

India

Underweight (no change)

Highlighted Companies

Indraprastha Gas

REDUCE, TP Rs277, Rs462 close

Over the last 12 years, the stock has on average traded at 17.6x one-year forward EPS. Compared to oil marketing companies or OMCs, Indian CGD companies trade at a valuation of 9x P/BV.

Gujarat Gas

REDUCE, TP Rs410, Rs466 close

Continued scarcity of LNG keeping its prices around US\$50/mmBtu is key headwind for the CGD segment. Consensus earnings are in for a disappointment as either the gross profit will decline, or the volume growth will disappoint. Gujarat Gas is our top REDUCE-rated stock.

Petronet LNG

HOLD, TP Rs228, Rs236 close

We shift to near-term P/E-based valuation. We value Petronet LNG at 11.5x FY24F EPS to arrive at our target price of Rs228. Retain HOLD rating on it.

Summary Valuation Metrics

P/E (x)	Mar22-A	Mar23-F	Mar24-F
Indraprastha Gas	24.03	29.39	27.77
Gujarat Gas	29.5	29.65	26.26
Petronet LNG	10.77	12.56	11.86
P/BV (x)	Mar22-A	Mar23-F	Mar24-F
Indraprastha Gas	4.36	3.91	3.52
Gujarat Gas	5.88	5.01	4.29
Petronet LNG	2.62	2.41	2.22
Dividend Yield	Mar22-A	Mar23-F	Mar24-F
Indraprastha Gas	0.78%	0.78%	0.78%
Gujarat Gas	0.43%	0.43%	0.43%
Petronet LNG	4.45%	4.71%	4.92%

Analyst(s)



Satish KUMAR

T (91) 22 4161 1562

E satish.kumar@incredcapital.com

Abbas PUNJANI

T (91) 22 4161 1598

E abbas.punjani@incredcapital.com

Oil & Gas - Overall

New gas pricing - Is it bullish for stocks? No

- We believe the bullishness on CGD (city gas distribution) companies because of lower APM (administered price mechanism) is misplaced as it will pass through and moreover, they will have to depend on domestic gas production growth which limits volume growth to, at best, a 10% CAGR over FY23F-26F.
- The government will give priority to CGD over urea, but don't expect any let-up in urea subsidy or else urea prices will rise. That's impossible in an election year. Any rise in LNG prices will raise the subsidy bill.
- We remain cautious on Indian CGD companies. Petronet LNG (HOLD) remains our top pick as its earnings are protected to some extent by a take-or-pay contract. Sell IGL & MGL when you see some strength, if there is any.

CGD firms' growth depends on domestic output, lower APM no help

Indeed, consumers rather than CGD business profit more from the changed APM pricing structure. We expect a 5–7% decline in prices but stay wary of CGD companies as: 1) Assuming that crude oil prices remain around the US\$85-90/bbl level, a long-term contract with a standard 12% slope will also not be feasible for Indian CGD and PNG players and hence, Indian CGD firms will have to rely on domestic APM natural gas. 2) In the next three-to-four years, Indian natural gas output increase is unlikely to be more than 4-4.5bcm, thus limiting CGD volume growth to a 10% CAGR over FY23F-26F. 3) While government aims at 100% indigenous urea production by 2025F, it will entirely depend on international urea and LNG prices. If urea prices remain subdued, it won't make sense to import costly LNG and produce urea from it. 4) While CNG stations are set to double over the next three years and PNG connections to rise by 50%, because of the reasons stated above, CNG sales per station will decline by 25% to 2mmscm from 2.7 mmscm/ station/ annum(FY23 Sales).

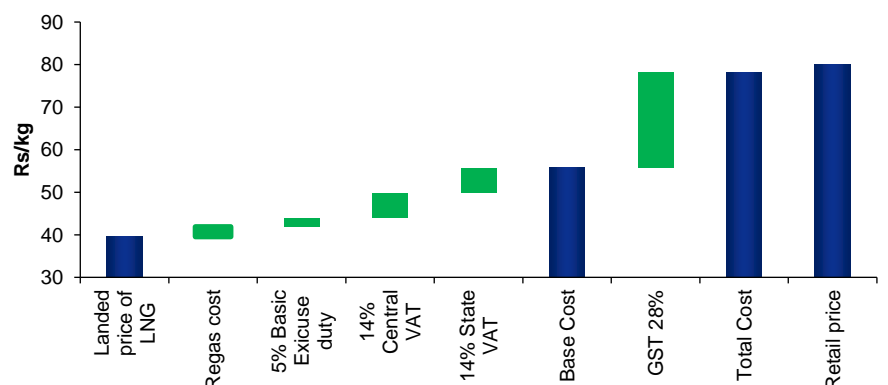
LNG liquefaction assets must operate at over 95% in CY23F/24F/25F

The delay in commissioning Russian LNG capacity (as most EPC contractors have pulled out of country) and the breakneck pace at which Germany is commissioning its LNG regasification capacity (to reduce the reliance on coal) makes the international market finely balanced. Global liquefaction assets need to operate at 95%+ of their capacity for the next three years continuously (please note that global liquefaction assets, on a combined basis, have never operated year-long at more than 90% of their capacity). Operational breakdowns, weather-related hiccups and mandatory shutdowns will keep the global LNG market highly volatile. In this scenario, it's very unlikely that India's import requirement of 37bcm LNG can be met at 12% slope to crude oil.

Reiterate underweight stance on CGD companies

We reiterate our underweight stance on CGD companies and retain REDUCE rating on Indraprastha Gas (IGL), Mahanagar Gas (MGL), and Gujarat Gas. On Petronet LNG, we maintain our HOLD rating as we see there is adequate protection via take-or-pay contracts.

Figure 1: Even at a 12% long-term contract and crude oil prices at US\$85-90/bbl, current CNG prices make imported LNG unviable



SOURCE: INCRED RESEARCH, COMPANY REPORTS

New gas pricing - Is it bullish for stocks? No

New gas pricing is good for consumers but does not render any help to CGD companies

The Cabinet Committee on Economic Affairs (CCEA) on Thursday approved the revised domestic natural gas pricing guidelines for gas produced from nomination fields of state-run ONGC and Oil India (OIL), New Exploration Licensing Policy (NELP) blocks and pre-NELP blocks, where the production sharing contract (PSC) provides for government approval of prices. As a result of these changes, consumer prices can fall by anywhere between 5-7% which is good for consumers but not of any help to CGD companies.

New gas pricing will be based on a formulae with a floor and a cap ➤

1. The price of such natural gas shall be 10 per cent of the monthly average of Indian crude oil basket and shall be notified on a monthly basis. For the gas produced by ONGC and Oil India from their nomination blocks, the administered price mechanism (APM)-generated price shall be subject to a floor and a ceiling.
2. The gas produced from new wells or well interventions in the nomination fields of ONGC and OIL would be allowed a premium of 20 per cent over the APM price.
3. *Floor and ceiling price to go up by 25 cents per year after two years. "The new guidelines are intended to ensure a stable pricing regime for domestic gas consumers while at the same time providing adequate protection to producers from adverse market fluctuation with incentives for enhancing production," the government said.*
4. Last year, the Kirit Parikh committee on fair pricing of natural gas had recommended the price from old fields should be fixed at 10 per cent of the monthly average of India's crude oil basket. Besides, this price will also have a floor of US\$4/mmBtu and a ceiling of US\$6.5/mmBtu.
5. The reforms will lead to a significant decrease in the price of piped natural gas (PNG) for households and compressed natural gas (CNG) for transport. The reduced prices shall also lower the fertilizer subsidy burden and help the domestic power sector, the government said.

New wells of ONGC and OIL will have an advantage of 20% over the APM cap ➤

With a provision for a floor in gas prices and a provision for 20 per cent premium for new wells, this reform will incentivise ONGC and OIL to make additional long-term investments in the upstream sector, leading to greater production of natural gas and consequent reduction in import dependence for fossil fuels.

CNG and PNG will become cheaper in most cities across India >

Figure 2: CNG prices will fall by 5-6% in most cities across India

	CNG prices (₹/kg)		
	Current	Expected	Change
Pune	92	87	5
Sindhudurg	95.9	89.9	6
Mumbai	87	79	8
Delhi	79.56	73.59	6
Bengaluru	89.5	83.5	6
Meerut	91	83	8
Bokaro	93.98	86.98	7

SOURCE: INCRED RESEARCH,
[HTTPS://WWW.THEHINDUBUSINESSLINE.COM/MARKETS/COMMODITIES/GOVT-APPROVES-KIRIT-PARIKH-PANEL-RECOMMENDATIONS-ON-NATURAL-GAS-PRICING/ARTICLE66707578.ECE](https://www.thehindubusinessline.com/markets/commodities/govt-approves-kirit-parikh-panel-recommendations-on-natural-gas-pricing/article66707578.ece)

Figure 3: Fall in PNG prices can be around 10% just because base prices are lower

	PNG prices (₹/SCM)		
	Current	Expected	Change
Pune	57	52	5
Sindhudurg	55	50	5
Mumbai	54	49	5
Delhi	53.59	47.59	6
Bengaluru	58.5	52	6.5
Meerut	58.5	52	6.5
Bokaro			

SOURCE: INCRED RESEARCH,
[HTTPS://WWW.THEHINDUBUSINESSLINE.COM/MARKETS/COMMODITIES/GOVT-APPROVES-KIRIT-PARIKH-PANEL-RECOMMENDATIONS-ON-NATURAL-GAS-PRICING/ARTICLE66707578.ECE](https://www.thehindubusinessline.com/markets/commodities/govt-approves-kirit-parikh-panel-recommendations-on-natural-gas-pricing/article66707578.ece)

It's a good move because it helps the government to fight inflation >

Any fall in the prices for consumers helps consumer sentiment in an election year.

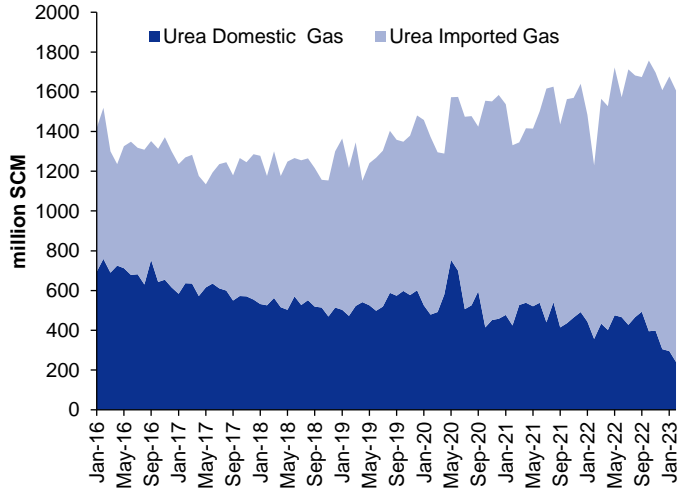
Does it help CGD companies? The answer is NO as gross profit (GP) percentage will go up but absolute GP and PAT to remain intact >

While the spreads will remain the same (selling price – cost of goods sold) in Rs/SCM terms, but as the denominator will go down (i.e., selling price will decline) gross margin in percentage terms will go up.

Domestic gas demand is likely to rise to 73bcm by FY26F

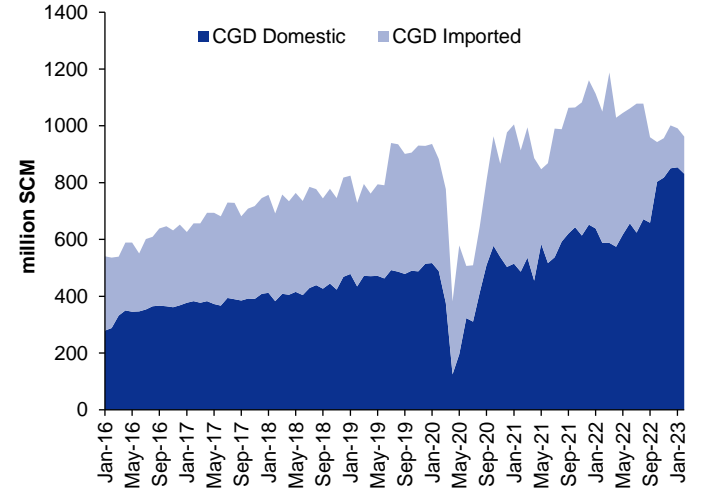
Indian urea and CGD demand is growing unabated ➤

Figure 4: While natural gas demand for urea production has increased by 30% over Jan 2016 to Jan 2023...



SOURCE: INCRED RESEARCH, COMPANY REPORTS

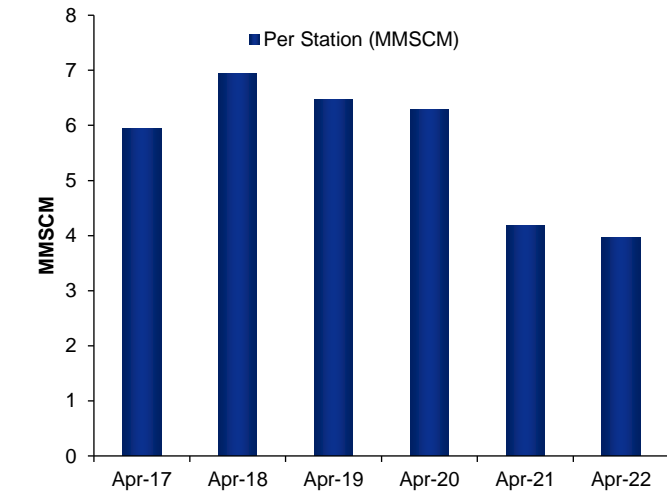
Figure 5: ...CGD gas demand has risen by ~80% over the same period



SOURCE: INCRED RESEARCH, COMPANY REPORTS

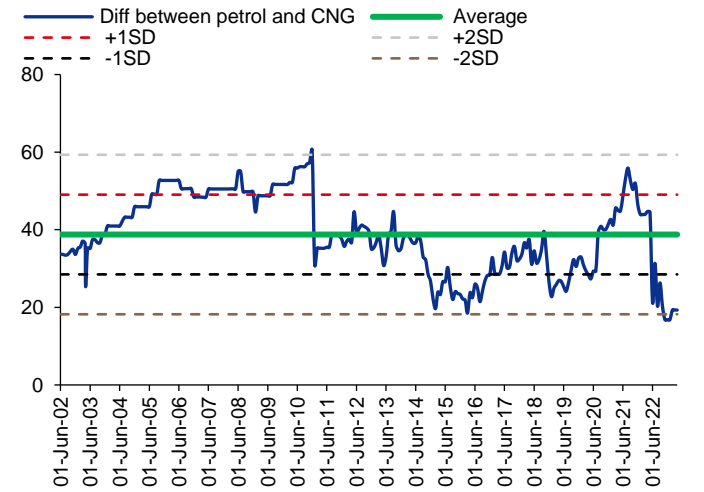
Per station CNG volume declines significantly as petrol and CNG spreads collapse ➤

Figure 6: Per station natural gas consumption declines...



SOURCE: INCRED RESEARCH, COMPANY REPORTS

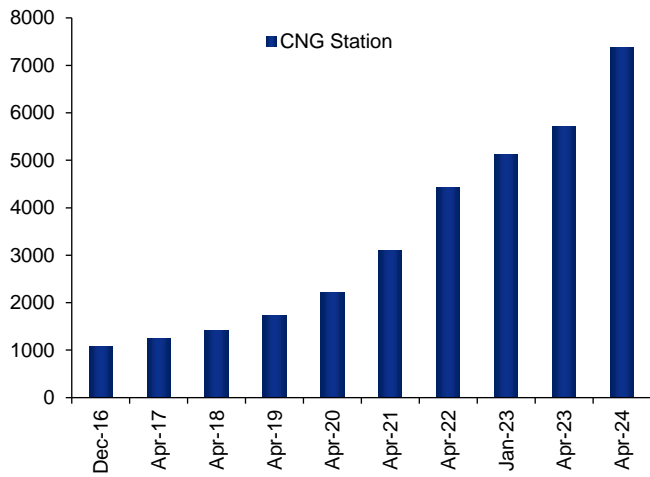
Figure 7: ...as the spreads of petrol and CNG collapse



SOURCE: INCRED RESEARCH, COMPANY REPORTS

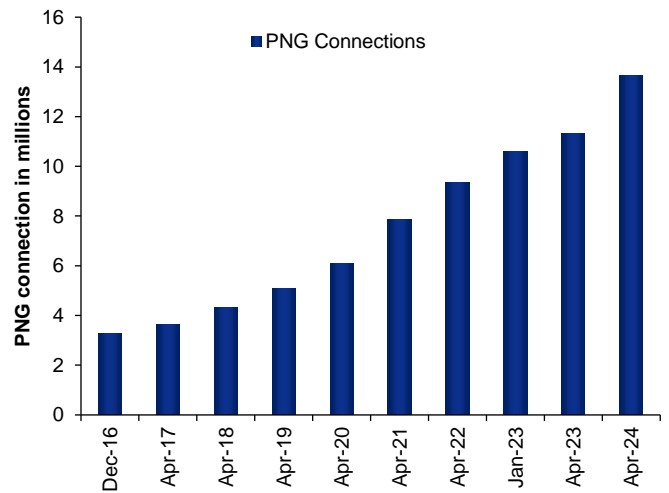
The Government of India is planning even more PNG connections and CNG stations ➤

Figure 8: CNG stations are rising exponentially...



SOURCE: INCRED RESEARCH, COMPANY REPORTS

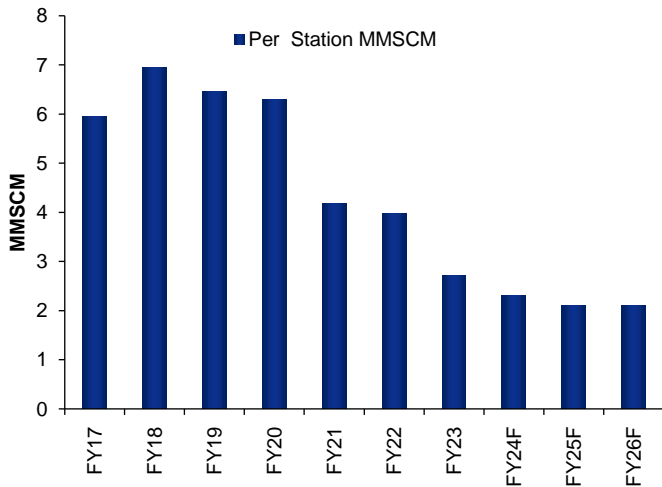
Figure 9: ...and similar is the case with piped natural gas connections



SOURCE: INCRED RESEARCH, COMPANY REPORTS

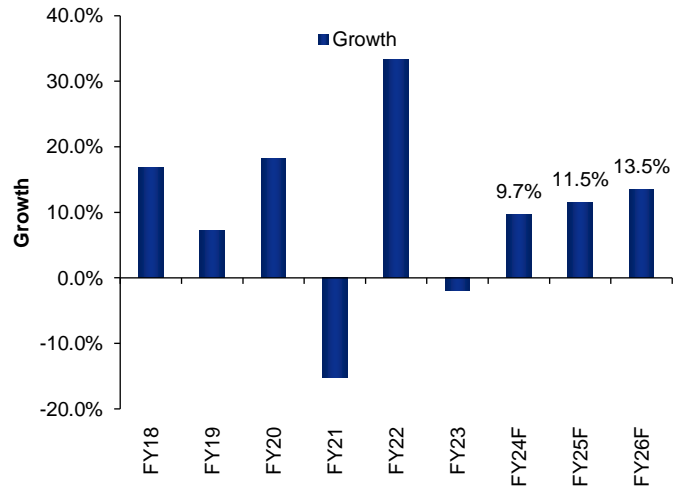
However, even if per station consumption declines by 15%, overall consumption will rise by 10% and 11.5% in FY24F and FY25F, respectively ➤

Figure 10: Per station consumption has been on the decline and we project it will fall further in FY24F and FY25F



SOURCE: COMPANY REPORTS, INCRED RESEARCH

Figure 11: Despite the decline in per station consumption, overall consumption will increase

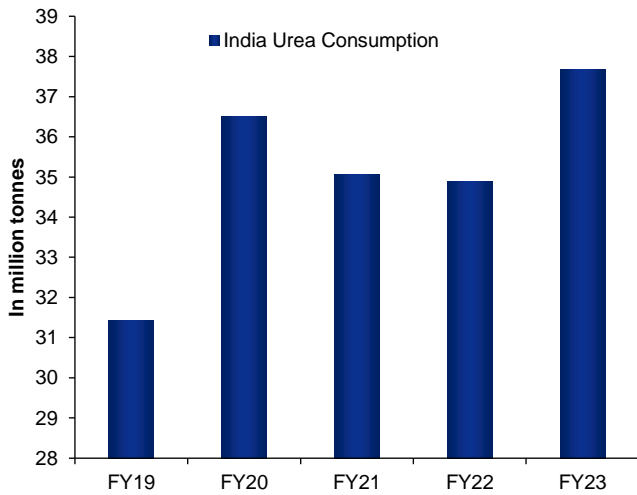


SOURCE: COMPANY REPORTS, INCRED RESEARCH

India's urea demand has been resilient and the country wants to be self reliant in urea production ➤

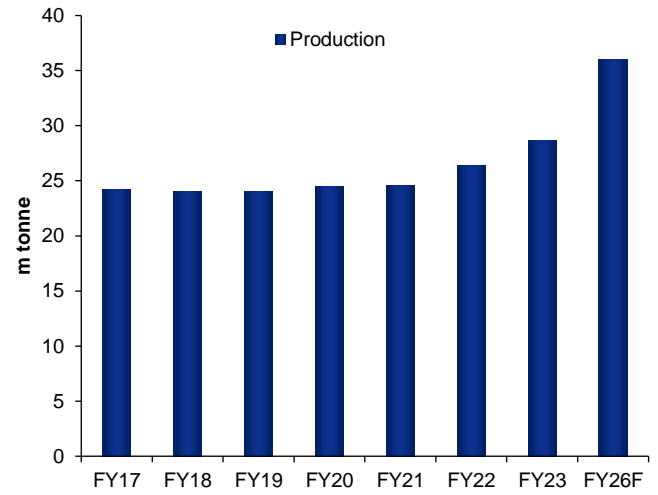
India plans to become self-sufficient in urea by 2025F, as per the Government of India's Atmanirbhar pitch. (https://www.business-standard.com/article/current-affairs/india-to-be-self-sufficient-in-urea-by-2025-end-output-of-conventional-nano-urea-rising-govt-122070500913_1.html)

Figure 12: India's urea consumption increases significantly



SOURCE: INCRED RESEARCH, COMPANY REPORTS

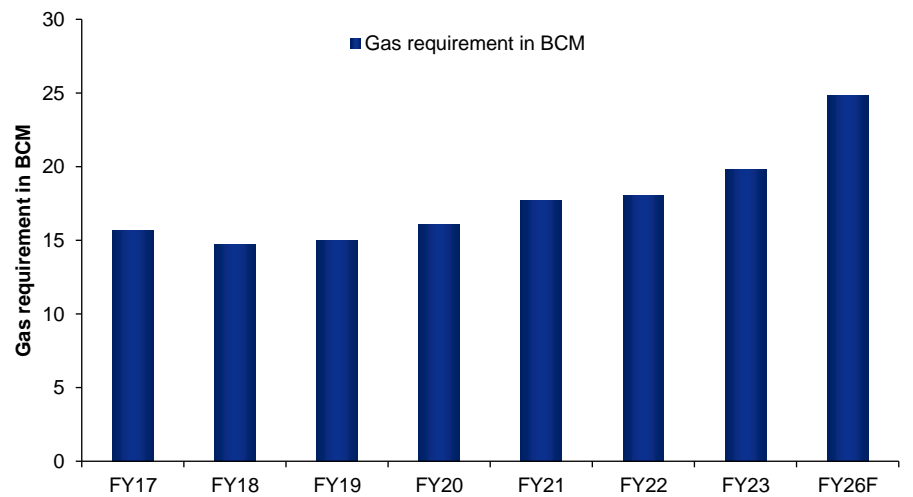
Figure 13: Domestic urea production will have to increase to 36mt by FY26F



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Hence, gas requirement for urea production will rise to ~25bcm by FY26F, 25% higher than in FY23 ➤

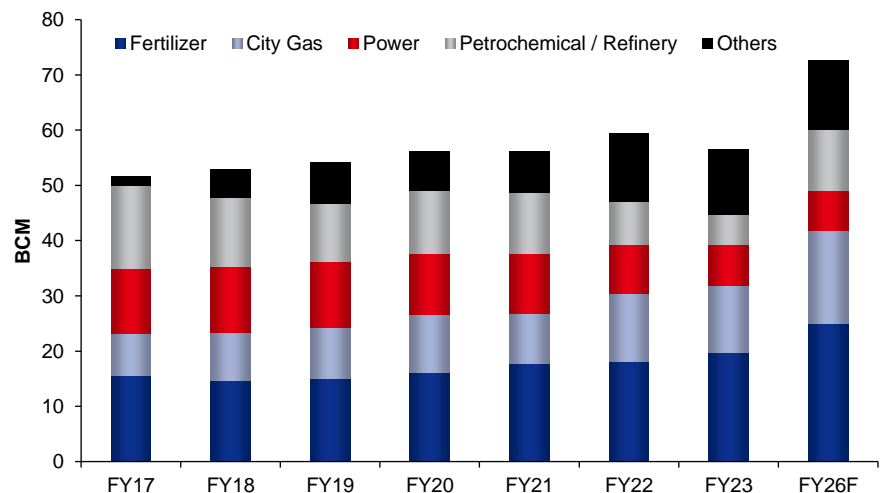
Figure 14: India plans to become self-sufficient in urea, but the problem is natural gas demand for urea production will rise by 25% to 25bcm/year by FY26F



SOURCE: INCRED RESEARCH, COMPANY REPORTS

This means that overall India's gas requirement will rise to 73 bcm by FY26F ➤

Figure 15: India's natural gas demand will rise to 73bcm by FY26F



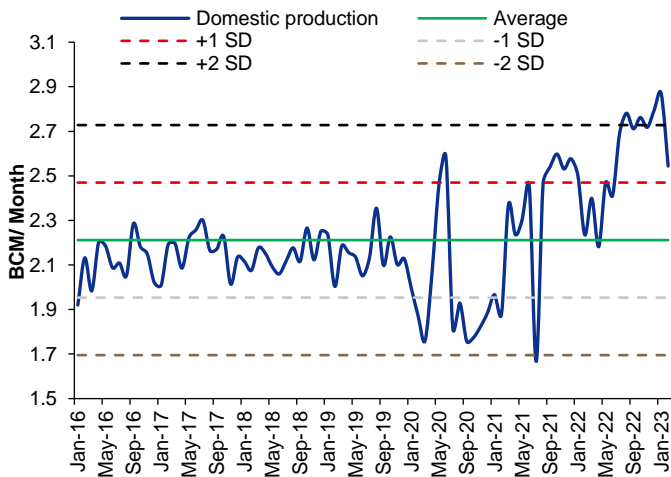
SOURCE: INCRED RESEARCH, COMPANY REPORTS

But where is the volume? Domestic gas production is not increasing vis-à-vis demand

While lower gas prices are good for consumers, the government’s policy doesn’t enumerate how the volume will come. Domestic gas production is not increasing and apart from ONGC & Oil India (who don’t have a great track record in gas production growth) the others have no big incentive to invest heavily in gas exploration.

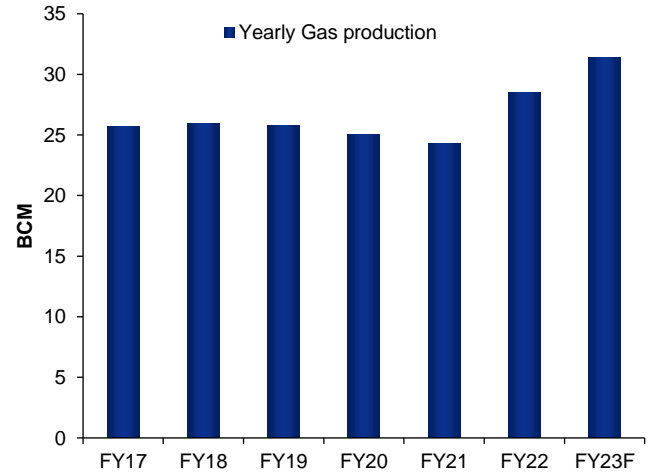
Domestic gas production is not going up significantly ➤

Figure 16: Monthly gas production has varied significantly



SOURCE: INCRED RESEARCH, COMPANY REPORTS

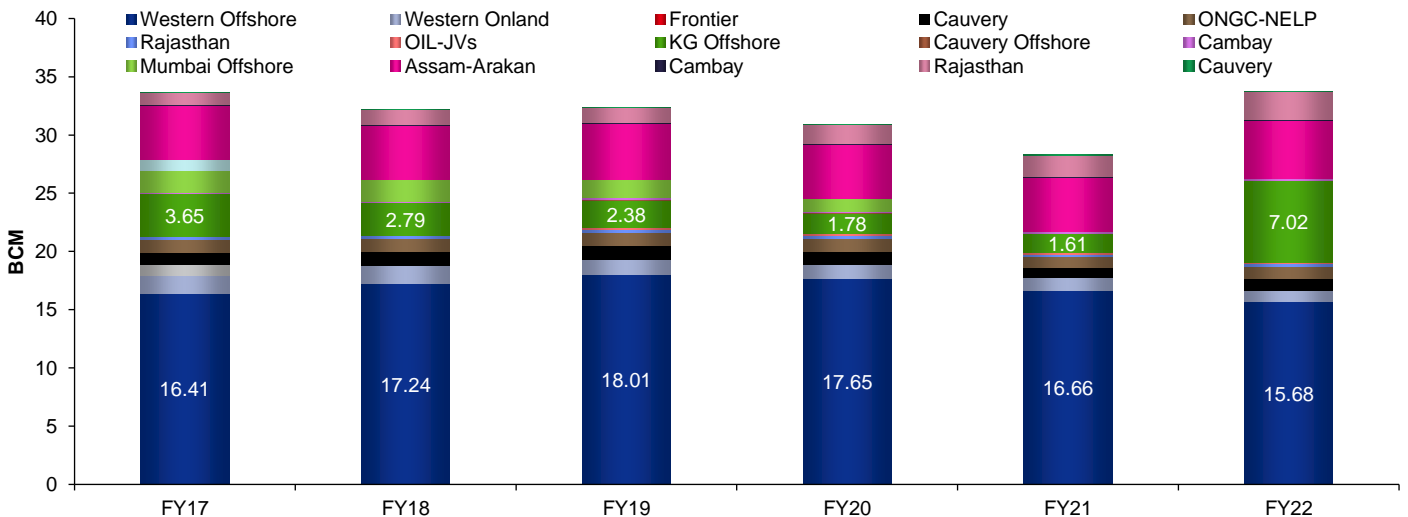
Figure 17: Annual gas production has increased over the last few, but at a very sedate pace



SOURCE: INCRED RESEARCH, COMPANY REPORTS

KG Basin (offshore) production has been ramped up in the recent past ➤

Figure 18: Production of natural gas from KG Basin (offshore) increased by 5.5bcm in FY22 and some ramp-up is likely in FY23F



SOURCE: INCRED RESEARCH, COMPANY REPORTS

India’s gas production can at best increase by 4.5bcm over three-to-four years ➤

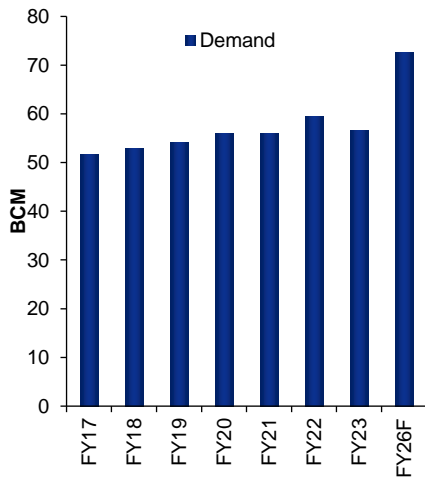
State-owned Oil & Natural Gas Corporation (ONGC) has kicked off gas production from its U deepwater field in the KG-DWN-98/2 asset, which is likely to achieve peak gas production of 3m cubic metres/day or 1bcm/year.

Similarly, Reliance Industries and its partner, the UK supermajor BP, are expected to initiate gas production from the MJ deep-water field in the KG-D6 asset, with peak production expected to rise to 12mmsmd or ~4bcm/year.

Increased gas production from the strategic deep-water assets near India's eastern coast comes as a tremendous relief for the country's hydrocarbon sector, which has seen its production declining over the years.

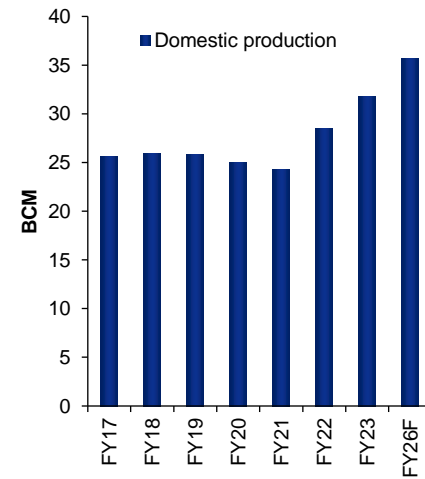
Hence, India's gas imports will rise substantially in the next two years ➤

Figure 19: India's gas demand will rise to 73bcm by FY26F



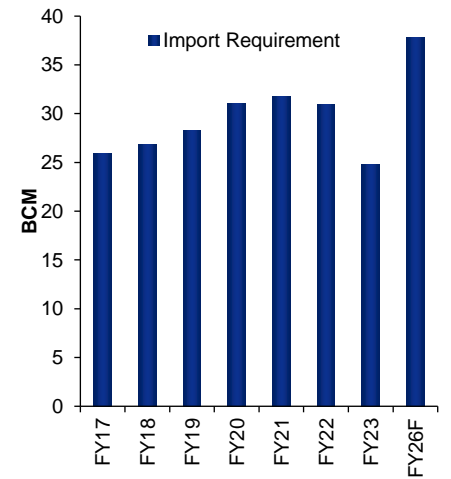
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 20: Domestic gas production can, at best, rise to 35bcm...



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 21: ...which means LNG imports will rise to 37bcm

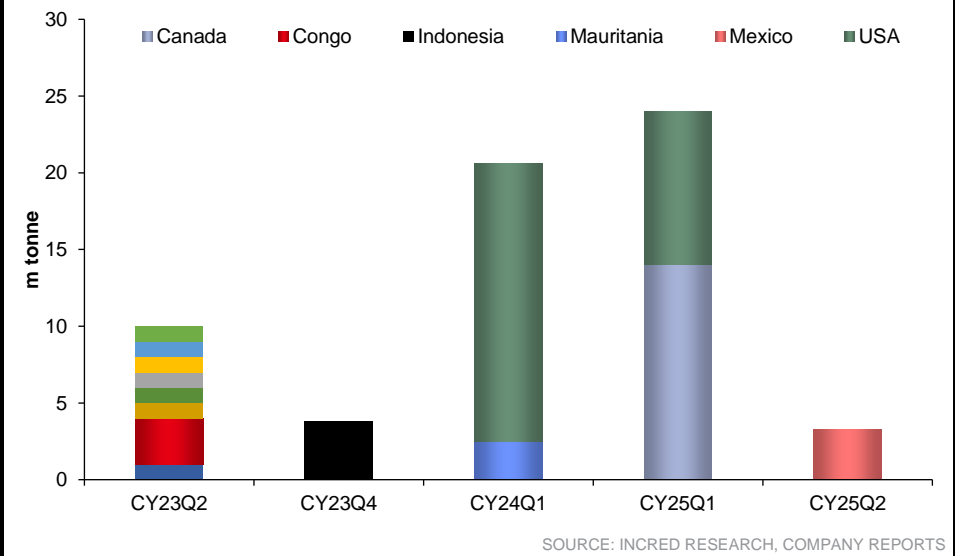


SOURCE: INCRED RESEARCH, COMPANY REPORTS

Can India's LNG imports rise by 13bcm or 9.5mt from spot market at 12% slope? Unlikely, hence supplies to urea-makers or CGD companies will be curtailed

In the next 33 months, ~55mt LNG liquefaction capacity will come on line ➤

Figure 22: In the next couple of years, 55mt new capacity is planned to come online (ex-Russia)



We are not accounting for Russian LNG projects as sanctions have impeded their progress significantly.

India's LNG imported LNG requirement is ~37bcm in FY26F ➤

Based on current demand calculations, we project import requirement of 37bcm or 27mt of LNG in FY26F.

As of now, most of the imported LNG goes into urea production ➤

Figure 23: India's LNG imports went down as costly LNG may not have been used in city gas distribution

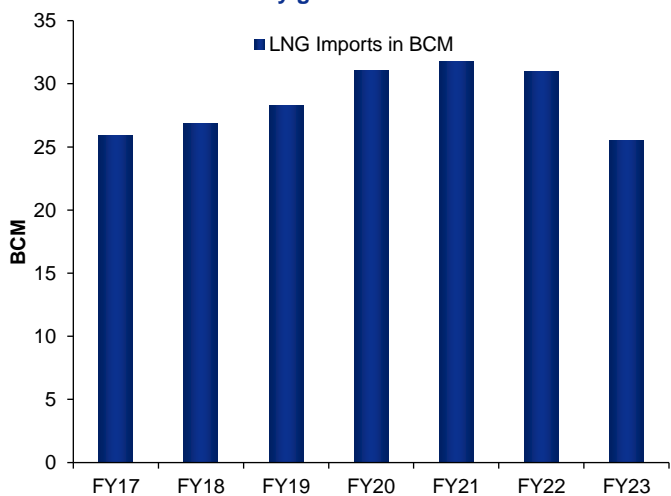
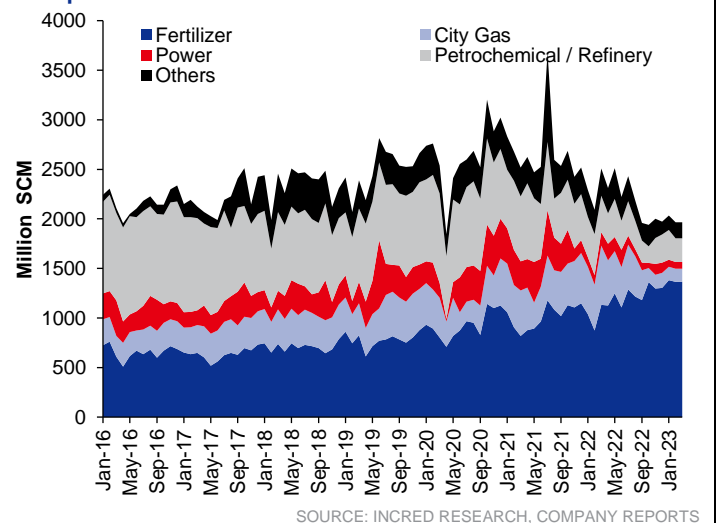


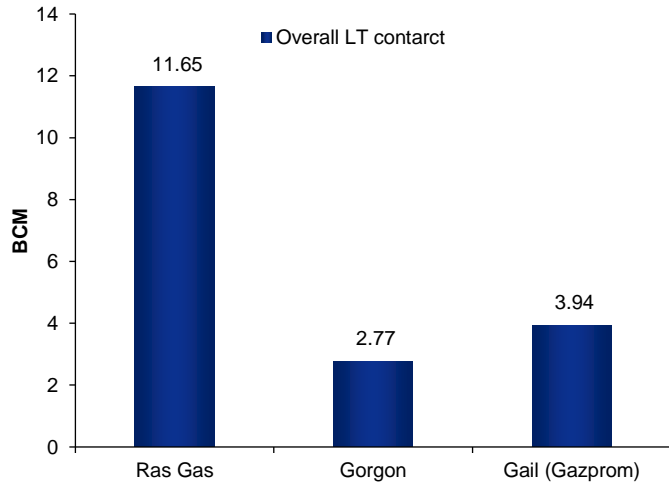
Figure 24: Government is using imported LNG increasingly for urea production



Can India get 37bcm LNG at 12% slope in FY26F? Only if global capacity keeps operating at 95%+ utilization for the next three years ➤

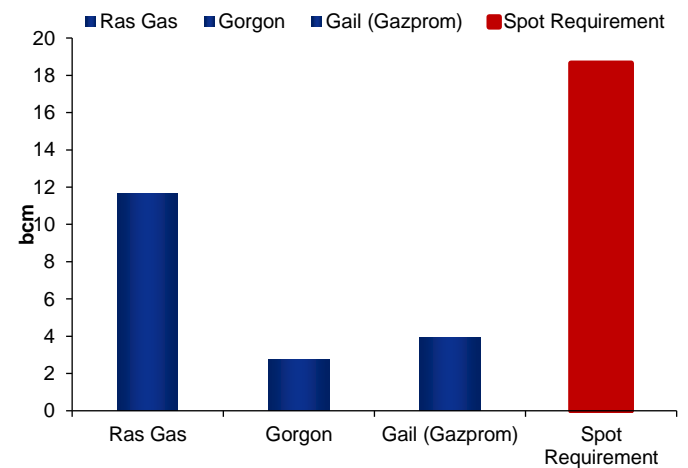
India's long-term contract as of now is ~18.5bcm. Hence, India is dependent on the spot market for the remaining 18.5bcm. Normally, long-term contracts are signed on 12% slope with crude oil.

Figure 25: Overall, India's long-term contract is for ~19bcm whereas its imports in FY23 stood at ~25bcm



SOURCE: INCRED RESEARCH, COMPANY REPORTS

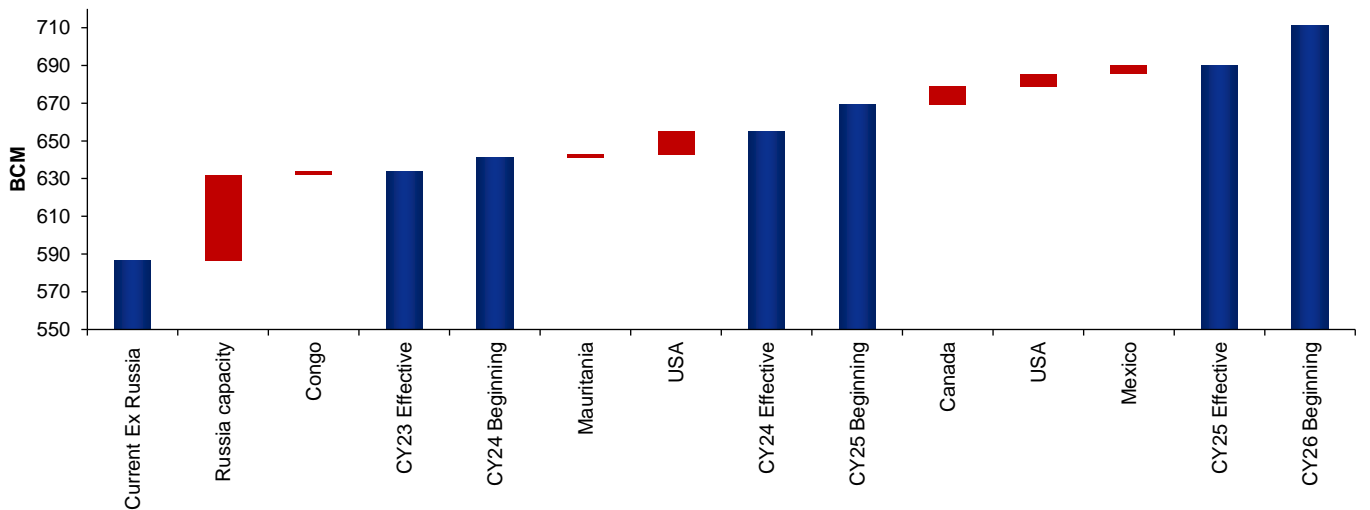
Figure 26: Spot requirement of India in FY26F is likely to be ~18bcm (this includes Gazprom contract)



SOURCE: INCRED RESEARCH, COMPANY REPORTS, GAZPROM RENEGED FROM CONTRACT IN FY23

Available global capacity is listed below. An important point to note here is that out of nearly 697bcm effective liquefaction capacity, ~22% is in USA. We inherently assume that USA's entire capacity will keep operating at 95-96% for the next three years. If it happens, it will be a rare feat.

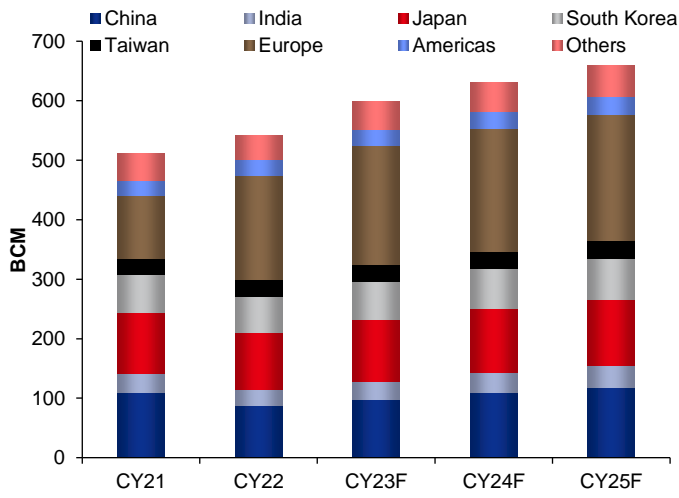
Figure 27: Current global capacity (ex-Russia) is ~587bcm; the increase in capacity addition is given below



SOURCE: INCRED RESEARCH, COMPANY REPORTS

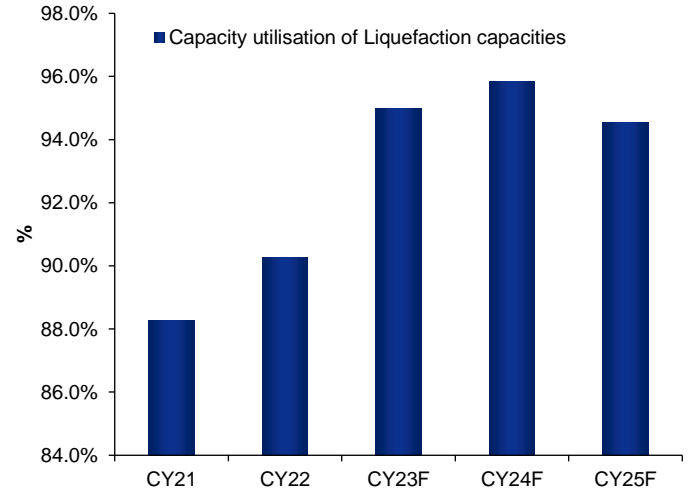
Global demand in 2023 and beyond is given below.

Figure 28: LNG demand will likely touch 659bcm in CY25F



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 29: The required capacity utilization will touch 96% in CY24F and ease a bit in CY25F to 95%

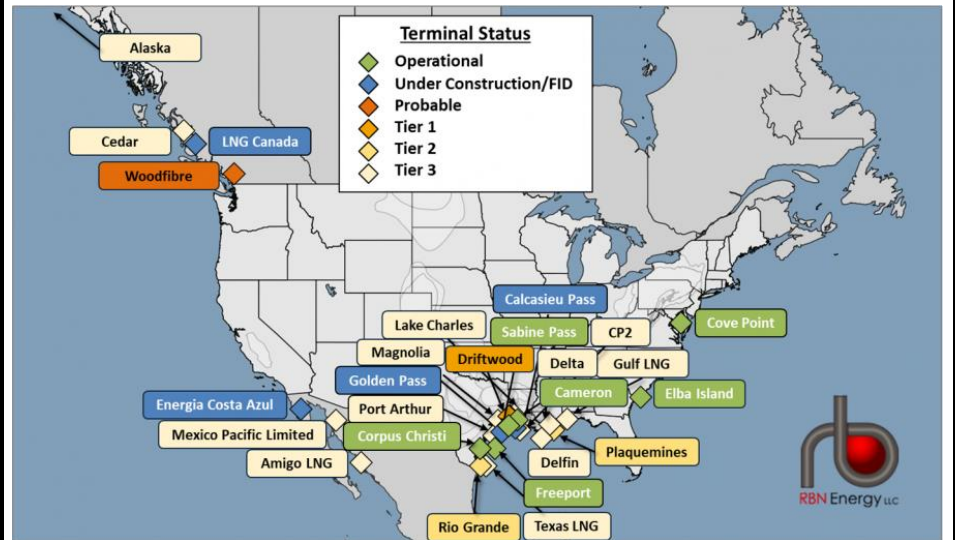


SOURCE: INCRED RESEARCH, COMPANY REPORTS

LNG industry has never operated at 95% of its capacity for a year, forget three consecutive years, and its very unlikely given weather-related issues and normal breakdowns >

Global liquefaction capacities are based near ports and many of them are prone to natural disasters. Hence, assuming a 100% capacity utilization rate across the world for the coming weeks is too much to ask for. In a most likely scenario, all LNG regasification capacity owners would like to have their storage filled at all point of time to avoid unforeseen weather risk.

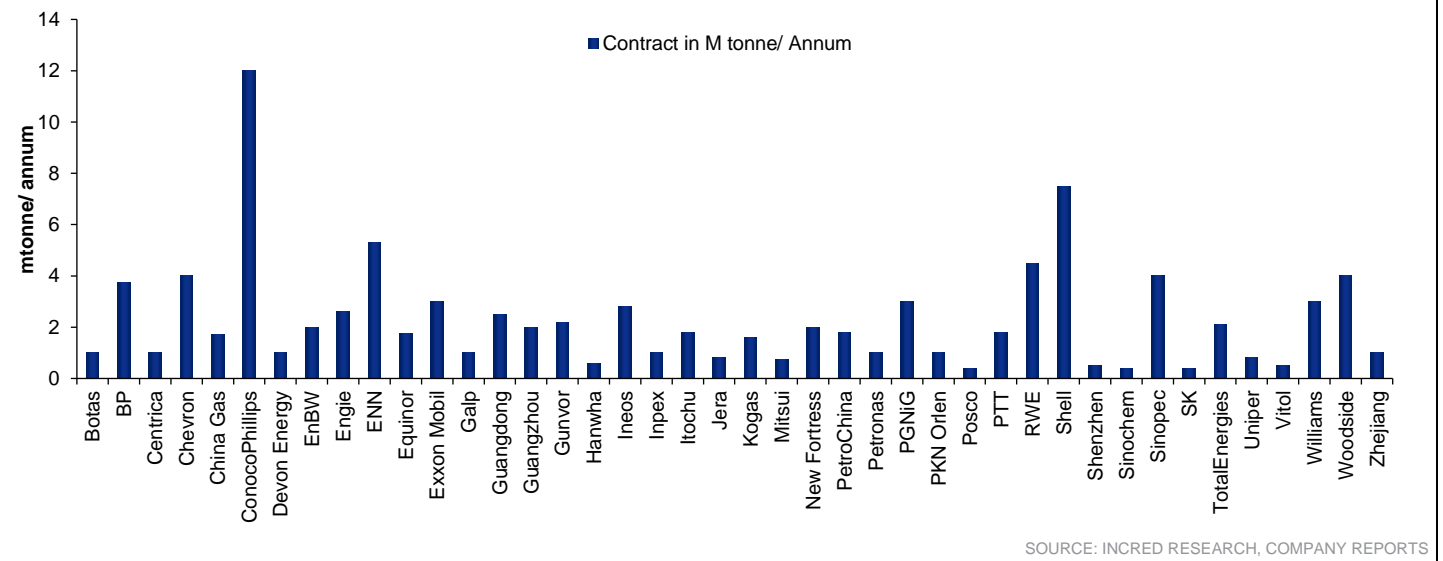
Figure 30: To cite an example, most US liquefaction capacity is based near the Gulf of Mexico which is prone to cyclones, and a similar situation prevails in Australia as well



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Indian companies have not been able to sign a single long-term contract in the last 15 months

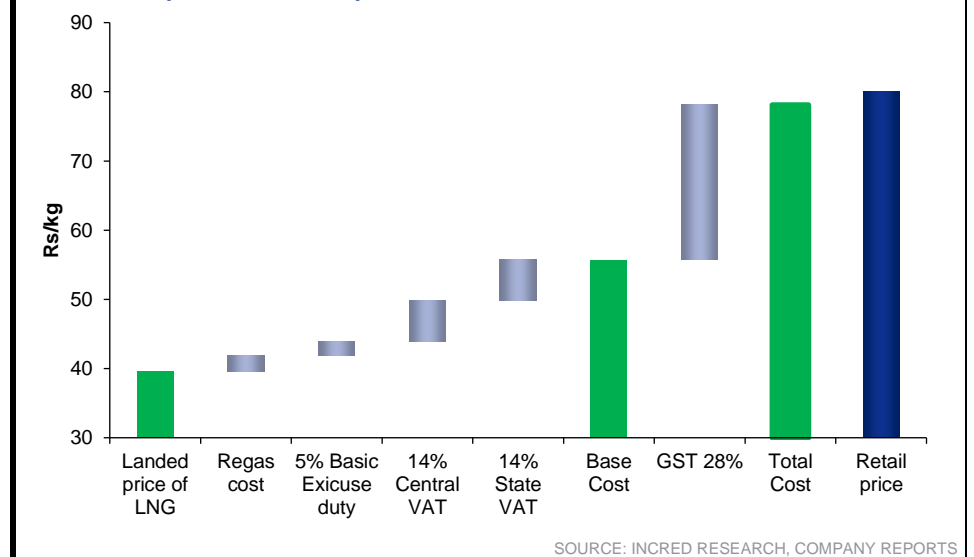
Figure 31: Indian companies have not been able to sign a single long-term contract in the last 15 months



Given the volatile crude oil market, even standard long-term contract at 12% slope will not be viable for Indian CGD players

Assuming crude oil prices remain around the US\$85-90/bbl level, the long-term contract at standard 12% slope also will not be viable for Indian CGD as well as PNG players.

Figure 32: Even at a long-term contract of 12% and crude oil price at US\$85-90/bbl, current CNG prices renders imported LNG unviable



Can India get LNG at 12% slope? It's not possible

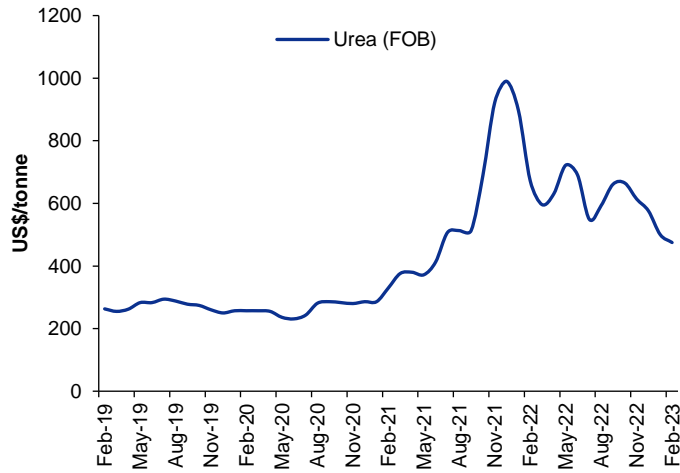
We have an old long-term contract for 18.5bcm and no new long-term contract has been signed by Indian CGD companies. Hence, getting LNG at 12% slope is not possible.

So what happens to CGD companies? They will get incremental volume from domestic fields at the expense of urea-makers

In an election year, the government is unlikely to cut supplies to the public, but fiscal prudence is also a requirement. Natural gas prices are bound to go up again because of the shortage in spot market which will make urea prices to rise again

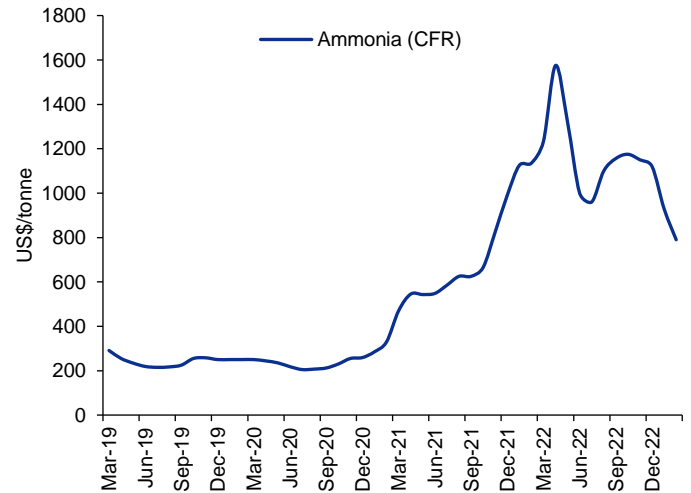
in the coming future. Both urea and ammonia prices are likely to touch their previous highs soon.

Figure 33: Urea prices have corrected in the last few months but as LNG prices rise again, urea prices will also follow suit



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 34: Similarly, ammonia prices will also witness tailwinds because of rising LNG prices



SOURCE: INCRED RESEARCH, COMPANY REPORTS

It's clear that CGD companies cannot use more than the current quantity of imported LNG and hence, volume growth will be a challenge ➤

Indian domestic CGD companies' volume growth will be a challenge and, at best, they can grow at the rate at which domestic gas production rises. If domestic gas production increases by ~4.5bcm in the next three years, then in a most likely case all incremental volume will go CGD players. We believe that industrial supply of natural gas will be curtailed in favour of retail supply.

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. Whilst 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 are 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 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

	Analyst/ Relative	Entity/ Associates
any financial interests in the company covered in this report (subject company) and nature of such financial interest	NO	NO
actual/beneficial ownership of 1% or more in securities of the subject company at the end of the month immediately preceding the date of publication of the research report or date of the public appearance;	NO	NO
any other material conflict of interest at the time of publication of the research report or at the time of public appearance	NO	NO
received any compensation from the subject company in the past twelve months for investment banking or merchant banking or brokerage services or investment advisory or depository or distribution from the subject company in the last twelve months for products/services other than investment banking or merchant banking or broker- age services or investment advisory or depository or distribution from the subject company in the last twelve months	NO	NO
managed or co-managed public offering of securities for the subject company in the last twelve months	NO	NO
received any compensation or other benefits from the subject company or third party in connection with the research report	NO	NO
served as an officer, director or employee of the subject company	NO	NO
been engaged in market making activity for the subject company	NO	NO

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 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.