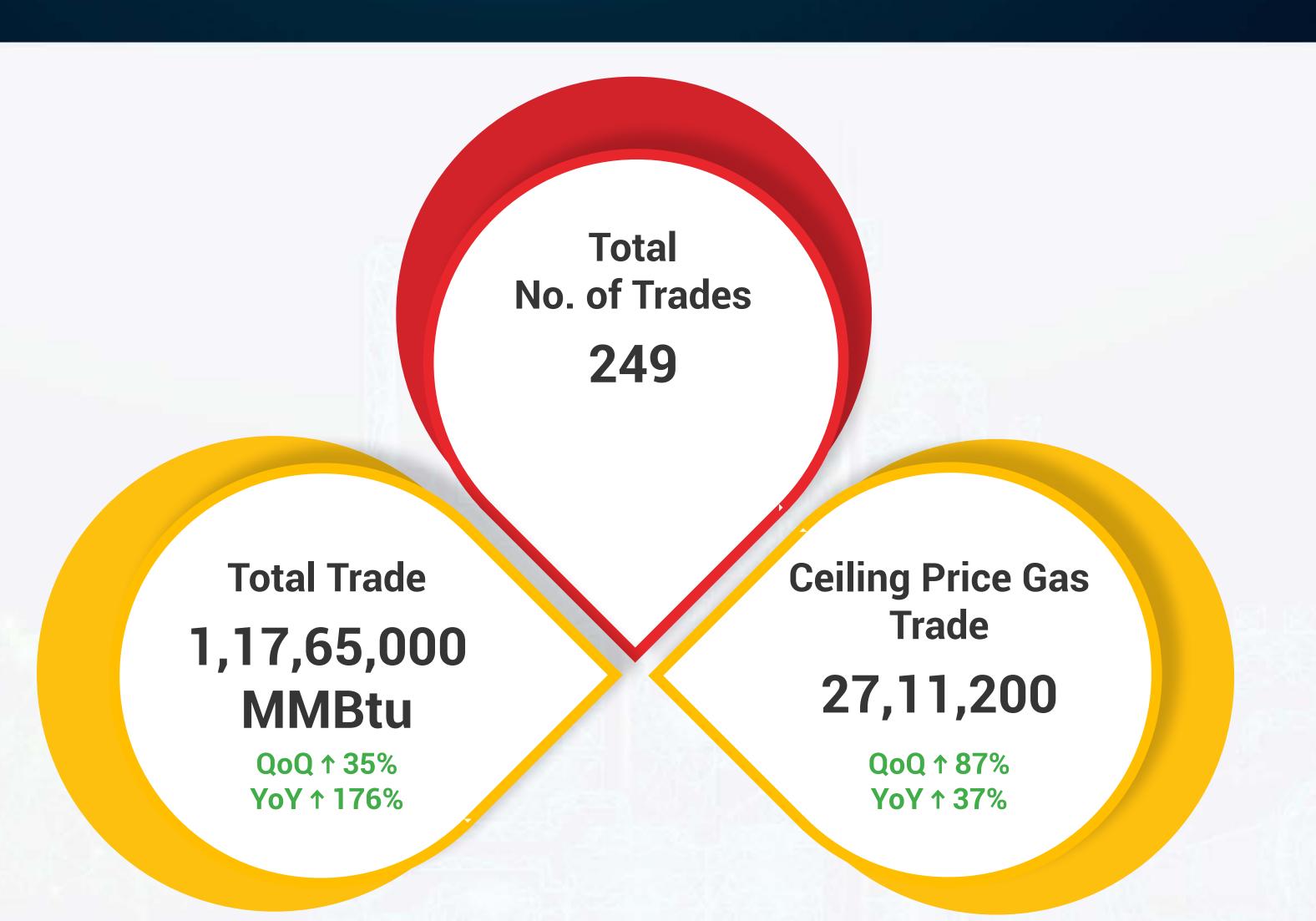


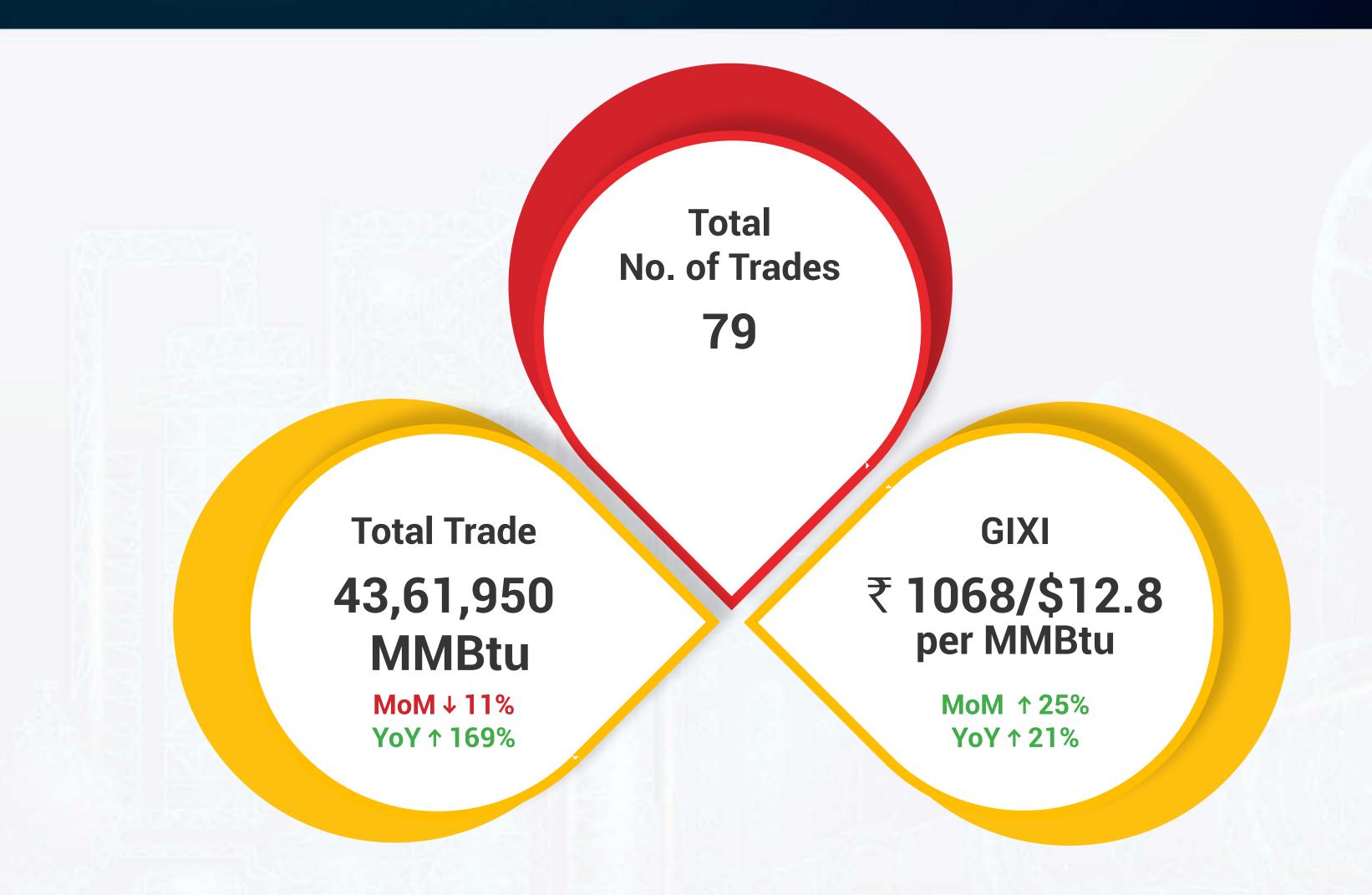


IGX BUSINESS KEY HIGHLIGHTS — Q1FY'25



- Total Trade Volume: 11.7 million MMBtu (Increased by 35% QoQ & 176% YoY)
- Domestic Ceiling Price Gas Trade Volume: 2.7
 Million MMBtu
- Total number of trades executed: 249
- Most Active Delivery Point: Dahej
- Most Active Contract: Monthly

IGX BUSINESS KEY HIGHLIGHTS — JUNE'24



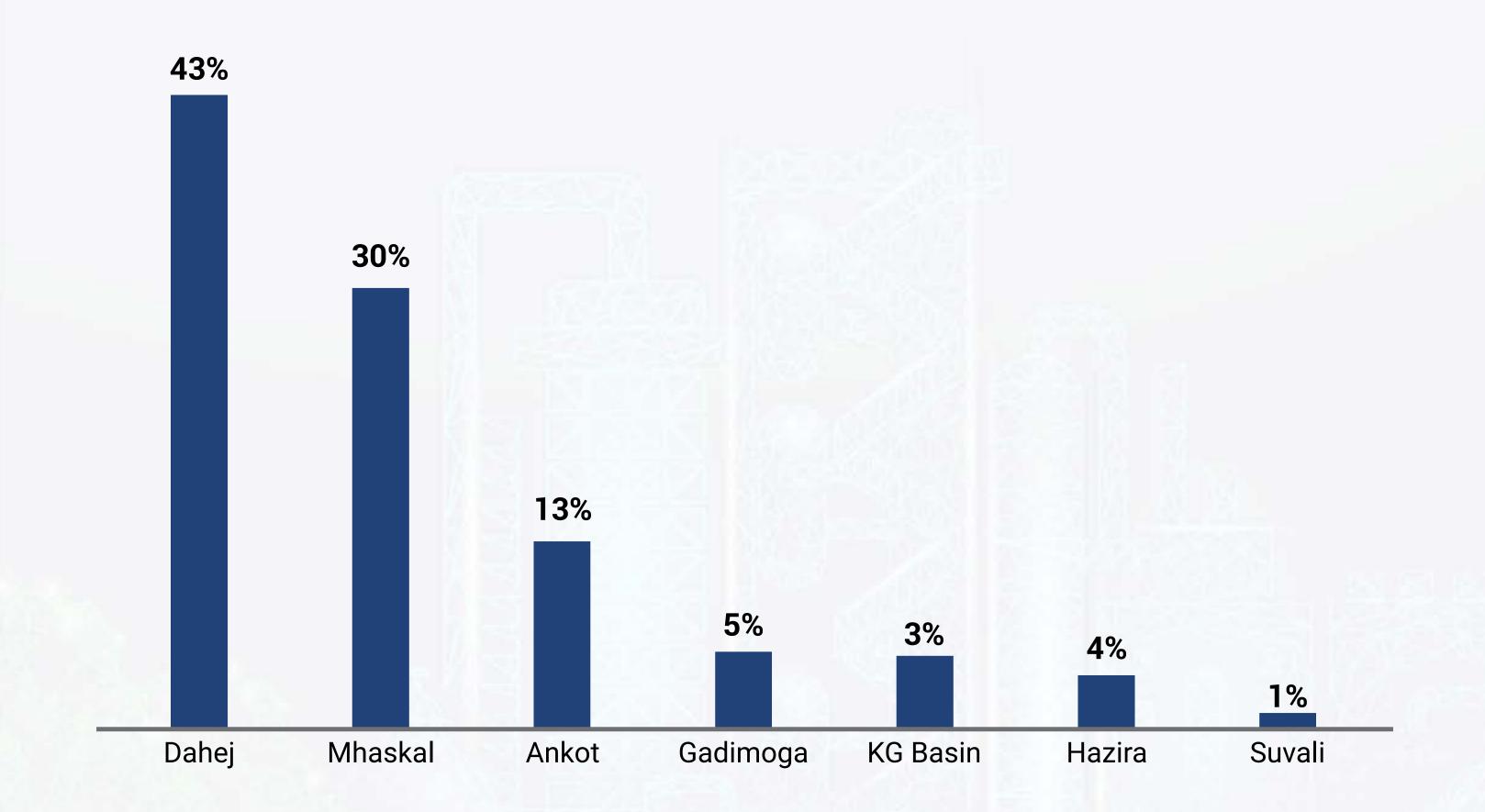
Trade volumes were high mainly due to increase in gas demand from gas-based power plants amid hot weather.

CONTRACT-WISE TRADE



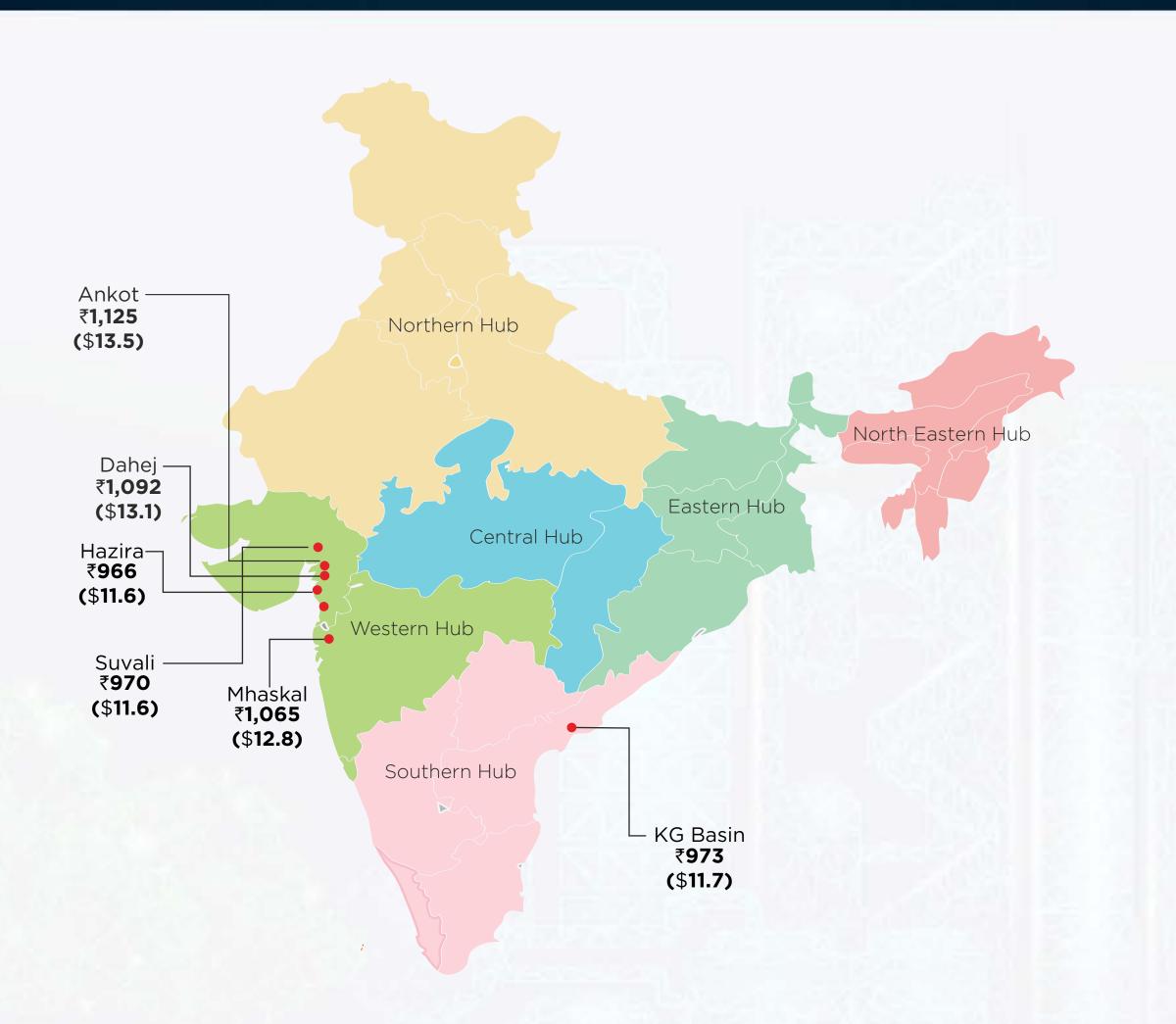
A total of 79 trades were executed in June'24. During the month, 36 trades (maximum number) were executed in Monthly contracts, followed by 24 trades in Fortnightly contracts, 17 trades in Weekly contracts & 2 trades in Daily contracts respectively.

DELIVERY POINT-WISE TRADE



The most active delivery points for free market gas were Dahej and Gadimoga, and for ceiling price gas, other trading delivery points were KG Basin, Hazira, Ankot, Suvali, and Mhaskal.

GIXI JUNE'24 - DELIVERY POINT-WISE IN ₹ & \$/MMBtu



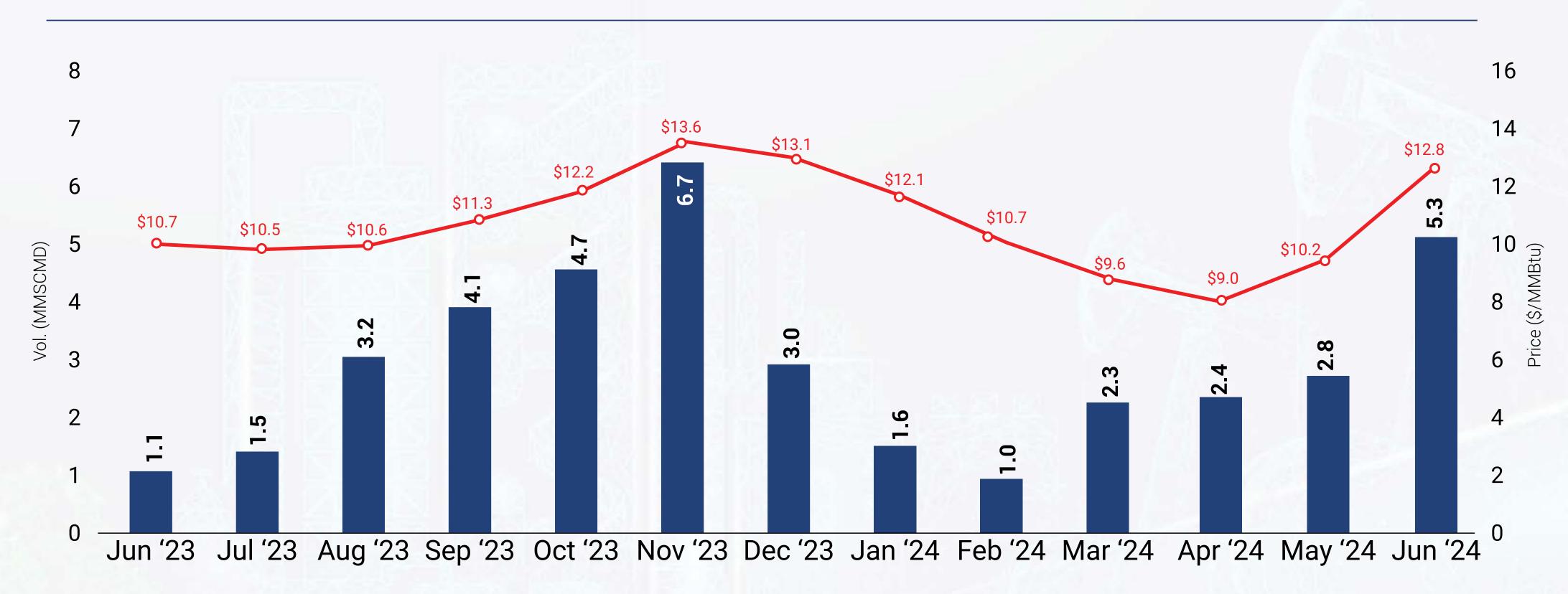
Daily GIXI Trend (Rs/MMBtu) in Feb 2024



Variation in delivery point-wise GIXI is indicative of tax arbitrage across states and transmission tariffs.

DELIVERY MONTH-WISE PRICE

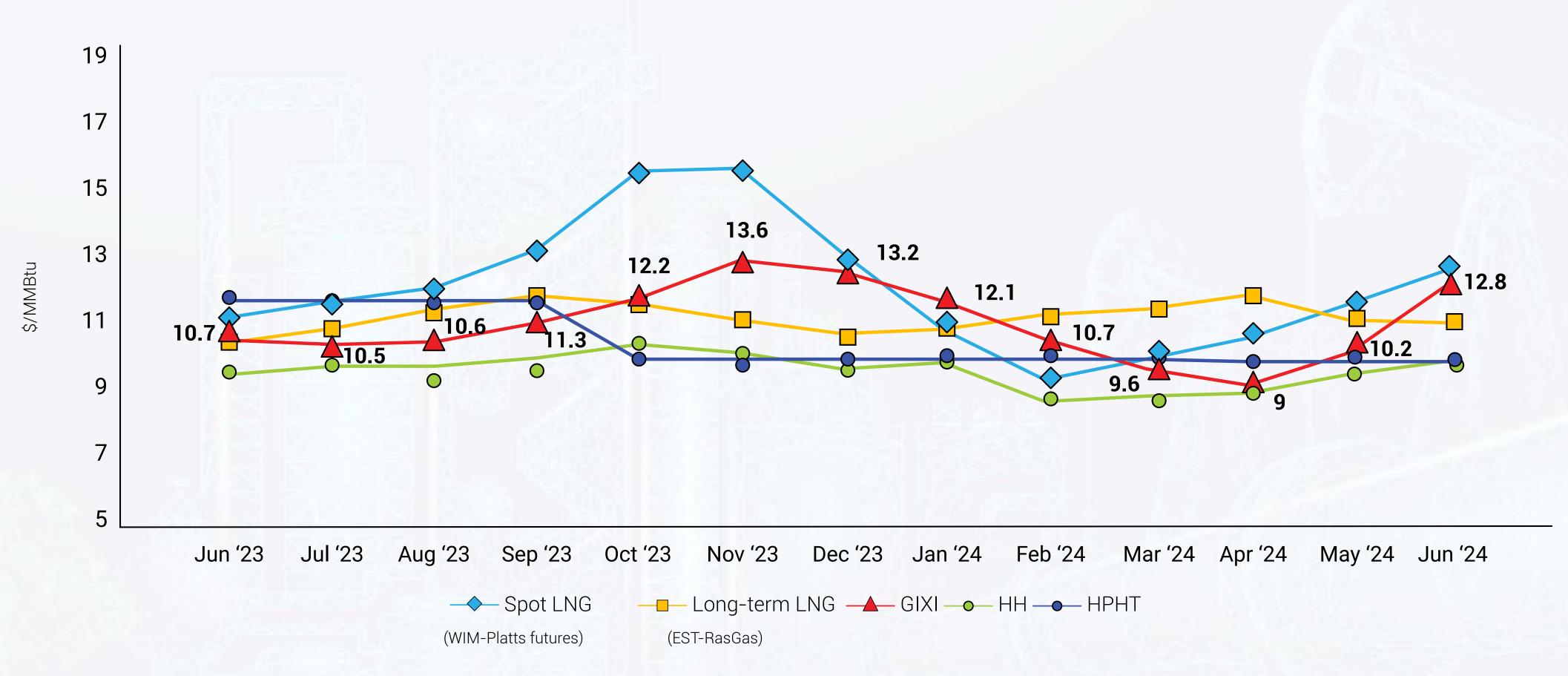
Trade Volume and Price



^{*}For delivered volumes both ceiling and non-ceiling volumes are considered, and prices excluding gas traded at ceiling price.

GIXI VS OTHER BENCHMARKS

GIXI Vs Other Benchmarks



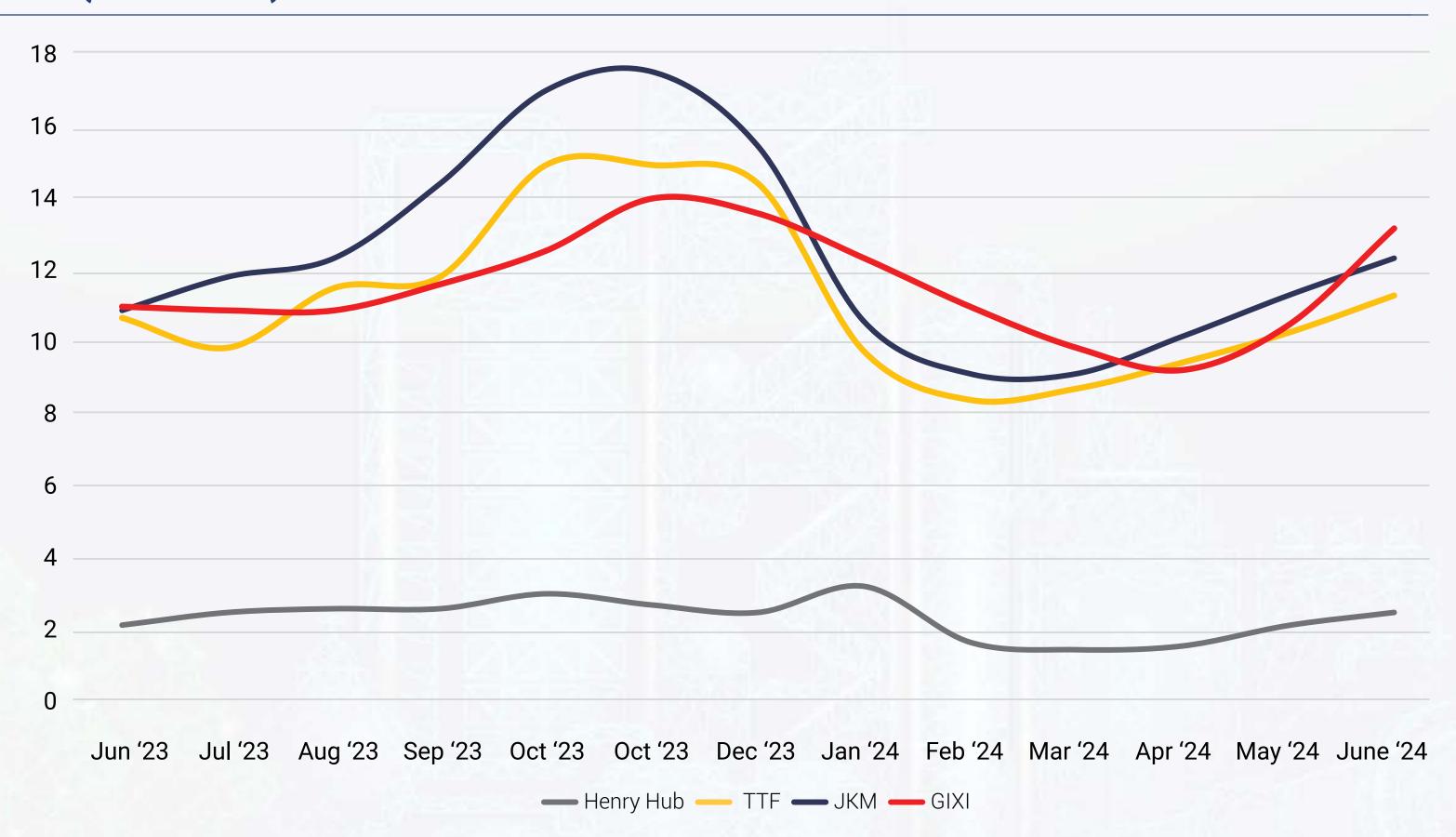
Source: IGX Market Intelligence

PARTICIPANTS



INTERNATIONAL GAS MARKET

Price (\$/MMBtu)

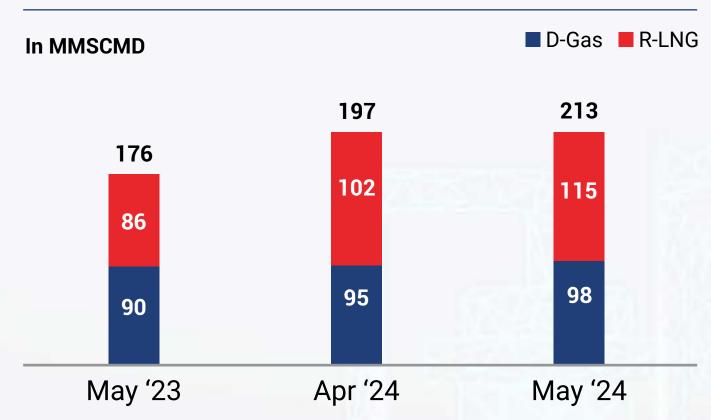


- TTF prices were up by ~10% MoM, due to unplanned outages in Norway and geopolitical situations.
- Henry Hub prices were up by ~17% MoM due to strong power demand and cuts in domestic production.
- JKM increased by ~9% MoM due to demand supported from China and power demand from India amid heatwaves and supply constraint due to outages in Australia.
- GIXI prices were up by ~25% MoM due to strong demand from gas-based power plants amid hot weather.

Source: IGX Market Intelligence

NATIONAL NATURAL GAS CONSUMPTION IN MAY'24

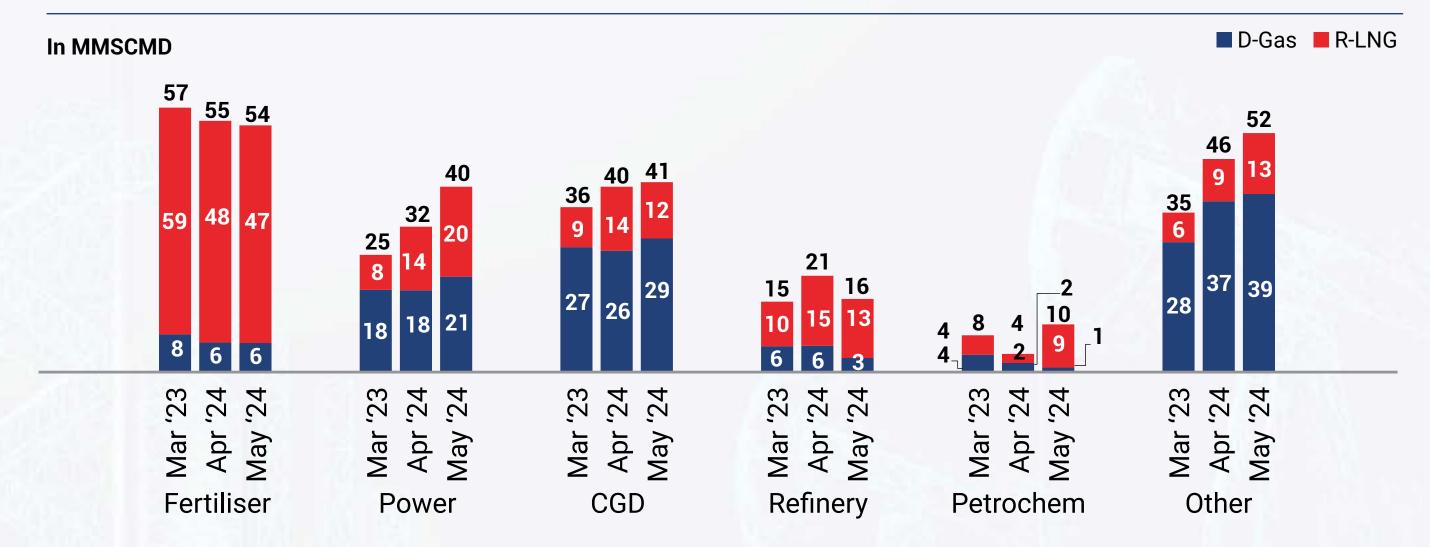
Natural Gas Consumption



CBM Production



Sector-wise Domestic & R-LNG Consumption

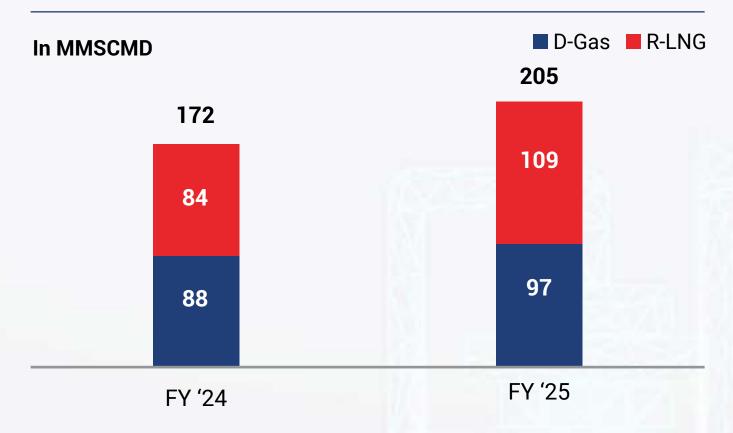


MoM Comparison:

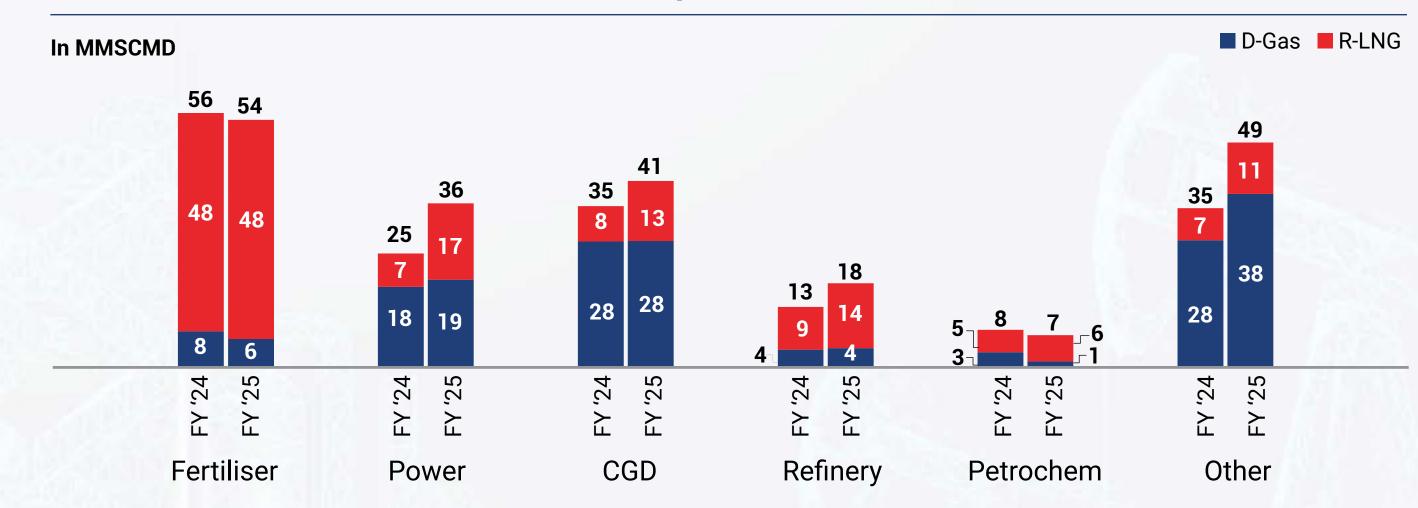
- Overall Gas Consumption increased by ~4% (213 MMSCMD)
- R-LNG Consumption increased by 12% & Domestic Gas Consumption by 4%
- Power Sector Consumption increased by 28% (42% in R-LNG & 17% in Domestic Gas)

NATIONAL NATURAL GAS CONSUMPTION IN FY-24 & 25 (APR-MAY)

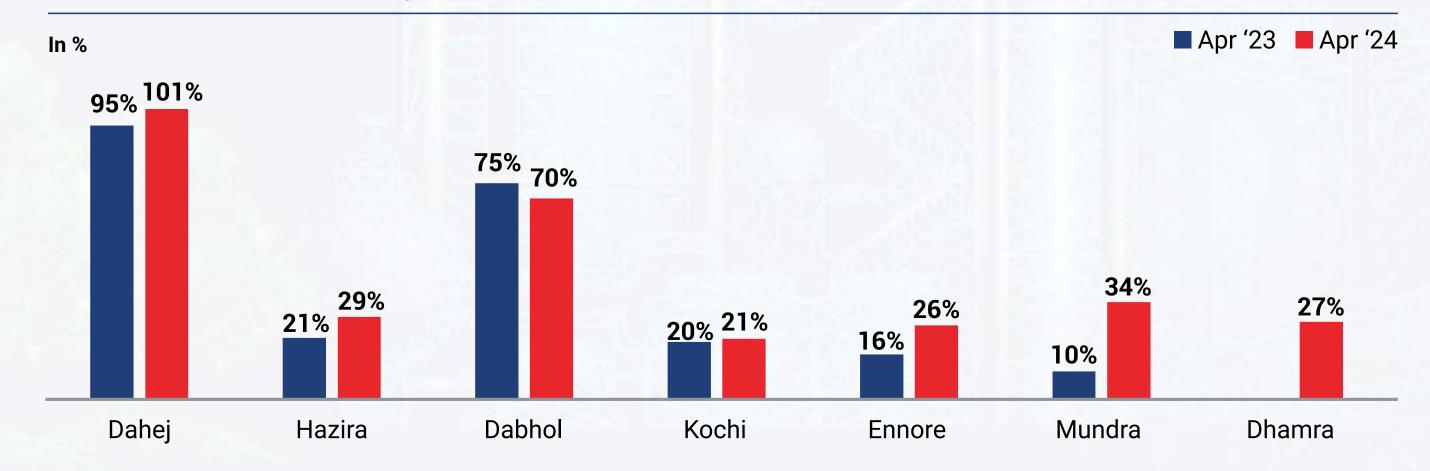
NG Consumption



Sector-wise Domestic & R-LNG Consumption



LNG Terminals Capacity Utilisation



FY-24 & 25 (Apr-May) Comparison:

- Overall Gas Consumption increased by 19% (R-LNG 30% & Domestic by 10%)
- Power Sector Gas Consumption increased by 44% (R-LNG by 128% & Domestic Gas by 9%)
- CGD Gas Consumption increased by 16% (R-LNG increased by 70% & Domestic Gas remained unchanged)
- Refinery Gas Consumption increased by 39% (R-LNG up by 18% & Domestic Gas by 9%)

GAS MARKET: WAY FORWARD

- Lee Rou Urn, Asia Editor, LNG, Argus Media



A tale of two summers

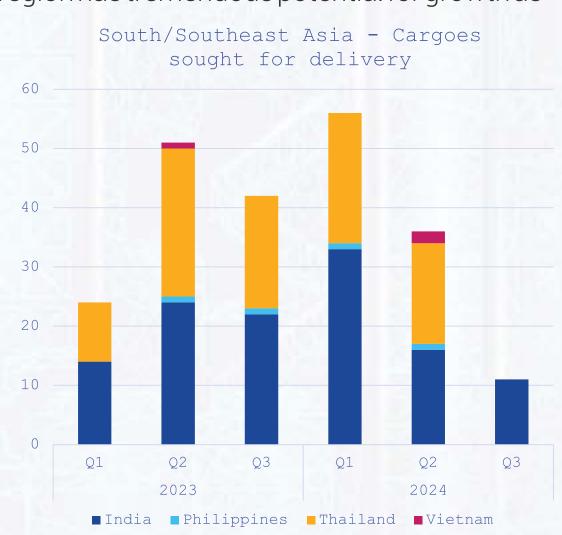
The end of the 2023-2024 winter season saw utilities all over the world sitting on record gas and LNG

inventories, which was unprecedented but not entirely unexpected given the deep psychological scars that have been left behind in the aftermath of the 2022 Russia-Ukraine war. That, coupled with consumers who have become much more conscious of their gas consumption, resulted in much more gas and LNG purchases in the run-up to the 2023-2024 winter and yet limited drawdowns.

Although summer is not typically a peak demand season in the sense that winter tends to be, unexpectedly warmer summers can still result in a considerable amount of incremental spot demand for LNG from traditional gasconsuming countries in northeast Asia, and drive prices higher.

The South and Southeast Asia story

Southeast Asia has found itself thrust into the spotlight this year, even with usual buyer Thailand still obviously leading in terms of spot purchases. Spot interest from the emerging gas consuming countries of the Philippines and Vietnam has begun picking up, particularly with the 1mn t/yr Thi Vai LNG terminal in Vietnam which came online in late 2023. Although one can argue that demand from southeast Asia is still marginal, the region has tremendous potential for growth as



many of the emerging economies there have embarked on the path of energy transition — mostly by moving away from coal-fired power generation to gas-fired power generation instead.

Thailand clearly still dominates in terms of spot buying interest in SoutheastAsia, as seen from the graph above. A warmer-than-usual hot season this year also compelled the state-controlled PTT to ramp up its spot purchases even as PTTEP strives to increase gas production at the country's largest Erawan gas field, along with other more minor fields. Output at Erawan averaged 853mn ft³/d in April, according to Thailand's Ministry of Energy. While this is in line with the country's target of reaching 800mn ft³/d (8.2bn m³/yr) of gas production by April, many traders are skeptical of whether this output target can be consistently maintained in the long term.

On the other hand, Thailand's latest power development and gas plan released in mid-June expects less gas-fired power generation demand owing to less cooling demand arising from lower economic growth, decarbonization and more domestic gas production expected from Arthit and other more minor gas fields in the country, until 2027. For this reason, Thailand will still be worth watching closely.

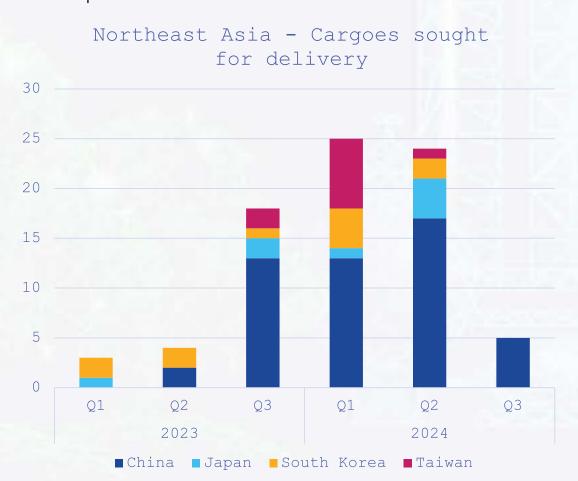
India is also formidable in terms of additional LNG import potential. India imports around 45pc of its daily gas needs, equivalent to around 190mn m³/d as LNG. The country plans to increase the share of gas in its energy mix to 15pc by 2030, which would increase overall demand to 600mn m³/d. But the cost of imports is still a major impediment to the country buying more, as well as the fact that coal is still the preferred choice for power generation in the country. Gas only comes into play for peaking demand – when temperatures get exceptionally high.

Despite a relatively hot spell in India this year over April-May, it can be observed that spot demand from the country was still lower as compared to the second quarter in 2023. This

couldbepartlyowingtothefactthatIndiafaced a period of exceptionally high inventories in April, which resulted in congestions at many of its major LNG import terminals and limited spot intake from the country's importers.

What about Northeast Asia?

It is now common knowledge that South Korea and Japan will progressively reduce their reliance on LNG and gas-fired power generation, while increasing their reliance on renewables power generation – most notably nuclear power. So the retreat in Northeast Asia for spot LNG purchases should not come as a surprise.



The seeming uptick in spot demand from both China and Japan, and even from South Korea and even more surprisingly, Taiwan may be confusing at first, but the Chinese and Japanese comeback came with a caveat. We observed a trend of more Chinese and Japanese participants emerging for requirements, less for actual demand and more for portfolio optimisation and contango play purposes. This tendency was particularly rampant among major buyers who have sufficiently large portfolios, including the likes of Chinese state-owned CNOOC, and Japanese gas firms such as Tokyo Gas alongside major Japanese utilities such as Kansai Electric.

On the other hand, there may still be a baseline level of spot LNG demand from south Korea, mostly because there are a few new gasfired power plants coming online this year

from the likes of private firms SK Gas and Hanwha Energy. Some irregular spot buyers, such as South Korean utility Korea Midland Power (Komipo) has demonstrated a knack for being able to swallow even higher than expected prices for spot purchases. This could still boost spot LNG purchases from the country.

Taiwan, meanwhile, seems to be backtracking on energy transition. The country's last nuclear plant, the 951MW Ma'anshan Unit 2, will go off line in May 2025. The country elected its new president Lai Ching-te in January this year, and the new administration has signaled that it would like to move away from nuclear power reliance. Moving forward, Taiwan's power mix will essentially be 50pc coal-fired, and 50pc gas-fired. At the same time, its coal usage will be limited by "environmental standards", which may then put more of the

burden on gas and LNG. Some traders have indicated that Taiwan may also use renewable power – more notably wind and solar. But the variability of renewables will still make gas essential as firming capacity.

Conclusion

As traditional LNG importers retreat, the market now must contend with arguably more uncertainty as less traditional importers enter the fray. Given that many of these new entrants are still grappling with more deep-seated issues such as lack of funding or political uncertainty and even lack of downstream gas pipeline infrastructure, the challenges in predicting seasonal LNG demand will undoubtedly increase, and there will be no lack of surprises for the market, for better or for worse.

STORIES OF THE MONTH

PNGRB seeks to regulate LNG Terminals

https://m.economictimes.com/industry/energy/oil-gas/pngrb-seeks-to-regulate-lng-terminals/articleshow/110774188.cms

ONGC and Indian Oil partner up to establish LNG plant near Hatta Gas Field

https://www.hindustantimes.com/business/ongc-and-indian-oil-partner-up-to-establish-lng-plant-near-hatta-gas-field-101719053624465.html

May sees surge in natural gas production amid falling LNG imports

https://energy.economictimes.indiatimes.com/news/oil-and-gas/may-sees-surge-in-natural-gas-production-amid-falling-lng-imports/111244649?utm_source=category_listing&utm_medium=sectionListing

India's LNG surge supports Asia's imports in June

https://www.reuters.com/business/energy/indias-Ing-surge-supports-asias-imports-june-russell-2024-06-24/#:~:text=The%20 real%20action%20in%20Asia's,up%20from%20May's%202.46%20million.

