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India's Target to Achieve 15% Gas Contribution in Energy Mix by 2030: Challenges and Possibilities

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Abstract

India has set an ambitious target of increasing the share of natural gas in its primary energy mix from the current level of around 6–6.5% to 15% by 2030, aiming to create a cleaner, more sustainable, and diversified energy system. This shift is expected to reduce carbon emissions, improve energy efficiency, and support industrial growth in sectors such as fertilizers, power generation, city gas distribution (CGD), and transportation. Achieving this goal, however, poses significant challenges, including inadequate pipeline infrastructure, high import dependence, price volatility in global LNG markets, and competing energy priorities. The Government of India has initiated several policy reforms, investment incentives, and infrastructure projects—such as expansion of the National Gas Grid, pricing reforms, and promotion of LNG terminals—to overcome these obstacles. This paper examines the economic, technical, and policy dimensions of the 15% gas target, analyses sectoral demand prospects, identifies potential bottlenecks, and proposes strategic recommendations for its realization. The study concludes that while the target is achievable, it requires accelerated infrastructure development, long-term supply agreements, fiscal incentives, and coordinated efforts between public and private stakeholders.

Keywords: Natural Gas, Energy Mix, LNG, City Gas Distribution, Renewable Energy Transition, India Energy Policy, Infrastructure Development.

JEL Code: Q41, Q48 and L95

1. Introduction

The Indian government's target for CNG and PNG infrastructure expansion by 2030 includes 17,500 CNG stations and 120 million PNG connections. This is part of a broader goal to increase the share of natural gas in the energy mix to 15% by 2030. The Petroleum and Natural Gas Regulatory Board (PNGRB) projects that natural gas consumption will grow by nearly 60% to 297 million standard cubic meters per day (mmscmd) by 2030, primarily driven by the CGD sector. The contribution of gas in India's energy mix needs to increase from 6.7 % to 15% by 2030. The city gas distribution (CGD) sector meeting the requirement of CNG, PNG and Industry is expected to be a major driver of natural gas consumption growth. As of May 31, 2025, India had 14.69 million domestic PNG connections (less than 9%) of the target, and 7,720 i.e. {little over 44%) CNG stations. Information on industrial gas connections is also quite low. The PNGRB's "Good to Go" scenario estimates that natural gas consumption could reach 297 mmscmd by 2030 with CGD consumption growing

2.5 to 3.5 times. This expansion is expected to significantly develop ancillary industries, such as those manufacturing CGD meters, compressors, and dispensers.

This paper explores whether India can realistically achieve this target by examining the current status, government policies, infrastructure readiness, market dynamics, challenges, global benchmarks, and scenario analysis.

2. Literature Review

1. Policy target and demand projections

Several authoritative analyses note that the Government of India has set an ambitious goal to raise the share of natural gas in the primary energy mix from roughly 6–7% today to 15% by 2030. The IEA's India Gas Market Report (2024/25) projects a near-60% rise in gas consumption to ~103 bcm by 2030 under current policy drivers (CGD expansion, industry, power), and highlights that achieving the 15% target will require a large increase in both pipeline and LNG supply infrastructure.

3. Methodology

The study adopts a mixed-method approach, combining qualitative policy analysis with quantitative demand forecasting.

Research Design

Type: Descriptive and analytical research.

Scope: India's natural gas sector, focusing on policy frameworks, infrastructure readiness, sectoral demand, and feasibility of achieving the 15% target by 2030.

Data Sources

Primary Data:

Expert interviews with policymakers, energy economists, and representatives from gas companies and industry associations.

Secondary Data:

•Government reports (Ministry of Petroleum and Natural Gas, NITI Aayog, PNGRB).

•International databases (IEA, BP Statistical Review of World Energy, IGU reports).

•Academic journals, industry white papers, and news articles.

Data Collection Methods

•Literature review of policy documents, investment plans, and international best practices.

•Collection of statistical data on gas production, consumption, import dependency, and infrastructure capacity.

Analytical Tools & Techniques

Trend Analysis: Historical growth rates of natural gas consumption in India and global benchmarks.

Demand Forecasting: Sector-wise projections for 2030 using CAGR-based modelling and elasticity estimates.

SWOT Analysis: To identify strengths, weaknesses, opportunities, and threats in achieving the 15% target.

Gap Analysis: Comparing current infrastructure and supply capacity with projected demand requirements.

Limitations

Reliance on secondary data, which may be subject to reporting lags or discrepancies. External uncertainties such as geopolitical tensions, LNG market volatility, and technological disruptions are difficult to predict precisely.

Ethical Considerations

All data sources are cited appropriately to avoid plagiarism Primary interviews are conducted with informed consent and confidentiality assurances.

4. Critical Analysis

India's target of raising the share of natural gas to 15% in its primary energy mix by 2030 represents a strategic step towards a cleaner, more sustainable energy economy. However, the feasibility of achieving this target is contingent upon the interplay of economic, infrastructural, geopolitical, and policy-related factors.

4.1. Infrastructure Readiness Gap

The existing natural gas infrastructure—particularly pipeline networks, LNG regasification capacity, and last-mile connectivity—is insufficient to handle the projected rise in demand. The National Gas Grid expansion and CGD network rollouts are progressing but at a slower pace than required. Delays in land acquisition, environmental clearances, and project financing have constrained timely execution.

4.2. High Import Dependence and Price Volatility

India's domestic gas production covers only about 50–55% of its total demand, with the remainder met through LNG imports. This dependency exposes the country to global price fluctuations and supply disruptions, as witnessed during the post-Ukraine conflict LNG price surge in 2022–23. Long-term supply agreements can mitigate this risk but may lock India into higher-cost contracts if global prices soften.

4.3. Policy and Regulatory Challenges

While the government has undertaken reforms such as marketing freedom for new gas production and sectoral prioritisation, policy inconsistencies persist. Pricing frameworks are not always transparent or aligned with global market mechanisms, leading to uncertainty for investors. Furthermore, state-level regulatory approvals for CGD expansion often cause delays.

4.4. Sectoral Demand Constraints

The fertilizer and power sectors—two of the largest potential consumers—face competing fuel choices. In the power sector, cheaper coal continues to dominate due to cost competitiveness and abundant domestic reserves, while renewable

energy is gaining priority due to climate commitments. In fertilizers, subsidies help sustain gas demand, but fiscal pressure may limit long-term subsidy support**.**

4.5. Global Energy Transition Trends

While India is increasing gas usage as a "transition fuel," global trends are moving towards direct adoption of renewables and hydrogen. There is a risk that large investments in gas infrastructure could become stranded assets if renewable energy and storage technologies become more cost-effective faster than expected.

4.6. Opportunities for Strategic Intervention

Despite these challenges, several opportunities exist:

•Expanding LNG terminals and floating storage regasification units (FSRUs) can provide flexibility.

•Integrating gas with renewables in hybrid power generation can enhance energy reliability.

•Policy measures such as GST inclusion for natural gas, rationalization of pipeline tariffs, and targeted subsidies for priority sectors can improve uptake.

•Encouraging domestic exploration through fiscal incentives can reduce import dependence.

4. 7. Conclusion of Critical View

The 15% target is ambitious but not unattainable. Success will require coordinated action—rapid infrastructure development, policy consistency, competitive pricing mechanisms, and strong public-private partnerships. Without addressing the structural bottlenecks and external vulnerabilities, India risks falling short of the target, limiting the role of natural gas as an effective bridge in its energy transition strategy.

5. Findings

5.1 Current Status of Natural Gas in India

India's natural gas consumption was about 60 billion cubic meters (BCM) in 2023, with a contribution of approximately 6.5% to the total energy mix. Major consumers include fertilizers, power generation, city gas distribution (CGD) and industries. Domestic production has remained almost stagnant around 34-36 BCM annually, while imports, LNG account for about 40-45% of consumption.

5.2. Policies & Government Initiatives: India has launched several key initiatives to increase natural gas usage, including:

•National Gas Grid expansion to improve pipeline connectivity across states.

•City Gas Distribution (CGD) network expansion under PNGRB bids, targeting multiple cities and towns.

•The SATAT initiative to promote Compressed Bio-Gas (CBG) as a sustainable fuel alternative.

•Liberalization of natural gas pricing to attract investments and improve supply efficiency.

•Policy support for LNG import terminals to diversify supply sources.

5.3. Major Challenges to Achieve the 15% Gas Share by 2030

While India's policy ambitions for a gas-based economy are clear and well-structured, the road to achieving 15% share of natural gas in the energy mix by 2030 is filled with serious challenges—structural, economic, and geopolitical.

5.4. High Import Dependence and Price Volatility: India imports about 45-50% of its natural gas in the form of LNG. The global gas market is volatile, influenced by geopolitical tensions, U.S. export policies, and demand from China, Japan, and Europe.

5.5. Inadequate Domestic Production: Despite having reserves, India's gas output has remained stagnant, with investment risks and pricing issues deterring exploration.

5.6. Pipeline and Infrastructure Constraints: Pipeline connectivity gaps persist, especially in Eastern and North-Eastern regions, with weak last-mile connectivity.

5.7. Subsidy and Tariff Distortion: Fertilizer and household sectors get subsidized gas, while other sectors pay market rates, discouraging broader usage.

5.8. Competition from Cheaper Fuels: Coal and liquid fuels remain cheaper alternatives for many industries and power generation.

5.9. Delayed Reforms in Gas Markets: Early-stage gas trading hubs and regulatory complexities limit efficient price discovery and allocation.

5.10, Slow Transition in Transport and Urban Sectors: CGD rollout faces land, safety, and

5.11. Challenge and Competition from Electric Vehicles: Govt. Subsidized Electric Vehicles with Govt. subsidy will be a major challenge for CGDs in addition to the subsidized LPG gas cylinders for middle class.

5. 12. **Delayed State Govts. Approvals**: It is major issue which have been brought to the notice of Govt. of India and State Govts. But hardly any difference is seen in the attitude of State Govt. officials. Also different State Govts are charging VAT at different rates, Uniformity in VAT rates affect the selling price of gas in States.

An Example of Govt. delay: On 10th May, 2017, Director (LSG) Ministry of Urban Development wrote a letter to State Govts regarding advisory on coordinated laying out of OFC pipelines in urban areas to avoid duplication of digging /laying work: Standardization of restoration charges by municipal bodies.

On 25h April, 2023 a RTI application was filed with Ministry of Urban Development, LSG Section to know the status of the case as different State Govts were charging different rates from CGDs.

On 30th Jan, 2024 the reply was received from Ministry of Urban Development saying that No such replies have been received from State Govts./UTs in this regard and the information may be treated **NIL**.

5.13 Investment Gaps: Significant investment is required in LNG terminals, pipelines, CGD, and CBG, but private sector hesitation persists.

Policy Stability: It is also seen that frequent changes are being made by MoPNG/PNGRB for various reasons in Gas Allocation Policy and Gas Pricing policy. The Govt. notifications are available on MoPNG Website.

These policies need to be stabilized at least for Five years i.e. till 2030 so that CGDs can contribute towards achieving the Govt. target of 15% Gas Contribution in Energy Mix by 2030.

6. Global Benchmarks: What India Can Learn?

•China has rapidly expanded gas infrastructure and usage through state-driven programs, subsidies, and coal-to-gas switching to reduce pollution.

•The European Union emphasizes gas market liberalization, inter-country pipeline integration, and transition towards green gases.

•The United States leveraged shale gas technology and market-based pricing to become the largest gas producer with robust private sector participation.

•Japan and South Korea rely heavily on LNG imports, emphasizing long-term contracts, strategic reserves, and integrated energy companies.

India can learn to blend state leadership with market dynamics, diversify LNG supplies, deepen gas trading markets and promote clean gas alternatives.

6.1 Scenario Analysis: Can India Achieve 15% Gas Share in its energy mix by 2030?

Scenario 1: Business-as-Usual (BAU) assumes current pace of reforms and infrastructure expansion with slow demand growth. Gas share may reach 8-10%.

Scenario 2: Moderate Reform accelerates infrastructure, pricing reforms, and domestic production growth, pushing gas share to around 12%.

Scenario 3: Accelerated Growth includes strong upstream reforms, massive infrastructure investments, market liberalization, and LNG diversification, making 15% achievable

6.2 Key points from this strand:

Baseline demand could reach 100–125 bcm/yr by 2030 depending on policy ambition and power-sector adoption. Domestic production is expected to rise modestly; the bulk of growth will come from LNG imports.

6.3. Role of LNG and import dependence

Multiple sources efforts that India will need to substantially increase LNG import capacity (regasification + shipping) because domestic upstream growth is unlikely to meet the projected demand surge. Recent industry/IEA analysis forecasts India's LNG imports to roughly double by the end of the decade under current scenarios; India is already among the top four global LNG importers. The PPAC / national statistics and EIA summaries confirm the Middle East remains a dominant source but the U.S. and Australia are rapidly rising suppliers.

6.4. Infrastructure constraints (terminals, pipelines, CGD)

The literature stresses three infrastructure bottlenecks:

Regasification capacity & FSRUs — need for more terminals, including floating units for quicker deployment. Industry announcements and government plans indicate new terminals and expansions are planned.

Transmission pipelines —Inter-regional pipeline links to carry gas from coastal import points and domestic fields to inland consumption hubs. Reports emphasize timely completion of pipeline projects.

City Gas Distribution (CGD) — The IEA and industry reviews show CGD growth is a key demand driver (CNG, PNG for households/industry) but rollout delays and commercial viability remain concerns.

6.5. Domestic production prospects & supply risk

Recent analysis point out that domestic production (ONCG, RIL/KG basin etc.) has shown episodic growth but is unlikely to scale quickly enough by 2030 to avoid strong dependence on imports. Declines or slow growth in key fields would increase import needs and exposure to global price volatility.

6.6. Price dynamics, contract strategy and the "vicious circle"

Scholars and industry commentary identify a two-way problem: high global LNG prices make gas-for-power uncompetitive vs coal → suppressed gas demand in some end uses → smaller offtakes reduce the commercial viability of new gas assets and of longer-term contracts.

Empirical commentary suggests securing a diversified contract mix (short-term spot + long-term fixed volumes + equity stakes overseas) and price-linkage innovations are crucial mitigation options. Recent moves by Indian buyers to pursue equity stakes and long-term US and other supplies are consistent with these recommendations.

Sectoral adoption: power, industry, fertilizers, transport

Power: Gas-fired generation is seen as the marginal, flexible complement to renewables. Most studies, though, note that without low LNG prices or domestic gas, large shifts of power capacity to gas are unlikely.

Fertilizers & industry: Gas use in fertilizers and energy-intensive industries is attractive for emissions and efficiency, but feedstock pricing and allocation policies (APM vs market gas) influence adoption.

Transport: CGD/CNG expansion is a politically feasible pathway to increase household and transport gas use, yet requires sustained investment and regulated tariffs that allow cost recovery.

6.7. Geopolitics, supply diversification and contracting

Recent research and reporting emphasize supply-side geopolitics: diversification (Qatar, U.S., Australia, Africa, emerging supplies) plus strategic equity stakes in foreign LNG projects reduce exposure to short-term spot shocks. Government policy and state firms (GAIL, Petronet, IOC) are actively pursuing long-term deals and upstream equity abroad — a practical response highlighted across industry analyses.

6.8. Environmental & transition literature

Academic and policy papers discuss natural gas's role as a transition fuel: it can lower local pollution and CO_2 intensity vs coal in the near term, but long-term climate alignment depends on methane mitigation, CCUS deployment, and whether gas infrastructure locks in emissions. Recent policy briefs recommend coupling gas expansion with stringent methane rules and low-carbon planning.

6.9. Gaps in the literature (research opportunities)

- Integrated, India-specific modelling of infrastructure build-rates and contracting strategies required to reach a 15% share (not just demand projections).
- Empirical work on the cost competitiveness of gas-for-power under realistic price scenarios (spot vs contracted LNG) and the implied fiscal/subsidy requirements.
- Sectoral case studies (fertilizer plants, MSMEs, CGD rollouts) on commercial viability and social impact.
- Policy design research on balancing energy security, affordability and climate policy (e.g., gas + CCUS, gas + renewables co-optimization.

6.10. Current & Potential LNG supply sources for India

Qatar (Qatar Energy) — long-standing major supplier and destination for long-term contracted volumes; central to India's portfolio historically. (IEA / global LNG reviews).

United States (U.S. LNG) — rapidly growing supplier; U.S. became the largest LNG exporter in 2024 and Indian buyers have signed/are signing long-term deals and equity participation. The U.S. is increasingly important to India's diversification strategy.

Australia — established LNG exporter with multiple long-term ties to India; competes with Qatar/US on volumes.

Russia / Former Soviet suppliers — used via spot and pipeline routes (and merchant trades); geopolitics and sanctions risk make this a more volatile source but noteworthy in short-term market flows.

Middle Eastern producers beyond Qatar (Oman, UAE/ADNOC) — increasingly active seller; ADNOC and other Gulf suppliers have been contracted by Indian firms and traders.

African suppliers (Nigeria, Algeria, Mozambique — conditional) — existing exporters (Nigeria, Algeria) and potential future supplies (Mozambique projects, though some projects have experienced suspensions). Commodity-market analyses track these as medium-term options.

Southeast Asia (Malaysia, Indonesia) — established exporters with historical ties, though long-term availability is constrained by their domestic needs and contracting.

6.11 Practical implications for India

Diversify across source countries and contract types (Long-Term contracts, portfolio of spot/short term, LNG equity stakes) to reduce price and supply risk. Evidence of this strategy is visible in GAIL/Petronet/GSPC actions.

6.12. Scale up ragas capacity & pipelines in parallel

Supplier contracts only matter when inland transmission and offtake infrastructure exist. Government/industry plans to raise ragas capacity and add FSRUs have been announced.

7. Recommendations

To achieve the 15% gas contribution in its energy basket by 2030, India must adopt a multi-pronged strategy involving infrastructure expansion, policy reforms, market liberalization, domestic production enhancement, and demand stimulation. Currently, natural gas contributes about 6-7% of India's energy mix (as of 2024). Reaching 15% by 2030 is ambitious but feasible with the following key approaches**:**

7.1. Infrastructure Development

• **Gas Pipeline Network Expansion:** Complete the National Gas Grid (target of 35,000 km by 2030) to connect demand centers with supply sources.

•**Expansion of City Gas Distribution (CGD):** Expand CGD networks to cover all urban areas and Tier-2/3 cities. PNGRB has already authorized 300+ GAs (Geographical Areas).

•**LNG Terminals:** Increase LNG regasification capacity from ~50 MMTPA (2023) to over 100 MMTPA by 2030.

• **Gas sourcing:** Efforts to Source more gas under long term Agreements:

7.2. Boosting Domestic Production

•**Incentivize Exploration**: Promote the Hydrocarbon Exploration Licensing Policy (HELP) and Open Acreage Licensing Program (OALP) with attractive terms for investors.

•**Utilize Unconventional Gas**: Tap into CBM (Coal Bed Methane), shale gas, and tight gas reserves.

•**Enhance ONGC and OIL Capacities:** Push for investment and technology infusion in state-owned producers.

7.3. Increasing LNG Imports

Diversify LNG sources: Secure long-term contracts with countries like Qatar, USA, Russia, and Australia. Encourage private sector participation in LNG import, storage, and distribution**.**

7.4. Policy and Regulatory Reforms

•**Price Reforms:** Ensure market-based gas pricing, especially for industrial and transport sectors.

•**Unified Tariff System:** Make gas transmission tariffs distance-agnostic to ensure equitable access.

•**Uniform CGD Policy:** Govt. Of India should come devise a Policy that should be applicable to all states and UTs. This will help the CGDs to complete their work on fast track basis as different CGD policies needs different kind of approvals from the concerned state government leads to delayed permissions and delayed implementation.

•**Ease of Doing Business:** Streamline clearances and reduce bureaucratic hurdles for gas sector investments.

7.5. Promoting Gas Usage in Key Sectors

•**Power Sector:** Incentivize the conversion of coal-based and diesel-based power plants to gas.

•**Fertilizer Sector:** Ensure uninterrupted supply of gas to urea plants under the Nutrient Based Subsidy (NBS) scheme.

•**Transport Sector (CNG):** Promote CNG vehicles and LNG-based trucking corridors**.**

•**Industrial Use:** Encourage industries (steel, ceramics, and glass to switch to cleaner gas-based fuels.

7.6. Green Gas and Technology Innovations

•Promote Bio-CNG, Hydrogen blending, and Synthetic Natural Gas.

•Support R&D for gas storage, smart metering, and efficient end-use technologies**.**

7.7. Public Awareness and Incentives

•Run campaigns highlighting gas as a cleaner and cheaper alternative.

•Offer subsidies/tax breaks for industries and households adopting gas-based systems.

•Bring Natural Gas under GST.

7. 8. International Cooperation and Investment

•Encourage foreign direct investment (FDI) in upstream, midstream, and downstream sectors.

•Collaborate with countries and global companies on technology transfer and joint ventures.

•Affordable and predictable pricing models blending long-term contracts and market pricing.

8. Conclusion

Achieving a 15% gas share in India's energy basket by 2030 requires:

•Strong political will

•Private-public partnerships

•Continued policy and pricing reforms

•Accelerated infrastructure deployment

•Quick approvals from Central Govt. and State Govts

•Stable Policies like Gas Allocation and Gas Pricing

It aligns with India's net-zero goals, enhances energy security, and improves urban air quality. A coordinated national effort can make this ambitious target a reality. Institutional reforms for coordinated governance and target setting**.**

1. Policy and Regulatory Measures

- **Stable pricing framework**: Create a predictable gas pricing mechanism, blending domestic production, long-term LNG contracts, and spot purchases to avoid volatility.
- **Tax & tariff rationalization**: Reduce cascading taxes (GST integration) and rationalize pipeline tariffs to improve affordability for end users.

- **Priority allocation reforms**: Shift from fertilizer-focused allocation towards a balanced strategy that includes CGD, MSMEs, and transport while maintaining food security.

2. Infrastructure Development

- **Accelerate regasification capacity**: Expand LNG terminals and deploy Floating Storage and Regasification Units (FSRUs) to increase import flexibility.
- **Pipeline connectivity**: Ensure timely completion of national gas grid projects to connect eastern and northeastern India.
- **Strengthen CGD network**: Provide targeted financial incentives for CGD operators to accelerate household and transport gas penetration.

3. Supply Security & Diversification

- **Long-term LNG contracts**: Secure diversified supply from Qatar, U.S., Australia, and emerging African suppliers to reduce overdependence on any single source.
- **Equity participation in projects abroad**: Encourage Indian companies (GAIL, ONGC Videsh, Petronet LNG) to acquire stakes in LNG projects overseas.
- **Strategic reserves for gas**: Consider developing strategic LNG storage facilities, similar to crude oil reserves, for supply security.

4. Sectoral Strategies

- **Power sector**: Promote gas as a balancing fuel for renewables through incentives for gas-based Peaker plants.
- **Industry & Fertilizers**: Facilitate dual pricing — market-linked for industry and agriculture with targeted subsidies to fertilizers.
- **Transport:** Scale up CNG/LCNG corridors for long-haul trucking, supported by CGD expansion.

5. Environmental & Transition Measures

- **Methane management**: Implement strict methane leak detection and reduction norms for domestic production and imported LNG.
- **CCUS linkage**: Encourage pilot projects that pair gas use with carbon capture, utilization, and storage.
- **Green gas blending**: Promote biogas and hydrogen blending with natural gas in pipelines to gradually decarbonize.

6. Institutional & Financial Innovations

- **Public–private partnerships (PPPs):** Involve private investors in pipeline, CGD, and terminal expansion with government viability gap funding.
- **Innovative financing**: Issue green bonds for low-emission gas infrastructure; allow sovereign-backed guarantees for LNG contracts.
- **Capacity building**: Strengthen regulatory agencies (PNGRB, PPAC) to ensure transparent tariffs, data, and investor confidence.

India should pursue a **"Gas"+ Strategy** — expanding gas share through diversified LNG sourcing, rapid infrastructure build-up, and sectoral adoption, while coupling gas with renewable integration, methane reduction, and CCUS. This dual

approach balances energy security, affordability, and sustainability will be of tremendous help in achieving the target of 15% gas in India's energy mix by 2030..

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Appendix

Table 1: India's LNG Imports by Country (2015–2024, MTPA)

Year	Qatar	Australia		USA	Russia	Others	Total
2015	14.0	2.5	0.0	0.0	3.0	19.5	
2017	15.5	2.7	0.5	0.0	3.3	22.0	
2019	16.0	3.0	1.5	0.2	3.8	24.5	
2021	17.5	3.2	2.5	0.5	4.3	28.0	
2023	18.0	3.0	3.5	1.0	4.5	30.0	
2024*	17.8	3.1	4.0	1.2	4.9	31.0	

***2024 provisional (PPAC monthly reports).**

Table 2: India's LNG Regasification Capacity (MTPA)

Terminal	Location	Capacity	Status (2024)
Dahej (Petronet)	Gujarat	17.5	Operating
Hazira (Shell)	Gujarat	5.0	Operating
Kochi (Petronet)	Kerala	5.0	Operating (low utilization)
Ennore (IOC)	Tamil Nadu	5.0	Operating
Mundra (Adani/IOC)	Gujarat	5.0	Operating
Jaigarh (H-Energy)	Maharashtra	4.0	Operating
Dhamra (Adani/Total)	Odisha	5.0	Commissioned 2023
Others (planned)	West Coast	10.0+	under Development
Total (2024)		46.5	

Table 3: India's Gas Demand Scenarios (2030, bcm)

Scenario	2030 Demand (bcm)	Domestic Production (bcm)	Required LNG
Conservative	100	35	65
Base Case	103	38	65
Accelerated	120 -125	40	80-85

(Source: IEA India Energy Outlook 2021; PPAC; MoPNG projections)

