

Last Week at a Glance

Week 9, 2023



BRENT M+1

83.89 \$/bbl

Oil prices fell amid slowing demand and expectations that central banks will further tighten their monetary policy.

Outlook:

(Horizon 1 week)



GAS TTF Y+1

53.68 €/MWh

TTF gas prices tumbled as milder weather and healthy supplies weighed on demand.

Outlook:

(Horizon 1 week)



POWER GE Y+1

148.02 €/MWh

German power declined following the bearish evolution of the gas market.

Outlook:

(Horizon 1 week)



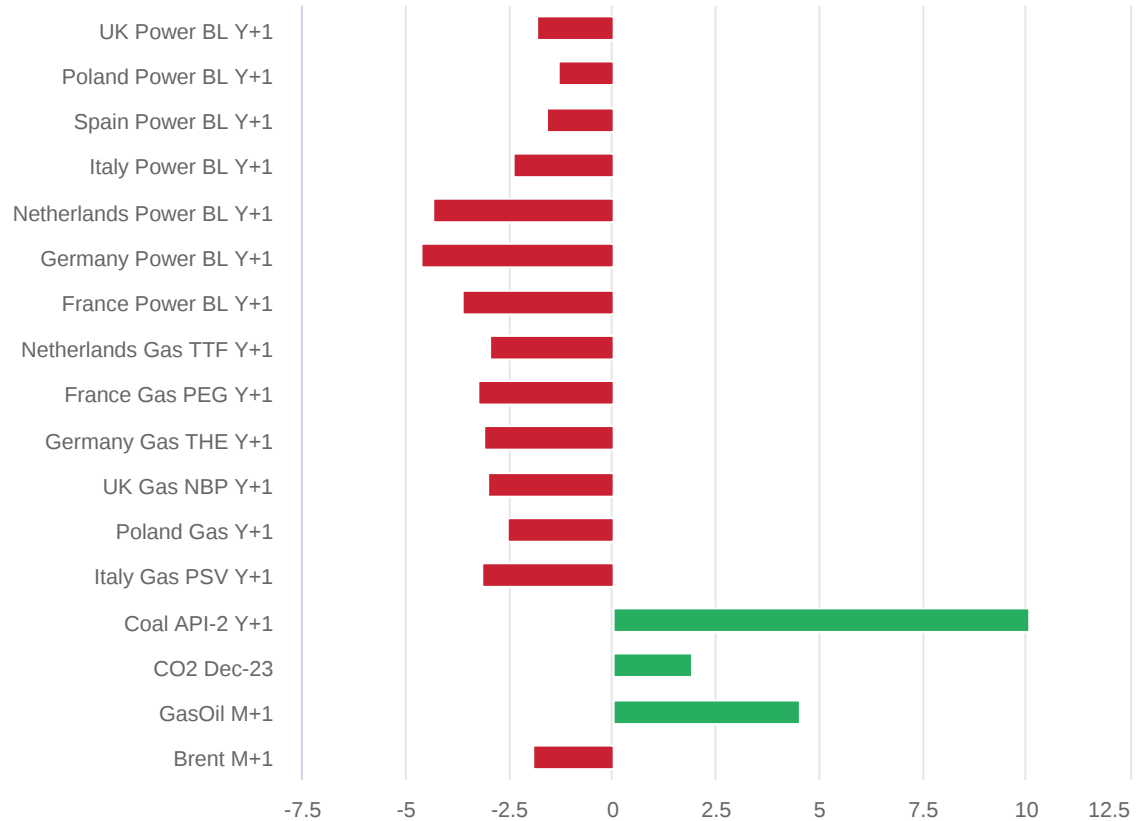
Highlights

EVOLUTION OF MAIN ENERGY PRODUCTS IN THE LAST WEEK

UK Power BL Y+1	▼ (-1.79%)
Poland Power BL Y+1	▼ (-1.31%)
Spain Power BL Y+1	▼ (-1.59%)
Italy Power BL Y+1	▼ (-2.4%)
Netherlands Power BL Y+1	▼ (-4.31%)
Germany Power BL Y+1	▼ (-4.59%)
France Power BL Y+1	▼ (-3.6%)
Netherlands Gas TTF Y+1	▼ (-2.97%)
France Gas PEG Y+1	▼ (-3.23%)
Germany Gas THE Y+1	▼ (-3.11%)
UK Gas NBP Y+1	▼ (-3.01%)
Poland Gas Y+1	▼ (-2.5%)
Italy Gas PSV Y+1	▼ (-3.12%)
Coal API-2 Y+1	▲ (10.06%)
CO2 Dec-23	▲ (1.91%)
GasOil M+1	▲ (4.55%)
Brent M+1	▼ (-1.93%)

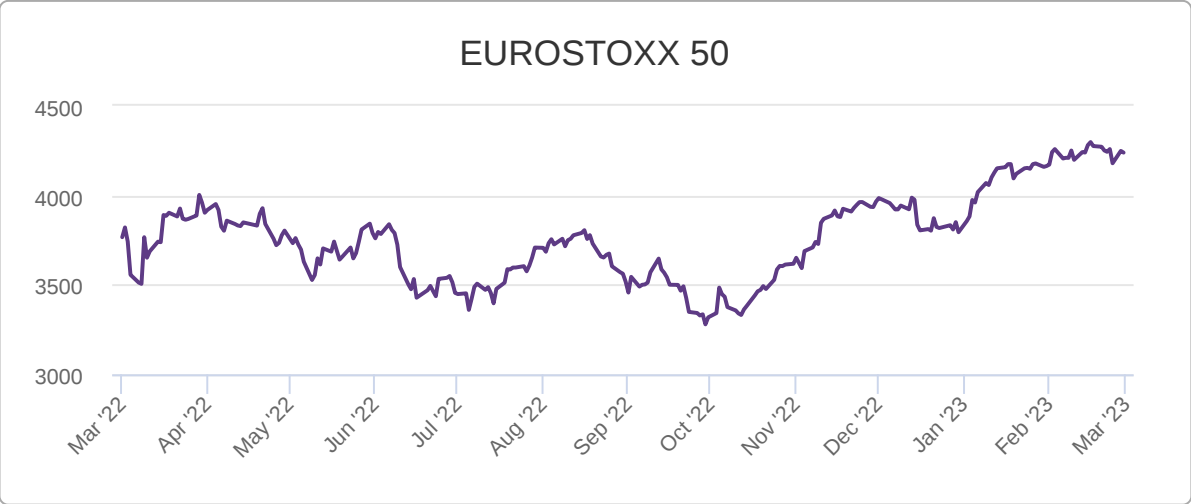
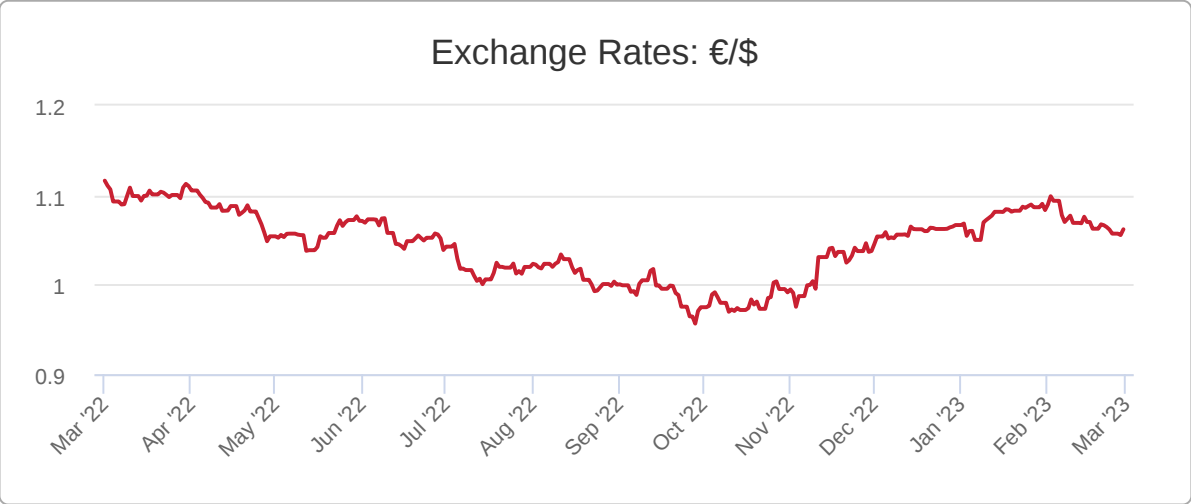
% Change Current Week vs Week-1

Evolution of main energy products in the last week



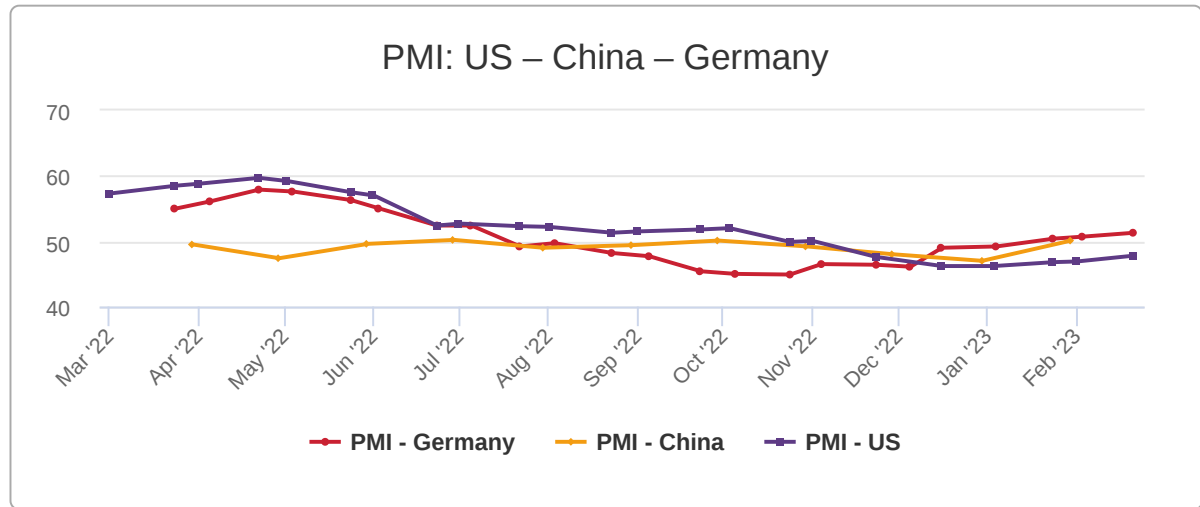
General Overview

✓ The EUR/USD rate slipped on a weekly basis. A scale down in the pace of interest rates hikes in the US, as well as solid economic data boosted the dollar.



✓ The purchasing managers index is a composite indicator of a country's manufacturing activity. It takes into account order intake, production, employment, shipments and stocks in the manufacturing sector.

- PMI < 50: contraction in the activity
- PMI > 50: expansion in the activity





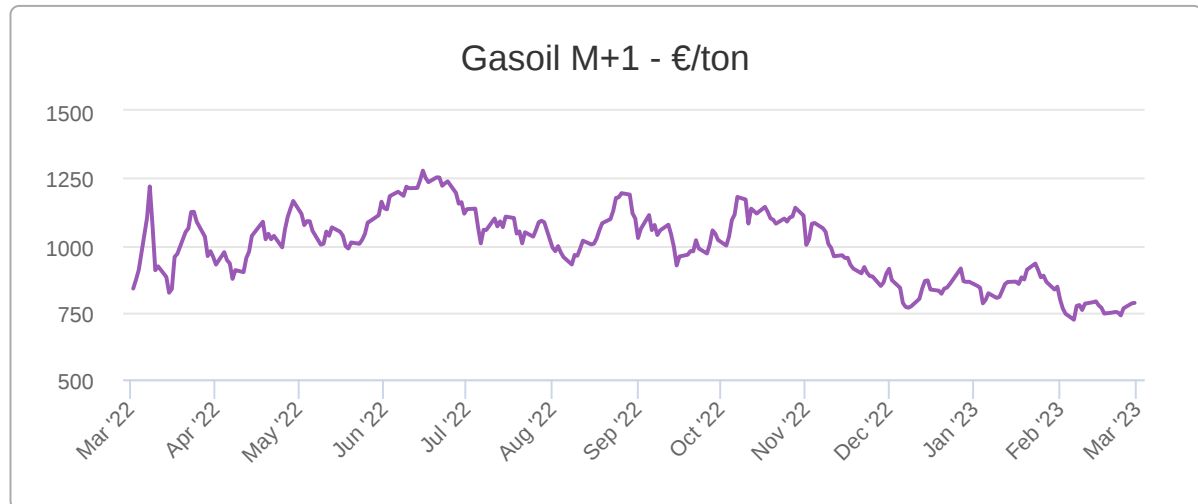
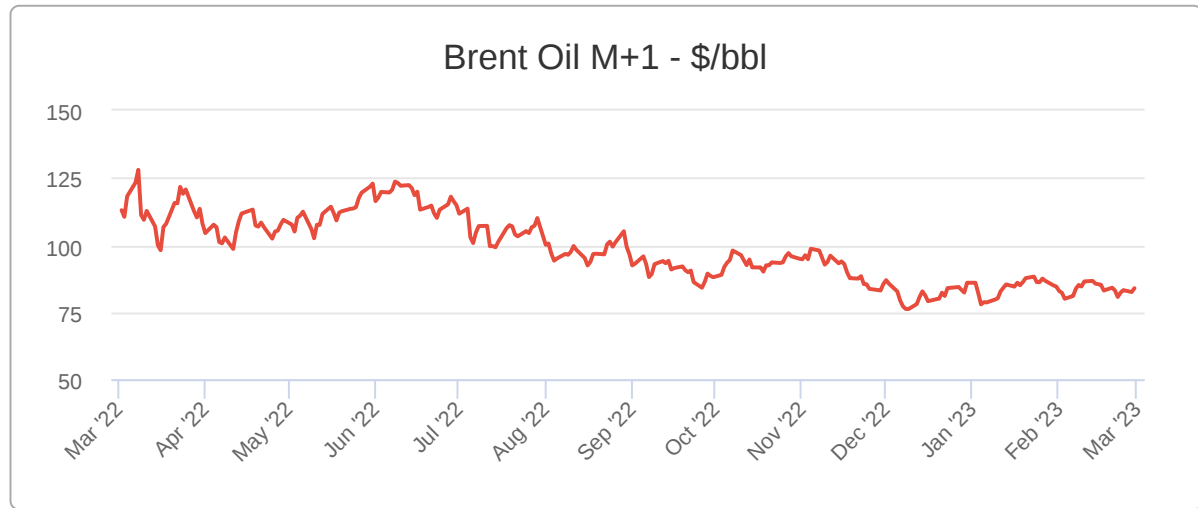
Oil

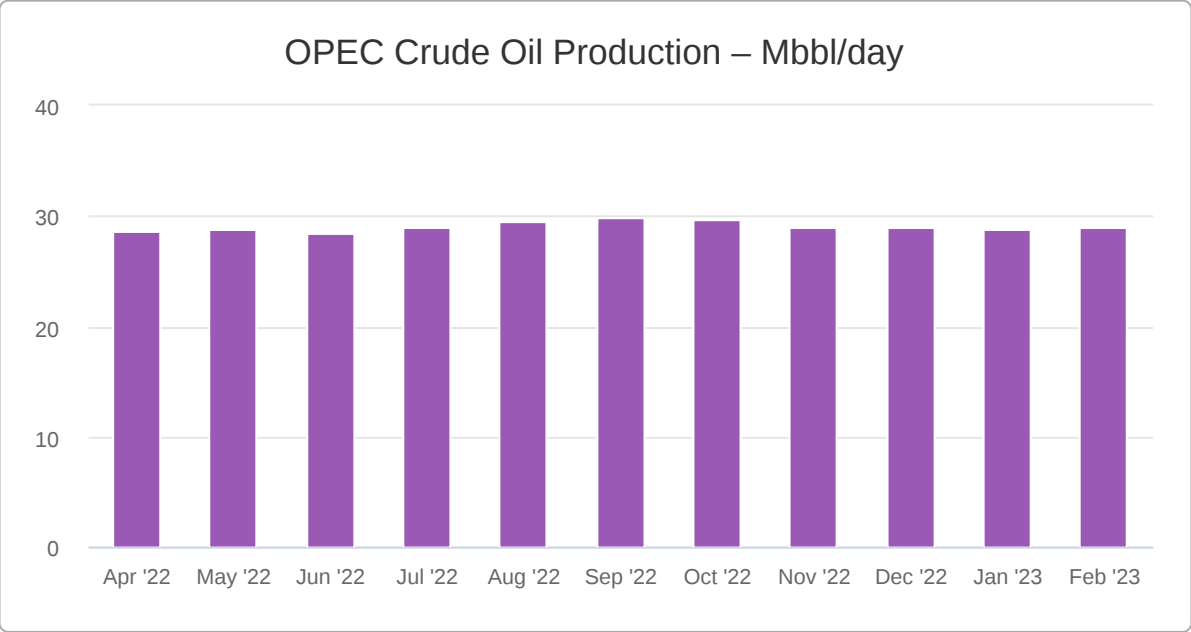
- ✓ Oil prices fell on a weekly basis amid slowing demand and expectations that central banks will further tighten their monetary policy.

Russia is planning to reduce oil exports by up to 25% in March.

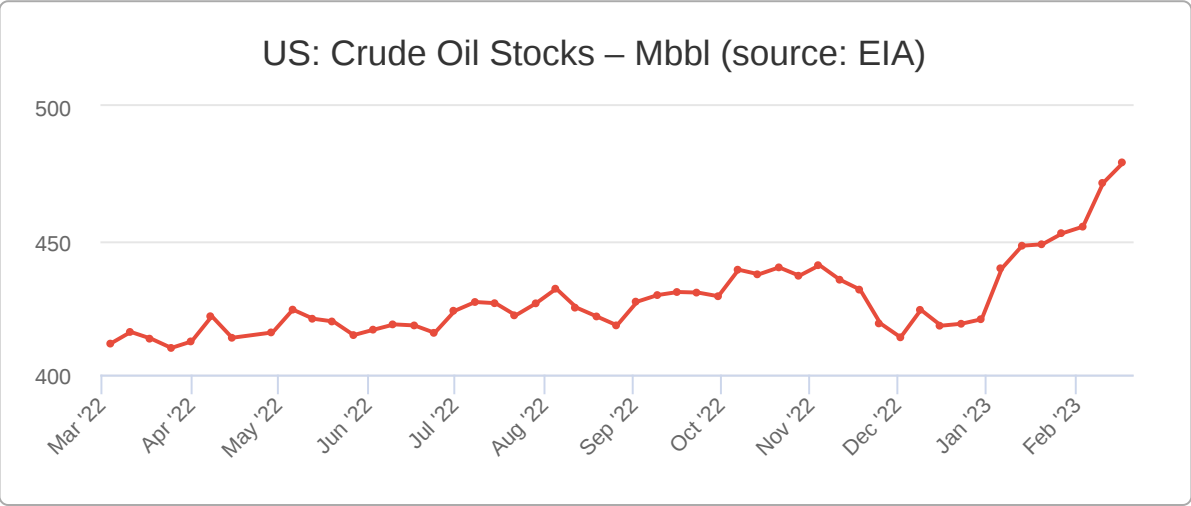
US Energy Information Administration (EIA) announced higher-than-expected numbers in crude inventories for the eighth consecutive week.

The market is also awaiting further signals of demand from the world's biggest crude importer China, as it continues to revive from pandemic lockdowns.





✓ The number of oil rigs in the United States fell by seven on a weekly basis to 600 in the week ending February 24, the Baker Hughes rig count data released on Friday revealed. On a yearly basis, oil rigs were up by 78.



Coal & CO2

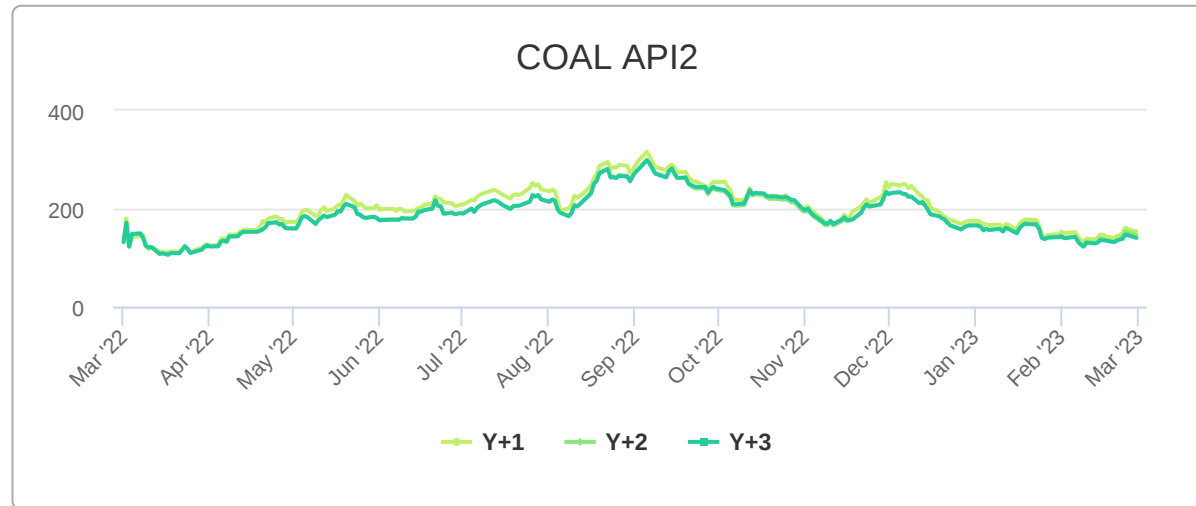
- ✓ European coal prices rose amid colder weather forecast and high demand.

Forecasts for lower temperatures over the rest of winter and the return of competition with coal-fired generation were supporting prospects of more demand.

Combined coal stocks at Amsterdam, Rotterdam and Antwerp (ARA) were seen last week at a one-month high of around 5.9m tonnes, more than double the level at the same time last year, according to the data from Montel.

Vessels continue to arrive, with northwest Europe provisionally estimated to import 4.1m tonnes of thermal coal this month, compared with 4m tonnes in January, according to DBX estimates.

The dramatic decrease in worldwide prices this year has made it difficult for smaller and medium-sized coal miners in countries like South Africa, Australia, and Russia to finance production costs.

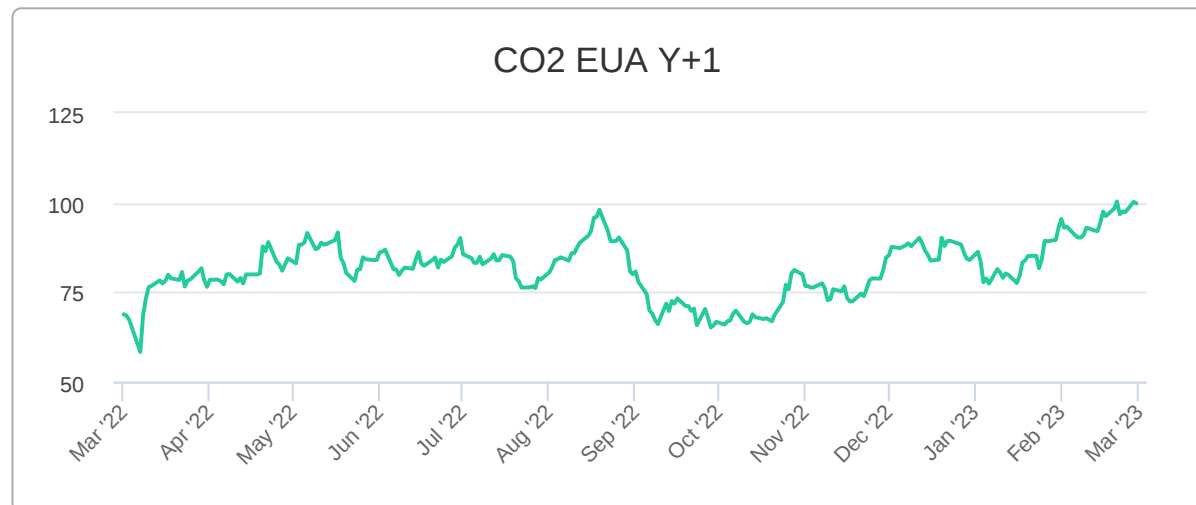


- ✓ European carbon prices rose on a weekly basis amid compliance buying and lack of vendors.

The market will pay special attention to how free carbon allowances were distributed, with "only a few" countries providing free permits prior to the official deadline.

Traders remained wary prior to the release of EEX's revised auction schedule, which would now contain the first round of additional volumes. The additional volumes are intended to raise EUR 20 billion to aid the EU on accelerating its energy transition and moving away from Russian fossil fuels since Moscow invaded Ukraine.

The level depends on whether the first additional auction starts by May or September, which remains unclear at the moment.



Natural Gas

Natural Gas Storage Total EU 28

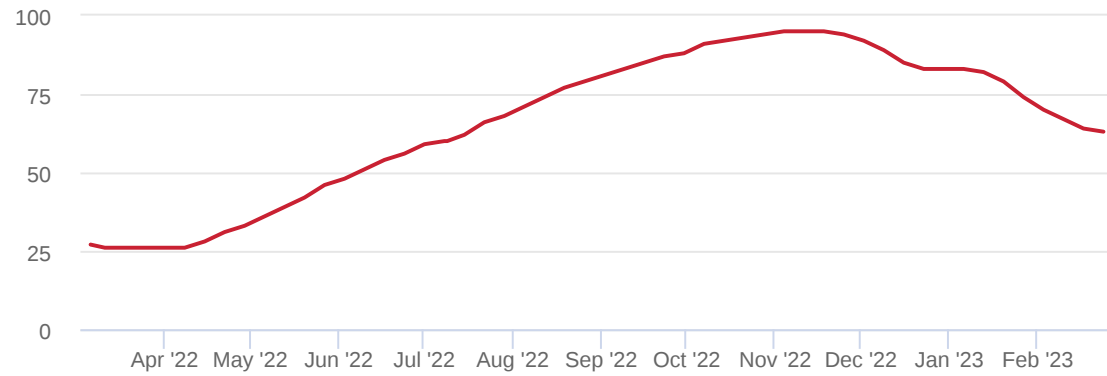
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Outlook:

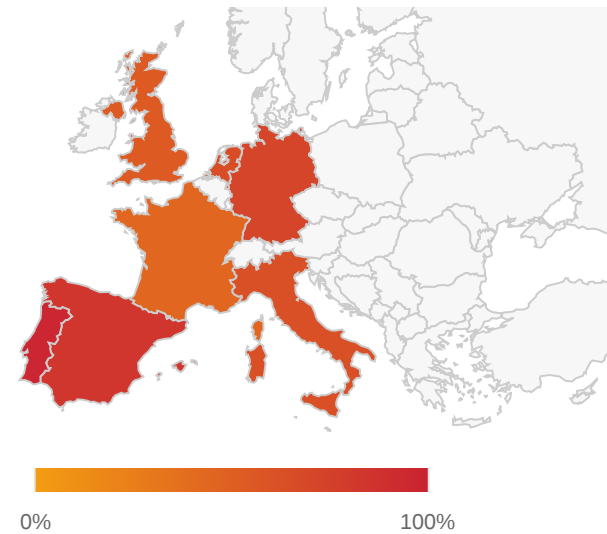


Gas Storage Inventory in % (EU)



Natural Gas Storage

 United Kingdom	53%
 Germany	71%
 France	44%
 Spain	83%
 Portugal	96%
 Italy	62%
 Netherlands	64%



LNG Storage

LNG Storage Total EU 28

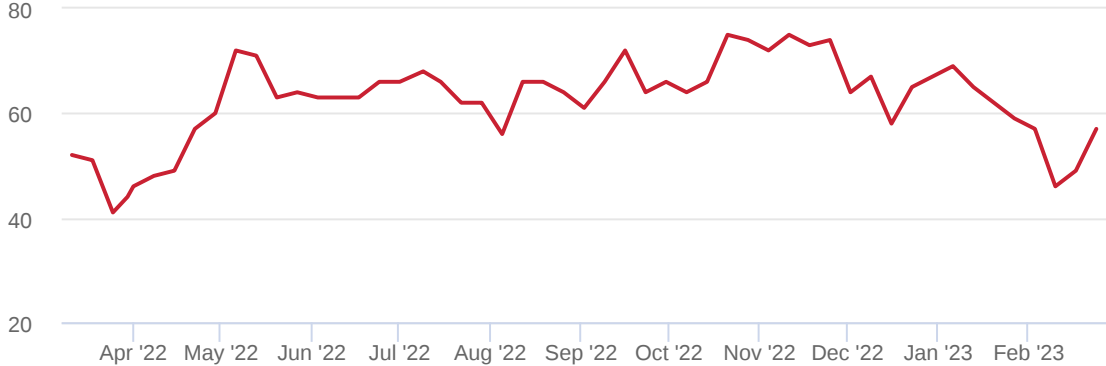
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Outlook:



LNG Storage Inventory in tsd. cubic meter LNG (EU)



LNG Storage

 United Kingdom	49%
 France	50%
 Spain	54%
 Portugal	60%
 Italy	73%
 Netherlands	53%



Henry Hub - TTF - JKM

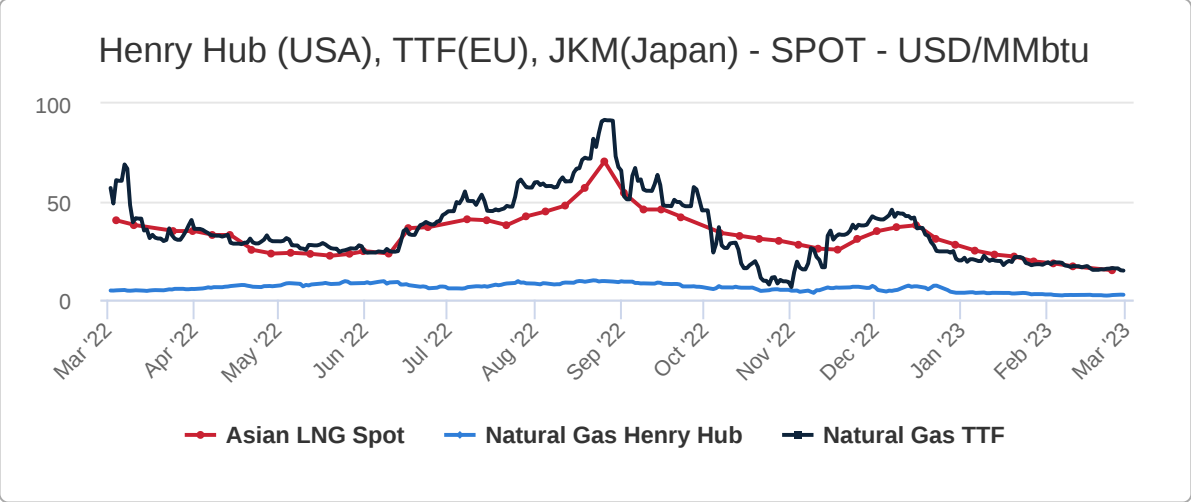
✓ Asian spot liquefied natural gas (LNG) prices fell as demand from key buyers in northeast Asia remains weak.

High stock levels, ample spot supply availability and limited buying interest from the northeast Asian buyers pressured prices. China Gas Holdings stated on Friday that it has signed two 20-year LNG supply contracts with US exporter Venture Global, for a total supply of two million tonnes per year.

American natural gas prices decreased due to muted demand and milder weather.

The U.S. natural gas market is expected to have a greater impact on the global LNG trade in the future as more projects are built and the world's supply contracts are increasingly tied to Henry Hub.

Following the extraordinary supply cuts to the European Union in 2022, the IEA says that American LNG played a "crucial role in alleviating the gap in Russian piped gas supply," and that LNG inflows to the EU increased by a startling 70% (55 bcm) compared to 2021.



TTF

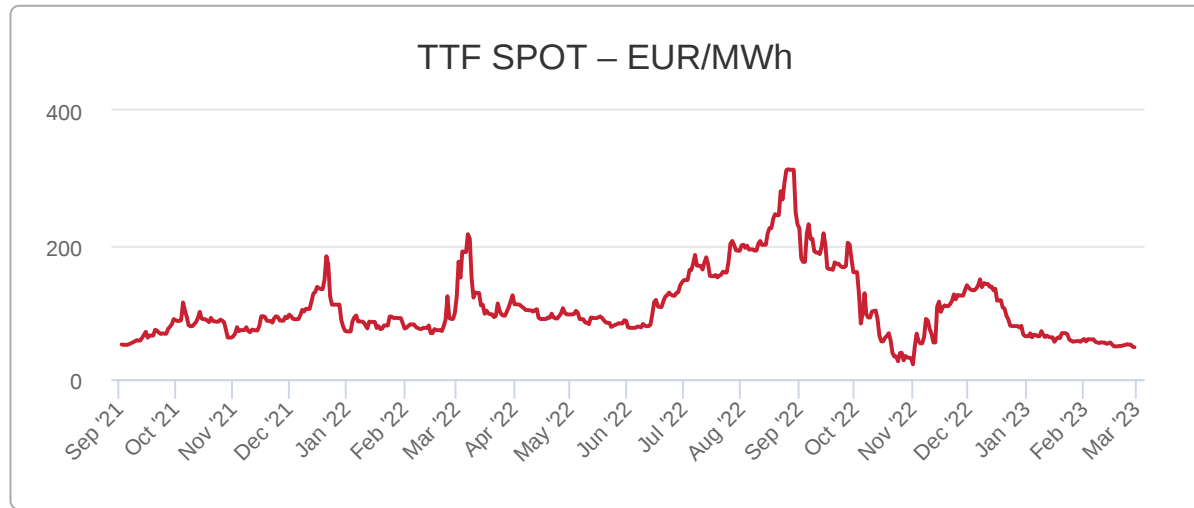
MARKET AVERAGE	PERIOD	PRICE €/MWH
Month M-12	March 22	127.4
Month M-1	February 23	53.3
Month M	March 23	0
Current Year	2023	58.1
Year Y-1	2022	121.1

- ✓ TTF spot price decreased due to high volumes of LNG despite the return of colder weather in March.

LNG deliveries to Europe and Turkey jumped to a fresh record last week of 4.9bcm, according to ship tracking data from Kpler, in comparison to the previous weekly record at 4.3bcm.

High storage levels could increase the risk of excess gas in the market by the end of summer unless supply will drop and demand will increase.

Since Russia's invasion of Ukraine, gas prices have fallen by more than 80% from their highest levels, mostly because of mild weather and an abundance of LNG.



SPREAD €/MWH	12-MONTH MOVING AVERAGE	LAST WEEK AVERAGE
TTF Y+2 vs Y+1	-24.3	-7.7
TTF Y+3 vs Y+1	-42.7	-19.7

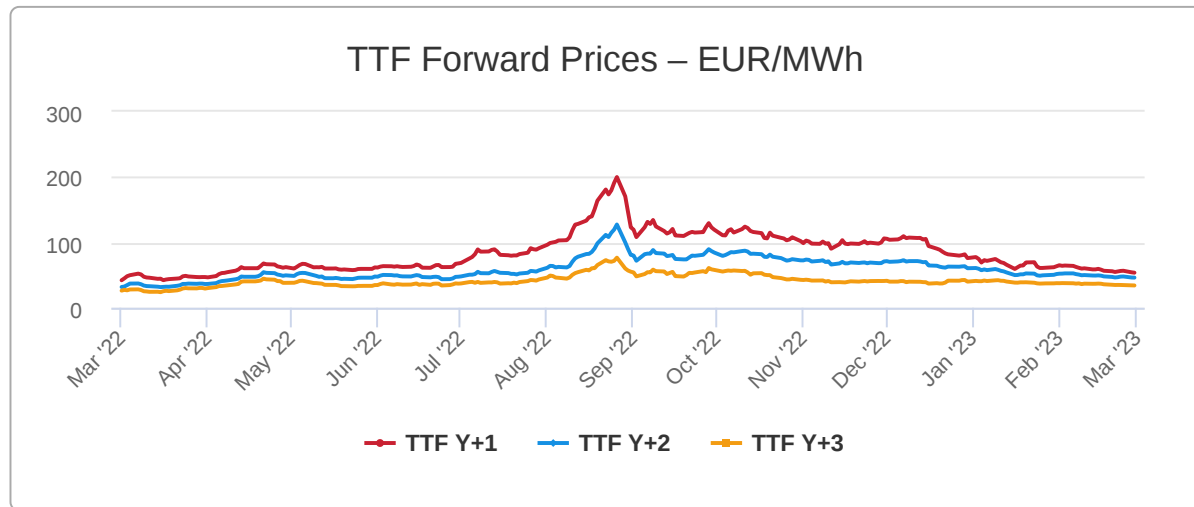
- ✓ TTF gas prices tumbled as milder weather and healthy supplies weighed on demand.

Natural gas prices dropped in the last few months after a milder-than-expected winter kept storage levels healthy and boosted supply in Europe.

Nominations at the Velke Kapusany crossing between Ukraine and Slovakia were seen up 2% at 36.6mcm, while flows via the Turkstream pipeline to Bulgaria were 2% lower at 24.5mcm.

Norwegian shipments to Europe were nominated marginally higher at 342mcm.

Natural gas prices could rise this year as demand for liquefied natural gas (LNG) revives in Asia, particularly in China, according to the International energy Agency (IEA).



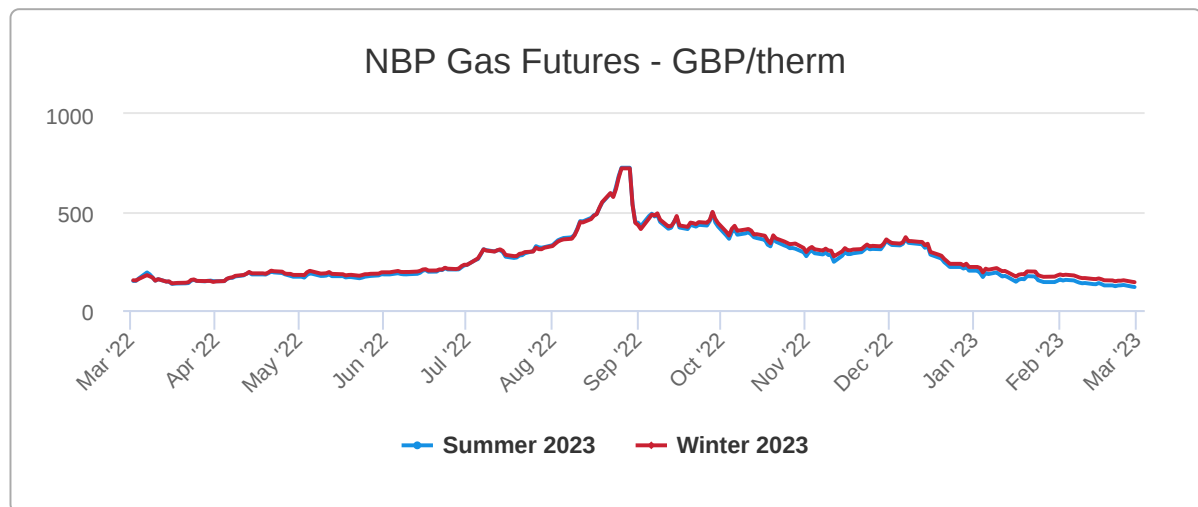
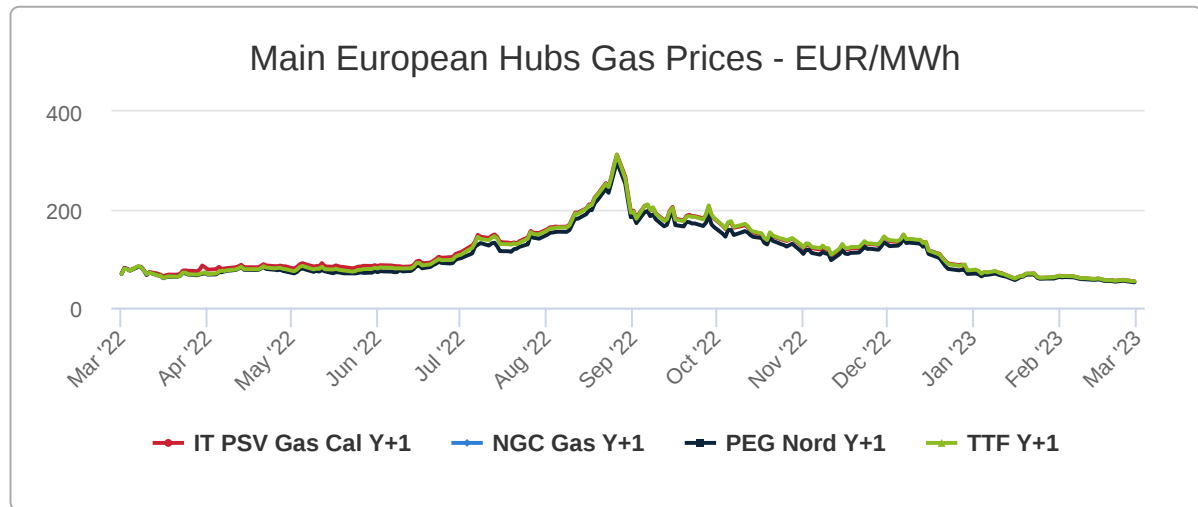
European Gas

Spread vs TTF	12-Month moving average	Last Week average
PSV (IT)	1.9	0.2
TRF (FR)	0	-2
NCG (GE)	-7.2	-1.9

- ✓ European gas storage facilities last stood at 62% full, about 32 % points higher compared to the same time last year.

With its most recent measures to put pressure on Russia to stop its war in Ukraine, the EU has prohibited Russian nationals and companies from reserving space in the organization's natural gas storage facilities. This had created an energy security issue for some EU countries.

However, if national authorities determine that exceptions to the ban are necessary to guarantee the EU's vital energy sources, they may grant them. Within two weeks of granting them, they must notify the European Commission and other EU nations of these exceptions.



German Power

MARKET AVERAGE	PERIOD	PRICE €/MWH
Month M-12	March 22	249.3
Month M-1	February 23	130.1
Month M	March 23	
Current Year	2023	125
Year Y-1	2022	235.3

- ✓ The German day-ahead power fell amid forecasts of increased solar and wind power generation.

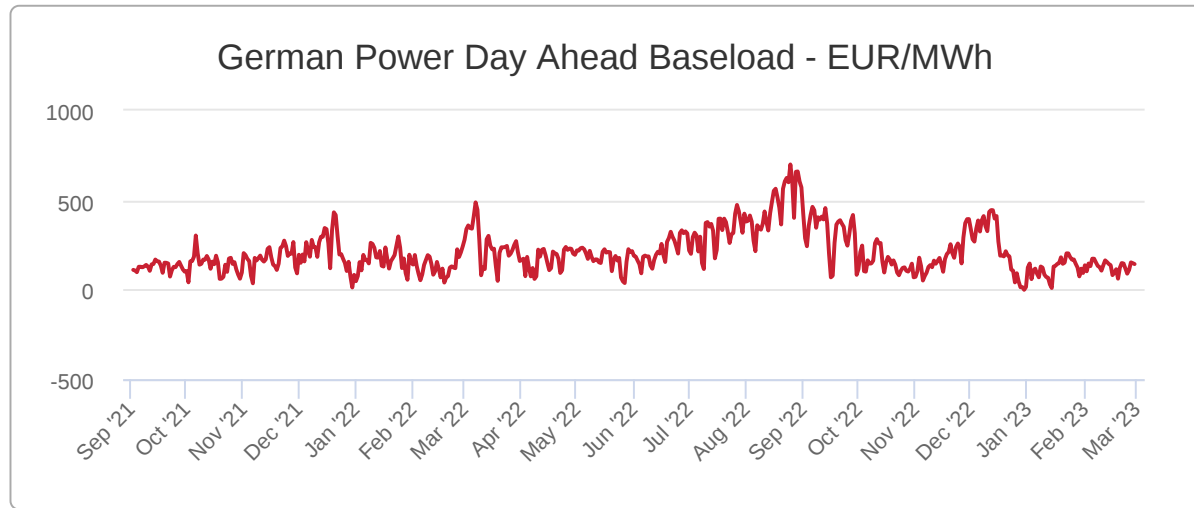
Solar output was expected to average 7.7 GW, or 2.6 GW above normal, with midday peak generation rising 3.8 GW from 26.4 GW today to 30.2 GW, according to Energy Quantified data from Montel.

The combined solar and wind midday peak should increase by 2 GW to 34.3 GW.

Average wind power generation was forecast to increase by 0.3 GW to 5.7 GW, according to TSO forecasts collated by Montel.

Temperatures in Germany were expected to rise 0.8C or 2.5C below the seasonal norm.

Meanwhile, combined German nuclear and lignite availability was set to rise 0.2 GW on the day to 19 GW, or 87% of operational capacity, according to EEX.

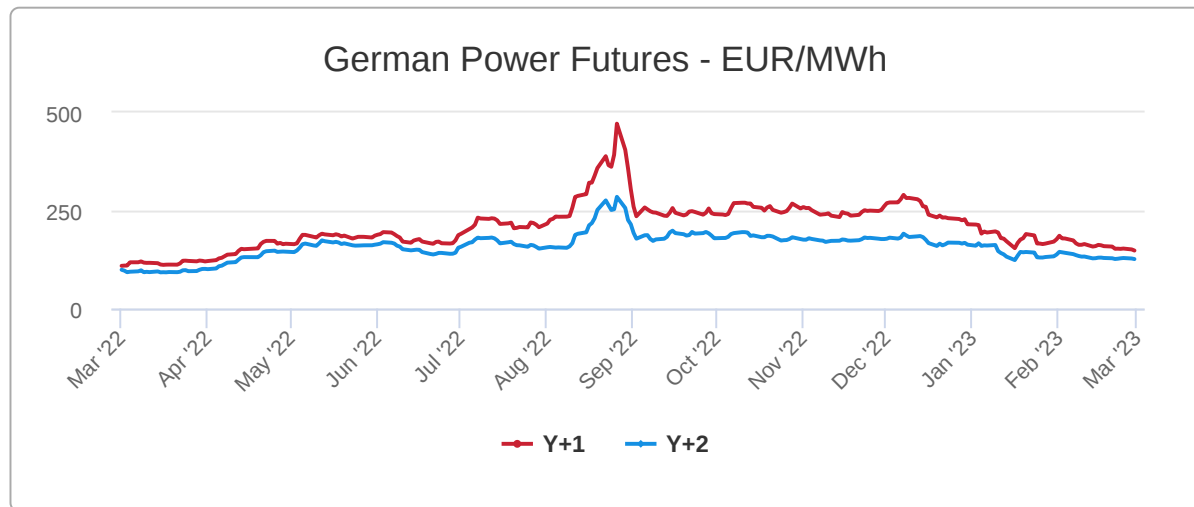


SPREAD €/MWH	12-MONTH MOVING AVERAGE	LAST WEEK AVERAGE
GE BL Y+2 vs Y+1	-49.3	-22.5
GE BL Y+3 vs Y+1	-71.6	-32.6

- ✓ German power futures prices declined following the bearish evolution of the gas market.

Germany must avoid supply shortages while reforming its power market design by investing in renewables.

Current goals would require additions of 260 GW of solar, 100 GW of land-based wind power and 40 GW of offshore wind power by 2035.



The German government wants to transition to a carbon-neutral economy by 2045, so it is looking at the market reform.

Central Western Europe

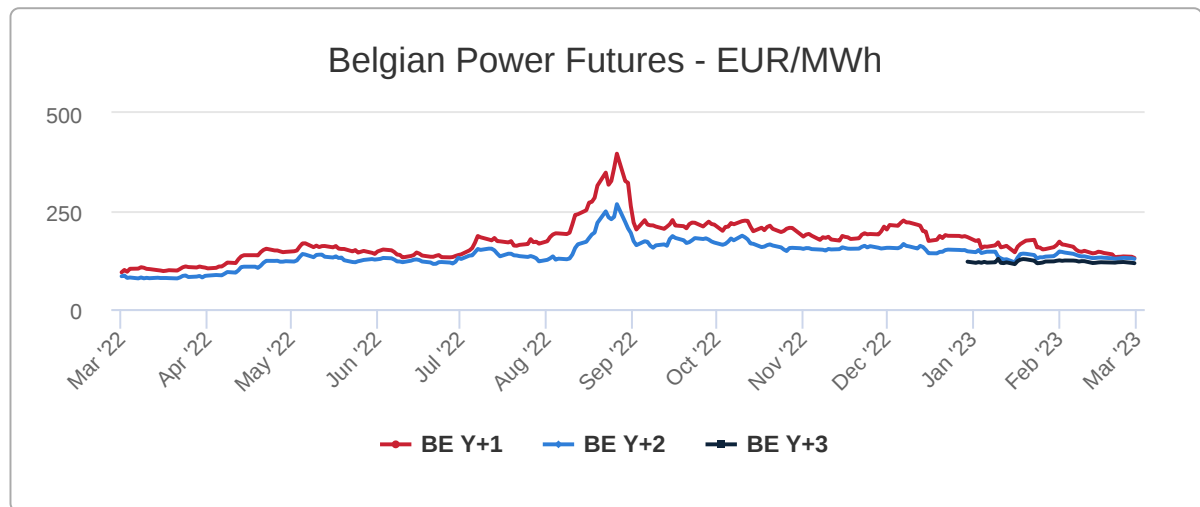
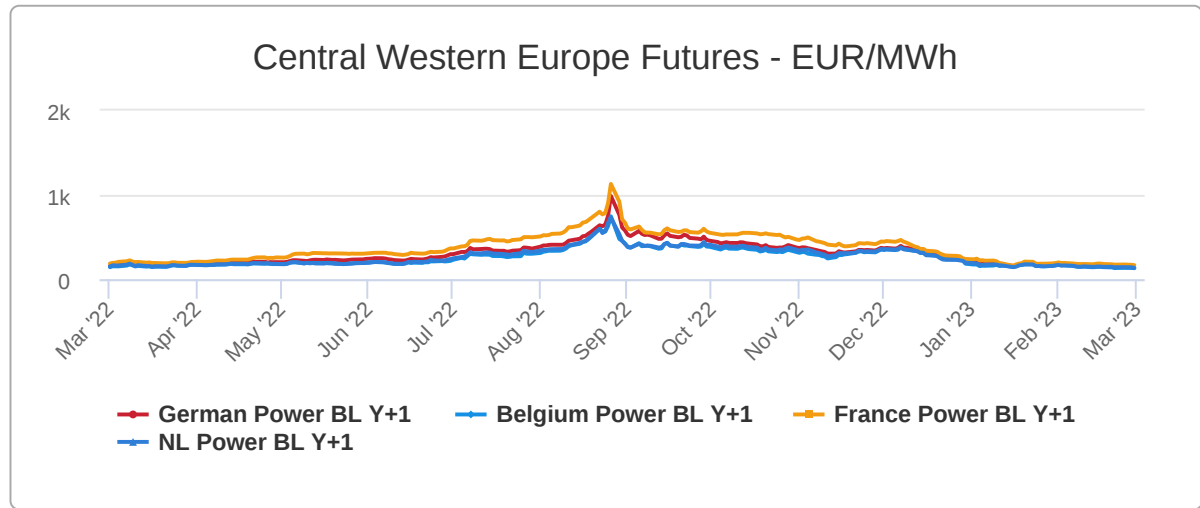
SPREAD VS GE POWER	12-MONTH MOVING AVERAGE	LAST WEEK AVERAGE
BE	-50.5	-29.3
FR	63.5	7.3
NL	-41.6	-23

✓ France is building an alliance of pro-nuclear states to support for expanding nuclear power in the bloc. EU energy ministers are meeting on Monday and Tuesday (27 and 28 February) to discuss issues about security of supply to the upcoming electricity market reform. French energy minister Agnes Pannier-Runache has invited 12 other countries to discuss a "nuclear alliance." On average it takes 12 to 15 years to build a new nuclear facility.

As nations work to lower power costs and support their businesses' ability to compete in international markets, Spain and the Netherlands have urged a speedy agreement on an anticipated redesign of Europe's electricity market.

Energy ministers from the member states of the European Union are gathering in Stockholm to discuss impending proposals that aim to adjust the market to prevent short-term fluctuations in fossil fuel costs from having a disastrous impact on European customers' energy bills.

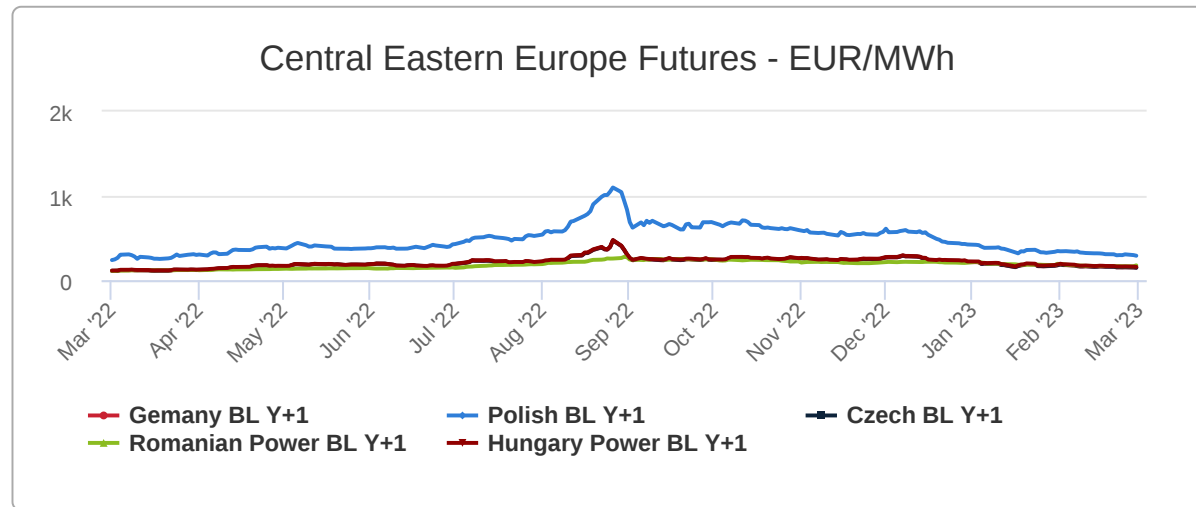
Negotiations on major EU legislation, which require approval from EU countries and the EU Parliament, can take two years - sometimes, more. The European Commission will propose the reforms next month.



Central Eastern Europe

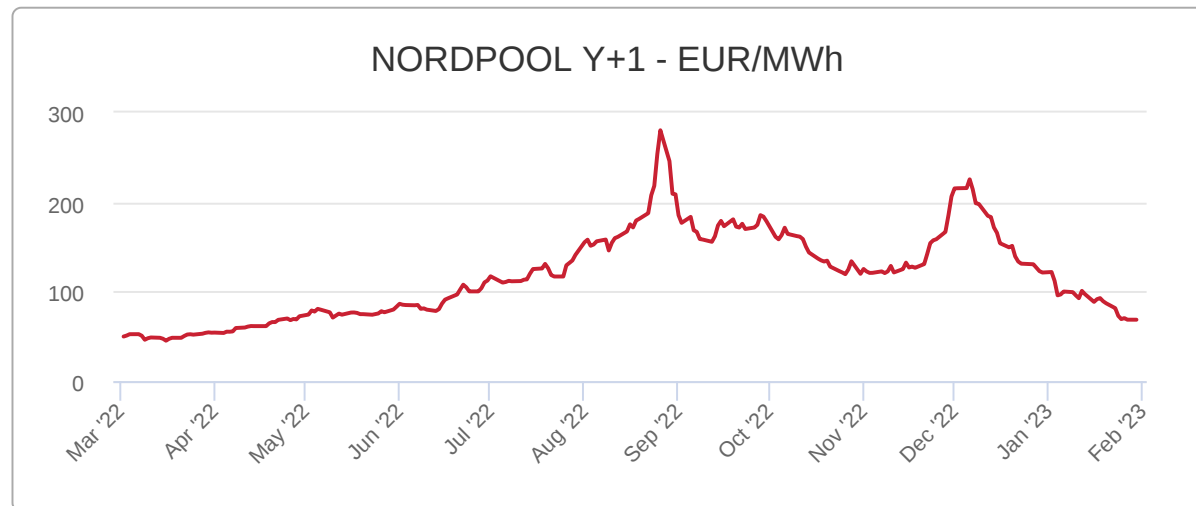
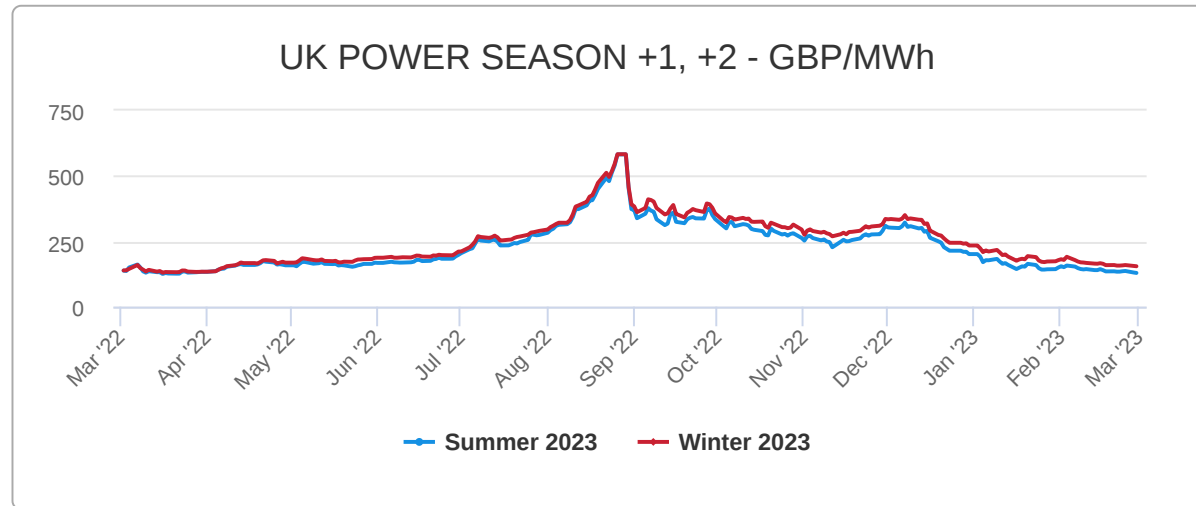
SPREAD VS GE POWER	12-MONTH MOVING AVERAGE	LAST WEEK AVERAGE
Polish BL Y+1	272.6	144.7
Czech BL Y+1	2	0.7
Romanian Power BL Y+1	-24.8	21.4
Hungarian Power BL Y+1	6.6	10.2

✓ A deal between Westinghouse and Poland's Polskie Elektrownie Jadrowe (PEJ) for pre-design work on what would be that nation's first nuclear power plant has been finalized. The Polish government chose Westinghouse to construct a nuclear plant using AP1000 reactor technology. The agreement was signed on February 22. Pomerania will be the location of the project. The nuclear power project will include six AP1000 pressurized water reactors, with a total generation capacity of 6 GW to 9 GW, according to government authorities. According to the nation's energy plan, development on the project will start in the upcoming years, with the first unit expected to be operational in 2032 or 2033 and with all six units expected online by 2040. To lower carbon emissions from its power generation sector, Poland is looking into nuclear energy and renewable energy sources. Now, the country derives 70% of its electricity from plants that burn black and brown coal.

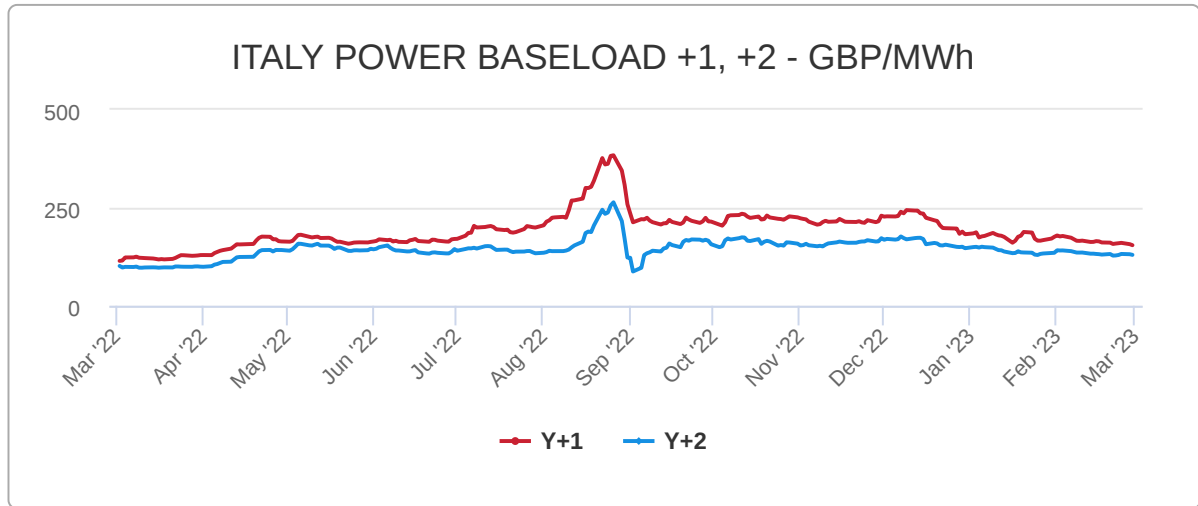
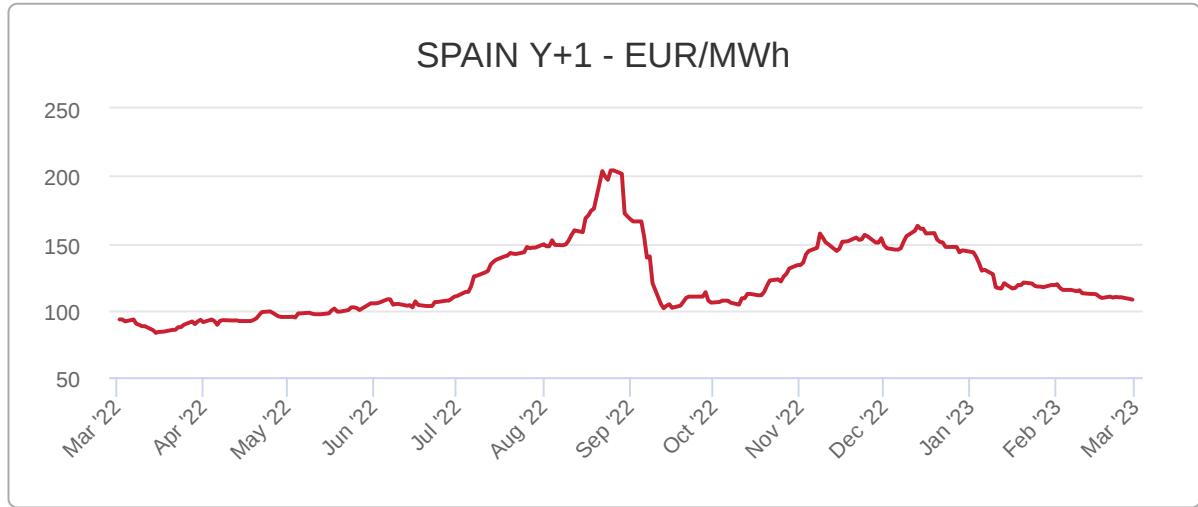


UK - Nordpool

- ✓ Ministers are under pressure to reduce subsidies to the operator of Britain's largest power plant after it announced an 84% increase in annual profits, helped by high electricity prices. As policymakers work to halt a wave of job losses in the steel industry, the UK government is prepared to assist more than 300 energy-intensive businesses in dealing with the crippling cost of power.
- The business secretary, Kemi Badenoch, will present steps on Thursday to assist employers in industries including steel, metals, paper, and chemicals that are among those most impacted by the high cost of electricity. The new policies, known as the British Industry Supercharger, are intended to lessen the price differential between power for heavy industry in the UK and its European rivals.
- The government will hold a consultation in the spring on three key initiatives:
1. lowering network charges that industrial users pay for their electricity supply;
 2. lowering maintenance costs for generating capacity;
 3. determining whether to raise exemptions on costs associated with renewable energy obligations from 85% to 100%.

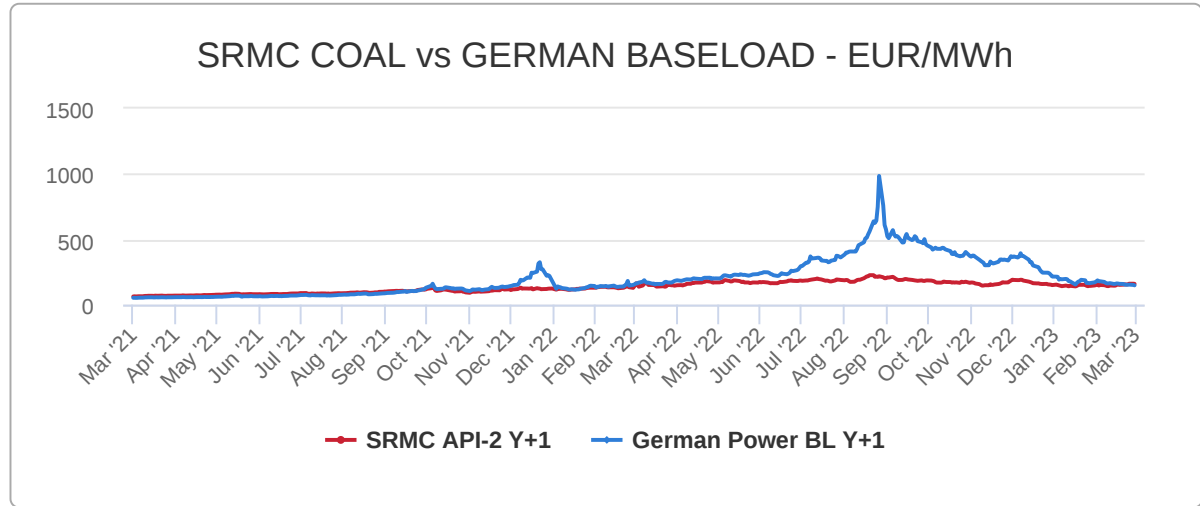


Electricity Spain - Italy



Short Range Marginal Cost

SPREAD SRMC	12-MONTH MOVING AVERAGE	LAST WEEK AVERAGE
Coal API-2 vs German Power Baseload Y+1	-132.7	4.3
Gas THE Y+1 vs German Power Peakload Y+1	-288	-131.1



TECHNICAL ASSUMPTIONS	GAS	COAL
Efficiency Factor	50%	36%
Management Cost	3.8	4.4

