



पेट्रोलियम एवं प्राकृतिक गैस विनियामक बोर्ड
Petroleum and Natural Gas Regulatory Board

प्रथम तल, वर्ल्ड ट्रेड सेंटर, बाबर रोड, नई दिल्ली – 110001

1st Floor, World Trade Centre, Babar Road, New Delhi – 110 001

फोन नं./Phone No. 011-23457700, ई-मेल /E-mail: contact@pngrb.gov.in

PNGRB/Tech/18-WSI/(4)/2024-Part(1) (E-5293)

28th August, 2024

To,

Shri Anupam Mukhopadhyay

Chief Executive Officer

Bengal Gas Company Limited

1st Floor, Block-A, Finance Centre, CBD,

Action Area-II B, New Town, Kolkata-700 161

Subject: Key takeaways of the Round Table discussion held on 27th June 2024 regarding "Adopting High-Efficiency Domestic PNG Stoves".

Sir,

We are writing to share the key takeaways from the roundtable discussion organized by the Petroleum and Natural Gas Regulatory Board (PNGRB) on 27th June 2024, titled "**Adopting High-Efficiency Domestic PNG Stoves**" which saw active participation from CGD entities engaged in the PNG business of supplying gas to consumers, authorities responsible for setting standards for domestic stoves, and research organizations focused on promoting energy-efficient appliances.

2. During the half day event, presentations from esteemed institutions such as CSIR-IIP, LERC, BPCL, BIS, BEE and PNG stove manufacturers provided a comprehensive analysis of the current practice of retrofitting of LPG stoves vis a vis BIS:17153 certified PNG stove. Following key takeaways & the drawbacks associated with the retrofitting of LPG stoves for use with Piped Natural Gas (PNG) emerged during this knowledge packed deliberations:

- i. **Safety Concerns:** Presentations from CSIR-IIP, LERC, BPCL, and BIS highlighted significant safety risks associated with the retrofitting of LPG stoves for PNG use. Issues such as "Flame Lift," Flame Failure, and potential gas leaks were identified as critical concerns due to the different burning velocities and modifications in the standard design.
- ii. **Efficiency and Environmental Impact:** It was noted that the thermal efficiency of LPG stoves, typically designed for 68%, significantly drops to around 45-50% when retrofitted for PNG. This inefficiency not only leads to higher gas consumption but also contributes to increased greenhouse gas (GHG) emissions. The adoption of dedicated high-efficiency PNG stoves could result in substantial savings on gas bills and a reduction in GHG emissions.
- iii. **Invalid BIS Certification:** The Bureau of Indian Standards (BIS) has clarified that any modification of LPG stoves invalidates their BIS approval. Also, Bureau of Indian Standards (BIS) in its letter to PNGRB dtd. 26-June-2024 informed that Ministry of Commerce & Industry has brought IS: 17153: 2019 for PNG stoves under mandatory BIS certification & the order has come into effect from 09-Feb-2024 (BIS letter & order attached).

3. Accordingly, to encourage widespread adoption of PNG stoves for PNG fuel, your best efforts are sought to initiate/implement various mode of campaigns and schemes in your respective Geographical Areas (GAs) as suggested below:

- a. Awareness Campaigns: Conduct mass media campaigns to educate consumers about the safety, efficiency, and environmental benefits of using BIS-certified PNG stoves.
- b. Buy-Back Programs: Launch attractive buy-back schemes for old LPG stoves to incentivize consumers to switch to dedicated PNG stoves.
- c. Subsidized Installments: Offer easy installment payment plans for purchasing high-efficiency PNG stoves, making them more accessible to consumers.
- d. Collaborative Initiatives: Partner with stove manufacturers and research institutions to support the development and availability of high-quality PNG stoves.
- e. Customer Support and Engagement: Provide comprehensive support and guidance to consumers during the transition to ensure a smooth and safe switch to PNG stoves.

4. These initiatives align with our national goal of increasing the share of natural gas in the energy mix to 15% by 2030 and is crucial for building a cleaner, safer, and more sustainable energy future. We believe that your esteemed organization shall play a vital role in promoting the adoption of high-efficiency dedicated PNG stoves as per IS17153:2019.

We look forward to your cooperation and commitment to this key initiative.

Yours faithfully


(Vandana Sharma)
Secretary

Encl:- As above.