

India

**Overweight** (no change)

**Highlighted Companies**

**Gujarat Gas**

**ADD, TP Rs679, Rs532 close**

CGD business will experience lower gas costs and higher margins, mainly driven by lower LNG pricing. We expect an increased volume in FY25F, especially with falling LNG prices, which should also positively impact margins. We currently have an ADD rating on the stock.

**Indraprastha Gas**

**ADD, TP Rs539, Rs440 close**

Lower LNG prices to city gas distribution (CGD) companies presents a favourable scenario and brings potential benefits to the CGD sector. We currently have an ADD rating on the stock.

**Tata Steel**

**REDUCE, TP Rs82, Rs162 close**

Steel market may witness sustained downward pressure, as competition to come from cheaper LNG-based steel and Chinese imports, resulting in no improvement in steel spreads. Steel companies' cost structure will inflate. We retain our REDUCE rating on the stock.

**Summary Valuation Metrics**

P/E (x)	Mar24-F	Mar25-F	Mar26-F
Gujarat Gas	20.73	18.12	15.87
Indraprastha Gas	14.37	13.07	11.88
Tata Steel	29.56	29.85	29.96
P/BV (x)	Mar24-F	Mar25-F	Mar26-F
Gujarat Gas	4.23	3.47	2.88
Indraprastha Gas	3.14	2.58	2.16
Tata Steel	1.84	1.77	1.71
Dividend Yield	Mar24-F	Mar25-F	Mar26-F
Gujarat Gas	0.38%	0.38%	0.38%
Indraprastha Gas	0.82%	0.82%	0.82%
Tata Steel	1.24%	1.24%	1.24%

**Research Analyst(s)**



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# Oil & Gas - Retail

## LNG prices to fall to US\$5.5-6/mmBtu

- Huge liquefaction capacity addition & sedate demand growth will lead to oversupply. Our cash cost analysis indicates LNG to fall to US\$5.5-6/mmBtu.
- While European demand is slowing down, Japan (as its multiple nuclear plants start), Korea and China's LNG demand will also fall in the coming years.
- All Indian users will benefit, be it CGD companies, LNG-based iron ore sponge and pellet makers, LNG regasifiers as well as LNG-based ammonia makers.

### LNG prices to fall – good for CGD, ammonia and power companies

Excess global liquefaction capacity, falling Chinese and Japanese imports and the European Union's move to do away with polluting fuels is leading to the oversupply of LNG in the global market. Consequently, we are likely to see a pull-back in the prices of LNG. Our equilibrium model shows that prices should fall to US\$5.5-6/mmBtu. This is a big positive for the Indian user Industry, be it city gas distribution companies, CNG users, tile manufacturing companies, ammonium nitrate makers, sponge iron makers or even pellet makers (who plan to use LNG to make pellets). India has significant regasification capacity of ~70mt and in the near term, it can run to 100% utilization (domestic production is likely to be limited to 20mt). With more and more green power coming into the grid, India needs quick-starting gas power plants and at the LNG price of US\$6/mmBtu, the variable cost of power production will fall to Rs3.2/unit.

### Blast furnace-based steel capacity will have one more headwind

Some time back, we had written a report on Indian iron ore, indicating that its prices are going to remain on an upswing ([IN: Metals and Mining - Indian iron ore to be firm for a longer span](#)), which is a headwind for blast furnace-based steel producers. At the same time, companies like Arcelor Mittal are doubling their steel capacity in India. Please note that Arcelor uses LNG to make sponge iron and hence, lower LNG prices are a big benefit for the company. If LNG prices fall to US\$6/mmBtu, then its cost of steel production can come down by US\$90-100/t. The same benefit will accrue to many gas-based pellet makers as well as gas-based sponge iron plants. India has 31mt gas-based sponge iron capacity which will become viable. Please note that gas-based sponge iron has higher elemental Fe (>90%) compared to coal-based sponge iron (78-80%). Higher the elemental FE content in sponge iron, the better it is for steel makers, and it sells also at a higher price,

### BUY CGD companies, power producers and SELL makers

Among city gas distribution or CGD companies, Indraprastha Gas and Gujarat Gas are the top picks. We don't have active coverage of power companies, but any power company with significant gas-based capacity stands to benefit. For companies like Tata Steel, in the near term, competition will come from cheaper LNG-based steel and Chinese imports. In the long term, these steel companies' cost structure will get inflated. Tata Steel remains our TOP SELL. Downside risks: A crisis in the Middle East which will jeopardize Qatar's investment plans.



## LNG prices to fall to US\$5.5-6/mmBtu

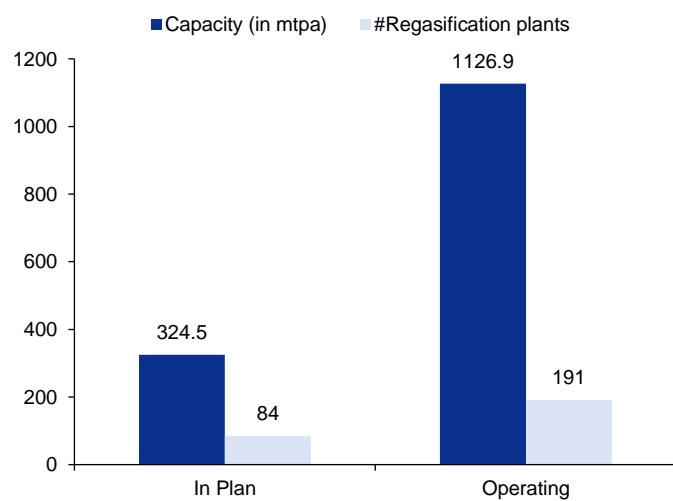
Excess global liquefaction capacity, falling Chinese and Japanese imports and the European Union's move to do away with the polluting fuel is leading to the oversupply of LNG in the global market. Consequently, we are likely to see a pull-back in the prices of LNG. Our equilibrium model shows that prices should fall to US\$6/mmBtu. This is a big positive for the Indian user industry, be it city gas distribution companies, CNG users, tile manufacturing companies, ammonium nitrate makers, sponge iron makers or even pellet makers (who plan to use LNG to make pellets). India has significant regasification capacity of ~70mt and in the near term, its utilization can increase to 100% (domestic production is likely to be limited to 20mt). Hence, the country needs more liquefaction capacity.

### LNG: Barring India, major importers will reduce their imports

#### Global regasification capacity is ~1,127mt and another 324mt capacity is in the pipeline >

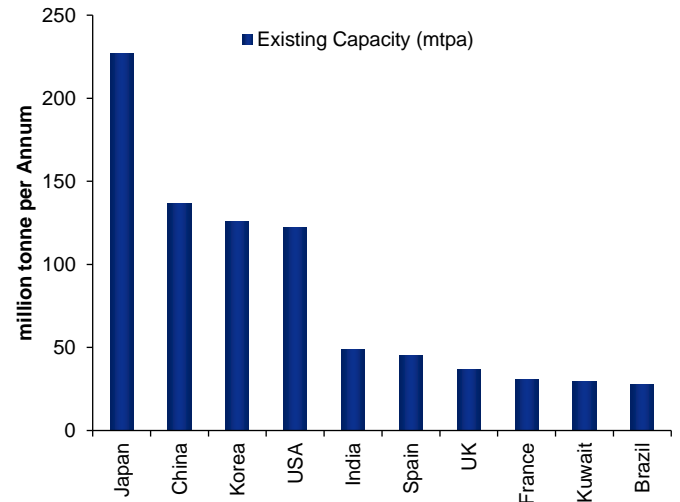
In 2022, ~403mt LNG was imported worldwide in which Europe, China, Japan, South Korea, India and Taiwan were the Top-6 countries accounting for ~87% of the total LNG imports. In the last six years, China has led import demand growth with its LNG import CAGR of ~7% while Japan has witnessed a declining trend in terms of LNG imports.

Figure 2: There is only limited regasification capacity addition



SOURCE: INCRED RESEARCH, COMPANY REPORTS

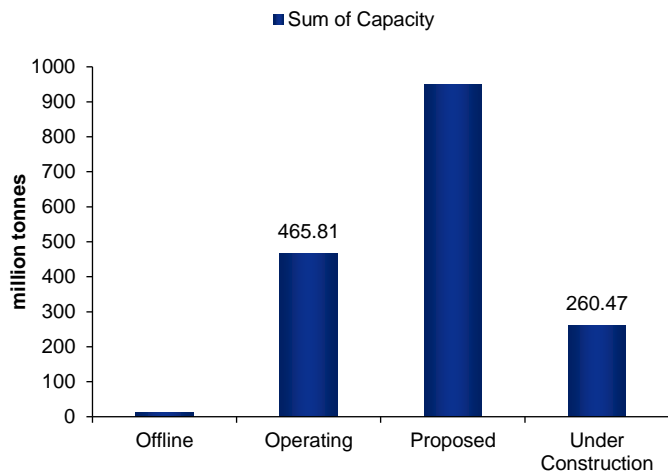
Figure 3: As of now, Japan leads the regasification capacity



SOURCE: INCRED RESEARCH, COMPANY REPORTS

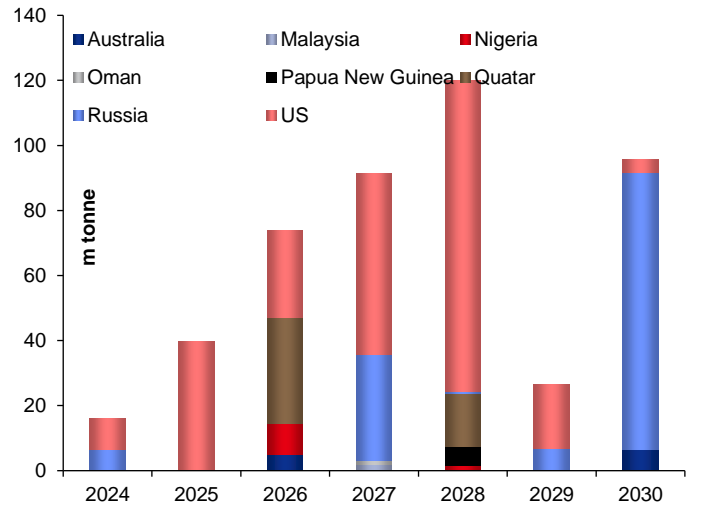
**Substantial liquefaction capacity is getting added ➤**

**Figure 4: Around 260mt of liquefaction capacity is getting added in the coming years**



SOURCE: INCRED RESEARCH, COMPANY REPORTS

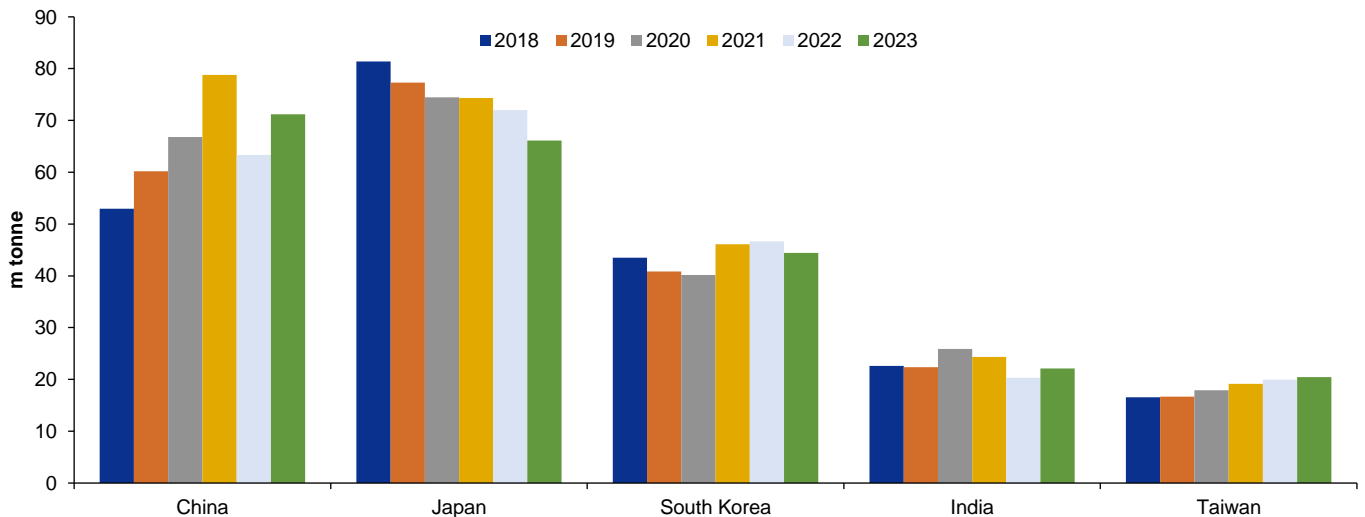
**Figure 5: The largest capacity is getting added in the US, which has excess natural gas production**



SOURCE: INCRED RESEARCH, COMPANY REPORTS

**China, Japan and India are the primary importers of LNG ➤**

**Figure 6: Over the years, China, Japan, Korea and India are the major Importers of LNG in the global market**



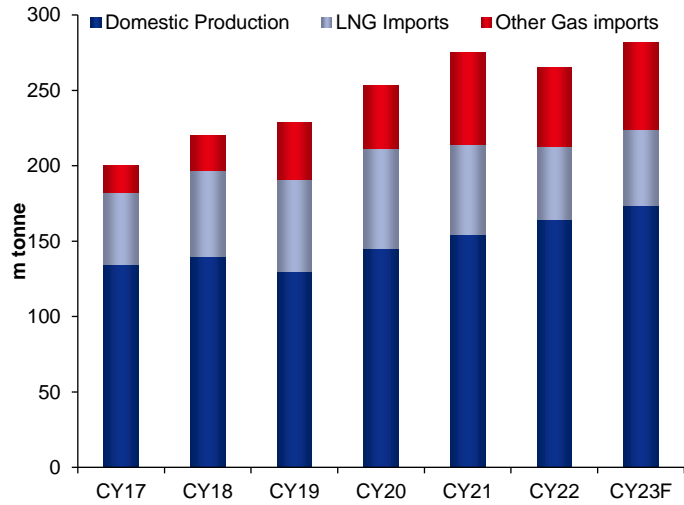
SOURCES: INCRED RESEARCH, COMPANY REPORTS

**China is the largest importer of LNG ➤**

China is the third-largest consumer of natural gas (298mtpa) and also the largest importer of LNG (71mtpa) having domestic annual production of 178mtpa. Around 80% of the import requirements of China is met by five countries, namely Australia, Qatar, Malaysia, Russia and Indonesia, with Australia alone importing 35-40%.

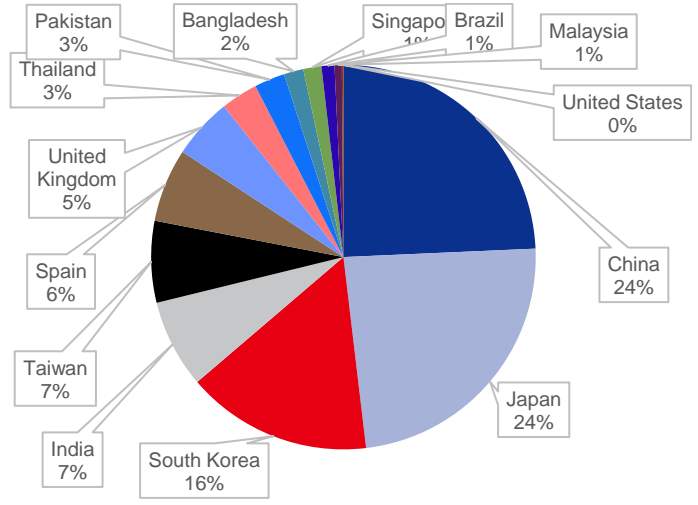
**Chinese natural gas demand is increasing, but most of it is met either by domestic production or piped gas from friendly countries ➤**

**Figure 7: Domestic gas production is increasing in China and its imports of LNG are coming down**



SOURCE: INCRED RESEARCH, COMPANY REPORTS

**Figure 8: In the last five years, China has imported 24% of the globally traded LNG**



SOURCE: INCRED RESEARCH, COMPANY REPORTS

China, the world's third-largest gas buyer, imports the fuel in a gaseous form via long-distance pipelines from three sources - central Asia, predominantly Turkmenistan, as well as Russia and Myanmar.

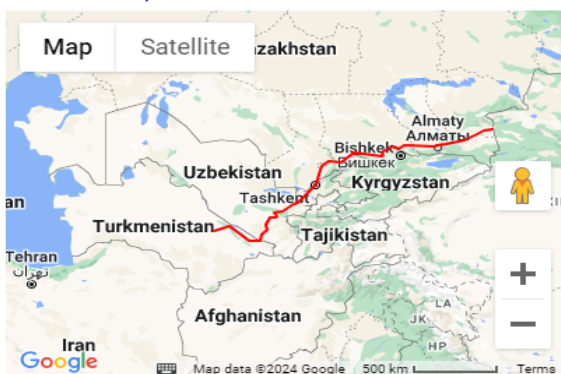
**Central Asia pipelines**

There are four supply lines which are operational/under construction meeting China's LNG demand.

Line A, B & C – the three parallel segments run through Turkmenistan, Uzbekistan, Kazakhstan, and China. Total length and capacities of these lines together are 5.5k km and 41.5mtpa, respectively.

Line D – The fourth segment is planned to start in 2028F from the Galkynysh gas field in Turkmenistan to the Chinese border through Uzbekistan, Tajikistan and Kyrgyzstan, which will be 966km-long having a capacity of 22.6mtpa.

**Figure 9: Line A, B and C are the three parallel lines running from Turkmenistan, Uzbekistan and Kazakhstan to China**



SOURCE: INCRED RESEARCH, COMPANY REPORTS

**Figure 10: The fourth segment, or line D, will start from 2028F**



SOURCE: INCRED RESEARCH, COMPANY REPORTS

**Myanmar pipeline**

The 793-km Myanmar-China gas pipeline, linking Ramree Island on the western coast of Myanmar with the Chinese border city Ruili in the southwestern Yunnan Province, began operating in 2013. It's designed to carry 9.1mtpa a year. About 20% of the gas supplies are reserved for local Myanmar market. But due to low production from the offshore Myanmar gas fields, the pipeline has for years been running under capacity, with 2022 deliveries to China at 2.9mtpa, according to Chinese customs authorities.

**Figure 11: This pipeline was started with great fanfare but because of low production in the offshore gas fields, the delivery to China is quite low**



SOURCE: COMPANY REPORTS, INCRED RESEARCH

**Russia pipeline**

**Power of Siberia** - Russian gas giant Gazprom began delivering gas to China in late 2019 via the 3,000-km Power of Siberia project linking Siberian fields with northeast China. Supplies reached 16bcm last year, with plans to ramp it up to touch 38bcm by 2025F.

**Far East Sakhalin Project** - In Feb 2022, during Russian President Vladimir Putin's visit to Beijing, China agreed to import gas from Russia's Far East Island of Sakhalin via a new pipeline across the Japan Sea to northeast China, with deliveries expected to reach up to 10bcm a year around 2026F.

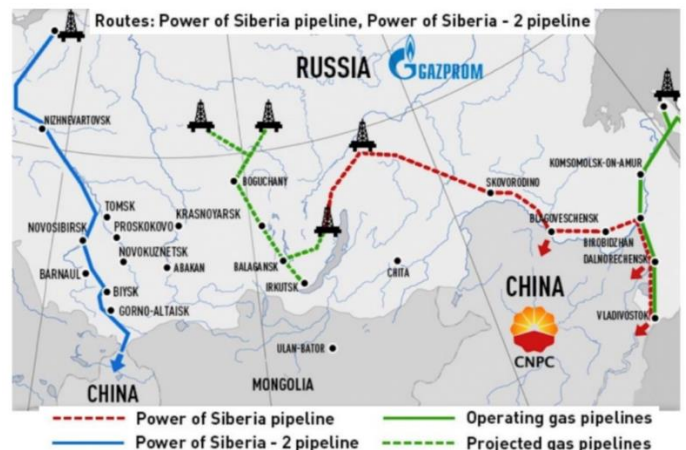
**Power of Siberia 2** - The proposed 2,600-km pipeline would bring 50bcm gas from the huge Yamal peninsula reserves in west Siberia and is expected to start operations from 2030F..

**Figure 12: Far East Sakhalin Project will start delivery from 2026F**



SOURCE: INCRED RESEARCH, COMPANY REPORTS

**Figure 13: The Power of Serbia is the dream project of Vladimir Putin, which will reduce Russia's dependence on other nations (for gas sales) significantly**



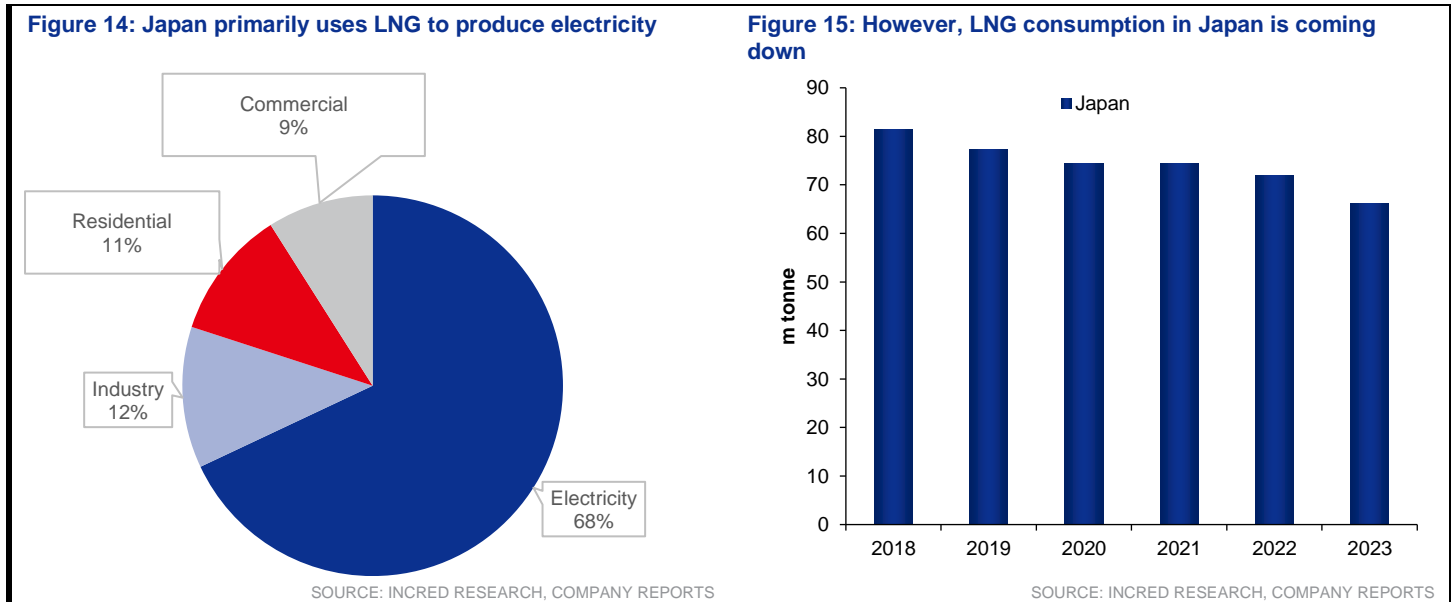
SOURCE: INCRED RESEARCH, COMPANY REPORTS

**Japan is the second-largest importer of LNG ➤**

1. Japan is the second-largest importer of LNG (~61mtpa), with ~78% contribution coming from Australia, Malaysia, Qatar, Russia and the US.
2. The share of natural gas in Japan's total energy supply increased significantly over the past decade, driven by rising demand from the electricity generation sector.

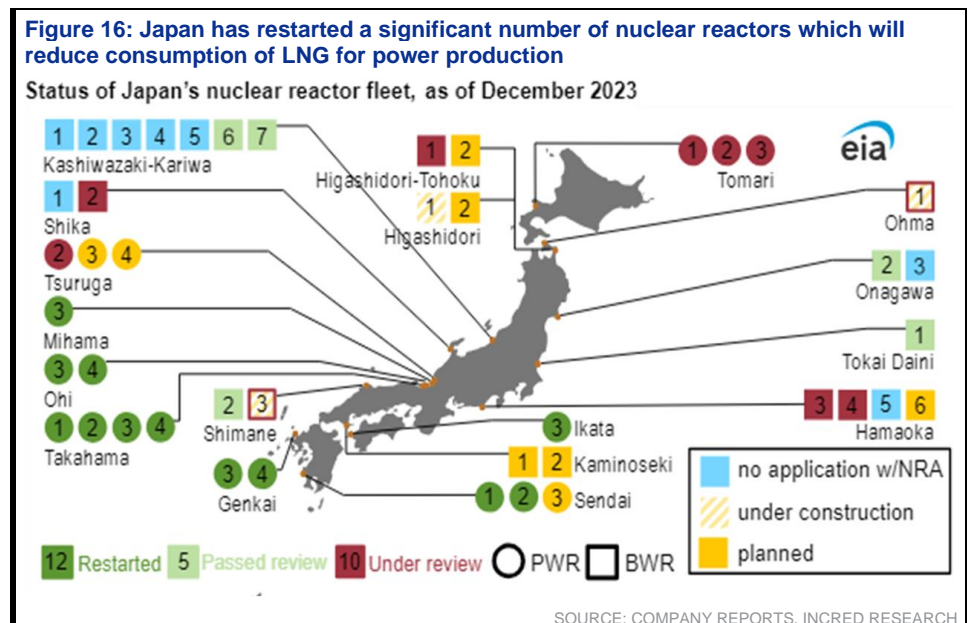
3. The 2011 Great East Japan Earthquake and subsequent Fukushima nuclear accident resulted in the closure of all nuclear plants, which led to an increase in the demand for natural gas.
4. While Japan produces more gas than oil, domestic production is still very limited, bringing the dependence on imports to over 90%.

**Japan is the second-largest importer of LNG but its LNG consumption is coming down ➤**



**Going ahead, Japan will rely on other sources of power, moving away from LNG ➤**

Japan’s domestic LNG demand is falling due to rising generation from nuclear and renewables, long-term energy and climate targets, demographic shifts and hence the Japanese utilities including JERA, Tokyo Gas, Osaka Gas, and Kansai Electric are likely to face an over-contracted position of roughly 11mtpa for the rest of the decade. The government’s climate and energy plans expect LNG-fired power generation to more than halve by 2030F. As a result, Japan’s LNG demand could fall between to roughly one-third of the 2019 level if the electricity generation targets are achieved.



## **But Japan may not stop imports, rather it will become a trader of LNG ▶**

Japan's LNG imports may not go down as the cancellation of the long-term contract with the suppliers will incur additional cost. Not only this, Japan's Ministry of Economy, Trade and Industry (METI) has set a target for companies to transact 100mtpa of LNG by 2030F. Hence, the country is planning to resell the imported LNG, thus becoming a threat to an existing base of suppliers. Based on figures from Japan Oil, Gas and Metals National Corporation (JOGMEC), LNG sales by Japanese companies to developing economies surged from 14.97mtpa in FY18 to over 38mtpa in FY21.

However, the chances of Japan turning out into a reselling hub are unlikely as its long-term contract arrangement prices are tied up with crude oil, making it Out-of-the-Money contract with respect to LNG spot prices. In fact, Japanese companies have lost money in reselling due to low spot LNG prices. Hence, it's a tradeoff between contract demolition costs vs. losses in reselling.

## **Taiwan's LNG demand can go up as new power plants are planned to be dependent on LNG ▶**

Taiwan is the sixth largest LNG importer (~20mtpa) in the world, with major consumers being industry (75%) and residential (16%). Almost 100% of the LNG demand of Taiwan is met by imported LNG, with the Top-5 partners (Australia, Qatar, Russia, Papua New Guinea and the US) constituting ~80% of the trade. Natural gas has become an increasingly popular option for electricity generation in many countries due to increased availability and the fact that it emits less CO2 and other pollutants than coal. Power generation accounted for 84% of total LNG demand due to increased demand from the industrial sector. Also, the share of LNG in electricity generation of Taiwan is currently at 37.2%, which is expected to go to 50% till 2025F, after continuing with the normal pace of electricity consumption growth of 5%. Therefore, government policies in the power sector are going to play a huge role in Taiwan's LNG import demand.

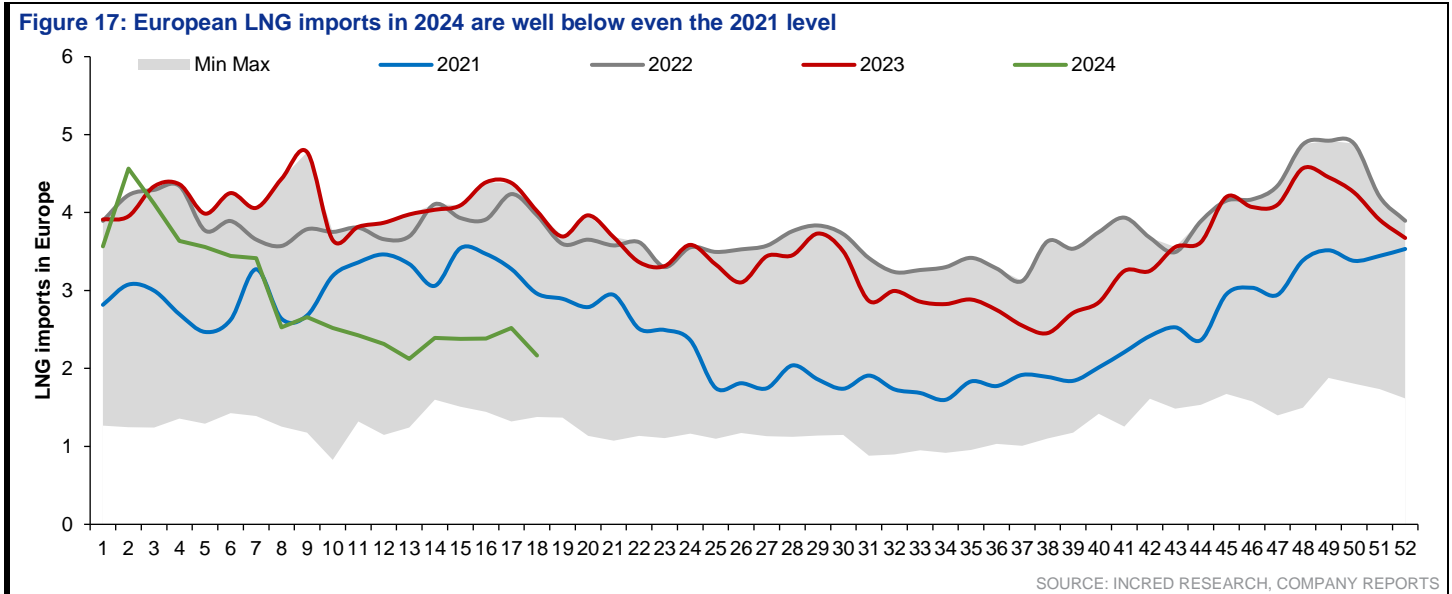
## **South Korea's intention is to reduce LNG demand ▶**

1. South Korea is the third largest importer of LNG (~46mtpa), meeting almost 100% of its LNG consumption needs through imports.
2. Top-5 countries, namely Qatar, Australia, the US, Malaysia, and Oman constitute ~80% of the imports. The country currently has six LNG terminals having regasification capacity of 153mtpa.
3. However, the country has some of the lowest utilization rates for its existing LNG terminals compared with other major LNG importing economies. Despite this, South Korea is planning to build 11 more LNG terminal projects by 2031F, many of which are either under construction or at earlier stages of development. These terminals account for roughly 37mtpa of regasification capacity, which, if built, would increase the national capacity to 190mtpa, up from 153mtpa currently.
4. Moreover, many of the country's newly proposed LNG terminal investments are located close to one another, suggesting an inefficient allocation of assets that could further hinder the usage rate.
5. Hence, there's a growing mismatch between the LNG import infrastructure and demand targeted in the country's net-zero goal, given the South Korean government's climate targets have projected that the share of LNG-fired power generation will fall to 9.3% by 2036F, down from 26.8% in 2018. Through 2036F, the government expects natural gas demand to record 37.7 mtpa, a 17% decrease from 45.4mtpa in 2022.

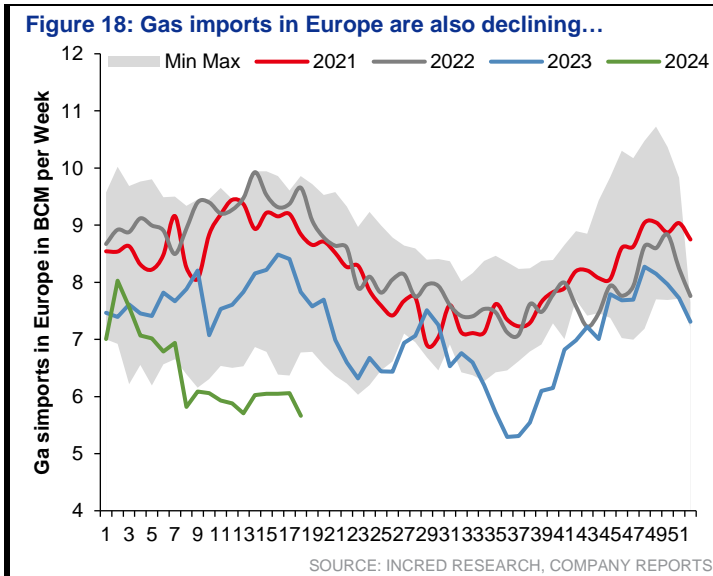
**Europe has successfully curtailed LNG demand ➤**

After the Ukraine invasion by Russia and closure of Nord Stream gas pipeline, it was widely feared that LNG shortage will drive gas prices to crazy levels. While it did happen for some time, after that Europe managed its LNG demand in an exemplary fashion.

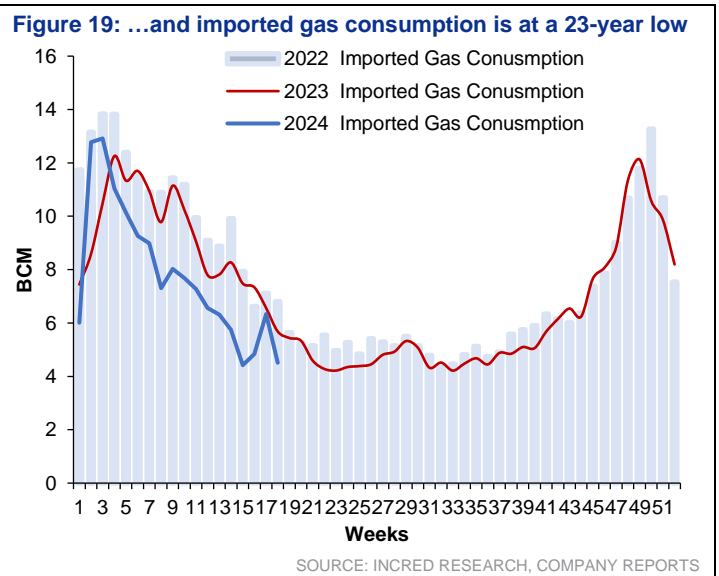
**Figure 17: European LNG imports in 2024 are well below even the 2021 level**



**Figure 18: Gas imports in Europe are also declining...**



**Figure 19: ...and imported gas consumption is at a 23-year low**



**India's LNG demand and imports will only go up ➤**

India is ranked 15<sup>th</sup> in terms of LNG consumption, with an average consumption rate of ~42-45mtpa. India is dependent on imported LNG (42-45% of natural gas is imported) to meet its domestic demand. LNG is imported either through long-term contracts or through spot purchases from the international market. Most of the long-term contracts are either crude oil-linked, which are largely from the Middle East or gas-linked, which are from the US.

Average yearly imports of India during 2021-24 were around 21mtpa, with the Top 5 suppliers constituting ~80% share. Qatar, the UAE and the US have been the Top-3 suppliers for India with ~67% market share. However, Russia has made a remarkable entry in the Indian market after the Russia-Ukraine war but has still a long way to go for becoming the top supplier because of the existing long-term contracts of Indian companies.

Long-term agreements - India traditionally favoured long-term gas sourcing. India has long-term LNG contracts of around 20mt, which constitutes around 95% of import requirements. However, in the last one year, India has been able to make



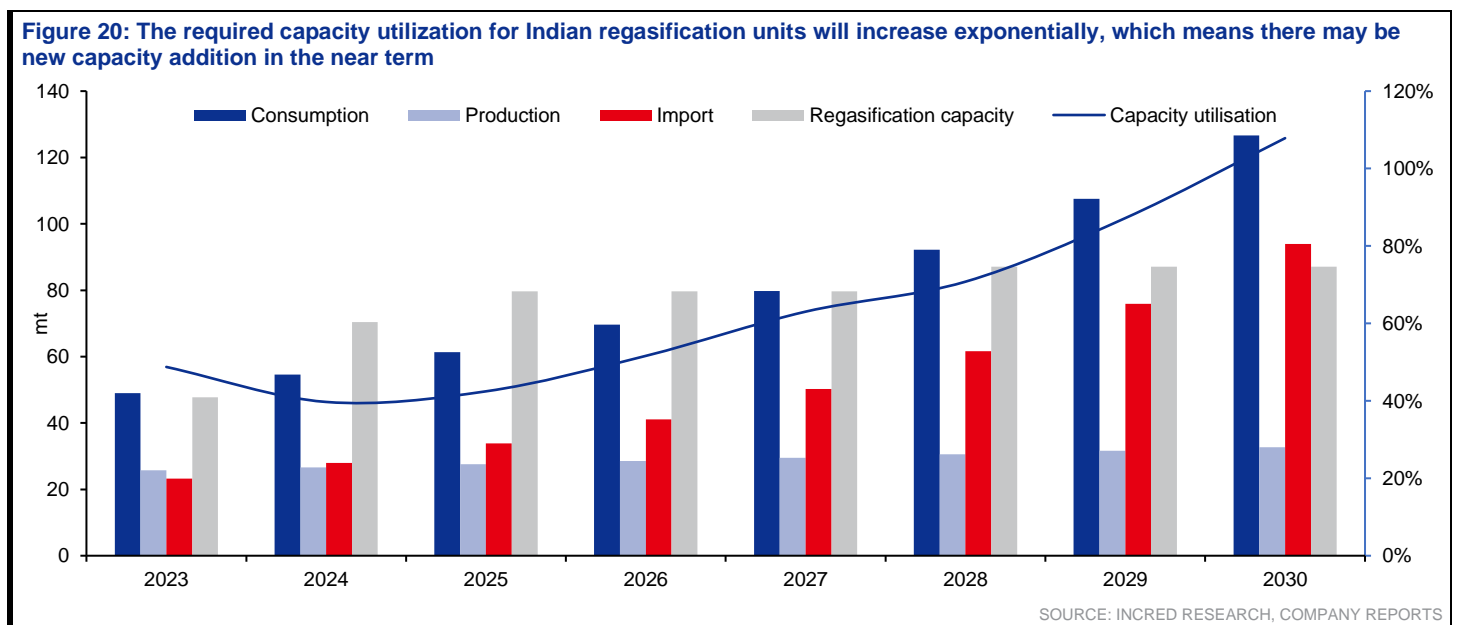
an additional contract of around 5mtpa via Indian Oil Corporation and GAIL (India), most of them getting effective from 2026F. In addition to this, Petronet LNG has also renewed its 7.5mtpa deal with Qatar Energy for the next 20 years, starting from 2028.

**India’s LNG demand has posted a 3% CAGR over 2015-22 >**

India has witnessed historical LNG growth of ~3% CAGR over 2015-22, with the major contributors (~88-90% consumption) being fertilizer, power, refineries and CGD sectors. ~80% of the imported LNG is used by these five sectors together. However, the shift of India’s focus towards green energy, along with low LNG prices, would lead to an increase in total LNG consumption by two-folds in the next five years, mostly driven by power, CGD and fertilizer sectors. With production capabilities being stagnant around 3.5-4.5% y-o-y, the demand growth is mostly expected to be met by LNG import of an additional 22-23% y-o-y.

**Need for more LNG terminals >**

India is currently having a regasification capacity of 47.7mtpa and average utilization rate of ~49% but is expected to add another 39.4mtpa in the next four years, with a major addition of 22.7mtpa in 2024F. This excess capacity addition would lead to underutilization of LNG terminals in the short term, leading to utilization decline from 49% in 2023 to 40% in 2024F. However, utilization is expected to rebound closer to 100% at the end of 2030F in anticipation of higher LNG imports. Hence, it makes sense for India to invest in new import terminals and get into more long-term LNG contracts to meet the nation’s LNG import demand.



**LNG demand in the next five years will be driven by power, CGD, fertilizer and CNG sectors >**

**Power:** This sector has a historical share of ~19% in LNG consumption over 2015-23. However, the sector has witnessed a decline in LNG consumption, with a rate of 4.1% during the period. However, with India’s commitment to increase the LNG share in the energy mix from the 6% level to 15%, till 2030F, the sector is expected to witness hyper growth of ~30% CAGR, given the fact that current power consumption is expected to go up from 243GW to 366GW during the same period.

**City gas distribution (CGD) - CNG** constitutes a 56% share of CGD. The government of India plans to increase the CNG stations from 6,035 to 17,500, which will lead to LNG demand CAGR of 19.4% over 2024-30F from this sub-sector.

**PNG:** Expansion of the National Gas Grid to about 33,500km from 21,715km currently will boost import demand to 7.4% y-o-y.

Overall, this sector has a share of 17.1% historically and is going to witness a growth of 14.1% y-o-y till 2030F.

**Fertilizer:** This industry is the largest consumer of LNG, with imported LNG's share in total gas consumption of the sector rising to 79% in 2022. India is looking towards getting independent from urea imports by 2025F. For that, the country has ramped up domestic urea production along with the production of urea alternatives like nano liquid urea and nano liquid di-ammonium phosphate (DAP). Projected growth rate for this sector between 2024-30F is ~3%.

Figure 21: India's LNG demand in a different scenario is shown in the graph below

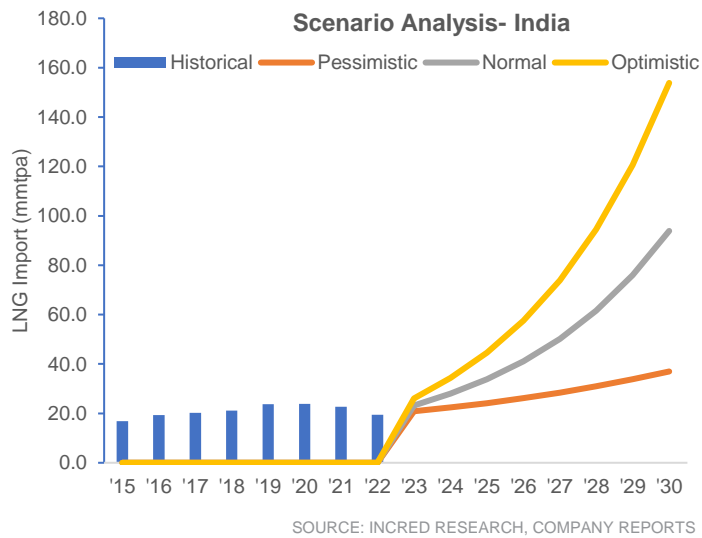
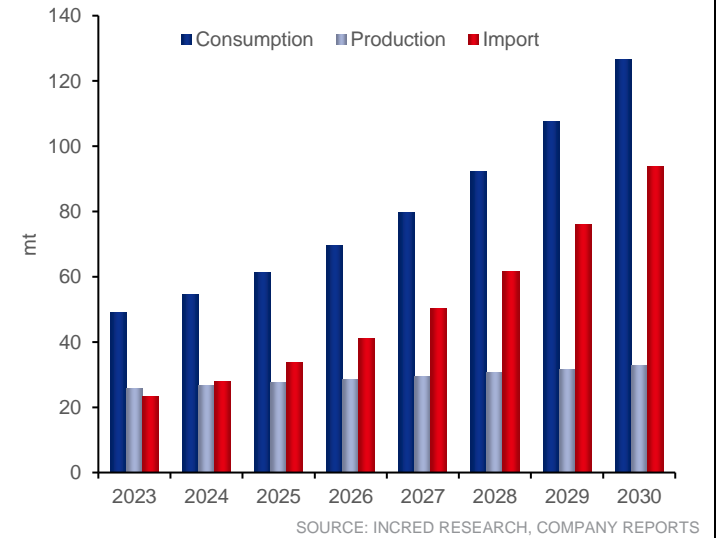


Figure 22: This is assuming the base as well India's need to install big regasification capacity

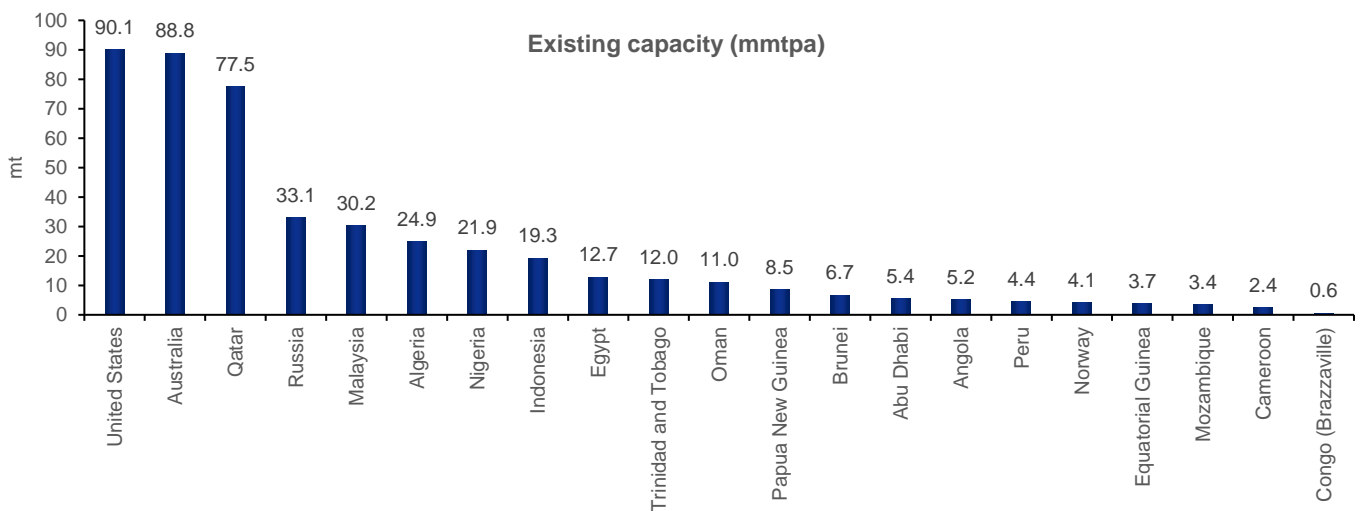


## Global LNG supply and equilibrium prices

In 2022, ~403mtpa of LNG was exported worldwide, with ~76% share of Top-5 countries (Qatar, Australia, the US, Russia and Malaysia). Gas reservoir in the world is anyway more than the demand. Hence, the actual supply bottleneck could practically lie from the liquefaction capacities across the world. Just to give an estimate, the current liquefaction capacity in the world stands out at around 466mtpa and the average utilization rate of liquefaction plants across the globe is around 85-87%. On the one hand, when production is expected to post a CAGR of ~4% over 2023-30F, the liquefaction capabilities are expected to witness a growth of 14% during the same period, leading to a further fall of capacity utilization to less than 50%. This scenario would lead to underutilization of resources, impacting the payback period of new liquefaction projects and the RoI of oil & gas companies.

### Huge capacity addition is in the pipeline ➔

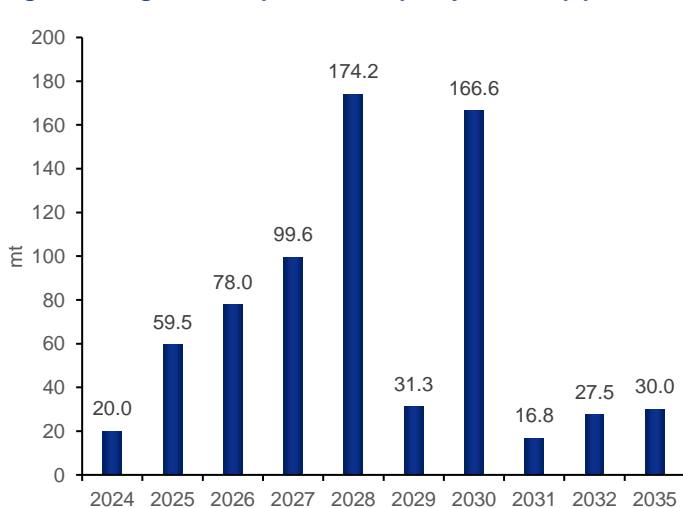
Figure 23: The US and Australia have the largest liquefaction capacities currently



SOURCE: COMPANY REPORTS, INCRED RESEARCH

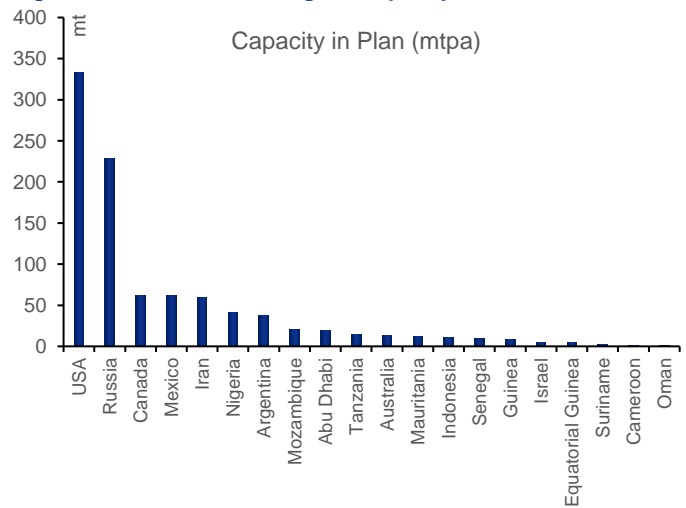
Currently, there are ~87 operating liquefaction plants across the globe with 30 under construction and 132 proposed to be commissioned till 2035F. More than half of the operating liquefaction capacities lies with the 3 nations, US (90.1), Australia (88.8) and Qatar (77.5) whereas the US and Russia have a share of ~60% in terms of planned (under construction and proposed) capacities. The total world liquefaction capacity is expected to touch 1,095mtpa by the end of 2030F, showing a growth of 10.4% over 2023-30F.

Figure 24: Significant liquefaction capacity is in the pipeline



SOURCE: COMPANY REPORTS, INCRED RESEARCH

Figure 25: The US is leading the capacity addition drive



SOURCE: COMPANY REPORTS, INCRED RESEARCH

## LNG demand-supply equilibrium

From the analysis, it's quite evident that on the one hand, the world demand for LNG import is expected to post a CAGR of 3.8% whereas the production and liquefaction capacities are expected to increase at the rate of 3.5% and 13%, respectively, creating a demand-supply mismatch and underutilization of resources. Hence, the prices of LNG are expected to go down further till 2030F.

### Global demand is likely to increase at a 3.8% CAGR ➤

**Figure 26: Driven by slowing Chinese, Japanese and European demand, LNG is likely to grow only at a 3.8% CAGR over 2023-30F**

Demand Analysis (all values in mmtpa)									
	2023	2024F	2025F	2026F	2027F	2028F	2029F	2030F	Growth rate
China	71.3	77	84	92.5	101.9	112.2	123.5	136	9.7%
India	23.3	28.0	33.8	41.1	50.2	61.6	75.9	93.9	22.1%
Taiwan	19.9	21.3	26.0	27.3	28.7	30.1	31.6	33.2	7.6%
South Korea	36.6	45.0	44.3	43.7	43.0	42.4	41.7	41.1	-1.5%
Japan	66	58.7	52.2	46.4	41.3	36.7	32.6	29	-11.1%
Europe	126	126.0	127.0	121.0	115.1	110.3	105.1	100.0	-3.2%
Top-6 regions' demand	343.1	356.0	367.4	372.0	380.1	393.2	410.5	433.2	3.4%
Share of Top-5	86.6%	86%	86%	85%	85%	85%	85%	84%	
Total world demand	396.1	413.9	427.2	437.6	447.2	462.6	482.9	515.7	3.8%
World demand increase		17.8	13.2	10.5	9.6	15.4	20.3	32.8	

SOURCE: INCRED RESEARCH, COMPANY REPORTS

### However, operating capacity is likely to increase at a 13% CAGR over 2023-30F ➤

**Figure 27: World supply is likely to increase at a 13% CAGR over 2023-30F**

World Supply Analysis (all values in mmtpa)									
	2023	2024F	2025F	2026F	2027F	2028F	2029F	2030F	Growth rate
Capacity being planned		20	59.5	78	99.6	174.2	31.3	166.6	
Operating capacity	465.8	485.8	545.3	623.3	722.9	897.1	928.4	1095	13.0%
Capacity utilization	85.0%	85.2%	78.3%	70.2%	61.9%	51.6%	52.0%	47.1%	
Production									Growth rate
OCED	1,184.8	1,210.3	1,236.3	1,262.9	1,290.0	1,317.8	1,346.1	1,375.0	2.2%
Non-OCED	2,081.6	2,172.1	2,266.6	2,365.2	2,468.1	2,575.5	2,687.5	2,804.4	4.4%
EU	50.0	47.0	44.2	41.5	39.0	36.7	34.5	32.4	-6.0%
Supply - total	3,316.4	3,429.4	3,547.1	3,669.6	3,797.2	3,929.9	4,068.1	4,211.9	3.5%
Supply increase		208.8	220.4	232.7	245.8	259.7	274.5	290.3	

SOURCE: INCRED RESEARCH, COMPANY REPORTS

### Operational cash cost of production varies and it will be the lowest for Qatar at US\$2.3/mmBtu ➤

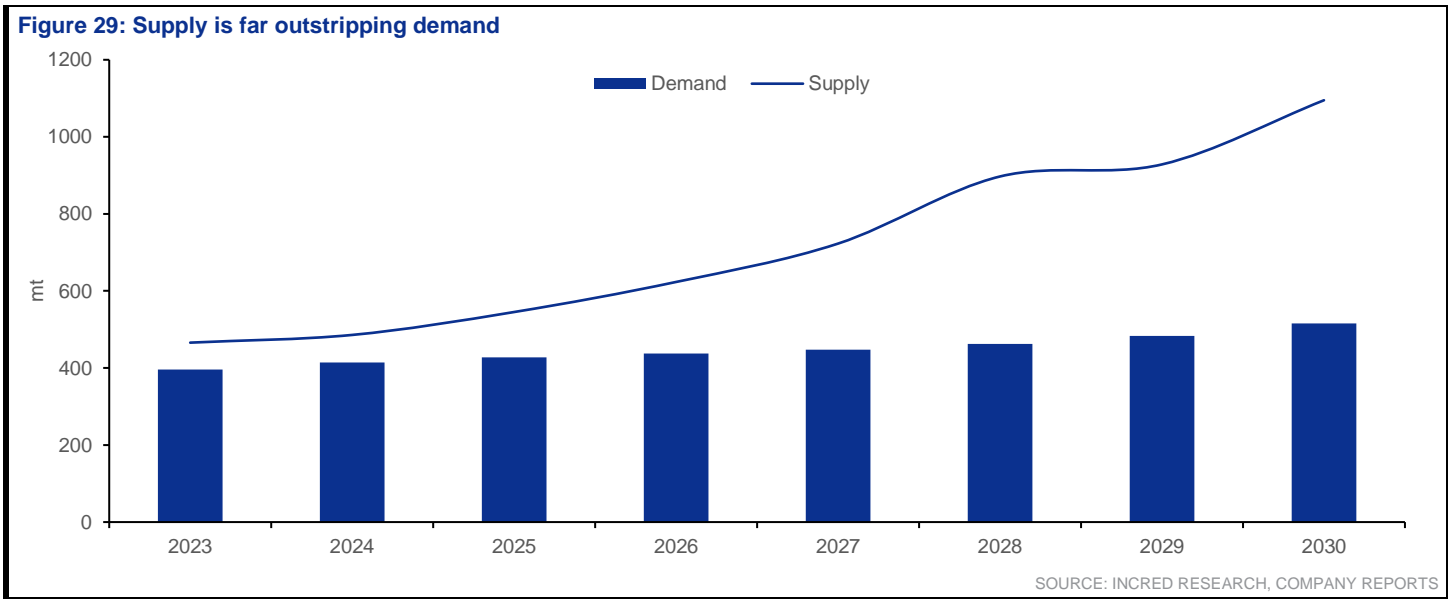
**Figure 28: Qatar will determine the prices at it has lowest cash cost production of US\$2.3/mmBtu for even new plants**

Row Labels	Upstream cost	Liquefaction cost	Interest cost	Breakeven for old plant	Operating breakeven for new plant
Algeria	3.0	3.8	0.6	6.8	7.3
Australia	3.0	6.0	0.3	9.0	9.3
Indonesia	3.0	3.0	0.5	6.0	6.5
Malaysia	1.8	3.0	0.4	4.8	5.2
Nigeria	3.0	3.8	1.8	6.8	8.6
Qatar	0.2	1.7	0.4	1.9	2.3
Russia	0.8	4.5	1.2	5.3	6.4
Trinidad	3.0	3.8	0.5	6.8	7.3
US Gulf	3.5	2.3	0.4	5.8	6.2

SOURCE: INCRED RESEARCH, COMPANY REPORTS

### Price prediction - it can fall to as low as US\$5.5-6/mmBtu

India has been successfully able to negotiate the economical price range for LNG imports in the last six years at an average price of US\$10.25/mmBtu during 2018-24. Talking about future predictions, world LNG prices can go to US\$5-6/mmBtu and would still be profitable for most of the major LNG exporting countries, except Australia, as its LNG upstream companies would be achieving breakeven at US\$9/mmBtu. India can be benefitted with LNG imports from Qatar, Russia, Malaysia and the US and the prices in Indian market can vary from US\$5.5-10/mmBtu in case of oversupply. Please note that the marginal cost of new LNG capacity is around US\$11.5/mmBtu while the liquefaction costs are in the range of US\$1.7-6/mmBtu and the lending rate varies from ~6% in the US to 15%+ in Nigeria. Hence, liquefaction companies would be able to make operational breakeven even when world LNG prices reach around US\$5.5-6mt (with a debt-equity ratio of 0.6:0.4).



We acknowledge the contribution of Pratyush Kamal in the writing of this note

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