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Regulatory Frame Work In Petroleum & Natural Gas Sector in India - Challenges & Opportunities



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Energy Consumption in India

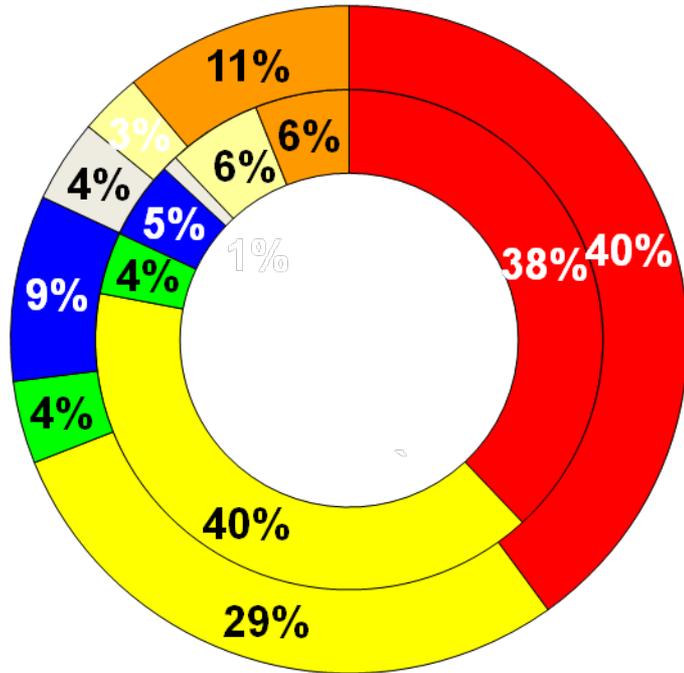
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- Energy consumption in India is about 520 Million Tons of Oil Equivalent (MTOE) against about 12,000 MTOE in the world and about 4,500 MTOE in the Asia Pacific.
- India is the 4th largest economy in the world. Oil & gas accounts for about 41% of India's primary energy consumption of which oil accounts for 30% and gas accounts for 11%.
- During the last decade, the average rate of growth of the primary energy consumption, which comprises coal, hydro, oil, gas, nuclear and renewable energy, in the world was about 2.4% against about 5.88% in India.

Natural Gas in India

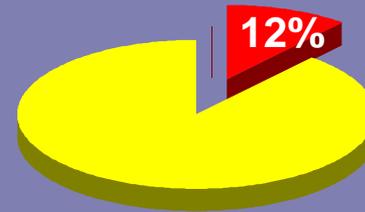
- The average growth rate of natural gas consumption during the last decade in the world was over 2.76%, while in India it was about 9%.
- Thus, the growth rate of primary energy consumption as well as natural gas consumption in India is higher compared to the World.
- Natural gas consumption at present in India is about 170 MMSCMD.
- As per the Integrated Energy Policy, the demand for natural gas in the country is expected to be about 600 MMSCMD by the year 2030.

Natural Gas Consumption pattern in India

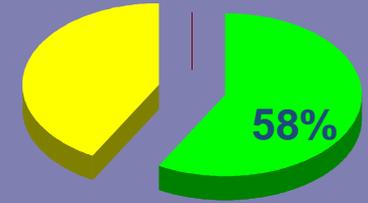


- Power
- LPG+Other Liquid HC
- City Gas / CNG
- Others
- Fertiliser
- Petrochem+Refineries
- Steel

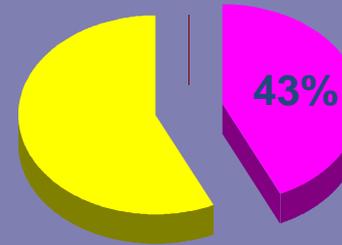
Power and Fertiliser – Anchor Markets
 Industrial & City Gas – Growing Markets



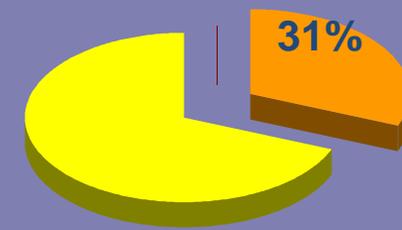
POWER



FERTILISER



PETROCHEMICALS



LPG

● Non gas based units

Significant potential for Gas in all end use segments

Need for Reform

Provision of level playing field

capital intensive activities requiring heavy investments

promoting competition

inviting foreign capital

attuning oil & gas sector in line with international practices

protection of consumer interest

PNGRB Act, 2006

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- Enacted by Parliament in March'06
- All provisions (except Section 16) of the Act notified w.e.f. 1.10.2007; Section 16 notified w.e.f. 15.7.2010
- PNGRB formally established w.e.f. 1.10.2007
- One Chairperson and four full time Members

Basic Objectives of PNGRB Act, 2006

- ✓ To protect the interest of consumers and entities
- ✓ To ensure uninterrupted and adequate supply in all parts of the country
- ✓ To provide level playing field
- ✓ To promote competitive markets

Salient Functions of PNGRB

Fostering fair trade & competition amongst entities

Register entities for-

marketing petroleum, petroleum products & natural gas

establishing & operating LNG terminals

establishing storage facilities

Authorize entities for-

Laying, building, operating or expanding a common carrier or contract carrier for transportation of natural gas or petroleum products

Laying, building, operating or expanding city or local natural gas distribution network

Salient Functions of PNGRB (contd.)

Declaring pipelines as common carrier or contract carrier & specify access code for allowing access to such pipelines

In respect of notified petroleum, petroleum products & natural gas -

Ensure adequate availability

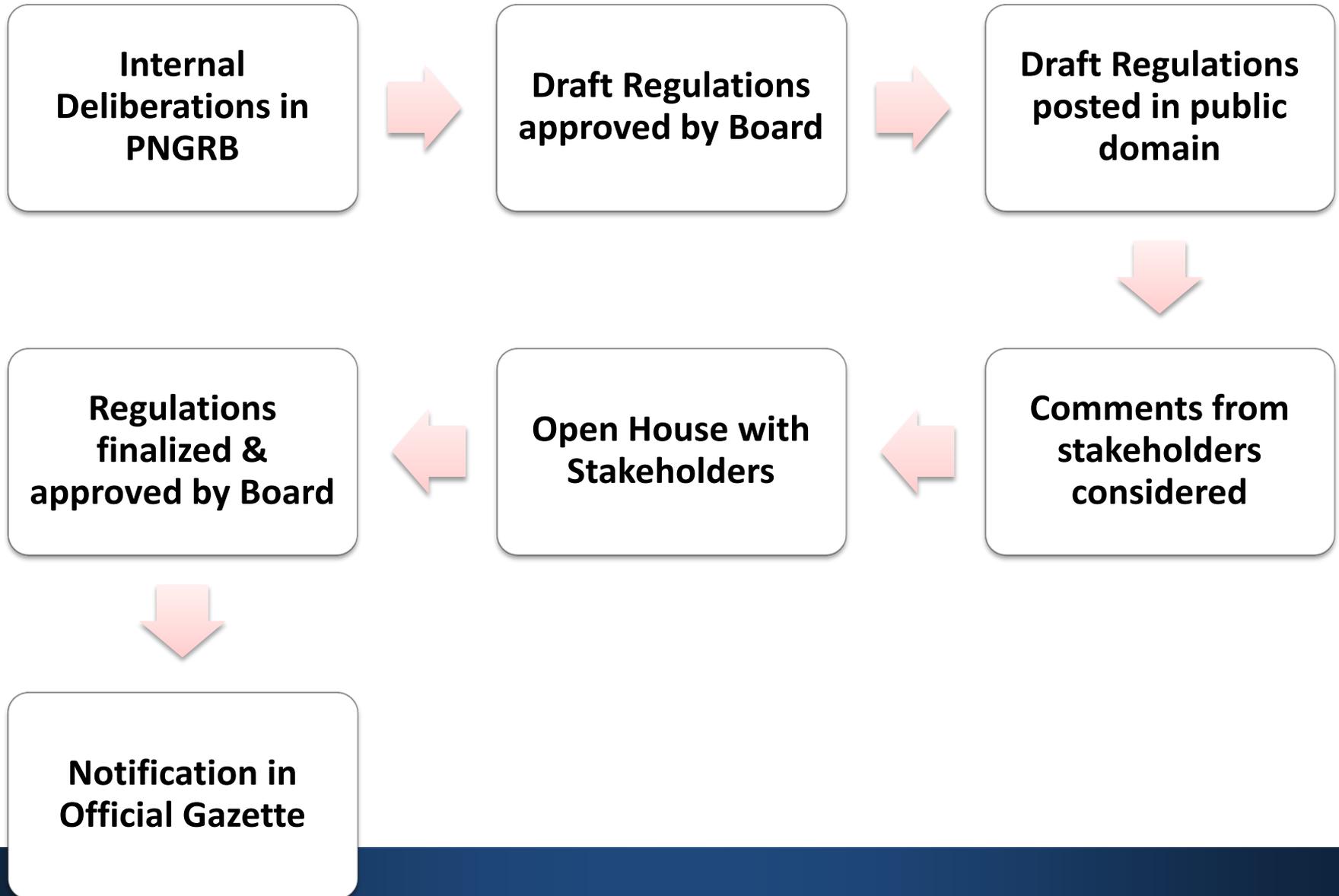
Monitor prices & take corrective measures to prevent restrictive trade practices

Enforce retail service obligations & marketing service obligations

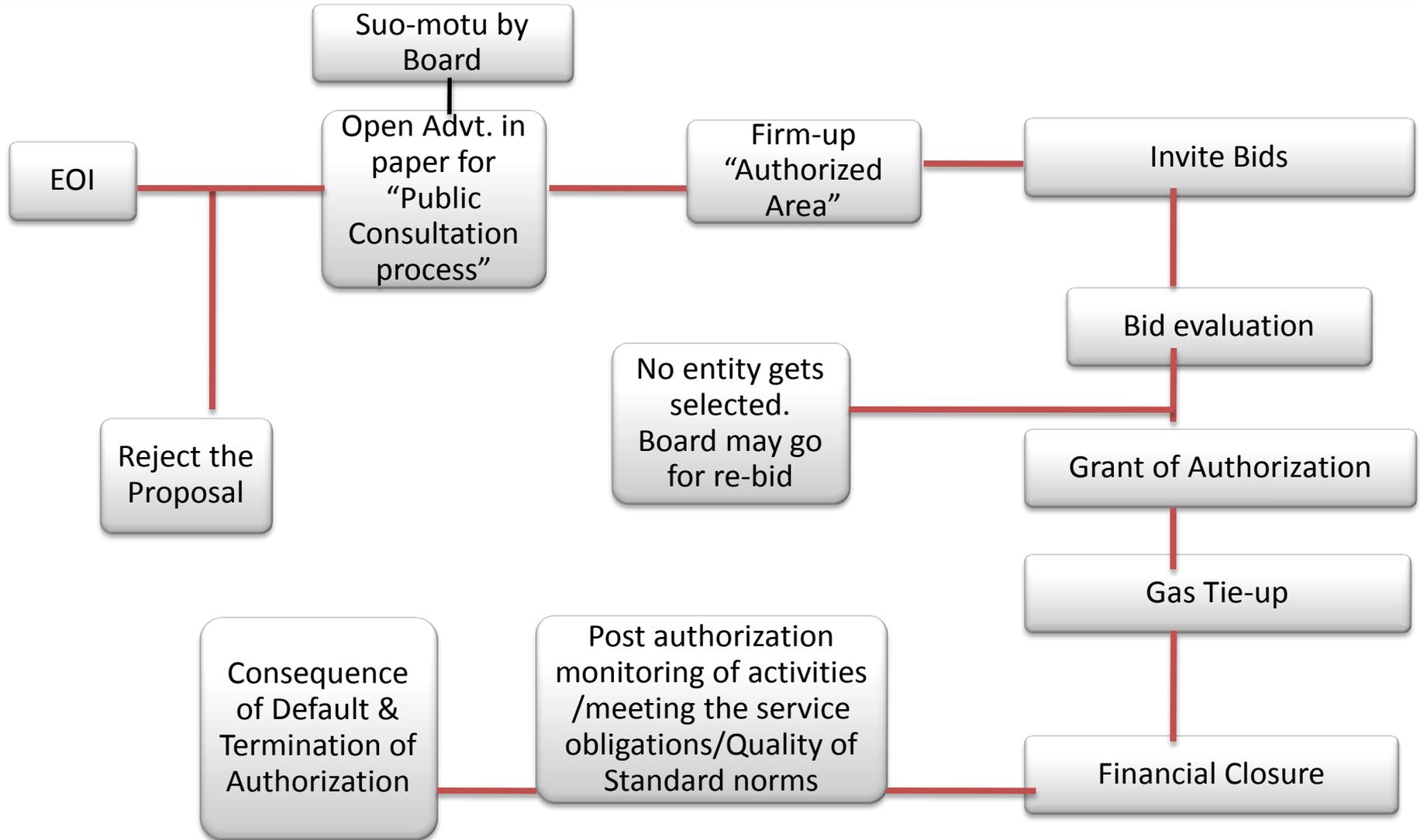
Lay down technical standards & specifications including safety standards in activities relating to petroleum, petroleum products & natural gas

PROCESS OF FRAMING & FINALISING REGULATIONS

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Process for Grant of Authorization



Development of CGD networks

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- More than 243 GAs identified suomotu basis, in addition to 73 EOs received
- GAs list webhosted for public consultation
- State-wise list of GAs, particularly their boundaries determined on the basis of consultation with concerned States
- Board fine tuning the bidding process, based on past experience

Development of LNG Terminals in India

- In order to meet huge deficit in indigenous availability of natural gas, in the immediate time frame, promotion of LNG terminals appears to be the most desirable objective to meet the unmet potential demand of natural gas in India 13
- At present, two LNG terminals are operating; two more are ready for commissioning
- Many more LNG terminals are at the planning stage
- PNGRB initiated the process of notifying Regulations to facilitate connectivity of LNG terminals with pipeline network

Whether open access to LNG terminals to be regulated or left to the operator?

धन्यवाद

Thank you