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Market Update Gas, Power & Carbon

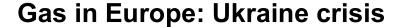
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12.05.2022

An LSEG Business



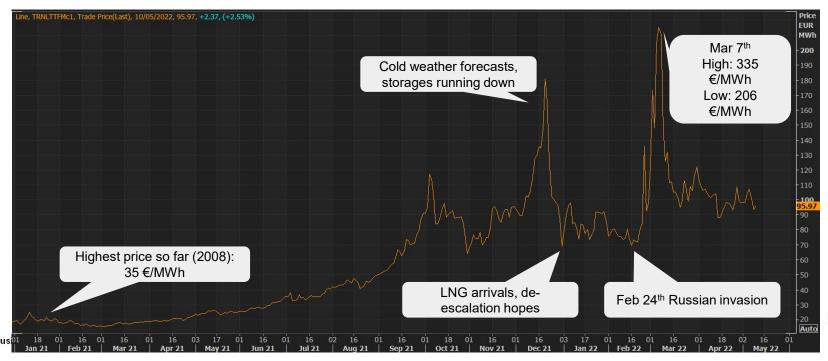
Gas Europe: from Russian imports to ...?





TTF Front Month contract: Price surge has receded

- The contract has fallen back to levels seen in Jan-22 Loss of momentum?
- Europe and especially the UK are very well supplied now
- De-escalation regarding Ruble payments to Gazprom

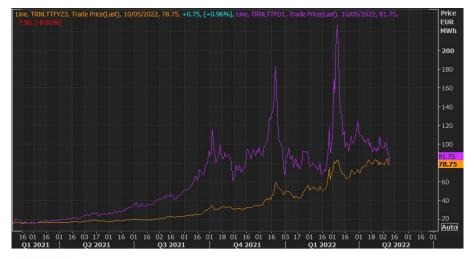


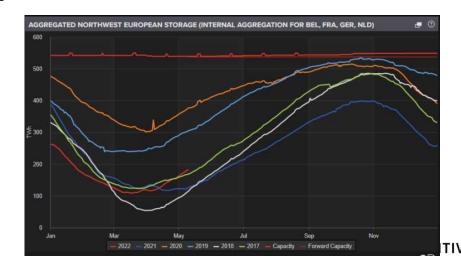


Gas in Europe: Ukraine crisis

TTF Summer vs. Front year:

- Anomaly in Mar-22: Sum22 > Win22/23 as most liquidity in the short term and fear of shortages for storage injections in summer
- Storage situation improving Gazprom storage in hands of German regulator, injections have started
- Cal-23 gaining and closing the discount to the spot:
 - Europe moving away from Russian imports means gas will arrive from further away (LNG)
 - · The risk of a sudden cut of Russian flows prevails for the time being



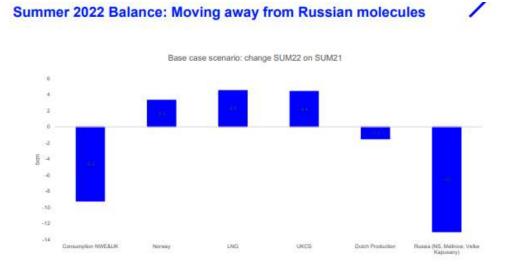


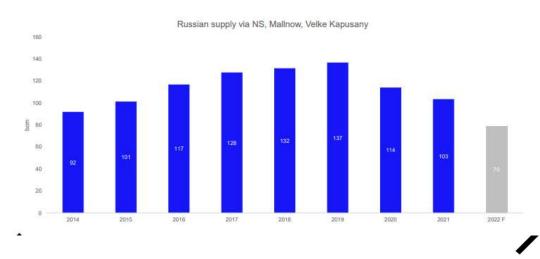




TTF gas surge:

- Minimum contractual obligations with Russia continue to be fulfilled
- Europe expected to reduce Russian imports by 13 bcm in Sum-22, to be replaced by LNG and alt. pipeline gas







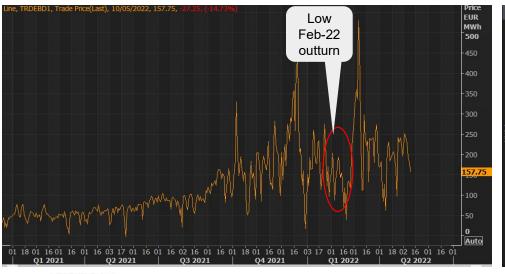
Power Europe: Continued reliance on gas





Day Ahead Price:

- Spot in Winter: all-defining factor WIND
- Feb-22: strong wind on most days leads to very low spot outturn of 129 €/MWh
- Day-on-day fluctuations as marginal production costs on strong/weak wind days vary strongly
 - · Weak wind days: full exposure to gas price and reliance on imports
 - Strong weak days: low prices, price decoupling and strong exports







Front Month Contract:

- · Coal prices have followed the bullish gas/oil sentiment coal SRMC (green) continues to rise
- Power contracts with strong focus on TTF gas



(SRMC = short run marginal cost = fuel + carbon cost at specific efficiency)





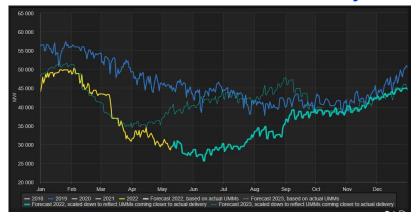
Risk Factors: Downside

- Renewable energy push? REPowerEU initiative to replace gas by renewable generation
- Return of decommissioned coal plants?
- Governmental interventions: Spain & Portugal capping gas at 50 €/MWh

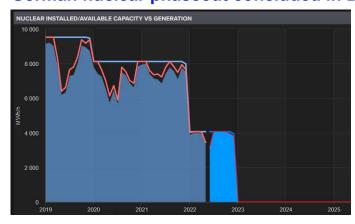
Risk Factors: Upside

- Tightness from nuclear/coal phaseout: in wind-poor hours the risk for very tight hours will increase as baseload supply is narrowing
- Russian gas supply cut: would the power sector's gas supply be curtailed?

French nuclear: current nuclear availability at 50%



German nuclear phaseout concluded in Dec-22: - 4GW

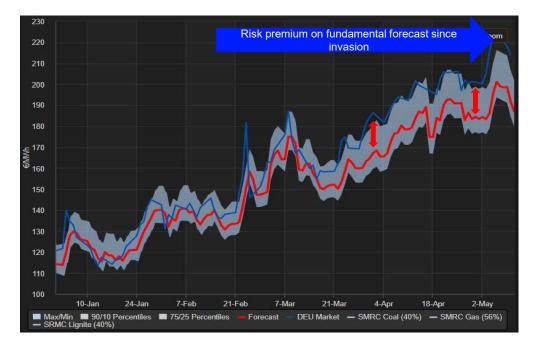


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Refinitiv Power Outlook Europe

- Front Year: bearish outlook based on market fuel prices
- ...while the market maintains a sustained <u>risk premium</u> on top of the fundamental value since the beginning of the war





EUA Carbon: Decoupling from the energy complex

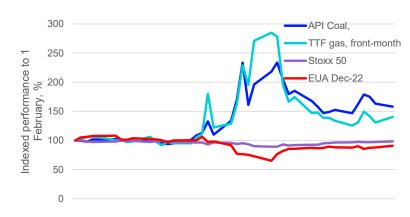


Carbon price hit by Russian invasion



Mar 2022:

correlation to coal/gas turns negative



In 2021 prices increased 150% high gas prices → more coal-burn

- Crash from almost 100 to €55/t: EUA following equities and pricing in recession risks
- Cash-constrained industrials possibly forced to sell off surplus allowances
- Liquidation of EUA positions to cover margins call in other energy positions
- EUA got bullish momentum back in the last two weeks:
 - dip-buying
 - compliance demand returning



Carbon outlook – short term (2022-2023)







- Increased coal burn → increased power sector emissions
- Nuclear outages in France driving fossilfuelled power in general



- High energy and metal prices might force industry to stop/limit production.
- War-induced economic downturn impacting industry sector's emissions
- Concern that ongoing climate policy process ('fit for 55') will take backseat delaying fit for 55 progress

Policy events 2022:

- Ongoing Fit-For55 negotiations
- CBAM: Carbon Border Adjustment Mechanism
- Earlier end of free allocations for industry under discussion
- Introduction of ETS for transportation and heating



Thank you!

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