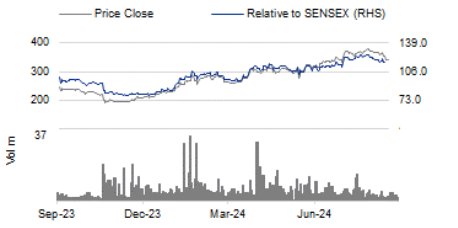
India

ADD *(previously HOLD)*

Consensus ratings*:	Buy 7	Hold 10	Sell 17
Current price:			Rs341
Target price:	▲		Rs519
Previous target:			Rs228
Up/downside:			52.2%
InCred Research / Consensus:			63.0%
Reuters:			
Bloomberg:			PLNG IN
Market cap:			US$7,038m
			Rs511,050m
Average daily turnover:			US$25.7m
			Rs1869.4m
Current shares o/s:			1,500.0m
Free float:			50.0%

Source: Bloomberg



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	(7.1)	8.1	41.7
Relative (%)	(9.6)	0.9	16.1

Major shareholders	% held
BPCL/GAIL/IOC/ONGC each	12.5
SBI PSU	6.0
Kotak MF	2.3

Petronet LNG

All set to witness ~10% volume growth

- Dahej terminal expansion to 22.5mmtpa by FY25F; Kochi set for 3x utilization.
- RasGas contract revised for US$1.2/mmBtu savings; Gorgon secured at 12.5% of Brent, ensuring 90% assured capacity booking for the Dahej terminal.
- EPS to grow at ~19% CAGR over FY24-27F led by volume growth of ~13%.

Global LNG oversupply to drive prices down; India stands to benefit

Globally, around 260mtpa of liquefaction capacity is set to come online in the coming years, with the US and Russia leading the way. This expansion will outpace demand growth, particularly in the regions like Japan, Korea, and Europe, which are projected to reduce their LNG imports. The global oversupply is set to drive LNG prices lower, presenting an opportunity for India, which relies heavily on imported LNG for its energy needs. With India's LNG demand expected to double over the next five years, primarily driven by the power, fertilizer, and city gas distribution (CGD) sectors, Petronet LNG is poised to benefit significantly. Petronet LNG's overall volume throughput is forecast to grow at a robust 10.7% CAGR over FY24-30F, with its terminals expected to operate at near-full capacity.

Dahej terminal to expand capacity to 22.5mmtpa by FY25F

The company's Dahej terminal, operating at an impressive 109% efficiency, is undergoing capacity expansion from 17.5mmtpa to 22.5mmtpa by FY25F, ensuring sustained high utilization. The Kochi terminal, currently operating at 20.8% of its capacity, is positioned for a major boost once the Kochi-Bengaluru pipeline is completed by FY25F. Additionally, the expected returns of Mangalore Refinery and Petrochemicals (MRPL) and ONGC Mangalore Petrochemicals (OMPL) in using LNG instead of alternative fuels, once LNG prices become more competitive, we believe, will further drive volume growth at the Kochi terminal, potentially tripling its utilization to 100% by FY29F.

RasGas & Gorgon contracts revise pricing - US$1.2/mmBtu savings

The 7.5mmtpa RasGas contract price was revised to reflect a more favourable pricing formula linked to Brent crude oil, saving the company US$1.2/mmBtu. Additionally, the Gorgon contract, which will add 1.2mmtpa of LNG, has been secured at 12.5% of Brent crude price, providing further cost advantages. These contracts are backed by long-term offtake agreements with GAIL (India), IOCL, and BPCL under the take-or-pay structure, which ensures that 90% of the capacity is booked through long-term contracts, creating a robust hedge against volume risk.

Volume tailwind ahead; upgrade to ADD rating with a TP of Rs519

The expected 10.7% yoy regas volume growth over FY24-30F, led by low global LNG prices and favourable natural gas policies of the government, is expected to boost the company's EPS by ~19% CAGR over FY24-27F. We upgrade our rating on the stock to ADD (from HOLD) with a higher target price of Rs519 (Rs228 earlier). However, any delay in new liquefaction capacity addition and non-utilization of the Kochi terminal pose downside risks to our earnings estimates.

Financial Summary	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
Revenue (Rsm)	598,994	527,293	536,043	668,496	678,272
Operating EBITDA (Rsm)	48,540	52,055	65,040	88,612	97,622
Net Profit (Rsm)	30,032	32,605	43,189	60,805	67,561
Core EPS (Rs)	20.0	21.7	28.8	40.5	45.0
Core EPS Growth	(11.7%)	8.6%	32.5%	40.8%	11.1%
FD Core P/E (x)	17.02	15.67	11.83	8.40	7.56
DPS (Rs)	11.0	11.0	11.0	11.0	11.0
Dividend Yield	3.26%	3.23%	3.23%	3.23%	3.23%
EV/EBITDA (x)	11.20	10.06	8.39	6.28	5.51
P/FCFE (x)	34.95	50.97	23.42	32.84	28.70
Net Gearing	21.5%	7.4%	17.5%	19.0%	9.3%
P/BV (x)	3.35	2.94	2.60	2.12	1.75
ROE	20.8%	20.0%	23.3%	27.8%	25.4%
% Change In Core EPS Estimates					
InCred Research/Consensus EPS (x)					

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Research Analyst(s)

Satish KUMAR
T (91) 22 4161 1562
E satish.kumar@incredresearch.com

Pratyush KAMAL
T (91) 2241611549
E pratyush.kamal@incredresearch.com

Abbas PUNJANI
T (91) 22 4161 1598
E abbas.punjani@incredresearch.com

Volume to post a 10% CAGR over FY24-30F

With 260mtpa of new liquefaction capacity set to come online, primarily from the US and Russia, and India's LNG demand forecast to double in the next five years, Petronet LNG is well-positioned to benefit. The company's volume throughput is projected to post a robust 10.7% CAGR over FY24-30F, bolstered by capacity expansion at its terminals and strategic long-term contracts that provide cost advantages and a strong hedge against volume risk.

Asset details

Petronet LNG has two main assets - Dahej and Kochi terminals. The company has 17.5mt regas capacity in Dahej and 5mt capacity in Kochi. The long-term gas tie-up for these terminals is 7.5mt for Dahej and 1.425mt for Kochi. Various companies have booked regas capacity with take-or-pay contracts at the Dahej terminal, but not at the Kochi terminal.

Details about Dahej and Kochi terminals

Petronet LNG has set up India's first LNG receiving and regasification terminal at Dahej in Gujarat, and another terminal at Kochi in Kerala. Dahej and Kochi terminals collectively supply 70mmscmd. While the Dahej terminal has a nominal capacity of 17.5mmtpa, the Kochi terminal has a capacity of 5mmtpa.

Figure 1: Details about Dahej and Kochi terminals' contracts

	Contract parties	Period up to	Sourcing/delivery
Gas sales and purchase agreement	RasGas of Qatar	2028	8.5mt
Gas sales and purchase agreement (GSPA)	Mobil Australia Resource Company	2035	1.425mt
Regasification services agreement	GAIL (India)	2036	2.5mt
Regasification services agreement	IOCL	2036	1.5mt
Regasification services agreement	BPCL	2036	1mt
Regasification services agreement	Torrent Power	2036	1mt
Short-term regasification services agreement	Adani Total		0.75mt
Other regasification services agreement			1.75mt

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Sourcing contracts

The 7.5mt RasGas contract renegotiations to save ~US$1/mmBtu

In 1999, RasGas offered LNG to Petronet LNG at US$2.13+ 2% crude. By 2003, the contract was revised to a fixed price of US$2.53/mmBtu for the first five years, with future prices indexed to crude oil.

From 2010, the pricing was linked to 12.67% of the 12-month Japanese crude cocktail average, with a ceiling and floor based on a 60-month average and a standard deviation or SD of 4. This led to high prices despite falling market rates.

In 2015, the formula was updated to 12.67% of the three-month Brent crude average price plus US$0.52/mmBtu. The latest adjustment to 12.1% of Brent crude prices on a DES basis aims to save US$1/mmBtu, with a further reduction possible if spot prices fall.

Similar to earlier agreements, the LNG volume under the new SPA shall also be off taken by GAIL (India) or GAIL (60%), Indian Oil Corporation or IOCL (30%) and Bharat Petroleum Corporation or BPCL (10%) after regasification, primarily from the Dahej terminal, on a substantially back-to-back basis.

The upcoming 1.2 mtpa Gorgon contract @12.5% Brent crude price to boost supply for Petronet LNG

Petronet LNG has secured a 20-year contract for 1.44mtpa of LNG from Mobil Australia Resources (ExxonMobil affiliate) for the Gorgon project with an earlier contract priced at 14.5 per cent of Brent crude price and has been renegotiated to 13.9 per cent of Brent crude price currently.

The updated contract introduces an additional 1.2mt of LNG, with 0.6mt starting in FY27F and full delivery of 1.2mtpa commencing in FY29F. With the pricing for the new supplies at 12.5% of Brent crude price, ExxonMobil will now cover transportation costs. This renegotiation will save Petronet LNG approximately US$1.2/mmBtu on the old contract and around US$2.3/mmBtu under the new terms. The contract is structured for back-to-back delivery to BPCL (40%), IOCL (30%), and GAIL (30%), optimizing the use of the Kochi terminal.

Offtake contracts

Petronet LNG has 8.25mtpa of regas offtake contracts

- Petronet LNG has secured regasification offtake contracts through 2036F, totaling 8.25mmtpa. The distribution includes GAIL (2.5mmt), IOCL (1.5mmt), BPCL (1mmt), Torrent power (1mmt), and a short-term deal with Adani total (0.75mmt).
- These contracts are based on a take-or-pay agreement, but high prices and logistical challenges prevented some off takers from meeting their contracted volume in FY22 and FY23 due to the Covid-19 pandemic and the Russia-Ukraine war, resulting in penalties of approximately Rs12bn.
- To address these outstanding dues, Petronet LNG has implemented a resolution mechanism. Off-takers are required to make up the shortfall by taking additional volume over the next three years. If they fail to do so, Petronet LNG will claim the dues from the bank guarantees provided by off-takers.

Terminal operations

Dahej terminal achieves 109% efficiency with 248trBtu (trillion Btu) throughput in 1QFY25; secures 90% capacity with long-term commitments

- For Petronet LNG, the Dahej terminal excelled with a throughput of 248trBtu in 1QFY25, reflecting an impressive operational efficiency of 109%.
- The terminal's long-term commitments ensure robust volume security, with nearly 15.75mmtpa booked. This includes 7.5mmtpa from RasGas and an additional 8.25mmtpa from capacity bookings, securing around 90% of the terminal's capacity.
- Overall, the port terminals achieved a total throughput of 262trBtu.
- The regasification tariff stands at Rs62.9/mmBtu for the Dahej terminal and approximately Rs85-86/mmBtu for the Kochi terminal, highlighting competitive pricing amidst strong operational performance.
- Since the Dabhol terminal is expected to be non-operational till Oct 2024F, we expect the terminal to witness 100%+ capacity utilization in 2QFY25F as well.

Kochi terminal hit with 1.04mmtpa in FY24, but set for growth with pipeline completion and increased LNG supply

- In FY24, the Kochi terminal, with a nameplate capacity of 5mmtpa, operated at 20.8% capacity, achieving a throughput of 1.04mmtpa and an energy send-out of 54.05trBtu, the highest ever for the terminal. Additionally, it set a record by loading 2,230 LNG trucks, up 49% from 1,494 trucks in FY23.
- The Kochi terminal has a contract with ExxonMobil for 1.425mmtpa of LNG, intended for increasing the terminal’s capacity utilization with back-to-back delivery to off-takers BPCL (40%), IOCL (30%), and GAIL (30%). However, due to connectivity issues and lower demand at the Kochi terminal, most of the cargoes are redirected to the Dahej terminal. From FY27F, the Kochi terminal is expected to receive an additional 0.6mmtpa for two-to-three years, rising to 1.2mmtpa, totaling 2.62mmtpa from FY29F.
- The completion of the Kochi-Bengaluru pipeline through Coimbatore is expected by FY25F, potentially boosting the Kochi terminal's capacity utilization. The pipeline will facilitate a unified tariff of around Rs40/mmBtu for

nearby sources compared to Rs100 for more distant supplies, improving cost efficiency for South India. Additionally, if LNG prices decrease, MRPL and OMPL are likely to resume using RLNG, which could increase the demand at Kochi terminal by 25-30%, promising a significant growth opportunity.

LNG: Barring India, major importers will reduce their imports

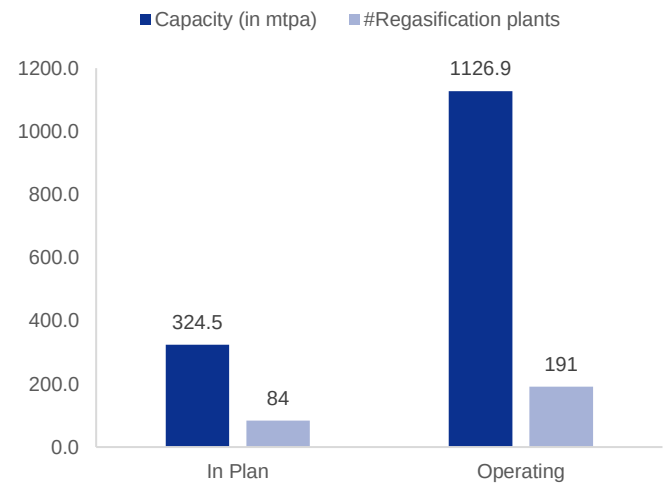
Global regasification capacity is ~1,127mt and another 324mt capacity is in the pipeline

In FY24, ~412 mt LNG was imported worldwide in which Europe, China, Japan, South Korea, India and Taiwan were the top-6 countries, accounting for ~87% of total LNG imports. In the last six years, China has led import demand growth, with its LNG imports CAGR at ~7% while Japan witnessed a declining trend in terms of LNG imports.

LNG imports shifted from Atlantic-facing countries such as the UK, France, and Spain to other nations, notably the Netherlands and Germany. This shift was driven by the development of new LNG import capacities in these countries, enabling direct deliveries and reducing the dependency on neighbouring countries for LNG reception.

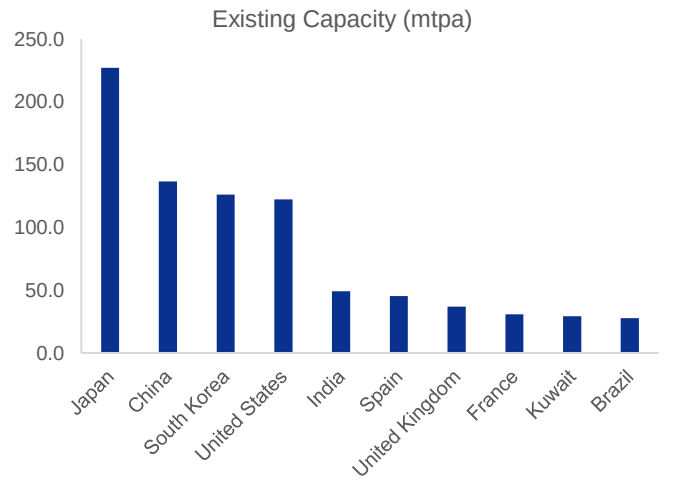
In FY24, Europe's LNG supply from the US grew stronger, with the US share of Europe's LNG imports rising from the level witnessed in 2022. Europe continued to be the top market for US-origin LNG, highlighting Europe's increasing reliance on American LNG amid broader geopolitical and market shifts.

Figure 2: There is only limited regasification capacity addition



SOURCE: INCRED RESEARCH, COMPANY REPORTS

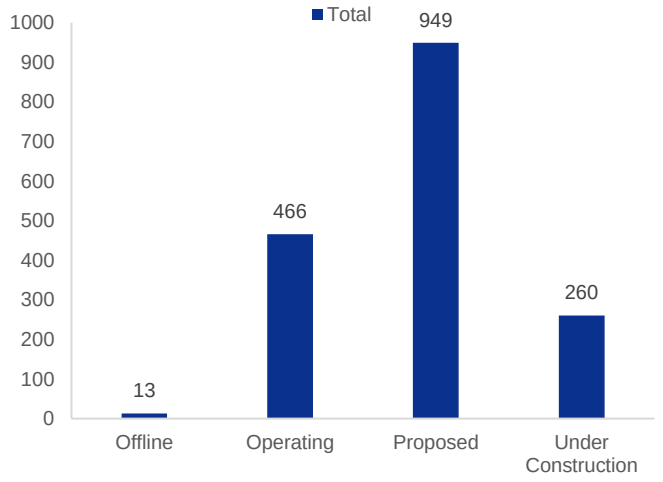
Figure 3: As of now, Japan leads in regasification capacity



SOURCE: INCRED RESEARCH, COMPANY REPORTS

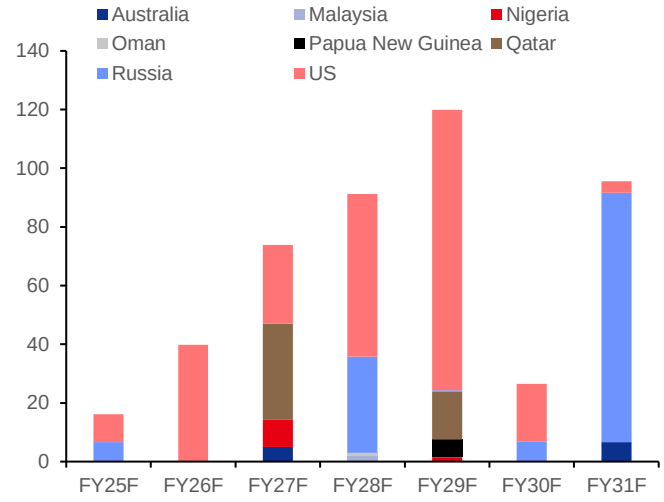
Substantial liquefaction capacity is being added

Figure 4: Around 260mt of liquefaction capacity will be added in the coming years



SOURCE: INCRED RESEARCH, COMPANY REPORTS

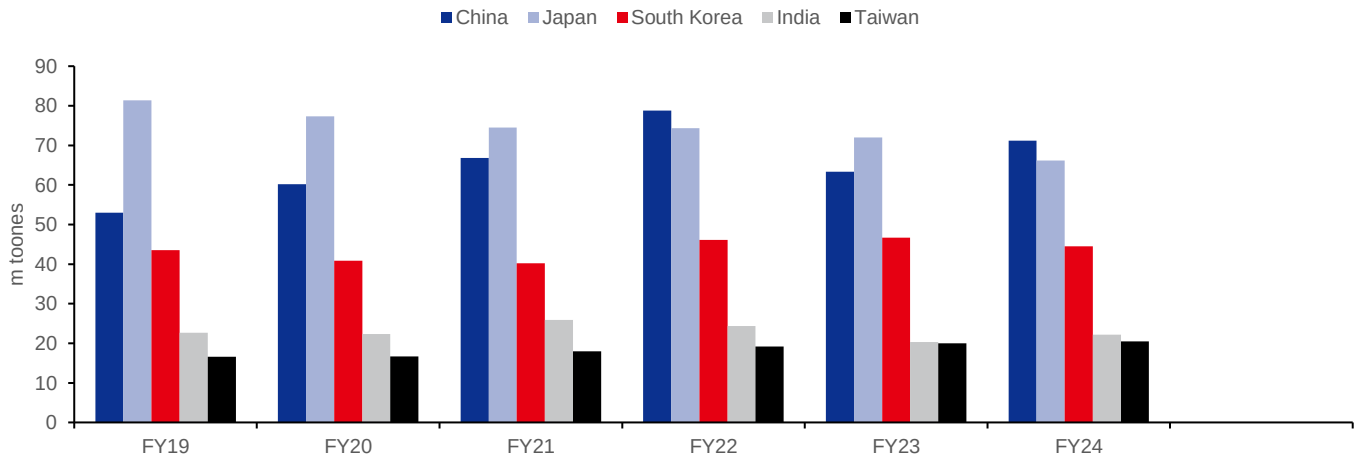
Figure 5: The largest capacity is getting added in the US, which has excess natural gas production



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



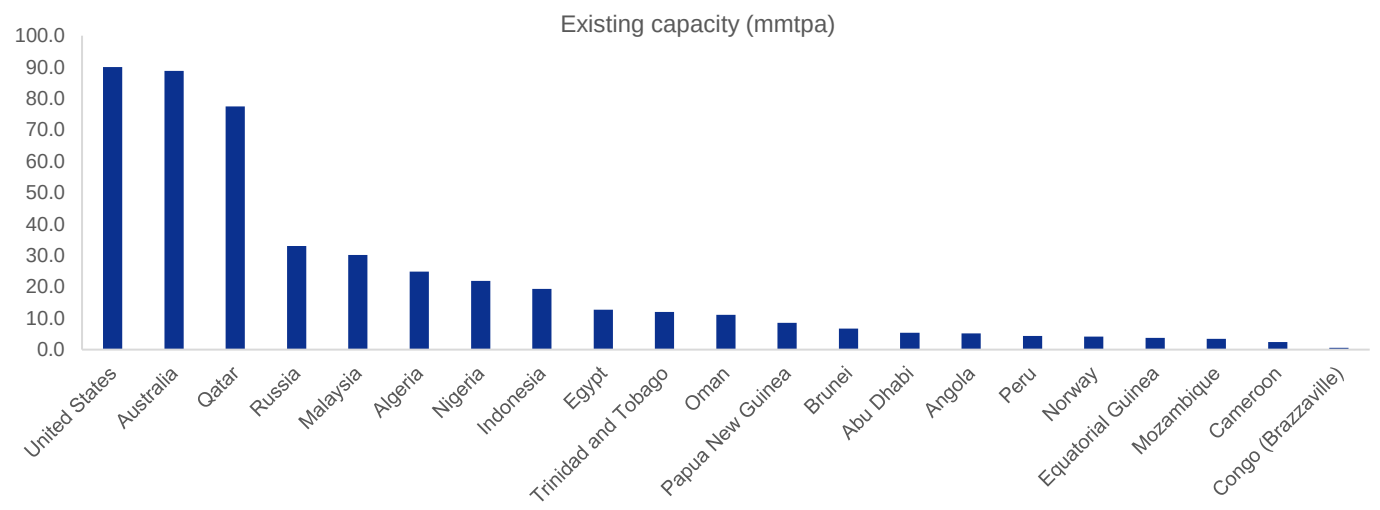
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Global LNG exports surge driven by Freeport LNG and Calcasieu Pass, but liquefaction overcapacity looms with utilization set to fall below 50%

In FY24, ~412mtpa of LNG was exported worldwide, with ~76% share of Top-5 countries (Qatar, Australia, the US, Russia and Malaysia). The gas reservoir in the world is anyway more than the demand. Hence, the actual supply bottleneck could practically lie from liquefaction capacities across the world. Just to give an estimate, the current liquefaction capacity in the world stands 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, liquefaction capacity is expected to witness a growth of 14% during the same period, leading to a further fall in 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. The return of the Freeport LNG terminal to full service played a crucial role, markedly increasing the export capacity by 6mt. Additionally, Venture Global LNG's Calcasieu Pass facility, which operated at full capacity for the entire year, further contributed to this surge in exports by 3mt.

Huge capacity addition is in the pipeline

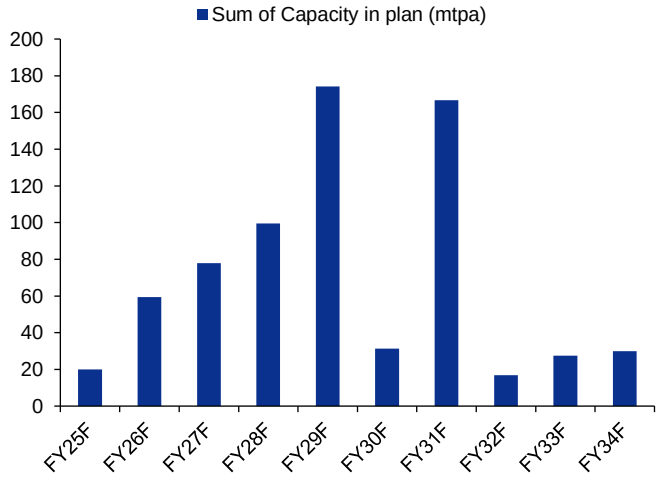
Figure 7: The US and Australia have the largest liquefaction capacities currently



SOURCE: INCRED RESEARCH, COMPANY REPORTS

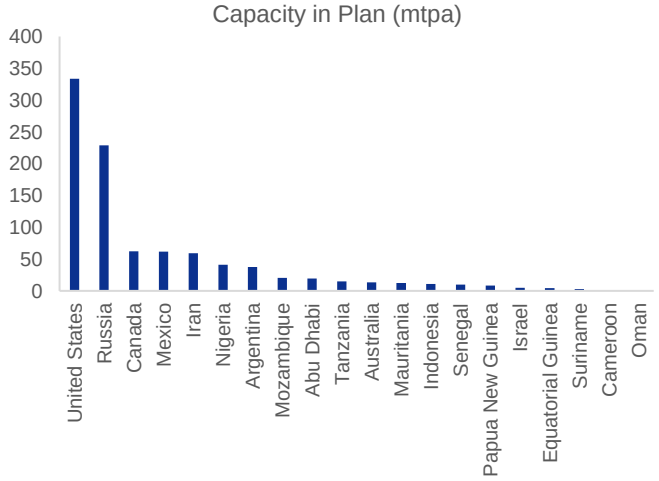
Currently, there are ~87 operational liquefaction plants across the globe, with 30 under construction and 132 proposed to be commissioned till 2035F. More than half of the operational liquefaction capacity lies in the three nations, US (90.1 mtpa), Australia (88.8mtpa) and Qatar (77.5mtpa) whereas the 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 8: Significant liquefaction capacity is in the pipeline



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 9: The US is leading the capacity addition drive



SOURCE: INCRED RESEARCH, COMPANY REPORTS

India's LNG demand and imports will only go up

India, ranked 15th globally in LNG consumption, relies on imports for 42-45% of its natural gas needs. With domestic production growing by 5.8% to 99.83mmscmd in FY24, it is expected to plateau and decline over the next three-to-four years due to the short asset life of new fields. LNG is imported through long-term contracts or spot purchases, with most contracts either crude oil-linked from the Middle East or gas-linked from the US. Between 2021-24, India imported around 21mtpa of LNG, with Qatar, the UAE, and the US accounting for about 67% of this supply. Despite Russia's recent entry into the market, it remains a minor player due to existing long-term agreements. India's preference for long-term contracts continues, covering around 95% of its LNG needs. Recent developments include additional contracts totalling 5mtpa, effective from 2026F, and a renewed 7.5mtpa deal with Qatar Energy starting in FY29F.

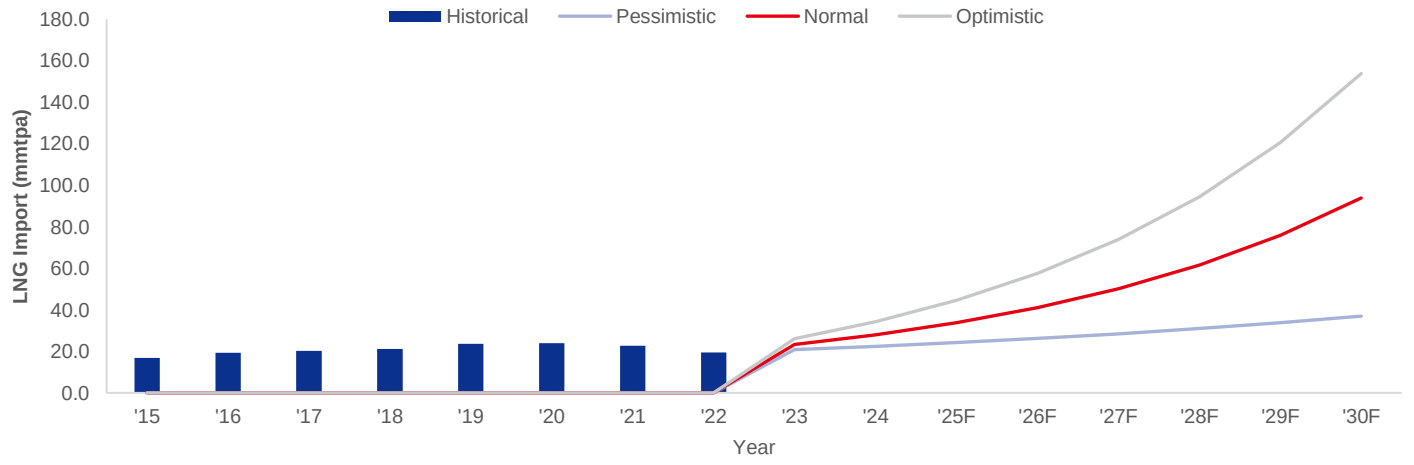
India's LNG demand posts a 3% CAGR over 2015-22

India has experienced a historical LNG CAGR of ~3% over 2015-22, with the fertilizer, power, refinery, and city gas distribution or CGD sectors accounting for ~88-90% of this consumption. These sectors together use ~80% of the imported LNG. As India shifts its focus to green energy and benefits from low LNG prices, total LNG consumption is projected to double over the next five years, primarily driven by the power, CGD, and fertilizer sectors. With domestic production growing at a stagnant rate of 3.5-4.5% y-o-y, the demand growth will be met through a 22-23% y-o-y rise in LNG imports.

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

- Power: This sector witnessed a historical share of ~19% in LNG consumption over 2015-23. However, the sector saw a decline in LNG consumption, with a rate of 4.1% during the period. However, with India's commitment to increase LNG's share in its 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) - The government of India's plan to increase compressed natural gas or CNG stations from 6,035 to 17,500, and the expansion of the National Gas Grid to about 33,500km from 21,715km currently will boost import demand, with a 14.1% y-o-y growth 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 independence 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). The projected growth rate for this sector over 2024-30F is ~3%.

Figure 10: India's LNG demand in a different scenario is shown in the graph below



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Need for more LNG regasification terminals

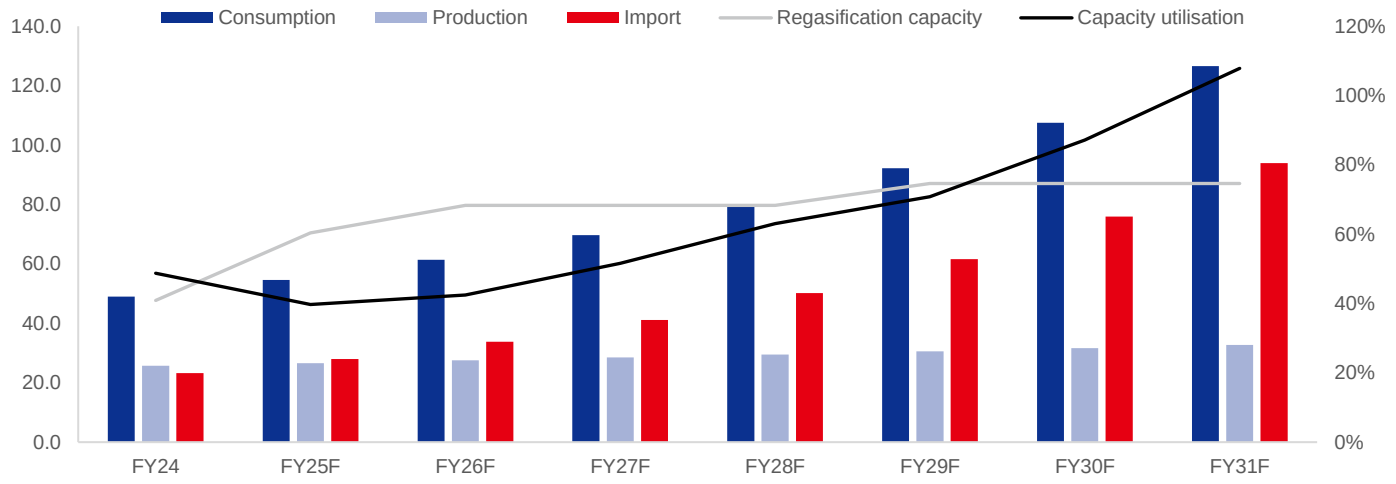
India is rapidly enhancing its natural gas infrastructure to secure its energy needs. With the current regasification capacity at 47.7mmtpa, planned expansions at Chhara, Jafrabad, and Dahej terminals will boost this to 66.7mmtpa. By 2030F, India aims at a total regasification capacity of around 110mmtpa, at a utilization rate of 80%, to support its goal of increasing natural gas's share in the energy mix to 15%. An extensive pipeline network expansion of 10,404km is also underway, reinforcing the country's commitment to a reliable energy future.

Figure 11: ~32 mtpa additional regasification capacity is going to be added in the next two years

New Terminals	Capacity (mtpa)
Chhara	4
Jafrabad	10
Jaigarh	6
Dabhol Extension	7
Dahej Extension	5

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 12: The required capacity utilization for Indian regasification units will increase exponentially, which means there may be new capacity addition in the near term

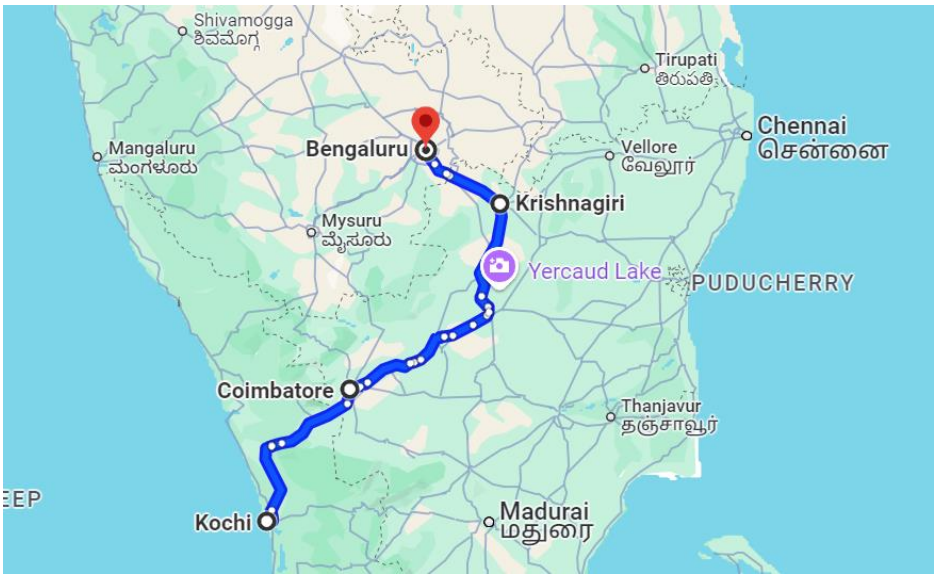


SOURCE: INCRED RESEARCH, COMPANY REPORTS

Kochi-Bengaluru pipeline completion is expected to increase capacity utilization by 3x

The remaining 250km stretch of the Kochi-Bengaluru pipeline from Coimbatore to Krishnagiri is expected to be completed by the year-end, linking the Kochi terminal to the national gas grid. This will enable gas swapping as, relatively, South India has lesser domestic gas reserves, enhancing capacity utilization by supplying gas to city gas distribution (CGD) companies in the southern region, where domestic availability is limited. Additionally, LNG tanker loadings at the Kochi terminal have surged to 2,230 tankers this year, up 50% from 1,500 last year, reflecting the increased use of tankers for gas distribution. This boost in both pipeline connectivity and tanker utilization signals promising growth for the Kochi terminal.

Figure 13: ~250km stretch from Coimbatore to Krishnagiri is pending



SOURCE: INCRED RESEARCH, COMPANY REPORTS

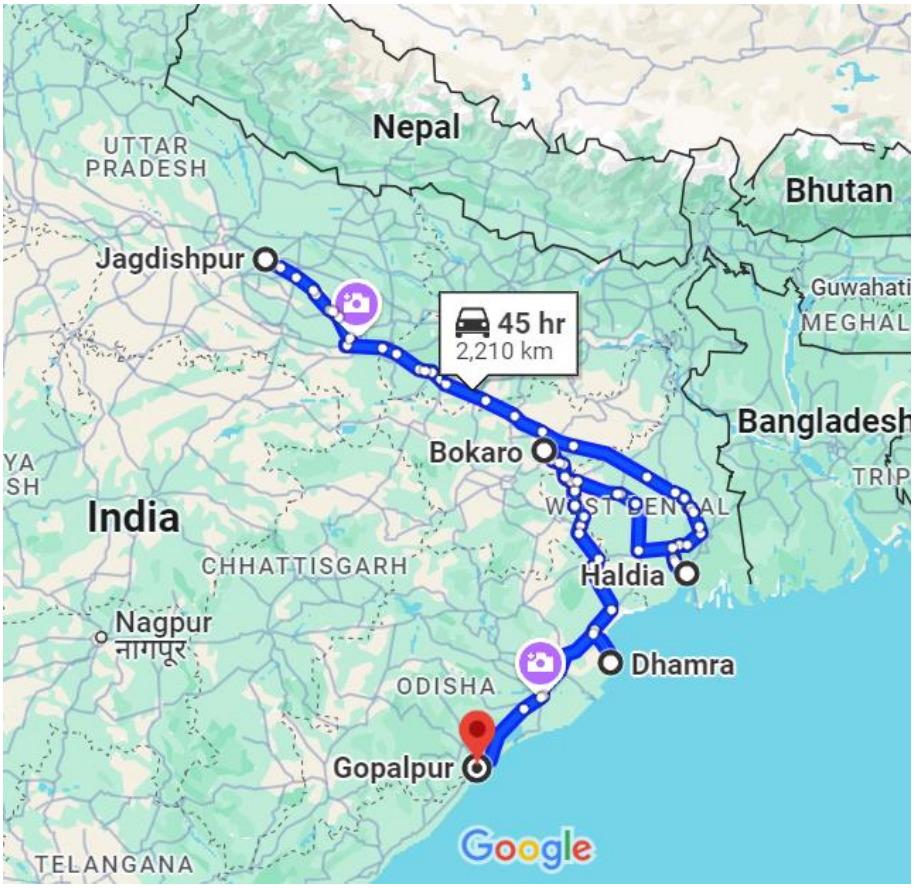
Dahej terminal expansion to boost capacity by 5mmtpa, offering 90% cost efficiency to meet the growing LNG demand

Petronet LNG is expanding its Dahej terminal's regasification capacity from 17.5 mmtpa to 22.5mmtpa by FY25F through a cost-effective brownfield expansion costing approximately Rs5.8bn. Compared to a greenfield terminal, this expansion is significantly more economical, costing only about 10% of the Rs50bn required for a new facility. The Dahej terminal's robust infrastructure, including five evacuation lines with a 35mmtpa capacity, ensures efficient handling and distribution, addressing connectivity issues that other terminals face.

Gopalpur terminal to leverage the unified tariff advantage with a Rs40/mmBtu rate, enhancing regional gas distribution and utilization by FY27F

The Gopalpur terminal, strategically located around 50km from the Jagdishpur-Haldia-Bokaro-Dhamra pipeline, stands to benefit from the increased gas consumption in Eastern India. The terminal's proximity to the North East allows cost-effective gas distribution, with the zone-one tariff at around Rs40/mmBtu, compared to Rs114/mmBtu from more distant sources like Dahej or Dabhol. This tariff advantage makes the Gopalpur terminal a viable option for industries in the region, including mining and transport sectors, which could use LNG as fuel. Additionally, swapping arrangements with terminals like Dahej could further optimize gas usage and enhance the Gopalpur terminal's capacity utilization. This terminal is expected to be commissioned by FY27F.

Figure 14: Gopalpur terminal is ~50 km from the JHBD pipeline



SOURCE: INCRED RESEARCH, COMPANY REPORTS

New businesses

Petronet LNG's Dahej terminal to offer toll-based ethane and propane facilities, capitalizing on lower US ethane costs and long-term sourcing from Saudi Arabia

Petronet LNG is also entering into the toll-based ethane and propane facilities in Dahej, which can be booked by petrochemical companies after the construction of the jetty and handling facilities. Positioned advantageously, the Dahej terminal will provide reliable ethane availability, mitigating the risks associated with ethane facility utilization.

Globally, the US dominates ethane supply due to the shale oil revolution, offering ethane at lower costs than LNG. Ethane is often extracted from LNG, but can be cheaper when sourced directly from the US as due to some local requirement of removing the heavier hydrocarbon from natural gas to transport through the pipeline, it becomes a by-product for them. Similarly, Petronet LNG is looking forward to source propane from both Saudi Arabia and the US on a long-term basis.

Petrochemicals business

India's petrochemicals sector is poised for rapid growth as plastic consumption rises, which is projected to hit US$300bn by FY31F

India's per capita plastic consumption is among the lowest globally at just 12kg, compared to China's 82kg, the world average of 38kg, and the US consumption at 93kg. Despite India's strong emphasis on reducing and reusing, there remains a vast potential for increased plastic consumption, with future polymer demand growth projected at 6-7% per annum.

Historically, India's petrochemical product consumption has grown at a rate 1.3-1.5 times its GDP, a trend which is expected to continue for the next 15-20 years. By 2030F, the petrochemicals sector is projected to expand to US$300bn, driven by an 8% CAGR over the next decade. This growth is being fuelled by investments in both refinery-linked petrochemical assets and purpose-built units with diversified feedstock.

Petronet LNG to boost petrochemicals business with a PDH-PP plant by FY28F

Historically reliant on naphtha due to limited feedstock, Indian producers are shifting towards mixed feed, aligning with global practices seen in the Middle East and the US. Petronet LNG is capitalizing on this shift with a Rs206.85bn investment in its Dahej project. This initiative includes a propane dehydrogenation (PDH) plant with a capacity of 750ktpa for propylene, 500ktpa for polypropylene, and facilities for ethane and propane storage.

The integrated project at Dahej, which will be supported by a new third jetty capable of handling LNG, propane, and ethane, is expected to enhance Petronet LNG's petrochemicals capabilities and is slated for completion by FY26F.

Reaction engineering

- Polypropylene (PP): It is a versatile polymer widely used in various applications such as pipes and industrial appliances, and one of the key methods for producing it is the propane dehydrogenation (PDH) process, which converts propane into propylene, a crucial feedstock for polypropylene production.
- Propane dehydrogenation (PDH) process: The PDH process starts with propane, a by-product of natural gas processing and oil refining. In this method, propane is subjected to high temperatures (around 600-650°C) in the presence of a catalyst. The dehydrogenation reaction occurs in reactors, where hydrogen atoms are removed from propane, converting it into propylene (C_3H_6) and hydrogen (H_2) as a by-product. The reaction is endothermic, requiring a continuous heat supply, typically provided by steam or direct-fired

heaters. The catalyst used in this process is often a metal-based catalyst like platinum or chromium oxide, supported on alumina.

- Propylene purification: The mixture of propylene and hydrogen exiting the reactor is then cooled, and the hydrogen is separated and recycled back into the process or used as fuel. The remaining propylene-rich stream is further purified through a series of distillation columns to remove any remaining impurities, ensuring that the propylene meets the required specifications for polymerization.
- Polypropylene production: The purified propylene is then fed into a polymerization reactor, where it undergoes polymerization in the presence of a catalyst, typically a Ziegler-Natta or metallocene catalyst. During polymerization, propylene monomers are linked together to form long polymer chains, resulting in polypropylene. The properties of the resulting polymer can be tailored by adjusting the process conditions and catalyst type. The polypropylene is then extruded, cooled, and pelletized for use in various applications, including packaging, automotive components, textiles, and consumer goods.

Figure 15: Propylene production through the PDH route

$$C_3H_8 \rightarrow C_3H_6 + H_2$$

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 16: Polypropylene production

$$n \times C_3H_6 \rightarrow (C_3H_6)_n$$

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 17: Mass balance and cost economics analysis of a PDH-PP plant

Dahej Petrochemicals Plant			
Product	Raw Material	Conversion	Conversion unit
Propylene	Propane	0.9	mt/mt
Polypropylene	Propylene	0.85	mt/mt
Polypropylene	Propane	0.77	mt/mt
	Case-1	Case-2	
Share of raw material in total cost	70%	70%	
Futures price of PP (US$)/mt	1,100	1,100	
Raw material price (US$)/mt	600	625	
Opex	257	268	
Total cost	857	893	
EBITDA (US$/t)	243	207	

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Advantages for Petronet LNG over its competitors in the PP market

Strategic location and integration:

- Proximity to jetty: The Dahej terminal's PDH/PP plant is located just 2.5km from its jetty, reducing the need for extensive pipeline infrastructure. Competitors like GAIL (India), which have to transport propane from distant locations (~50km) like JNPT, face higher logistical costs.
- Integration with LNG terminal: The PDH/PP plant is integrated with the existing LNG regasification terminal, allowing Petronet LNG to utilize the excess cold energy from the LNG plant for refrigeration, saving approximately Rs1.2-1.3bn in power costs.

Feedstock control and sourcing:

- Propane supply: The third jetty at Dahej includes a dedicated propane handling facility. Petronet LNG can source propane competitively from both the Middle East and the US, ensuring stable and cost-effective feedstock supply.
- Efficient conversion technology: The PDH technology used at Petronet LNG achieves an 85% conversion rate of propane to propylene, enhancing efficiency and output compared to other technologies.

Long-term agreements and contracts:

- Propylene supply contract: Petronet LNG has secured a long-term agreement with Deepak Phenolics for 250kta of propylene and 11kta of hydrogen, structured on an import parity price (IPP) basis with handling and additional costs and hence, securing one-third of the volume even before the start of the plant.
- Take-or-pay contract: The contract includes a take-or-pay arrangement, ensuring stable revenue and mitigating the risk of demand fluctuations.

Proximity to major markets:

- Consumer base: The Dahej facility's location near key consumption centres in western and northern India positions Petronet LNG advantageously to meet the regional demand efficiently.

Segmental business performance over FY24-30F

Figure 18: Overall throughput rate to increase with a CAGR of ~10.7% over FY24-30F

Segmental Regas Throughput (trBtu)	FY24	FY25F	FY26F	FY27F	FY28F	FY29F	FY30F
Dahej	864	888.9	1,107.9	1,142.9	1,142.9	1,166.2	1,166.2
Kochi	54.1	64.8	129.6	155.5	233.2	259.2	259.2
Gopalpur					260	260	260
Gopalpur Capacity Utilization					100%	100%	100%
Dahej Capacity Utilization	95%	98%	95%	98%	98%	100%	100%
Kochi Capacity Utilization	20%	25%	50%	60%	90%	100%	100%
Dahej Capacity (mtpa)	17.5	17.5	22.5	22.5	22.5	22.5	22.5
Kochi Capacity (mtpa)	5	5	5	5	5	5	5
Gopalpur Capacity (mtpa)					5	5	5
Total throughput (trBtu)	918.05	953.672	1,237.441	1,298.342	1,636.087	1,685.325	1,685.325

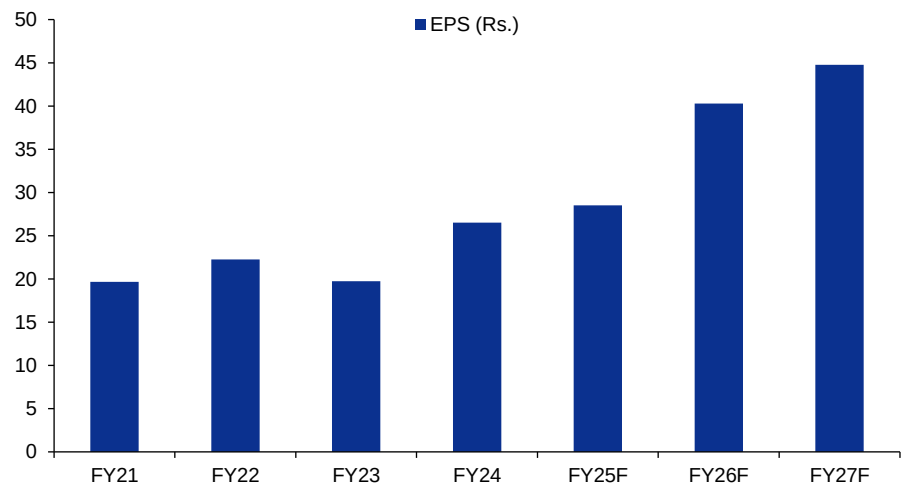
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Earnings and valuation

We expect an earnings CAGR of 19% % over FY24-27F. Our earnings projection assumes a 13% volume growth for Petronet LNG in the same period, led by low global LNG prices and higher utilization of the Kochi terminal post-integration with the National Gas Grid. Any delay in the addition of new liquefaction capacities or completion of the Kochi-Bengaluru pipeline can affect the earnings estimates negatively. We value the stock at a one-year forward to its' average P/E of 12.8x.

EPS CAGR of ~19% over FY24-27F

Figure 19: EPS to grow from Rs27 to Rs45 over FY24-27F



SOURCE: INCRED RESEARCH, COMPANY REPORTS

The stock currently trades at a forward P/E of 11.8x but given the expected volume-led EPS growth, it might trade at the average P/E multiple of 12.8x soon

Figure 20: Petronet LNG currently trades at a forward P/E of 11.8x but we expect it to trade at an average P/E of 12.8x led by 10% volume growth

SOURCE: INCRED RESEARCH, COMPANY REPORTS

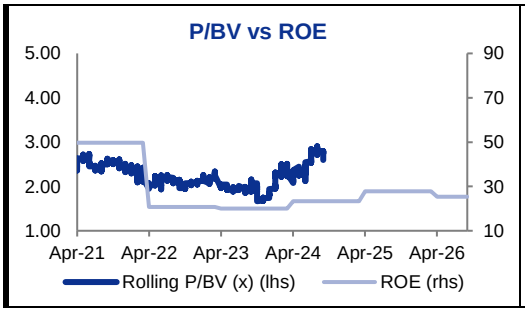
We have valued Petronet LNG at an average P/E of 12.8x FY26F EPS to arrive at our target price of Rs519

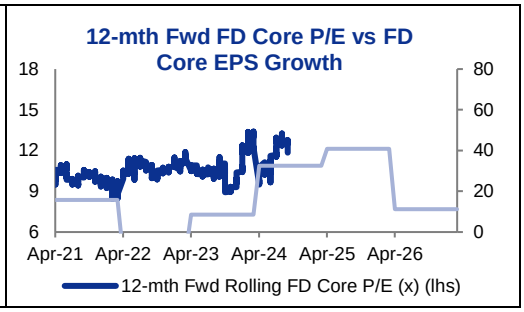
Figure 21: We have valued Petronet LNG at its 12-year historical average to arrive at our target price of Rs519, with the rating upgraded to ADD

	Value	Units
FY25F EPS	28.79	Rs/share
FY26F EPS	40.54	Rs/share
P/E multiple	12.80	x
Target price	519	Rs/share

SOURCE: INCRED RESEARCH, COMPANY REPORTS

BY THE NUMBERS





Profit & Loss

(Rs mn)	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
Total Net Revenues	**598,994**	**527,293**	**536,043**	**668,496**	**678,272**
Gross Profit	**59,470**	**62,652**	**77,467**	**103,220**	**114,831**
Operating EBITDA	**48,540**	**52,055**	**65,040**	**88,612**	**97,622**
Depreciation And Amortisation	(7,643)	(7,766)	(7,842)	(7,842)	(7,842)
Operating EBIT	**40,896**	**44,289**	**57,198**	**80,770**	**89,780**
Financial Income/(Expense)	(3,305)	(2,897)	(2,897)	(2,897)	(2,897)
Pretax Income/(Loss) from Assoc.	400	400	400	400	400
Non-Operating Income/(Expense)	2,984	3,019	3,057	3,099	3,145
Profit Before Tax (pre-EI)	**40,976**	**44,811**	**57,758**	**81,372**	**90,428**
Exceptional Items					
Pre-tax Profit	**40,976**	**44,811**	**57,758**	**81,372**	**90,428**
Taxation	(10,944)	(12,207)	(14,569)	(20,567)	(22,867)
Exceptional Income - post-tax					
Profit After Tax	**30,032**	**32,605**	**43,189**	**60,805**	**67,561**
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	**30,032**	**32,605**	**43,189**	**60,805**	**67,561**
Recurring Net Profit	30,032	32,605	43,189	60,805	67,561
Fully Diluted Recurring Net Profit	**30,032**	**32,605**	**43,189**	**60,805**	**67,561**

Cash Flow

(Rs mn)	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
EBITDA	48,540	52,055	65,040	88,612	97,622
Cash Flow from Invt. & Assoc.	3,384	3,419	3,457	3,499	3,545
Change In Working Capital	(422)	287	(2,323)	(6,247)	(1,476)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow					
Net Interest (Paid)/Received	(3,305)	(2,897)	(2,897)	(2,897)	(2,897)
Tax Paid	(12,220)	(13,040)	(14,454)	(20,405)	(22,687)
Cashflow From Operations	**35,977**	**39,824**	**48,823**	**62,562**	**74,107**
Capex	(14,740)	(23,400)	(40,600)	(60,600)	(69,900)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments	(400)	(400)	(400)	(400)	(400)
Other Investing Cashflow					
Cash Flow From Investing	**(15,140)**	**(23,800)**	**(41,000)**	**(61,000)**	**(70,300)**
Debt Raised/(repaid)	(6,217)	(5,998)	14,000	14,000	14,000
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(16,650)	(16,500)	(16,500)	(16,500)	(16,500)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	**(22,867)**	**(22,498)**	**(2,500)**	**(2,500)**	**(2,500)**
Total Cash Generated	(2,030)	(6,474)	5,323	(938)	1,307
Free Cashflow To Equity	**14,620**	**10,026**	**21,823**	**15,562**	**17,807**
Free Cashflow To Firm	**24,142**	**18,921**	**10,719**	**4,459**	**6,704**

SOURCE: INCRED RESEARCH, COMPANY REPORTS

BY THE NUMBERS…cont'd

Balance Sheet

(Rs mn)	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
Total Cash And Equivalents	627	17,234	19,796	24,174	26,592
Total Debtors	38,436	36,261	41,652	50,864	55,951
Inventories	11,531	14,654	16,833	20,556	22,612
Total Other Current Assets	68,335	60,792	69,831	85,275	93,803
Total Current Assets	**118,928**	**128,941**	**148,113**	**180,870**	**198,957**
Fixed Assets	99,133	96,970	111,388	136,023	149,625
Total Investments	4,986	6,167	7,084	8,650	9,515
Intangible Assets	29	24	28	34	37
Total Other Non-Current Assets	4,907	23,129	26,568	32,444	35,688
Total Non-current Assets	**109,055**	**126,289**	**145,067**	**177,151**	**194,866**
Short-term Debt	2,745	4,117	6,590	7,249	7,974
Current Portion of Long-Term Debt					
Total Creditors	16,902	28,650	18,066	22,242	22,272
Other Current Liabilities	9,815	8,816	9,697	10,667	11,734
Total Current Liabilities	**29,462**	**41,582**	**34,354**	**40,159**	**41,980**
Total Long-term Debt	30,705	25,964	47,667	62,636	45,776
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	**30,705**	**25,964**	**47,667**	**62,636**	**45,776**
Total Provisions	15,171	13,583	14,476	14,638	14,818
Total Liabilities	**75,337**	**81,129**	**96,496**	**117,432**	**102,573**
Shareholders Equity	152,646	174,101	196,684	240,589	291,250
Minority Interests					
Total Equity	**152,646**	**174,101**	**196,684**	**240,589**	**291,250**

Key Ratios

	Mar-23A	Mar-24A	Mar-25F	Mar-26F	Mar-27F
Revenue Growth	38.8%	(12.0%)	1.7%	24.7%	1.5%
Operating EBITDA Growth	(7.5%)	7.2%	24.9%	36.2%	10.2%
Operating EBITDA Margin	8.1%	9.9%	12.1%	13.3%	14.4%
Net Cash Per Share (Rs)	(21.88)	(8.56)	(22.97)	(30.47)	(18.11)
BVPS (Rs)	101.76	116.07	131.12	160.39	194.17
Gross Interest Cover	12.37	15.29	19.75	27.88	30.99
Effective Tax Rate	26.7%	27.2%	25.2%	25.3%	25.3%
Net Dividend Payout Ratio	55.4%	50.6%	38.2%	27.1%	24.4%
Accounts Receivables Days	19.89	25.85	26.53	25.26	28.74
Inventory Days	5.85	10.28	12.53	12.07	13.98
Accounts Payables Days	10.88	17.89	18.59	13.01	14.42
ROIC (%)	15.6%	17.0%	17.9%	20.7%	20.7%
ROCE (%)	23.6%	23.5%	25.8%	29.2%	27.8%
Return On Average Assets	14.7%	14.4%	16.5%	19.3%	18.5%

SOURCE: INCRED RESEARCH, COMPANY REPORTS

DISCLAIMER

This report (including the views and opinions expressed therein, and the information comprised therein) has been prepared by Incred Research Services Private Ltd. (formerly known as Earnest Innovation Partners Private Limited) (hereinafter referred to as "IRSPL"). IRSPL is registered with SEBI as a Research Analyst vide Registration No. INH000011024. Pursuant to a trademark agreement, IRSPL has adopted "Incred Equities" as its trademark for use in this report.

The term "IRSPL" shall, unless the context otherwise requires, mean IRSPL and its affiliates, subsidiaries and related companies. This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject IRSPL and its affiliates/group companies to registration or licensing requirements within such jurisdictions.

This report is being supplied to you strictly on the basis that it will remain confidential. No part of this report may be (i) copied, photocopied, duplicated, stored or reproduced in any form by any means; or (ii) redistributed or passed on, directly or indirectly, to any other person in whole or in part, for any purpose without the prior written consent of IRSPL.

The information contained in this report is prepared from data believed to be correct and reliable at the time of issue of this report.

IRSPL is not required to issue regular reports on the subject matter of this report at any frequency and it may cease to do so or change the periodicity of reports at any time. IRSPL is not under any obligation to update this report in the event of a material change to the information contained in this report. IRSPL has not any and will not accept any, obligation to (i) check or ensure that the contents of this report remain current, reliable or relevant; (ii) ensure that the content of this report constitutes all the information a prospective investor may require; (iii) ensure the adequacy, accuracy, completeness, reliability or fairness of any views, opinions and information, and accordingly, IRSPL and its affiliates/group companies (and their respective directors, associates, connected persons and/or employees) shall not be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof.

Unless otherwise specified, this report is based upon reasonable sources. Such sources will, unless otherwise specified, for market data, be market data and prices available from the main stock exchange or market where the relevant security is listed, or, where appropriate, any other market. Information on the accounts and business of company(ies) will generally be based on published statements of the company(ies), information disseminated by regulatory information services, other publicly available information and information resulting from our research. While every effort is made to ensure that statements of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable as of the date of the document in which they are contained and must not be construed as a representation that the matters referred to therein will occur. Past performance is not a reliable indicator of future performance. The value of investments may go down as well as up and those investing may, depending on the investments in question, lose more than the initial investment. No report shall constitute an offer or an invitation by or on behalf of IRSPL and its affiliates/group companies to any person to buy or sell any investments.

The opinions expressed are based on information which is believed to be accurate and complete and obtained through reliable public or other non-confidential sources at the time made (information barriers and other arrangements may be established, where necessary, to prevent conflicts of interests arising. However, the analyst(s) may receive compensation that is based on his/their coverage of company(ies) in the performance of his/their duties or the performance of his/their recommendations. In reviewing this report, an investor should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additional information is, subject to the duties of confidentiality, available on request.

The report is not a "prospectus" as defined under Indian Law, including the Companies Act, 2013, and is not, and shall not be, approved by, or filed or registered with, any Indian regulator, including any Registrar of Companies in India, SEBI, any Indian stock exchange, or the Reserve Bank of India. No offer, or invitation to offer, or solicitation of subscription with respect to any such securities listed or proposed to be listed in India is being made, or intended to be made, to the public, or to any member or section of the public in India, through or pursuant to this report.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

IRSPL may have issued other reports (based on technical analysis, event specific, short-term views, etc.) that are inconsistent with and reach a different conclusion from the information presented in this report.

Holding of Analysts/Relatives of Analysts, IRSPL and Associates of IRSPL in the covered securities, as on the date of publishing of this report

Research Analyst or his/her relative(s) or InCred Research Services Private Limited or our associate may have any financial interest in the subject company.

Research Analyst or his/her relatives or InCred Research Services Limited or our associates may have actual or beneficial ownership of 1% or more securities of the subject company(ies) at the end of the month immediately preceding the date of publication of the Research Report.

Research Analyst or his/her relative or InCred Research Services Private Limited or our associate entities may have any other material conflict of interest at the time of publication of the Research Report.

In the past 12 months, IRSPL or any of its associates may have:

a) Received any compensation/other benefits from the subject company,
b) Managed or co-managed public offering of securities for the subject company,
c) Received compensation for investment banking or merchant banking or brokerage services from the subject company,
d) Received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company

We or our associates may have received compensation or other benefits from the subject company(ies) or third party in connection with the research report.

Research Analyst may have served as director, officer, or employee in the subject company.

We or our research analyst may engage in market-making activity of the subject company.

Analyst declaration

- The analyst responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and autonomously in an unbiased manner.
- No part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations(s) or view(s) in this report or based on any specific investment banking transaction.
- The analyst(s) has(have) not had any serious disciplinary action taken against him/her(them).
- The analyst, strategist, or economist does not have any material conflict of interest at the time of publication of this report.
- The analyst(s) has(have) received compensation based upon various factors, including quality, accuracy and value of research, overall firm performance, client feedback and competitive factors.

IRSPL and/or its affiliates and/or its Directors/employees may own or have positions in securities of the company(ies) covered in this report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities.

IRSPL and/or its affiliates and/or its Directors/employees may do and seek to do business with the company(ies) covered in this research report and may from time to time (a) buy/sell the securities covered in this report, from time to time and/or (b) act as market maker or have assumed an underwriting commitment in securities of such company(ies), and/or (c) may sell them to or buy them from customers on a principal basis and/or (d) may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) and/or (e) solicit such investment, advisory or other services from any entity mentioned in this report and/or (f) act as a lender/borrower to such company and may earn brokerage or other compensation. However, Analysts are forbidden to acquire, on their own account or hold securities (physical or uncertificated, including derivatives) of companies in respect of which they are compiling and producing financial recommendations or in the result of which they play a key part.

Recommendation Framework

Stock Ratings	Definition:
Add	The stock's total return is expected to exceed 10% over the next 12 months.
Hold	The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
Reduce	The stock's total return is expected to fall below 0% or more over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings	Definition:
Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings	Definition:
Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.