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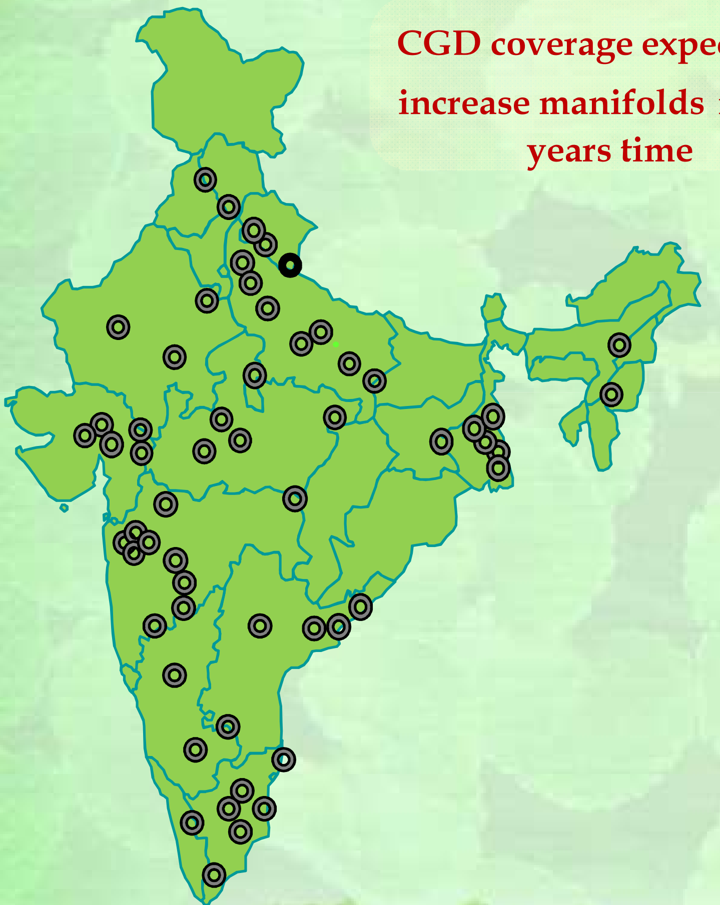
Challenges in implementing CGD Network

By: Rajesh Vedvyas
Managing Director
Indraprastha Gas Limited
New Delhi

Agenda

- *Inherent challenges in a CGD Business*
- *Challenges for implementing CGD in smaller cities*
- *Issues with PNGRB Regulations*
- *Way forward*

CGD Expansion Plans



CGD coverage expected to increase manifolds in two years time

- Regulator has highly ambitious plans in downstream sector, *particularly* awarding 200 CGD Projects in two years time
- However, there appears to be a mismatch between Government thinking with PNGRB plans
- For putting the plans into successful implementation, the Regulator and Government need to play complimentary roles

Appalling state of existing CGD Projects

- **While it is planned to roll out CGD in new cities, it is essential to consider the performance of ongoing CGD projects**
- **It is observed that barring few exceptions like Delhi, Mumbai etc., CGD Projects in major cities are limping/struggling and far from meeting targets set out,** *even after 4-5 years of their roll out*. **On analyzing these projects we find that:**
  - *CNG Programme is unable to take off*
  - *Domestic PNG Programme in most of the cities has not even begun*
  - *Even the Commercial & Industrial segment is in nascent stage*

Success of CNG Programme in Delhi and Mumbai

The reasons are not far to seek for successful implementation of CNG programme in the cities of Delhi and Mumbai:

- *Regulations mandating CNG usage in Public transport*
- *Huge price difference between CNG and Petrol/Diesel*

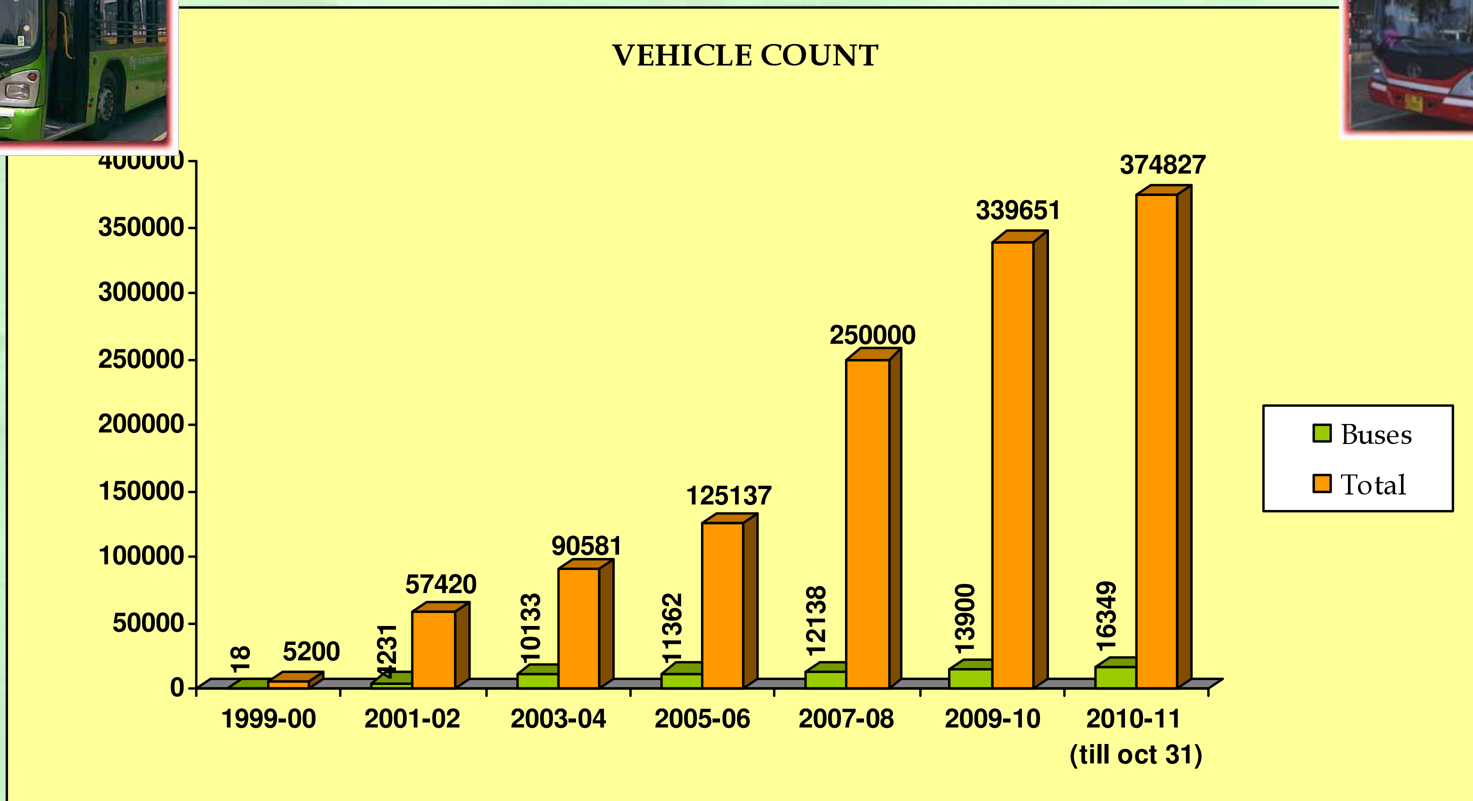
These two factors are very essential for the success of CNG programme in any cities

Court and government mandates helped in implementation of CNG usage for public transport

Nov 18, 1996	Supreme Court of India	Notice issued to Delhi government - Submit action plan to control air pollution
Dec 1996	Delhi Government	Presents its first ever action plan to the Court - Combat air pollution in Delhi
Nov 04, 1997	Environment Ministry	Announces plans to issue a white paper on pollution by December 2,1997
Jan 07, 1998	Supreme Court of India	Directs setting up of EPCA, to monitor implementation of Court orders
Jul 28, 1998	Supreme Court of India	Orders all buses to run on CNG and ensures financial incentives for CNG in taxis, three-wheelers etc

Leading to development of one of the largest CNG fleets globally

No. of CNG vehicles in Delhi



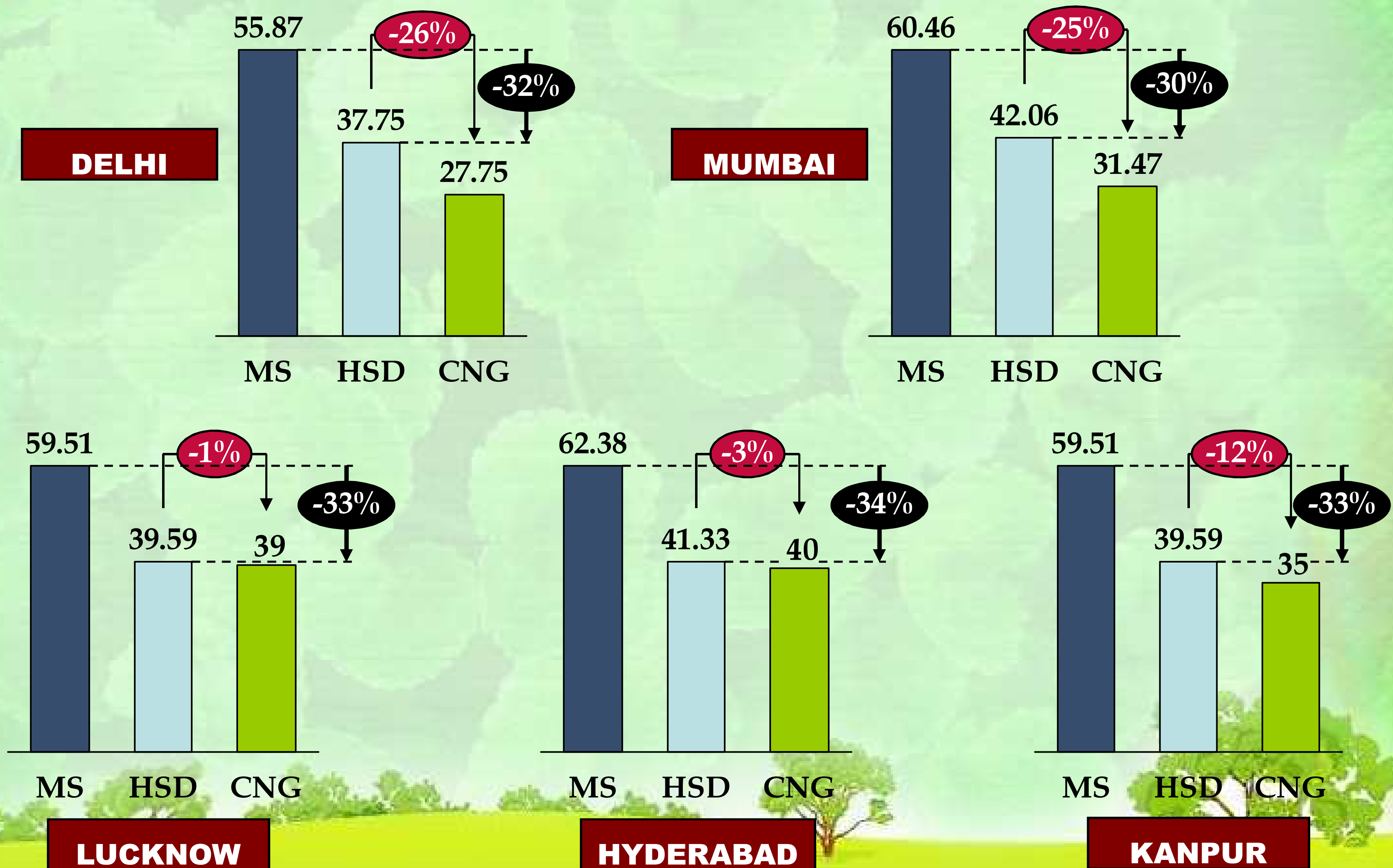
Delhi Transport Corporation operates the largest single fleet of CNG buses in the world

Challenges for CNG Programme in other cities

- **No Regulation for mandating CNG usage in Public transport-** *Even in cities where such regulation is in place, its **execution is disappointing***
- **There is a marginal/negligible difference in CNG price vis-à-vis Petrol/Diesel price**
- **The public transport fleet is not as big as Delhi/Mumbai and cannot ensure anchor volume which can make business sustainable**
- **Due to low avg. run of vehicle, small price differential with liquid fuels and high conversion cost even private vehicles are not motivated to switch over to CNG**

The scenario calls for some drastic measures -*discontinuation of private diesel vehicles completely may be one of the option*

Challenges for CNG Programme in other cities – comparative fuel prices (in Rs.)



Conviction for CNG – as cleanest fuel *(1 of 2)*

- **To reinforce any mandate for CNG usage, it is essential to be convinced that CNG is better and more environment friendly than Euro 4 Petrol and Diesel fuels**

- **The Government needs to get the study conducted from agencies like SIAM,CSE etc., to settle the debate whether there is any case for CNG vis-à-vis Euro 4 fuels**

Conviction for CNG – as cleanest fuel *(2 of 2)*

– **In case CNG emerges out as the preferred fuel, it will facilitate Government in:**

- *Bringing out **regulations/mandate** for CNG usage*
- *Making provision for **cheaper gas allocation** to CGD projects*

Regulations and Gas availability will be key for CGD projects to take off, otherwise there is no hope for CGD making any dent

Viability of PNG business (1 of 2)

- **Going by Delhi's experience**
    - *Last Mile Connectivity (LMC) charge per household is Rs.7000/- approx.*
    - *Additionally, Rs.5000-6000 is the cost of MDPE laying per household*
    - *Exorbitant Road Restoration(RR) charges being paid to different agencies*

  The high cost makes providing PNG connection to households an unviable proposition

- **In Delhi, huge scale of CNG operations acted as a savior to share the burden of extra cost for subsidizing PNG to households**

In smaller cities , however, it does not seem likely

Viability of PNG business (2 of 2)

- **Other challenges with PNG supply to households are :**
  - ➢ *to combat with LPG , which is highly subsidized by the Government -**so PNG price has to be artificially kept low***
  - ➢ *PNG may be successful in some pockets but not in the complete city*

Government and CGD companies need to brainstorm together to see how domestic PNG can be made successful *– if there is any case for PNG to be promoted over LPG….*

PNG Connection -*Average Cost / household*

Cost Details	Avg. cost per connection (in Rs.)
MDPE Laying	5000 - 6000
Road Restoration	3000 – 5000
Last Mile Connectivity (LMC)	6500 – 7500
Total Cost	**14500- 18500**

Cost of connection per household is ~ **3 times of the Refundable Security Deposit (Rs 5000/-)** taken from the customer

Commercial & Industrial segment - to provide Anchor Load

– To ensure viability of a CGD project in most of the cities, leaving aside big cities, not less than 70% of the anchor load should come from Commercial & Industrial (C&I) segment

– In these medium-small cities, cost of infrastructure creation and development for CNG and PNG need to be largely shouldered by the Industrial demand

Issues with PNGRB Regulations

- **PNGRB in its own wisdom is keen to come out with Access Code-** *draft access code has already been issued*
- **There are issues with the draft Access code-** *it apparently appears to be* ***loaded against the incumbent company***
  - *Incumbent company is* ***not getting sufficient time*** *to roll out business and bring it to the stage of self sustainability*
  - *There are* ***no checks/balances to prevent the Shipper*** *(post exclusivity) from cherry picking lucrative Commercial & Industrial segment customers– it may jeopardize the viability of incumbent company's CNG and PNG business*

Measures to address the Issues

- **Exclusivity period to be of sufficient length-** *to provide incumbent company ample time to make returns on its Infrastructure expenditure* **and then** *freely face the competition*
- **It takes a long time for C&I customers to switch over to NG and also to sufficiently lay the pipeline in the city.** In order to sufficiently realize returns on investment, it may take:
  - ***10 years*** *in smaller cities*
  - ***10-15*** *years in medium cities, and*
  - ***20-25*** *years in bigger cities*

Therefore exclusivity period should be decided in this order and not to be fixed at 3-5 years, as presently provided in the Regulations

Availability of Gas

- PNGRB's CGD development plans need to be in synchronization with the **Government's overall energy plan for the country**

- There is no point in planning CGD implementation in bigger cities if Government is not in the position of providing allocation of **low price gas for domestic PNG and CNG**

- Even for SME industries, cheaper priced gas is required- *mix of domestic and RLNG gas*

Coordinated efforts – Government, PNGRB & CGD Companies

- **Issues of existing CGD companies needs to be taken up by the Regulator with concerned government agencies, like:**
  - *Exorbitant Road Restoration(RR) charges[1] are being levied by different agencies*
  - *No preference is given in allotment of land for CNG stations*
  - *Govt. agencies and CCOE take 10-15 months to issue licenses*
- **Regulator has only the power for authorization-** *Government to make plans to take forward downstream business, including spreading CGD business*
- **Regulator plans cannot succeed unless there is a Government mandate for CNG usage**

Government also need to closely engage the existing CGD companies - *take their learnings to refine Regulations and put them on the path of sustainability*

(1) *Explained separately*

Coordinated efforts -RR Charges (Issues)

- **RR charges are demanded in the tune of Rs 1500-2000 per meter approx, which is very high considering domestic gas consumption**
- **Different agencies have different policies for considering width for restoration charges –** *even for the excavation of 0.75 mtr, average RR charges are to be paid for a minimum 2 mtr width*
- **Security deposit being taken in different forms by different agencies**-*cash, bank guarantee, etc.*

It is suggested that a utility duct may be planned by statutory authorities with consideration of present and future demand of utility agencies – *it will reduce financial outflow and facilitate easy maintenance work*

Way forward - *CGD Business in India*

- **A determined and synchronized efforts of all the stakeholders -** *to ensure the success of rolling out* ***an ambitious plan for CGD*** *Network in the country*
- **Superficial or half hearted approach may result in falling flat**

Looking forward to a better CGD scenario

INDRAPRASTHA GAS LIMITED