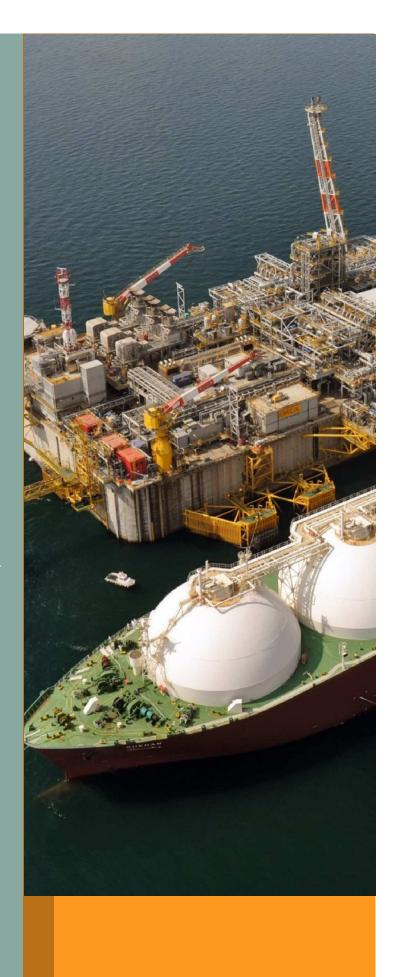
LNG Bull v Bear

24th May 2024 Onyx Capital Advisory





Summary & News

- The National Grid announced its plan to sell Britain's largest liquefied natural gas (LNG) terminal, Grain LNG, as part of its strategy to streamline operations and focus on networks, as stated during the presentation of its 2023/24 business year earnings.
- ADNOC has acquired a **10% stake in Mozambique's LNG project** from Galp, entitling it to a share of the production capacity exceeding 25 million tonnes per annum, expanding its international natural gas operations.
- Flex LNG suggests that recent second hand purchases of LNG carriers may indicate the formation of a "dark fleet" for transporting Russian cargo, echoing strategies seen in the oil and petroleum sector.
- In Q2'24, GTT secured an order from an Asian shippard for tank design for four new LNG carriers, each with a capacity of 174,000 m3, utilizing GTT's NO96 membrane containment system. The vessels are expected to be delivered between 1Q27 and 3Q27.
- **Tokyo Gas** is set to acquire a 20% stake in FGEN LNG, the company managing the interim offshore LNG import terminal project located at First Gen's Clean Energy Complex in Batangas City, Philippines.
- Pakistan and Turkmenistan are discussing a plan to transport Turkmen gas to Europe by
 piping it to Pakistan, converting it into LNG, and shipping it, while also deciding to
 independently finance the completion of the TAPI pipeline due to international reluctance
 to recognise Afghanistan's Taliban administration, as announced by Pakistan's
 Petroleum Minister Musadik Malik on May 23.
- **LNG Croatia** received its inaugural LNG cargo from Algeria via the 92nd LNG carrier, marking Algeria's entry into the group of 12 countries that have delivered LNG to the terminal.
- According to a top U.S. energy official, Deputy Energy Secretary David Turk, President
 Joe Biden's decision to pause approvals for new LNG projects won't affect current LNG
 deliveries to Europe or ongoing construction for increased LNG exports.
- Since mid-May 2024, Singapore's port has operated JMS Sunshine, the world's first LNG tug
 powered by mtu gas engines from Rolls-Royce, designed and operated by Seatrium Limited.
 The tug supports Singapore's commitment to environmentally friendly maritime practices.
 Rolls-Royce provided the engines, with excellent support noted by Seatrium Marine Services.



Contract	Forecast	Logic
TTF Flat Price	Small Bull	European LNG buying has risen to stock for winter, but CDDs in the US are rising and there is an extreme heatwave in Central America which may take more piped LNG. We expect there to be small support, amid supply-side concerns from US cargoes heading east to Asia.
Basis	Bearish	We expect JKM to face more pressure as high Henry Hub prices encouraged production earlier this quarter. Higher supply will likely be directed to Asia as prices are stronger there and there are no serious Panama or Suez canal issues. We have already seen thinner demand as spot cargoes aren't getting snapped up at these inflated prices. There also seems to be an increase in coal use in heatwave-stricken India, seen in real-time CO2 releases being high.

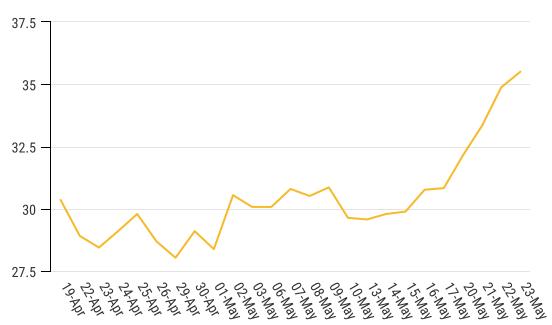
Bearish Factor



European demand

- Last week we saw a 7.7% decline in weekly global LNG on floating storage. There is a stark difference in the storage situation in the States and Europe. US natgas storage saw a 78Bcf injection this week. This brings the total increase this season to +452 BCF, 27 BCF above the 5-year average. This is the third smallest increase in the last five years, just 21 BCF below 2021's minimum. Last year, the total was +623 BCF by this time. There is continued above-normal CDD use in the US.
- The low sendout levels are a sign of weak LNG demand in the region, as the weather has been mild and the generation of renewables has been strong, amid a windy spring for much of the continent. Europe has imported a total of 5.5 million mt of LNG in May so far, which is 32% lower than the same period last year and the lowest level since Sep 2020.
- Gas inventory levels in the EU were 67.2% full as of May 19, according to Gas Infrastructure
 Europe data, which is higher than 65.2% at the same time last year, indicating that the
 market is softening and there is no urgency to import LNG for injections. Europe is still
 priced out by Asian buyers too.
- The LNG import levels may recover as demand ramps up from cooling demand in the summer months, but this will depend on the weather and the readiness of Northwest Europe for the winter.

Jul TTF (€/MWh)



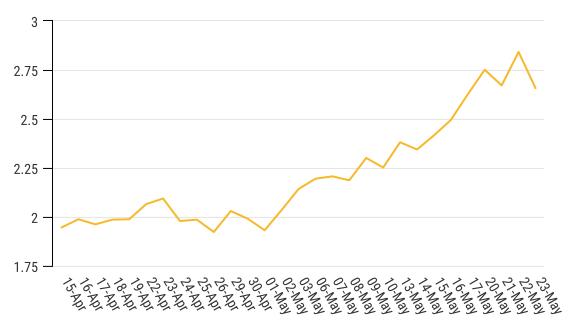
Bullish Factor



Prepare for volatility

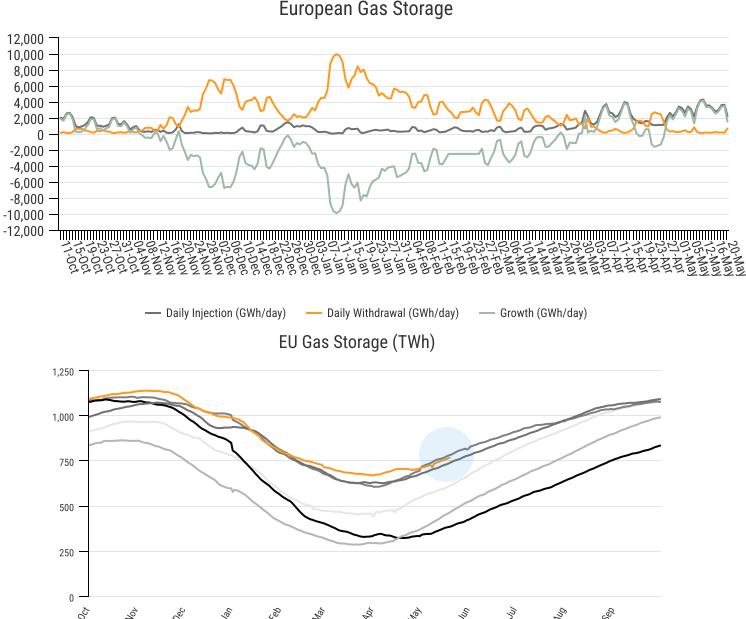
- Asian LNG demand has been stronger in the past 2 months due to the devastating heatwave seen in South and South East Asia in particular. This is a growing concern in the fairly tight market currently as Extreme heat in Central America, and the U.S. South strained energy grids. Meteorologists attribute this to a heat dome blocking cloud formation and causing intense sunshine and high temperatures.
- Talk of hurricane season has intensified this week as the season approaches. If there is heavy disruption to the Atlantic Ocean as predicted trade routes would be severely disrupted. European stocks are strong, however they continue to be outbid by the more desperate Asian buyers.
- This bidding ceiling seems dictated by coal strength in the East and with higher prices in the tight market, globally. Unless the reaction of the US producers, and export capacity is timely there may be a resurgence of supply anxiety in Europe and higher volatility as demand continues into the forecast heightened activity of Atlantic hurricane season.

Jun Henry Hub (\$/gal)



European Storage L

European Gas Storage



Source: Gas Infrastructure Europe

-0- 2018-19

-O- 2019-20

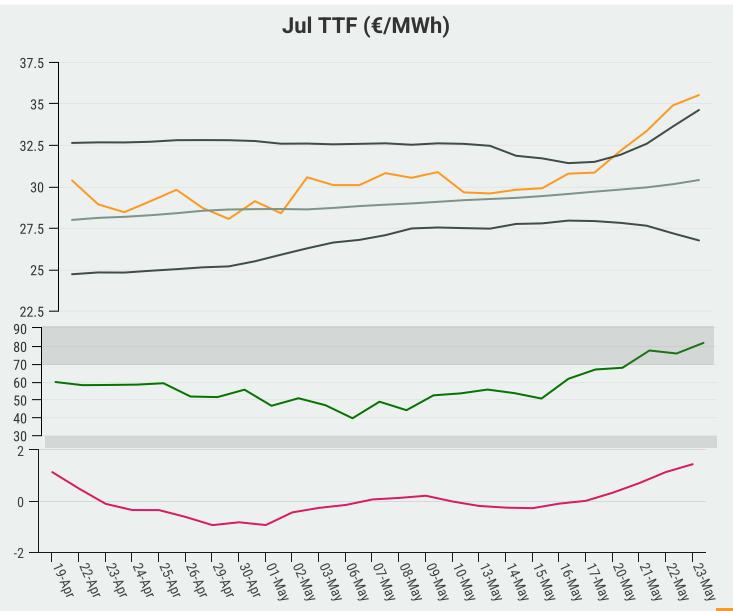
Over the past fortnight, European gas in storage has climbed, rising by an average of 0.25% each day from May 1. Levels have reached 67.53% full on May 20, from around 63.55% on May 5. These levels are very strong, historically although the level is slightly below the 2022-23 level.

-0- 2021-22

-O- 2022-23

O- 2020-21

Technical Analysis



- The Jul TTF flat price rallied over the past two weeks and hit €35.50/MWh on May 23 having begun the fortnight at €30.80/MWh.
- This strength likely stemmed despite healthy European LNG stocks alongside the recent support in Asian LNG on the back of power generation demand and LNG restocking activity.
- At these levels, prices are well within the overbought territory based on the RSI and Bollinger bands - which may indicate that a reversal lower may be on the cards.
 However, the PPO is also on a steady uptick, highlighting the bullish momentum in TTF recently.
- Finally, the Bollinger bands have also recently widened, thus flagging the rise in volatility in the benchmark European LNG contract over the past week.

Price (€/MWh)

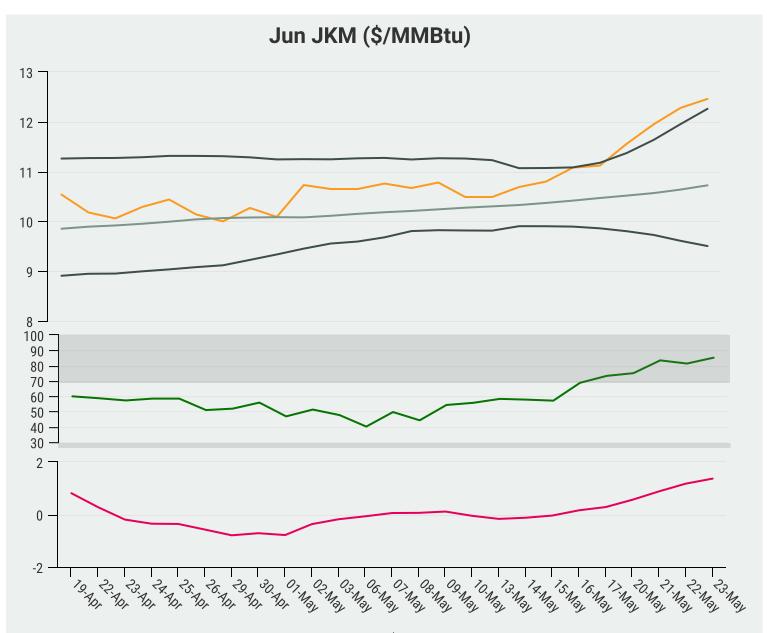
Bollinger Bands

30-Day Moving Average

Relative Strength Index

PPO

Technical Analysis



- Jul JKM has, in a similar vein to TTF, rallied from below \$10.80/MMBtu on May 09 to just shy of \$12.50/MMBtu come May 23.
- With this rally, prices shot into the overbought territory with an RSI comfortably sitting at 85 on May 23 and flat price well above the upper Bollinger band.
- This support likely stemmed from aggressive buying by Asian players with Japan
 and South Korea restocking ahead of summertime power generation demand.
 However, while South and South East Asia's current heat wave continues to fuel
 the LNG bulls, more bearish players may rejoice upon noting that South Asia may
 be employing more coal to use for its cooling demand.

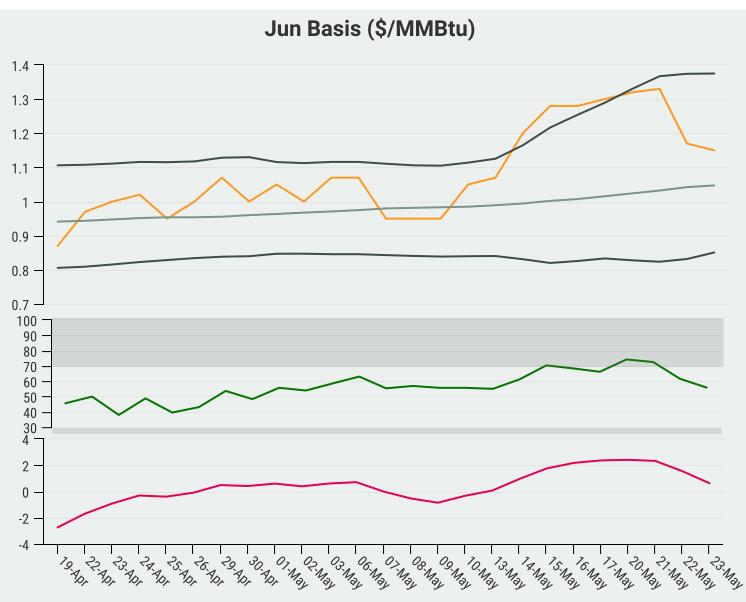
Price (\$/MMBtu)

Bollinger Bands

30-Day Moving Average

Relative Strength Index

Technical Analysis



- Amid the strength seen in both TTF and JKM, the Jul Basis saw more oscillatory price
 movements, with the diff first shifting up from \$0.95/MMBtu on May 09 to \$1.33/MMBtu
 on May 21 only to retrace lower to \$1.15/MMBtu on May 23.
- Looking at technical indicators, price action soared into the overbought conditions around
 the highs recorded on May 21 based on the RSI and a week prior to this based on the
 Bollinger bands. However, price action has since eased to the bounds of neutrality since
 then.
- The PPO, unlike what we saw in flat price TTF and JKM, has begun retracing lower following May 21, highlighting the support seen in TTF relative to its Asian counterpart.

Price (\$/MMBtu)

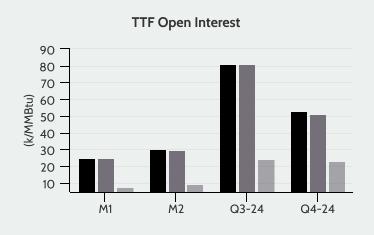
Bollinger Bands

30-Day Moving Average

Relative Strength Index

PPO

Open Interest



Open interest in the TTF contract has been concentrated in Q3 at 81mbbls. Although this OI increased by less than 0.5% in the past week, current levels lie almost 130% above the 5-year average. In the M2, levels declined w-o-w by under 2% to slightly below 30mbbls, 3.2 times over the 5-year average.



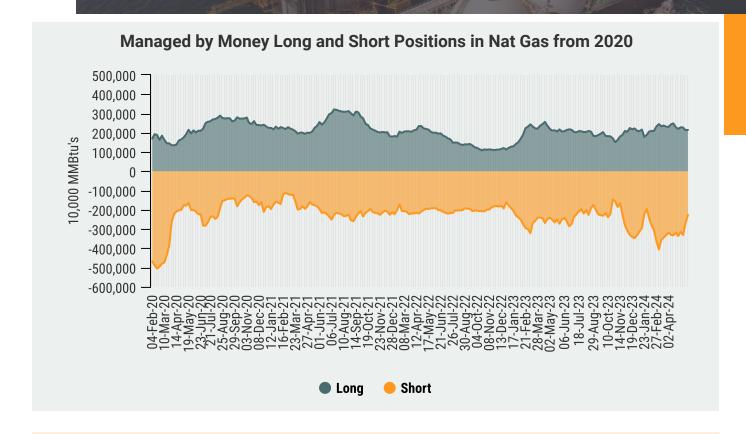
In a very similar vein to TTF, the JKM complex displayed Q3 as the most concentrated quarter, increasing by 9% in the past fortnight to 95mbbls (+50% to the five-year average). Open interest in both Jul rose nearly 5% w-o-w and 22% on a fortnightly basis to over 40mbbls (91% above the 5-year average).

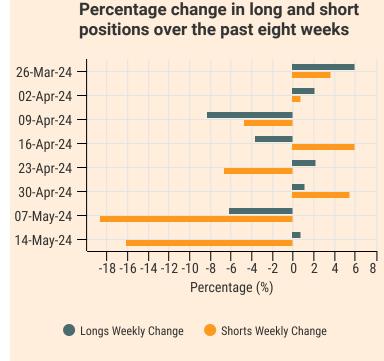
Technical Indicators Analysis:

TTF and JKM demonstrated very similar technical indicators, with both contracts soaring into the fortnight. The contracts saw price action rally into overbought conditions by the end of the fortnight based on both the Bollinger bands and the RSI. However, a rising PPO in both contracts evidences the bullish momentum in LNG over the past two weeks.

Basis, on the other hand, fought a tug of war amid JKM and TTF strength with JKM first taking the lead only to ultimately be outperformed by TTF. Basis saw technical indicators fall back into neutral grounds after having previously been in the overbought territory.

CFTC - NAT GAS NYMEX





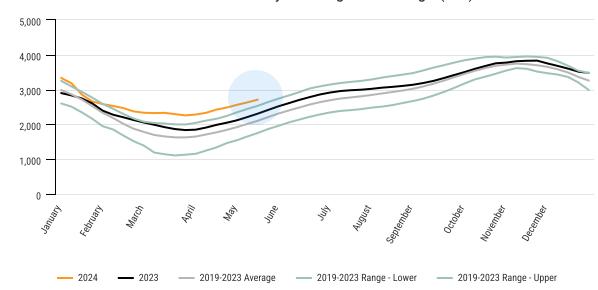
In the week to May 07, speculative players witnessed a change of heart as they flipped to remove long and short risk from their natural gas positions, with long money managers trimming length by 13.9mbbls (-6% w-o-w), whilst their bearish counterparts liquidated their positions by 61.7kbbls (-18.63%).

This positioning again flipped in the week to May 14 when speculative shorts removed 43kbbls of their positions whilst long positioned money managers added a more muted 1.6kbbls to their length.

Looking at the prod/merc positions, we saw these players remove long and short risk in the week to May 07 by 2% and 0.25%, respectively, but add to both these positions the following week albeit with more shorts added than longs.

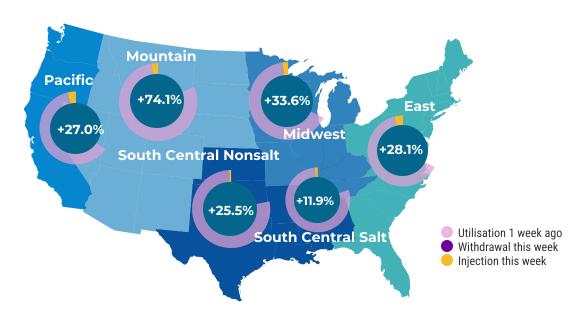
US Storage Levels





Source: US Energy Information Administration

Underground Natural Gas Storage compared to 5year average



As of May 17, 2024, the EIA estimates working gas in storage at 2,711 Bcf, showing a net increase of 78 Bcf from the previous week, with stocks exceeding both last year's levels by 402 Bcf and the five-year average by 606 Bcf, placing total working gas above the historical range.

Natural Gas ETFs

ETFs	5-day Sentiment	Flows	Call OI Chg	Put OI Chg	P/C Ratio Chg
UNG	Bearish	The UNG saw flows dwindle over the past fortnight and predominantly lie on the bearish end with May 16 seeing net selling equivalent to selling 370k shares of stock whilst May 22 clocked net option delta (NOD) volumes of nearly -160k. May 22's bearishness emerged out of traders selling a net equivalent of over 400k call options with the largest delta volume coming from large institutional trades who went short -76k in net option delta volumes. Open interest came off by 2% in UNG although OI climbed by 19% in put options - further signifying the bearishness.	-15.1%	+19.0%	+40.2%
BOIL	Bearish	Flows in BOIL flipped from net bullish over the first leg of the fortnight to incredibly bearish at the start of this week. NOD-wise, May 16 saw +45k in volumes whilst the following day recorded over -175k in NOD volumes. These flows grew more muted into the week despite oscillating between net buying and selling. Open interest in BOIL also eased this week, falling by 4%, and while call OI also declined with this, the put open interest increased by nearly 14% w-o-w.	-7.4%	+13.8%	+22.8%
KOLD	Bullish	Price action in the ultrashort ETF continued to fall over the fortnight, ultimately hitting \$36.70 on May 23 where it found support and rebounded above \$40 at the end of the day. Despite this weakness, flows in KOLD have been seen net positive flows everyday since May 13. Open interest in KOLD, despite the net bullish flow, plummeted by 23.6% w-o-w and came off on both a call and put options basis - indicating that the bullishness may have been a function of more puts exiting than calls rather than an injection of new bullish delta.	-20.8%	-29.3%	-10.8%

^{*}Sentiment and Open interest changes refer to the changes in open interest and overall sentiment in the ETF in the last 5-days.

Summary:

We see bearishness seep into the natural gas complex amid selling noted in UNG and BOIL. Although the ultrashort KOLD recorded net bullish flow, this was more a function of de-risking rather than an injection of new calls. As a result, while the put/call ratio climbed significantly w-o-w in both UNG and BOIL, it came off by 10.8% in KOLD.

Suggested Trade

Short Jul JKM (\$/MMBtu)

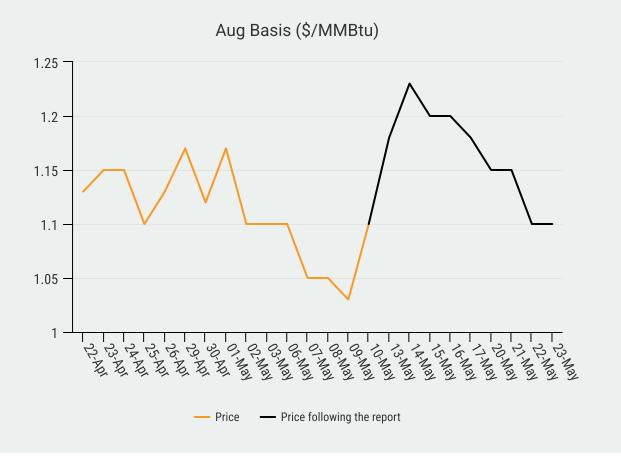
Asian LNG prices have seen incredible strength over the past fortnight, climbing from \$10.80/MMBtu on May 09 to \$11/MMBtu the following week and ultimately landing at \$12.45/MMBtu come May 23. This support emerged from good demand-side signals in Asia with Japan and South Korea stockpiling ahead of summertime cooling demand. However, we may see these fundamentals relax amid an anticipated increase in US supply - which is likely to be diverted to Asia considering the current demand and higher prices relative to Europe. In addition, South Asian nations like India are amplifying their coal usage for summertime power generation use, which may further hinder LNG demand in their regions.



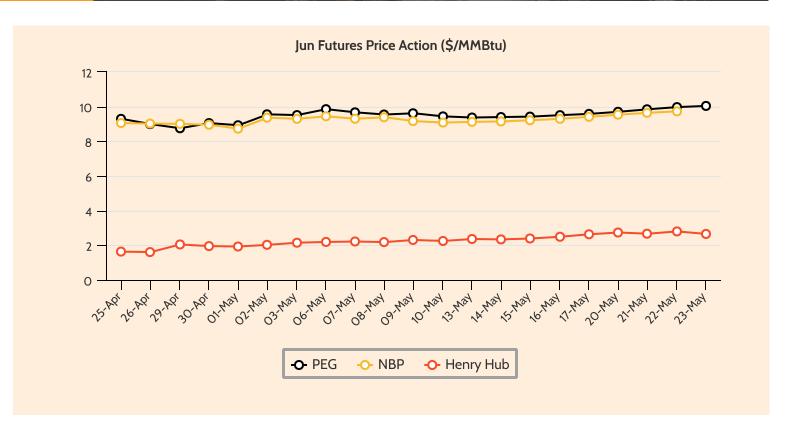
Trade Review

Short Aug Basis (\$/MMBtu)

We expected Asian LNG prices to continue to fall due to Chinese importers' physical selling. JKM faced more pressure as Freeport LNG ramped up production. Despite high European gas inventories, increased buying in Oct TTF winter options suggested higher winter volatility. We have seen stronger pressure on the Aug basis as prices seemingly overextended long and there was stronger European pricing.



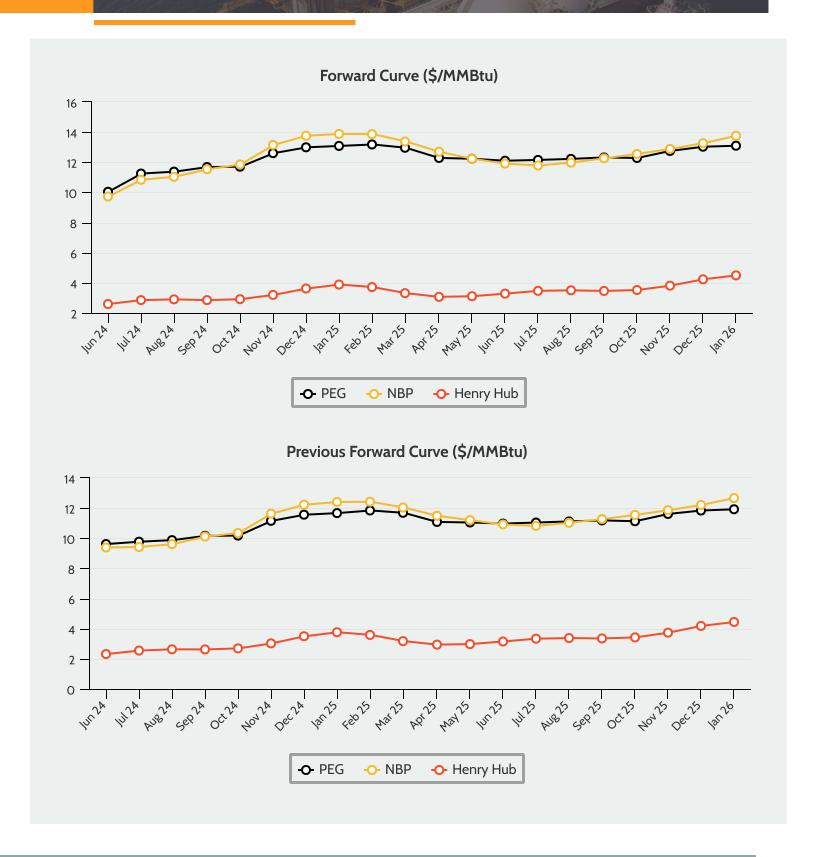
Futures Benchmarks



Global Benchmark Spreads (\$/MMBtu)

	TTF/Henry Hub	TTF/NBP	NBP/Henry Hub
Jun	8.51	0.25	8.25
Jul	8.35	0.35	7.99
Aug	8.44	0.31	8.12

Futures Benchmarks

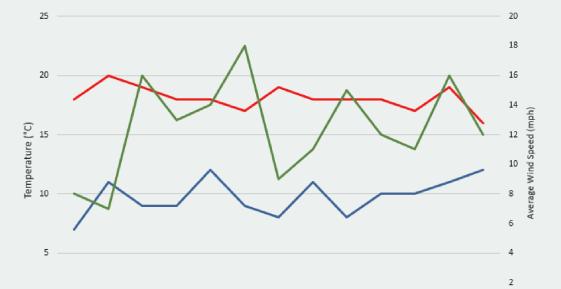


Weather Forecast



Weather Forecast





24-May 25-May 26-May 27-May 28-May 29-May 30-May 31-May 01-Jun 02-Jun 03-Jun 04-Jun 05-Jun

——Max Temperature ——Min Temperature ——Wind Speed

