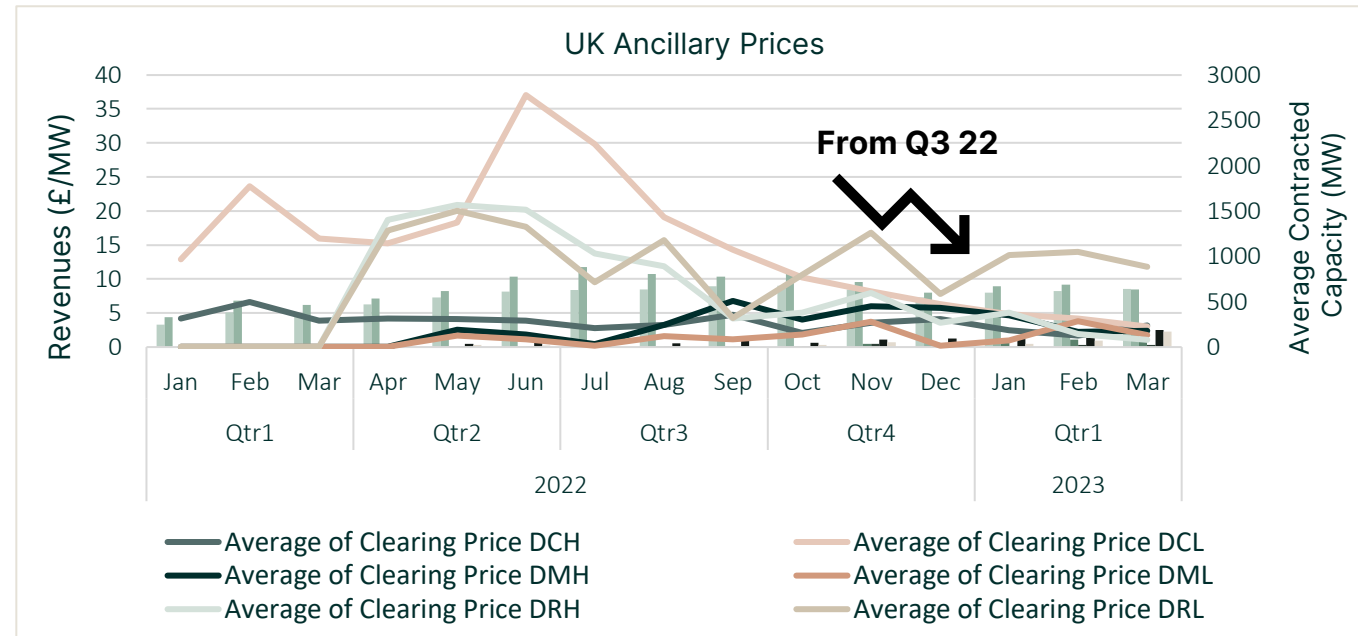


UK market overview

A landscape photograph of rolling green hills under a blue sky with white clouds. Several white wind turbines are visible on the ridges. In the foreground, a flock of sheep is grazing in a green field.

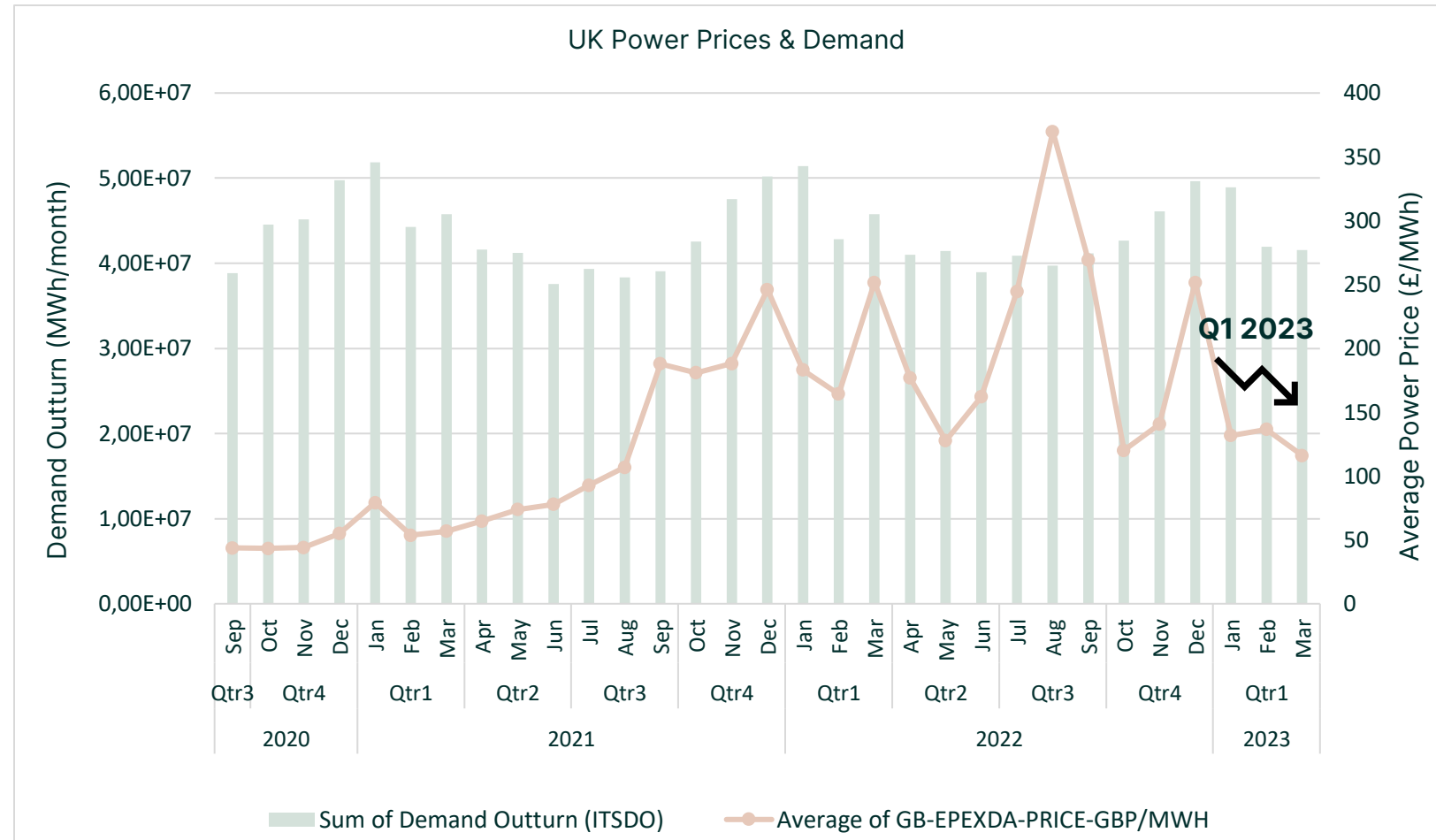
STORAGE REVENUES

- Ancillary : frequency response similar to FRU.
- Ancillary prices decreasing from the summer spike.
- Spikes of volatility in Q3-Q4 2022.
- Q1 2023 volatility decreased by 45% compared to Q1 2022.



POWER PRICES AND DEMAND

- UK prices spiked in summer 22.
- Demand slightly lower Q1 23 than Q1 22.
- Return to normal in Q1 23.



Conclusions

HIGHLIGHTS

- **Q1-Q2 2023 – Power:** the downward trend in gas coupled to a lower demand made electricity prices lower than expected in Q1 2023.
- **Q1-Q2 2023 – Battery storage:** GB storage revenues impacted negatively from the beginning of 2023 by the lack of volatility in power wholesales as well as a cannibalization behaviour of the ancillary markets
- **Q2 2023 – UKAs:** The UKAs are currently following a neutral trend between the price marks of 65 £/Ton and 85 £/Ton.
- **Q2 2023 – Gas:** On April 1st, a very high starting level of gas storages in Europe (55%) made gas prices reach pre-pandemic levels despite the decrease of Russians flows. They are still very sensitive to market news, such as OPEC+ cutting oil production. NBP is back in market coupling with TTF for now.
- **Q3-Q4 2023 - Power:** high bullish potential due to a dry year for hydro but also for river levels used to cool down thermal and nuclear plants; French nuclear availability put in question when everlasting strikes are pushing more maintenances to the 2nd half of the year.

Thank you

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