

SESSION 8

CBG CELL



**ANIL KUMAR
GARG**

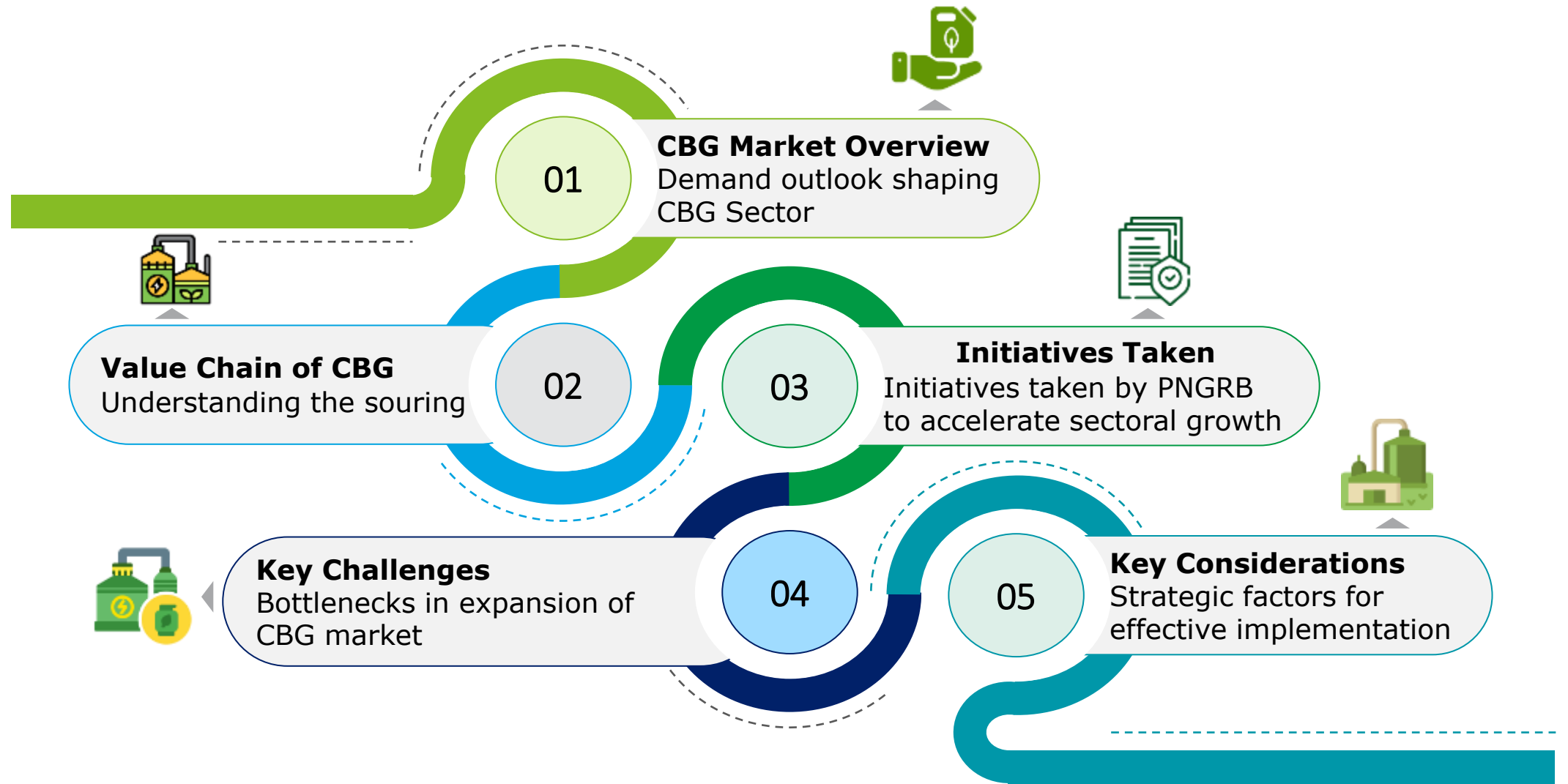
Confluence – CBG Cell

Contributing to India's energy transition goals



20th April 2026

Overview



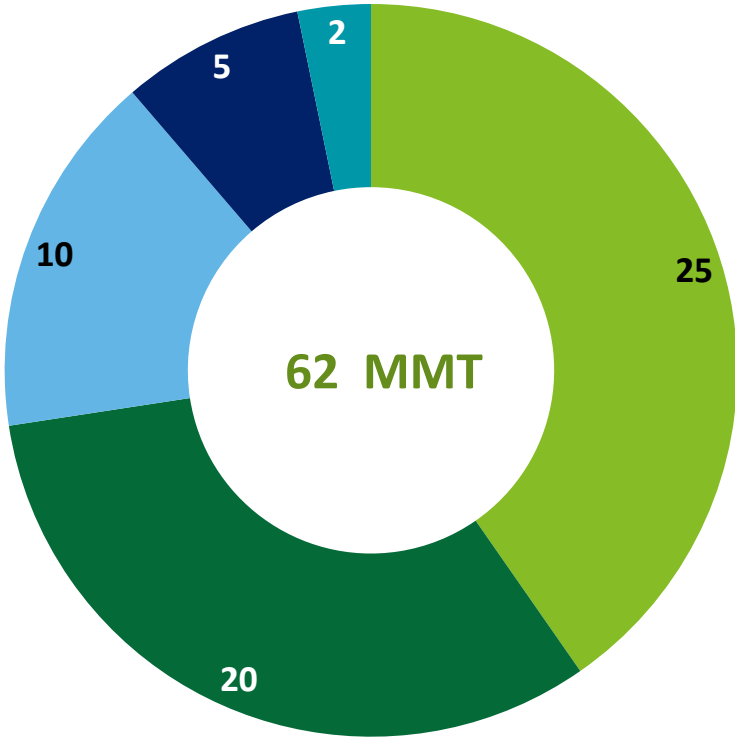
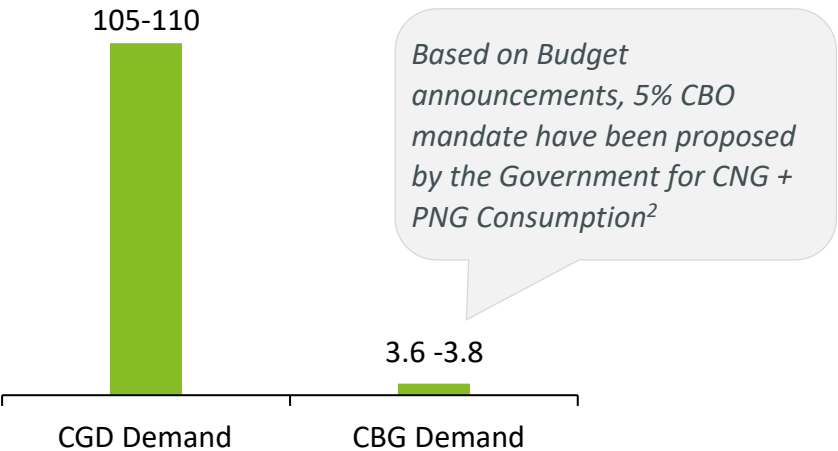
CBG Market Overview (1/3)

India, an agricultural powerhouse, has set an ambitious target of producing around 15 MMTPA of CBG⁵ through 5,000 plants, signaling strong future potential for green gas in its energy

Market overview

Feedstock Potential for CBG production (MMT)

India CBG Market – FY 30, in MMSCMD¹



- 207 plants** are currently (Apr 2026) functional in India³
- There are **1545 CBG plants** under construction and yet to start in India. **5000 plants⁴** planned under **SATAT by 2030**.

Cattle Dung

Agri Residue

Sewage Teartment Plants

Muncipal Wastes

Pressmud

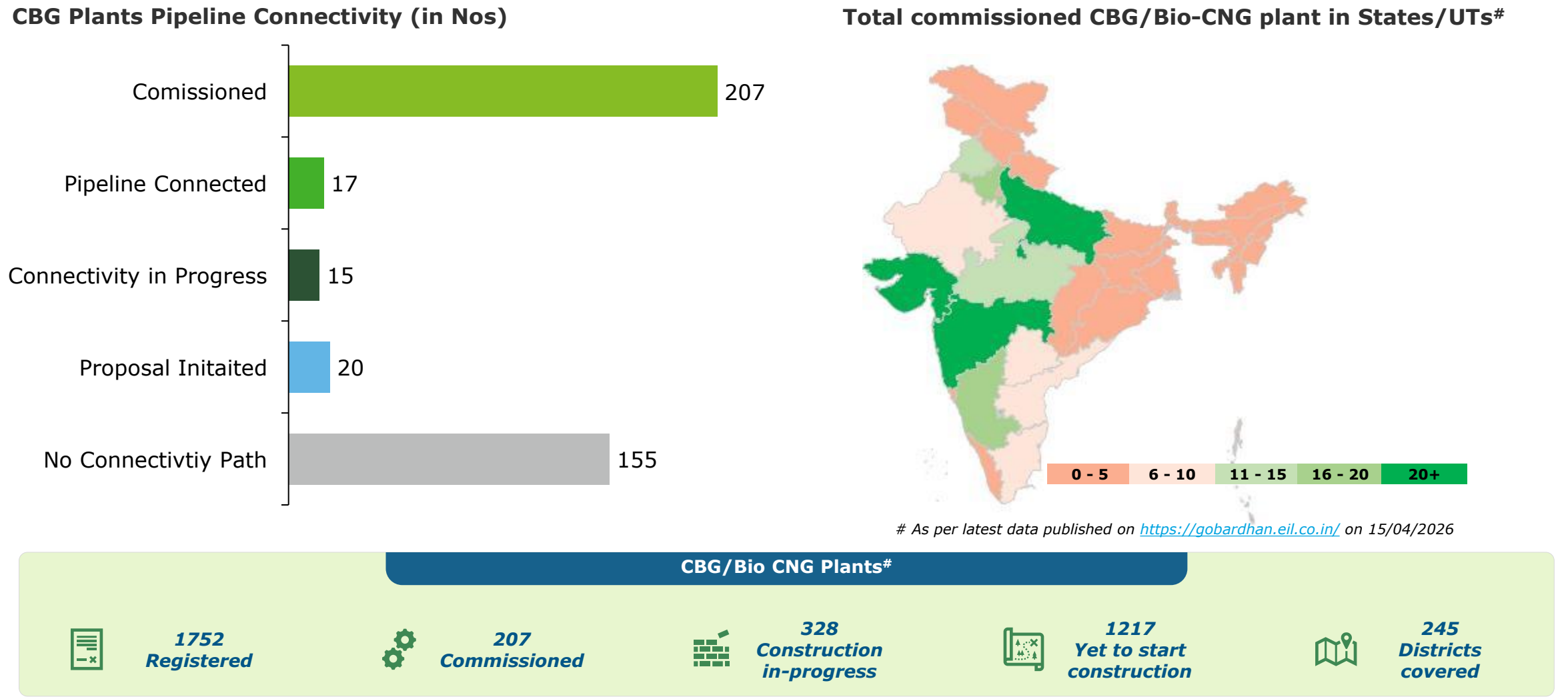
Notes: [1] Natural gas demand (Deloitte Analysis) ; [2] PIB; [3] Gobardhan Website – July – 25; [4]CGD India; [5] PPAC Ready Reckoner – Nov – 24; [5] MoPNG [PIB](#);

Source: BP Energy Outlook 2023, Budget Speech FY24

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CBG Market Overview | Infrastructure Readiness (2/3)

Only 17 of 207 commissioned plants are pipeline-connected, infrastructure readiness is the critical gap



CBG Market Overview | Policy and regulatory initiatives (3/3)

Govt has put in place SATAT and synchronization scheme to enable efficient offtake of CBG by oil & gas marketing companies

Off-take by Oil and Gas marketing companies¹

- Oil and Gas marketing companies will issue LOIs to sign long term offtake agreements with CBG producers
- About 1,086 Letters of Intent were issued by the OMCs
- 207 CBG plants commissioned against target of 5,000 plants
- Commissioned capacity of 2 MMTPA (1469 TPD) against production target of 15 MMTPA

Minimum price guarantee under SATAT²

- The scheme provides minimum price guarantee of INR 46/kg + applicable taxes till 31st March 2029
 - RSP of CBG in the market shall be at par with that of CNG
 - Procurement price of CBG ranges from INR 54 to 74/kg net realization (~20% discount to retail selling prices of CNG)
 - If the retail price of CNG increases beyond INR 100 /kg, upwards revision of CBG procurement price is expected

Key drivers for Synchronization Scheme growth³

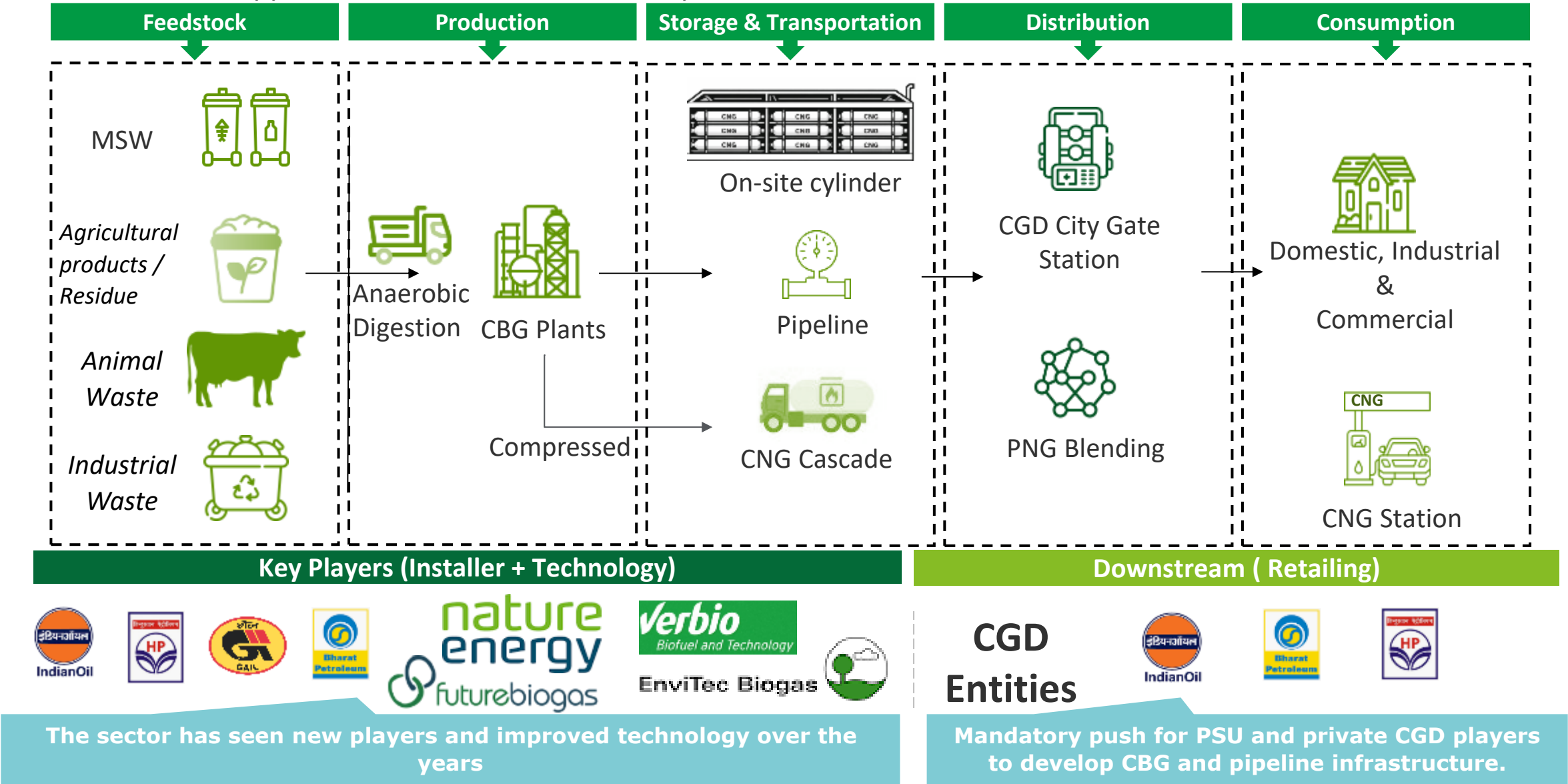
Implementing Entities



- CBG City gas distribution synchronization scheme
- In 2021, MoPNG mandated GAIL to supply Biogas/CBG comingled with domestic gas at uniform base price across all CGD entities for transport and domestic segments
- Sale occurs in way of a tri-partite agreement between producer, CGD entity and GAIL
- Scheme guarantees a minimum price of INR 770 /mmbtu plus applicable taxes for CBG.
- Current CBG purchase price is INR 1478 / mmbtu (i.e. INR 73 /kg net realization)

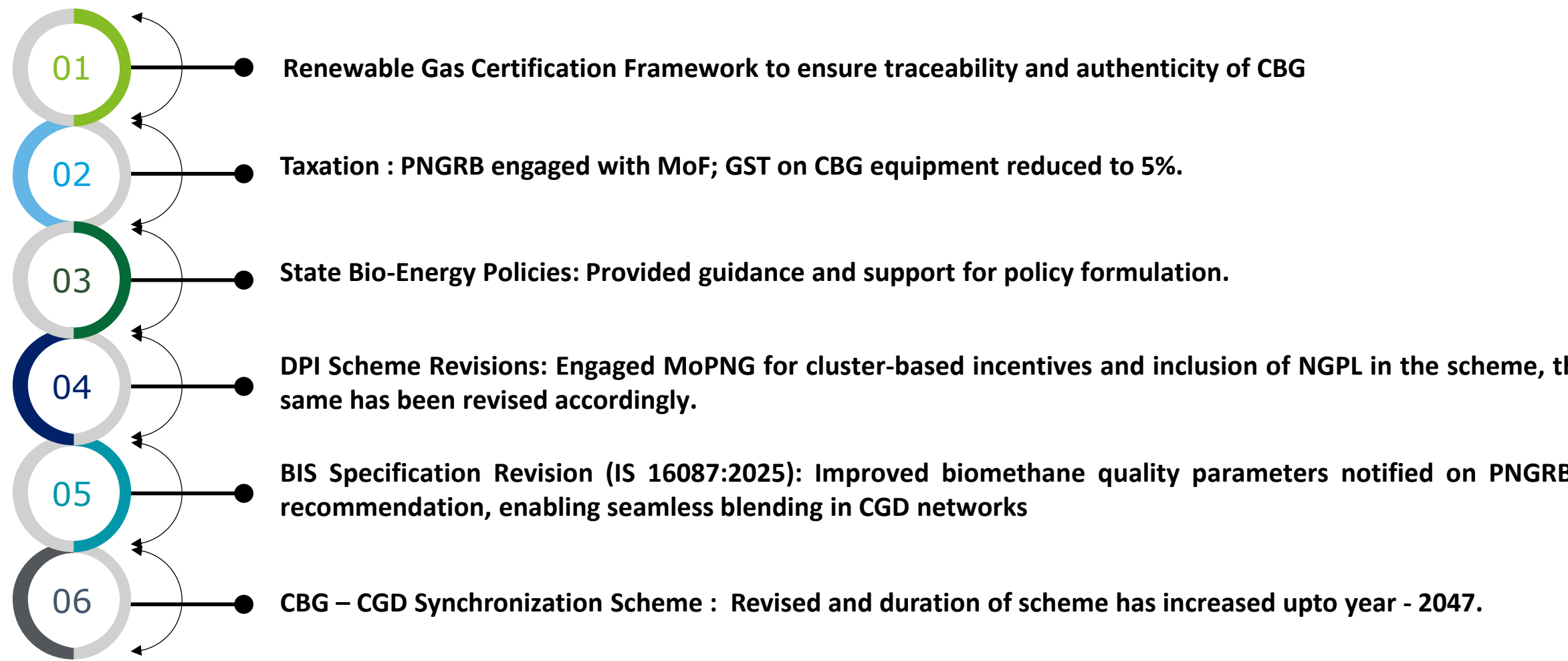
Value Chain of CBG

Indian government has introduced several initiatives to promote the production of CBG from various sources. These initiatives aim to support the use of CBG in the transportation sector.



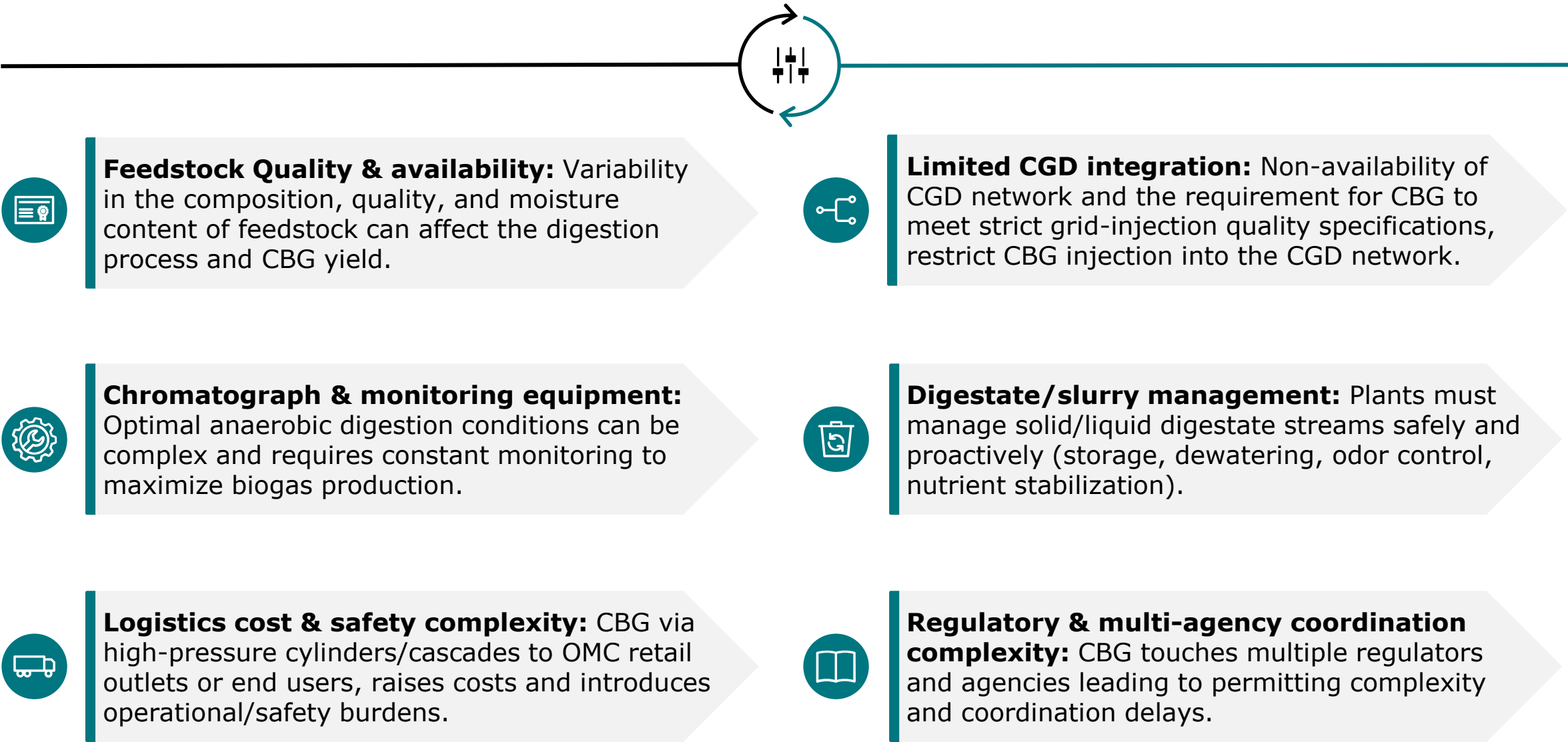
Initiatives of PNGRB

PNGRB has undertaken many initiatives to strengthen the CBG ecosystem through certification, fiscal incentives, policy alignment, quality standards, and long-term CGD integration



Key Challenges

CBG requires advanced purification, robust infrastructure compatibility to ensure safe, reliable integration.



Key Considerations

Enablers for Sustainable CBG Growth and Market Development

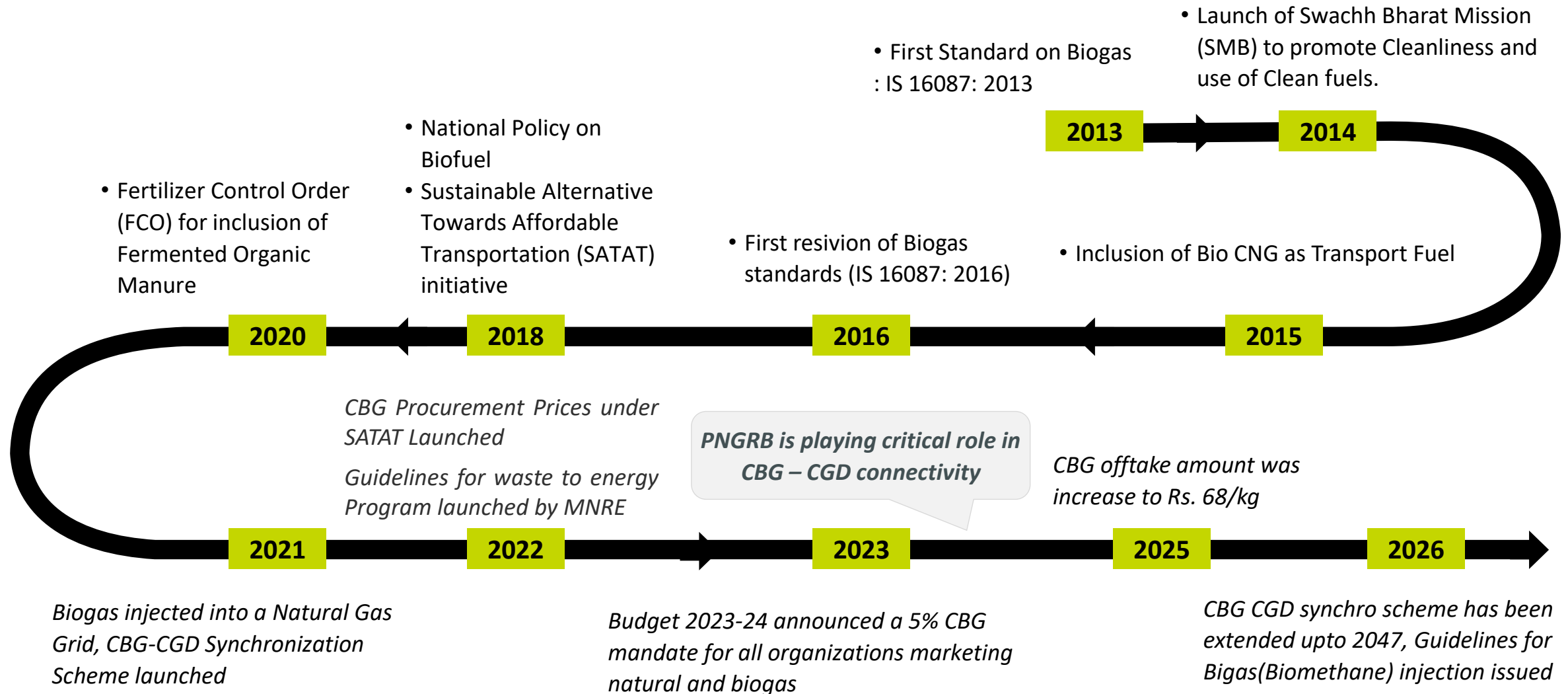
Feedstock Linkage	Establish state-led feedstock aggregation systems through designated nodal agencies, with coordination from NOCs to ensure reliable biomass supply chains for CBG plants
Access Infrastructure	Develop last-mile connectivity for remote CBG plants, with state governments enabling pipeline and utility support in collaboration with NOCs
Assured Offtake	Create demand guarantees via mandates (CBG blending, rural stations), backed by NOCs and CGD entities, with state-level enforcement to ensure steady revenue for developers
Circular Economy Push	Promote bio-manure markets and organic farming linkages, led by state level agriculture departments, integrating CBG plants with fertilizer ecosystems and farmer networks.



Thank You

Roadmap on Evolution of CBG market In India

An overview of the key events in the Indian CBG market. The CBG segment in India has received significant policy impetus.



Demand Outlook for CBG

India's CBG capacity is projected to reach ~8–12 MMTPA by 2030, unlocking massive investment potential

1

India's gas market is expected to remain supply short due to limited domestic gas field discoveries. CBG will play an important role to reduce dependence on imported LNG

2

CBG production is expected to grow 7x+ by 2030, with total bioenergy demand rising ~53%, indicating strong parallel demand absorption capacity²

3

India's CBG potential is ~87 bcm/year, while current capacity is <1%, indicating huge headroom for demand creation as supply scales³

4

Government interventions like CBG blending mandates, MDA for by-products, and SATAT are actively creating assured demand markets⁴

5

Under current policy support, biogas and CBG supply is set to grow ~53% by 2030, with CBG output expanding over sevenfold²

Regulatory and Policy Overview | State level policies

Biofuel segment has received significant impetus from state govt. after policy push from central government



Gujarat



Uttar Pradesh



Bihar

Nodal Agency	Gujarat Waste to Energy policy 2022	UP New and Renewable Energy Development Agency 2022	Department of Industries, Govt. of Bihar 2023
Policy Incentives	- Provides land at a nominal lease rent of ₹1 per annum near landfill sites, free supply of MSW at project locations - Policy effective for five years until 2027, the policy supports projects with a 25-year lifespan for power purchase - Urban local bodies cover 20% of the approved tariff for waste-to-energy projects, while GUVNL funds the remaining 80%, with tariffs determined through competitive bidding.	- Incentive Subsidy of INR 75 lakh per tonne up to a maximum of INR 20 crore on CBG production. - Stamp duty will be reimbursed completely while there will also be a complete waiver of power dues for 10 years - Grant of land related permissions for biodiesel plant such as exemption from land ceiling etc. will be processed - Government land on lease rent of INR 1 per acre p.a. available for setting up bio-energy - industry and storage of feedstocks.	- Promotes greenfield CBG and bioethanol plants - The quantum of capital subsidy under this policy shall be 15% of the cost of the plant and machinery or Rs. 5 Cr, whichever is less - Standalone distilleries producing 100% fuel-grade Ethanol and CBG/bio- CNG manufacturing units are eligible for incentives under this policy - Benefits under industrial policy extended - Interest subvention subsidy on term loans - Exemption from stamp duty, registration fees, land conversion charges

Source: State Biofuel policy, News Articles, Deloitte Analysis