CGD SECTOR CHALLENGES AND STRATEGIC ACTION PLANS FOR SUSTAINABLE GROWTH

1. About ACE

The Association of CGD Entities (ACE), incorporated on December 30, 2020, under Section 8 of the Companies Act, 2013, is a not-for-profit organization dedicated to championing the growth and development of the City Gas Distribution (CGD) sector in India. Headquartered in Delhi, ACE unites forward-thinking entities committed to transforming India's energy landscape through natural gas centric sustainable and innovative solutions.

Our core members include leading players such as Adani Total Gas Ltd., Gujarat Gas Ltd., Megha Gas, THINK Gas (including AG&P which is part of THINK Gas now), and Torrent Gas Ltd. Associate members include Haryana City Gas, IRM Energy Ltd., and Unison Enviro Pvt. Ltd. (now part of Mahanagar Gas Ltd.).

ACE aspires to establish itself as a global leader in clean energy advocacy, ensuring natural gas remains pivotal in achieving a sustainable energy future while paving the way for the integration of Bio-gas, green hydrogen and other innovative solutions.

2. Introduction

India is the world's third-largest energy consumer, with energy use doubling since 2000, and over 80%[1] of demand met by oil, coal, and biomass. Natural gas accounts for around 6% of India's energy mix, with a target to raise it to 15% by 2030[2] as part of the transition to a gas-based economy.

CGD sector account for nearly 20%[3] in overall natural gas sectoral consumption. CGD serves as a vital link in the natural gas value chain, playing a key role in delivering gas directly to end users.

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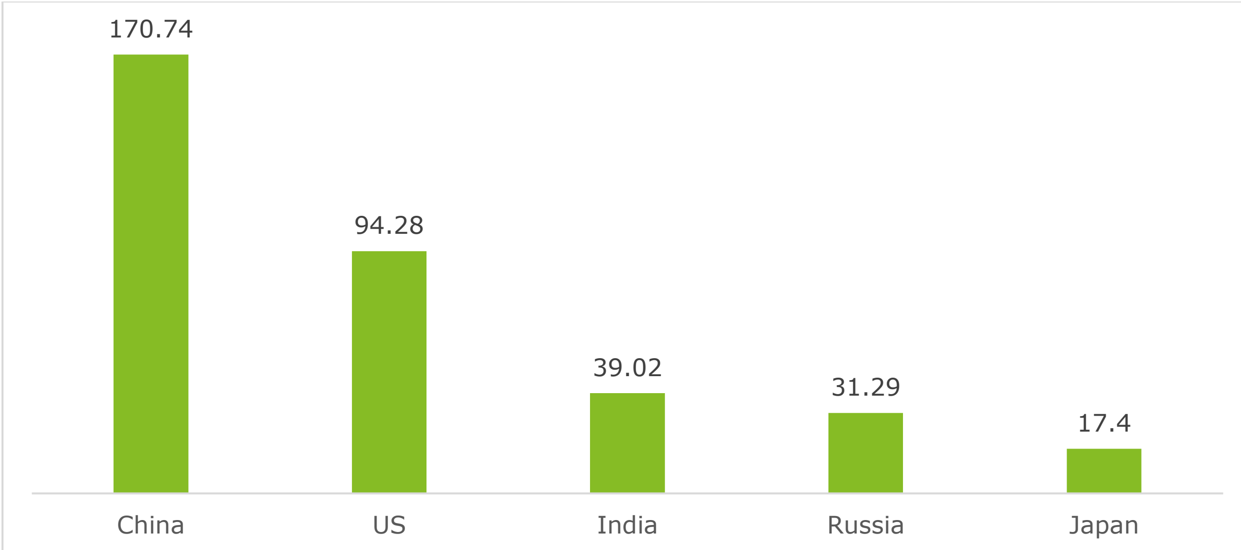
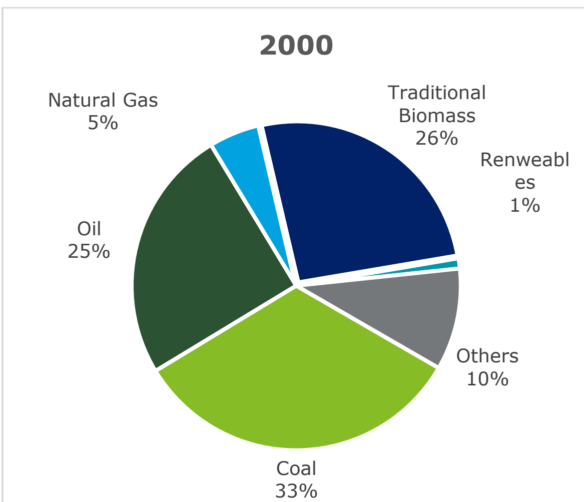
1 World Energy Institute
2 https://pib.gov.in/newsite/PrintRelease.aspx?relid=193117
3 PPAC

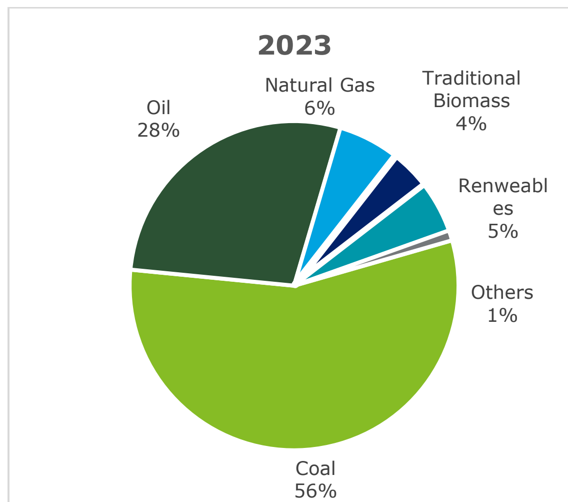
Top 5 Energy Consumer Countries in World: 2023 (Exajoules)



Source: Statistical Review of World Energy 2024 by World Energy Institute

India Energy Consumption 2000 vs 2023

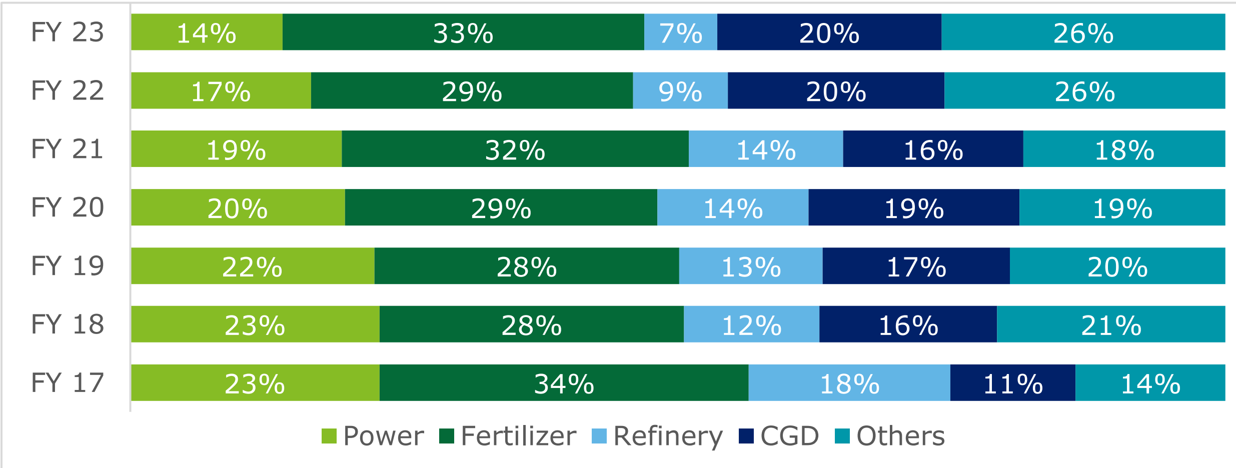




Energy Consumption - 18.46 Exajoules **39.02 Exajoules**

Source: Total primary energy demand in India by IEA

Sector wise Natural Gas consumption (mmscmd)



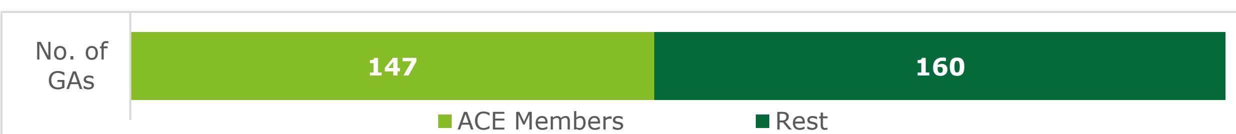
Source: Indian Petroleum and Natural Gas Statistics - 2022-23 by data.gov.in

- ## Current Status of CGD (as of February 2025):

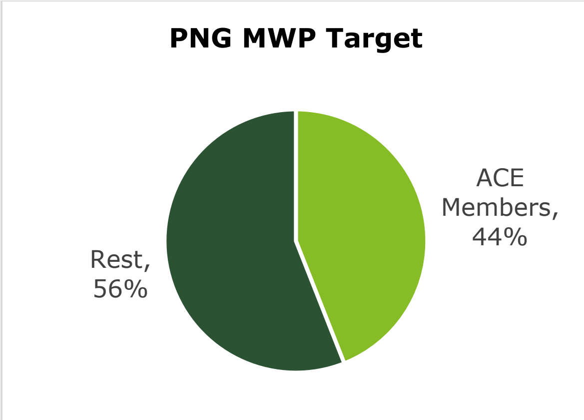
PNGRB has authorized 307 Geographical Areas (GAs) across the country, achieving 100% coverage (except Andaman - Nicobar and Lakshadweep) in terms of CGD authorization.[1] Out of these, 287 GAs are operational, either through pipeline supply or alternate delivery methods. Additionally, 195 GAs have been connected to the national gas transmission pipeline network, supporting the growing shift towards cleaner energy solutions.

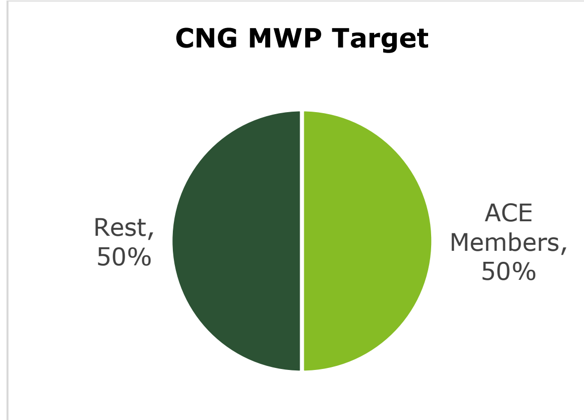
PNGRB has set a Minimum Work Programme (MWP) target of 12.63 crore domestic PNG connections and 18,300 CNG stations to be achieved by FY 2030–31[4]. As of February 2025, India has over 1.42+ crore domestic connections under the CGD network, along with 44,471 industrial and 19,811 commercial connections[4]. A total of 7,541 CNG stations have been established across various operational GAs.

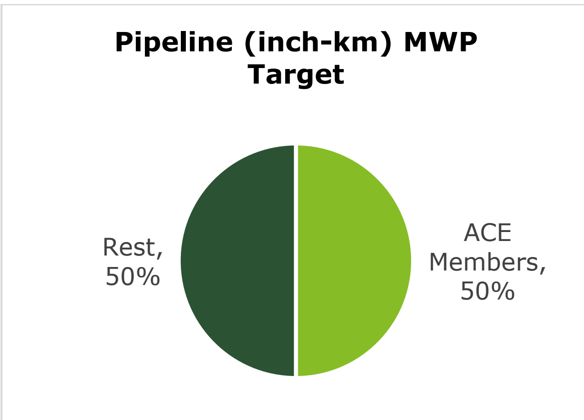
Snapshot of ACE Members



[4] PNGRB Databank







ACE members and its JVs have total 147 GAs out of total 307 GAs. The MWP target achieved by ACE members up to January 2025 is as under:

Description	PNG	CNG	Inch-Km
Industry	11%	41%	50%
ACE Members	**7%**	**31%**	**40%**

3. Challenges in CGD sector

CGD sector holds significant potential for growth, driven by the increasing adoption of compressed natural gas (CNG) vehicles and piped natural gas (PNG) connections. However, The City Gas Distribution (CGD) sector in India faces several challenges despite its critical role in the country's transition to a gas-based economy. There are certain challenges that need to be addressed to accelerate natural gas's share in India's energy mix.

Key challenges pertaining to CGD sector are:

A. Policy and Regulatory:

i. **Reduction in APM allocation** - The reduction in domestic gas (APM) allocation for CNG(T) poses challenges for CGD companies, leading to higher input costs and potential price hikes for consumers, which adversely impact affordability.

ii. **Tax inefficiencies**

- Natural gas remains **outside the ambit of GST**, leading to cascading taxes and making it less competitive compared to other fuels covered under GST.
- GST rates on CNG/LNG vehicles and related components at par with EV.

Interim Measures (until gas is brought under GST framework):

  - High Tax (VAT) Rates on Natural gas across the states: The High VAT rates in many states become deterrent and adversely impact the affordability of consumers
    a. Despite proven credential of natural gas CNG as low-cost surface mobility fuel option, the owning cost of operation and ownership of CNG vehicles is significantly higher than the competing low emission options of EVs.
    b. Clear cut need for abated emissions to be sole criteria for determining the level of incentive/support between options like EVs and CNG vehicle
  - Lack of Clear Policy on Tax Benefits: The tax structure does not accommodate the operational realities of CGD entities, leading to unnecessary financial burdens.
- Government of India/State Governments/Concerned Tax Authority may be persuaded with the support from all stakeholders for
  - Reducing VAT rates on Natural Gas/LNG
  - Supply of domestic gas for PNG(D) and CNG(T) on CST basis
  - Elimination of Excise Duty on CNG
  - Elimination of Customs Duty on import of LNG

  till the time Natural Gas is included under the GST framework.

iii. **Lack of mandatory fuel switching policies**
  - Comprehensive and mandatory fuel switching policy across all states and sectors is lacking. Such policies could significantly enhance the adoption of cleaner fuels and support the CGD sector's growth.
  - By diversifying the energy mix and reducing dependence on imported fuels, these policies can enhance energy security.

B. Infrastructure:

i. **ROU and ROW issues** delay the infrastructure rollout - Infrastructure rollout faces significant delays due to procedural bottlenecks and land acquisition hurdles related to ROU and ROW approvals.

ii. **Transmission connectivity** - Inadequate pipeline infrastructure restricts access to gas in several GAs, underscoring the urgent need for expanded transmission networks.
  - Interconnectivity of following pipelines to complete the grid and de-bottlenecking through enhanced compression capacity at strategic points/locations should be expedited
    - IOCL’s ETBPL (Ennore-Tuticorin-Bengaluru R-LNG Pipeline) with GAIL’s KKMBPL (Kochi-Koottanad-Bangalore-Mangalore Gas Pipeline) at Bangalore

    - GAIL's BGPL (Barauni Guwahati Pipeline) with IGGL (Indradhanush Gas Grid Gas Pipeline) at Guwahati
  - Installation of enhanced compression facilities at strategic locations in time-bound manner to facilitate flow of higher volume of gas.

C. Operational:

i. **Marketing margin on NWG** - Marketing Margin levied by GAIL on NWG should be brought in parity with the margin applicable to APM gas supplied to PNG(D) and CNG(T) segments.
ii. **Ship or Pay** - Require a shipper to either use the transportation service to which a contract relates or pay for it anyway.
iii. **Imbalances** – rate and daily imbalance charge
iv. **Conversion cost of CNG** - The substantial upfront cost associated with vehicle conversion to CNG remains a key barrier to consumer adoption.

4. Action Points

A. APM allocation for CNG(T) and Entity-wise allocation

- Persuasion for Increase in APM allocation for CNG(T)
- Advocacy for reforms that ensure a more stable and predictable supply of domestic gas based on Entity-wise allocation
- Pushing for supportive measures that promote the use of cleaner fuels and support the CGD sector's growth
  - Rationalisation of Marketing Margin on NWG
  - Diverting APM from non-priority sectors to PNG(D)/CNG(T)

B. Tax Inefficiency

- Continued advocacy for uniform GST on CNG/PNG to boost natural gas adoption.
- Facilitate stakeholder dialogue to include natural gas within the GST regime and GST on CNG vehicles & components should be at par with Electric vehicles.
- Collaborating with various stakeholders for persuading State Governments for uniform VAT rates on natural gas/LNG across different states,
- Building up a strong case with genesis & evolution of Excise Duty on compression of gas for vigorous persuasion to eliminate Excise Duty on CNG
- Continued efforts for CST Invoicing and removal of Customs Duty on import of LNG

C. Introduce Mandatory Fuel-Switching Policies

- Absence of CGD-specific policies in some states – CGD policies are available for few states like Madhya Pradesh, Gujarat, Maharashtra, Delhi, Uttar Pradesh, Haryana) only. All states/UT should roll out CGD policy aligning it with utility services.

- Need for requirement for all new housing societies or complexes to have complete PNG infrastructure internally available to ensure seamless connectivity to end consumers.
- To roll out "Prajwala scheme for PNG(D)" on the lines of "Ujwala scheme for LPG" equivalent of upfront cost of PNG connection for realization of PNG connection targets and also to provide level plating field to PNG vis-a-vis LPG
- Implement region-specific mandates (e.g., in pollution hotspots) for Industrial, commercial, and municipal fleets to switch to CNG/PNG.
    - State PCB should roll out policies for same

D. Streamline ROW/ROU approval Process

- Single Window Clearance at State and central level for efficient pipeline infrastructure development.
- Develop model guidelines for uniform and time-bound ROW/ROU approvals across jurisdictions.

E. Accelerate Pipeline Infrastructure Expansion

- Planned utility corridors while urban development is essential for efficient and timely laying of pipelines.
- Promote PPP and VGF for remote or underserved regions & difficult terrain.
- Limited pipeline connectivity in new GAs – Only 195 out of 307 Geographical Areas (GAs) are currently connected (source PNGRB) via natural gas pipelines.
- Ensure expeditious pipeline connectivity for newly authorized GAs to enable sustainable development of CGD networks.
- PNGRB to direct concern pipeline operators for expeditious inter connectivity and augmentation of compression facilities to overcome infrastructural challenges.

F. Marketing margin on NWG

- Engaging with policymakers (GAIL) to secure incentives and subsidies for NWG can reduce costs and improve margins.
- Advocating for supportive regulatory frameworks that facilitate easier access to NWG and reduce bureaucratic hurdle

G. Imbalances and Ship or Pay

- Continued Advocacy for supportive regulatory frameworks for reduction in imbalance charges, increasing the limits for positive & negative imbalances and fortnightly/monthly calculation instead of daily.
- Ship or Pay Term for CGD Entities needs to be reviewed for incorporating flexibility in view of unpredictable fluctuations in sales/consumption of gas.

H. Incentivize CNG Conversion

- Offer targeted incentives, loans at friendly interest rate for vehicle owners to offset CNG conversion costs.

- Collaborate with automobile OEMs for factory fitted CNG variants at competitive prices & with less waiting period.
- Increase APM allocation for CNG(T) under no cut category (RLNG price volatility affects reliability as a primary fuel).

5. Conclusion

CGD sector holds immense promise as a cornerstone of India's clean energy transition. With the government's ambitious vision to increase the share of natural gas in the energy mix from 6% to 15% by 2030, CGD networks are poised to play a pivotal role in enabling cleaner, affordable, and more sustainable energy access across the country. However, unlocking the full potential of this sector demands cohesive and urgent action across multiple fronts—policy alignment, regulatory reforms, infrastructure enhancement, and stakeholder collaboration.

ACE, as the collective voice of CGD entities, remains steadfast in its commitment to advocate for a conducive policy and regulatory environment. By addressing key challenges—from tax inefficiencies and transmission bottlenecks to operational constraints and conversion cost barriers—ACE aims to facilitate an accelerated and inclusive growth trajectory for the CGD sector. Going forward, strategic interventions such as uniform GST treatment for natural gas, streamlined ROW/ROU processes, dedicated support for CNG conversion, and a national CGD policy framework will be crucial.

As India navigates its energy transition journey, the role of natural gas as a reliable bridge fuel becomes more vital than ever. With ACE leading advocacy and coordination efforts, and with the collective will of all stakeholders, the CGD sector can deliver on its promise of fueling India’s cleaner, greener tomorrow.