



सत्यमेव जयते



पी एन जी आर बी
PNRB

Fueling Progress: PNRB Roadmap For Consumer Protection, Strategic Actions & Monitoring Mechanism

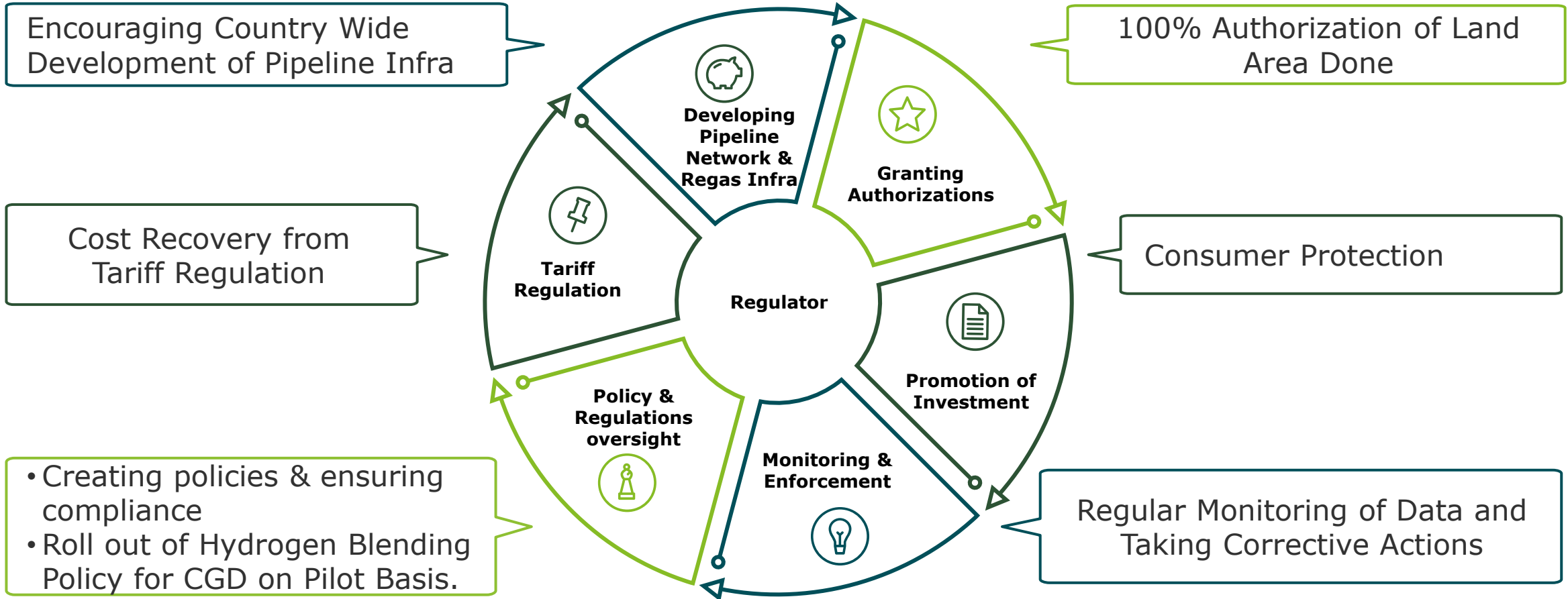


About PNGRB

- The Petroleum and Natural Gas Regulatory Board Act, 2006
- Constituted on 1st October 2007
- To protect the interests of consumers and entities engaged in specified activities relating to Petroleum, Petroleum Products and Natural Gas and to promote competitive markets
- PNGRB Authorises
 - ✓ City Gas Distribution (CGD) networks,
 - ✓ Natural gas & Petroleum Product pipelines (NGPL & PPPL),
 - ✓ Determines transportation tariff
 - ✓ Lays down the technical & safety standards etc.

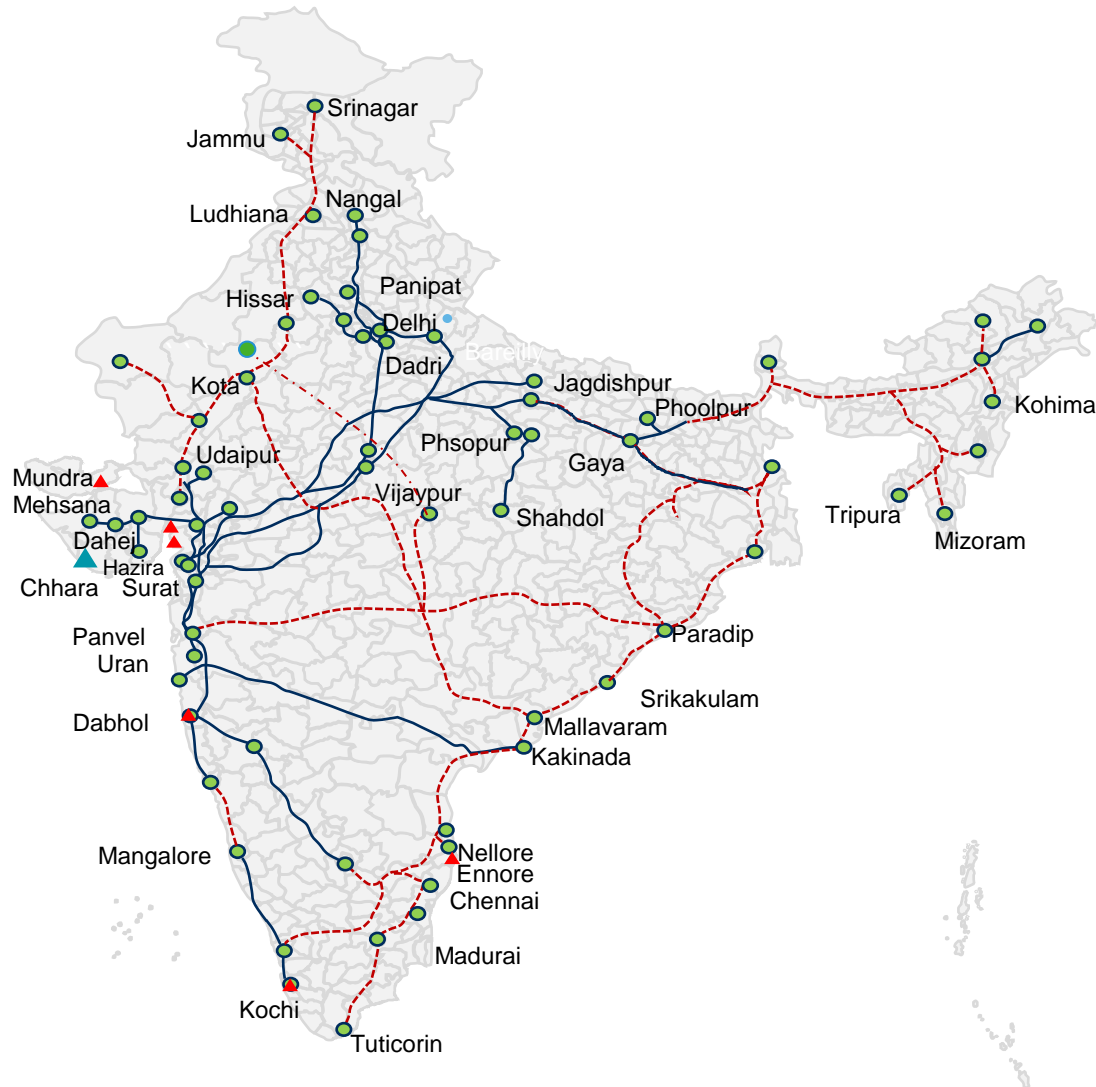
Role of PNGRB

REGULATOR'S ROLE



PNGRB's Impact

PNGRB has made significant strides in regulatory reforms and key regulatory milestones.

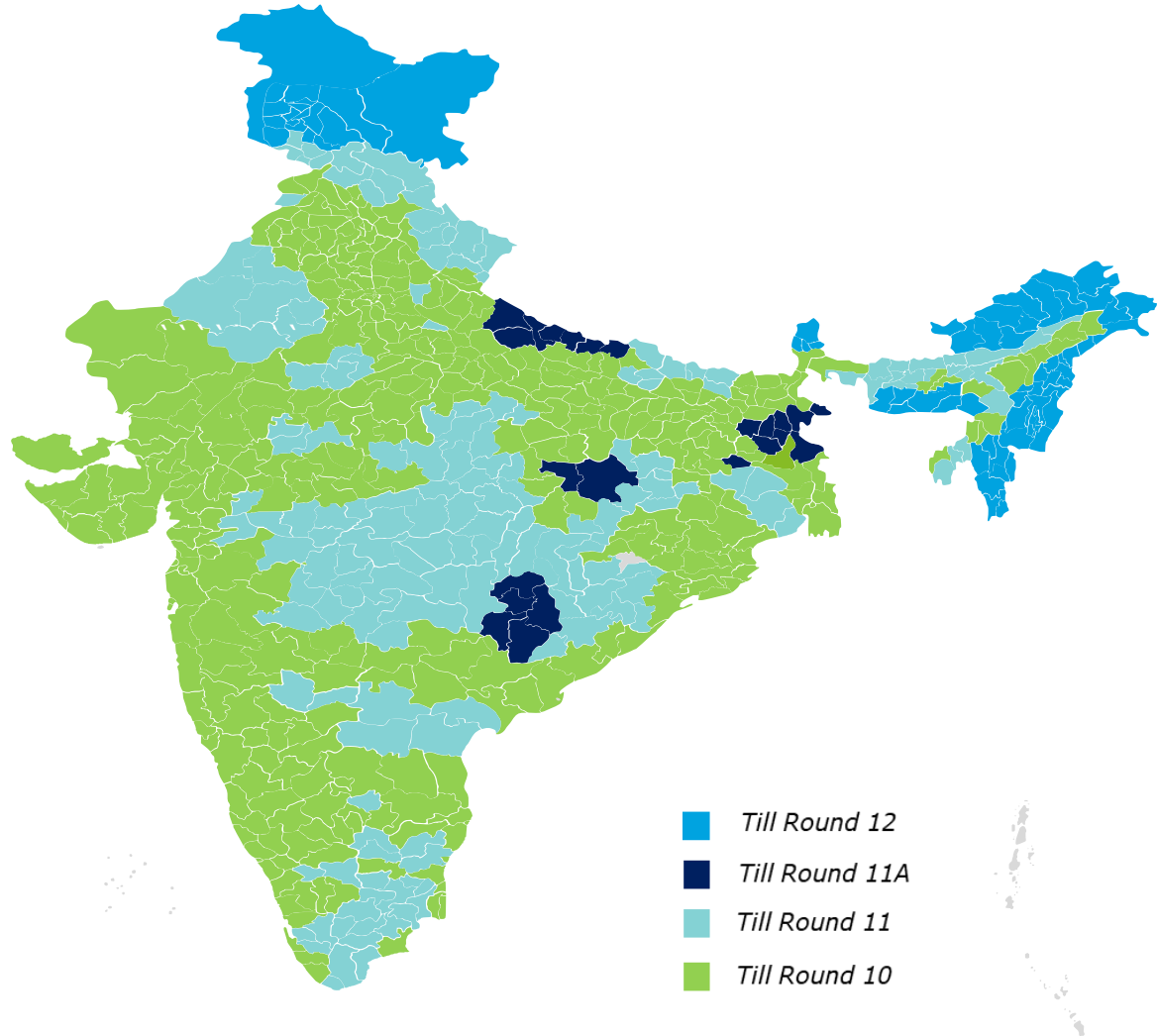


Note: Map Not to Scale, Only for Illustrative purpose

Impact of PNGRB

- The National Gas Grid, overseen by PNGRB, aims to achieve uniform economic and social progress by ensuring natural gas availability across India.
- Natural Gas Pipeline Expansion: 25,000 km laid, nearing a national gas grid with 10,800 km pipeline under construction
- Common Carrier Petroleum Product Pipelines: 9,200 km in operation
- Major Projects: Notable pipeline projects include the Dabhol–Bangalore Natural Gas Pipeline and the East West Gas Pipeline & IGGL
- Investment & Employment Impact: Huge capital inflow and job creation

PNGRB CGD Outlook



Note: Map Not to Scale, Only for Illustrative purpose

CGD Outlook

- CGD Network Expansion: 307 GAs in mainland fully authorized after 12A Bidding Round
- From an initial 34 Geographical Areas (GAs) before PNGRB, the authorization has grown by 273 additional GAs, bringing the total to 307 GAs
- DPNG connections have seen 4.67x growth from **28 lakh** In 2015 to massive **1.42 Cr.** In FY2-25
- IGX operationalized in 2020, has grown to facilitate more than 1,000 trades, with a trade volume of **40 Million MMBtu** in 2024
- PNGRB has 287 operational GAs out of which 195 are connected via pipeline and others are being catered via virtual pipeline method

Regulatory Interventions by PNGRB-Key Highlights



Established regulations covering all aspects of the petroleum value chain, Pipeline, Refinery, Refinery installation, Retail outlet



Enabled establishment & operationalization of India's 1st Gas Exchange in 2020¹



Introduced Unified Tariff in Gas transportation with motto-"One Nation, One Grid, One Tariff"²



Devised settlement committee responsible for managing revenue distribution among entities, handling amounts worth INR 17,000 crores³

Key Notified works around regulations

Key Infrastructure Developments

PNGRB has taken landmark steps in to boost in energy security, reduced reliance on road transport

1.

Expanding CGD Networks



PNGRB has authorized CGD GAs across India to cover the entire mainland, promoting cleaner fuel accessibility and economic growth.

2.

Facilitating LNG and CNG Accessibility



PNGRB is enhancing access to Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG) by allowing mobile refueling units and setting up stations beyond geographical boundaries.

3.

City Gate Stations Beyond GA Boundaries



PNGRB has enabled entities to set up City Gate Stations (CGS) outside their authorized geographical areas, improving natural gas penetration and infrastructure development.

4.

Suo-Moto Proposals for New Pipelines



PNGRB is proactively proposing new pipelines for LPG and ATF to reduce road movement and enhance energy security, based on demand-supply analysis and public consultations.

Regulatory Reforms & Common Carrier Declaration

These reforms Increased transparency, fair pricing, and better consumer access to energy needs

Captive Pipelines to Common Carrier to boost accessibility

- 69% (~10,319 km) of the 14,920 km under transition
- Two ATF pipelines in Mumbai already declared common carriers.

Common Carrier for CGD Networks

- PNGRB has initiated the process to declare 74 CGD networks as common carriers



Unified Tariff for NGPL – National Gas Grid with zonal tariff structure

- PNGRB implemented the Unified Tariff from April 1, 2023, streamlining gas pricing, expanding market access, and supporting India's gas consumption growth

Revised Tariff for PPPL

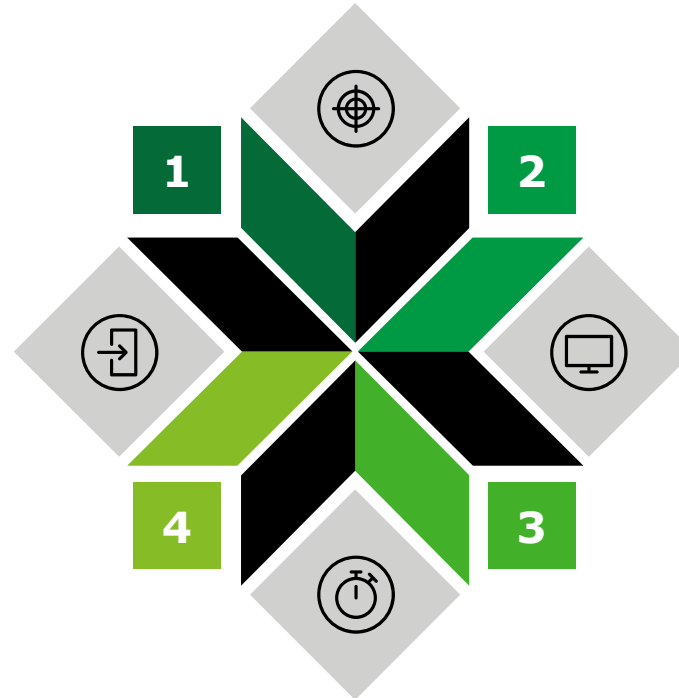
- Delinking of railway tariff-based system with a revised framework in 2024
- Ensured fair pricing, inflation adjustment, and an option for tariff determination based on capital expenditure.

PNGRB's Role in Hydrogen & Clean Energy Transition

PNGRB aims to build a **future-ready** gas infrastructure that supports **clean energy goals**

National Green Hydrogen Mission

The **National Green Hydrogen Mission (NGHM)**, launched on **January 2023**, with a **₹19,744 crore** outlay, aims to produce **5 MMT of green hydrogen**, reducing import dependence, while **PNGRB** oversees its transportation via pipelines.



Hydrogen Blending in CGD & NGPL: Study & pilot projects underway

*PNGRB has engaged ICF to develop a roadmap for **hydrogen blending** and **100% hydrogen pipelines**, focusing on regulations, safety, technical standards, and funding to support India's energy self-reliance and security.*

Periodic Technical and Safety Audits

Periodic Technical and Safety Audits under PNGRB regulations ensure safe operations and incident prevention.

Collaboration with global & National agencies

*PNGRB has organized **International Regulator Conference** at IEW Goa.*

*A Mega Safety conference was held with FIPI to **enhance safety awareness** in the petroleum and natural gas sector.*

High-Level Expert Committees

PNGRB has recognized key issues to drive regulatory reforms and enhance the ease of doing business in India's Oil & Gas sector, leading to the formation of High-Level Expert Committees (HLECs).

1.

HLEC on Safety

The committee reviewed safety regulations, conducted industry consultations and site visits, and submitted 21 recommendations to strengthen risk management and operational integrity.

2.

HLEC on Consumer Protection

This committee focuses on ensuring fair trade practices and consumer protection in the Oil & Gas sector and committee report has been published.

3.

HLEC on Vision 2040 – NG Infrastructure

This committee is tasked with developing a roadmap to increase natural gas's share in India's energy mix to 15% by 2030, assessing infrastructure needs, pricing, taxation, and competition with alternative fuels.

4.

HLEC on Promoting Competition in Gas Transmission & Distribution

This committee addresses challenges in separating gas marketing from transportation, ensuring fair tariffs, and transitioning CGD networks to open access for fostering a competitive market.

CBG | Energy Powerhouse

India is an agricultural Powerhouse has set an ambitious goal of approximately 15 MMTPA CBG production.

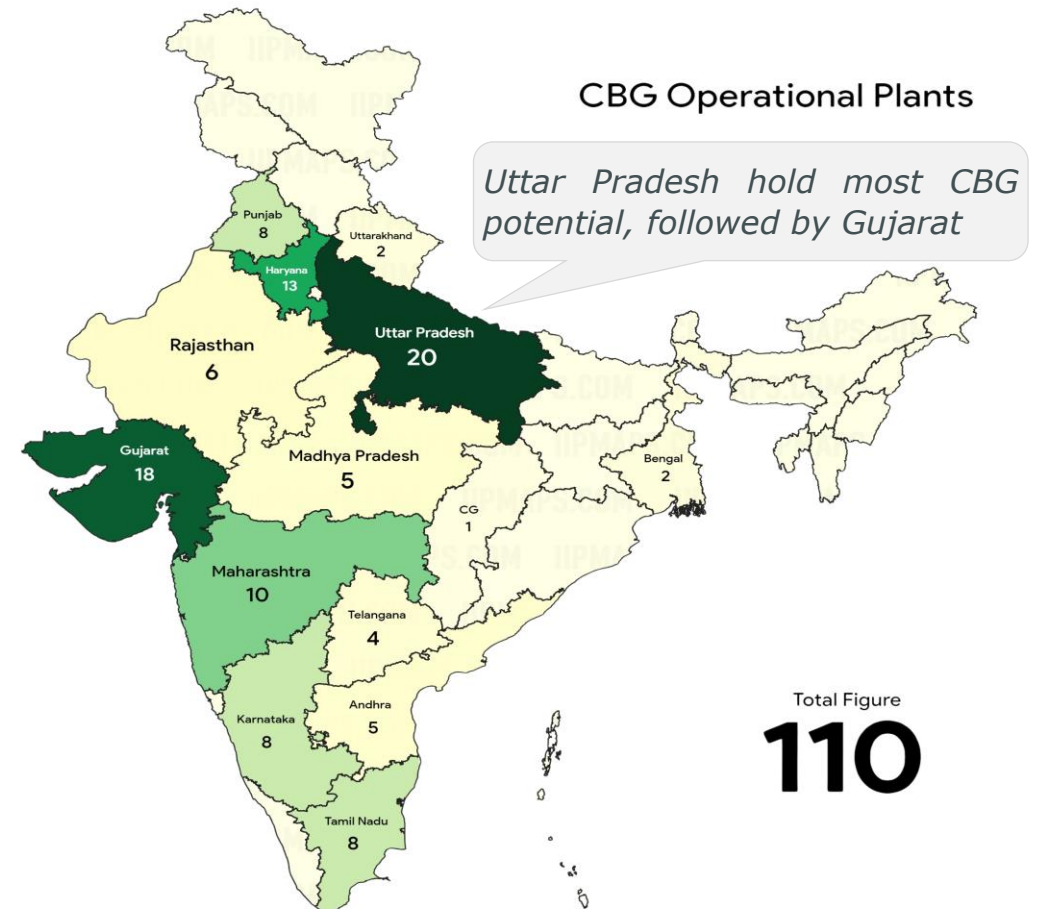


Market overview

- CBG is produced from agricultural residue, cattle dung, pressmud, and municipal solid waste, all of which are abundantly available in India.
- As per World Biogas Association, India has potential of **62 MMT (212 MMSCMD)** of Bio-CNG potential.
- **110 plants** are currently functional in India³
- There are **594 CBG plants** under construction and yet to start in India. **5000 plants⁴** planned under **SATAT by 2030.**
- PSU and private players are investing heavily in CBG ecosystem
- Overall sale of CBG in FY 25 (Till Nov-24) is **~23,600 MT (.132 MMSCMD)⁵**



CBG Plant outlook



Notes: [1] Natural gas demand range taken for net zero scenario and accelerated scenario ; [2] EAC – CBG Report [3] Government Order - DWWS [4]CGD India [5] PPAC Ready Reckoner – Nov - 24

Sources: BP Energy Outlook 2023, Budget Speech FY24

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Thank You

