



25th world gas conference  
"Gas: Sustaining Future Global Growth"

# Challenges and Perspective for the Indian gas Market

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# India – A 2012 snapshot

- India consumed 63 bcm in 2011
  - 80% came from its domestic production
  - The rest was imported through LNG
- Gas represents currently a small share of total energy supplies
- India has the potential to be one of the world's fastest growing gas markets in the world over the next 20 years
  - The main gas users are fertiliser producers and power generators
  - The power generation sector is one of the key demand drivers, but there gas has to compete against coal
  - Small amounts of gas are used in the residential/commercial sector
  - Gas use in the transport sector is growing, even if it still represents a small share of total supplies
- Different prices exist for the different gas supply sources

# Four main issues

- Insufficient supplies
  - KG-D6 unexpected production decline
  - More reliance on LNG supplies over the medium term
  
- Gas pricing
  - LNG imports are expensive compared to domestic gas production
  
- Regulation and policy
  - Need stable regulatory framework
  
- Transmission infrastructure
  - The network is relatively underdeveloped, notably in the South and East of the country

- Indian gas demand has been and remains constrained by lack of supplies
- KG-D6 field was expected to double gas production between 2009 and 2012
  - But the field, which started in 2009, failed to meet expectations
- A dual move needs to be performed: increasing gas production and bringing additional imports
- Developing domestic gas resources is critical
  - India is still relatively underexplored
  - There are still some shortcomings regarding NELP such as the absence of most IOCs despite the presence of private companies

## Insufficient supplies (2)

- India is also likely to become more import dependent
- So far, only 2 operating LNG terminals with 2 more by end 2012
  - 34 bcm of import LNG capacity by 2013
  - Most of the current supplies come from Qatar (oil indexed)
  - New supplies will come from Australia (Gorgon)
  - Some MOUs with Russia
  - But firmly contracted supply is well below LNG terminals capacity
- Pipelines from Iran and Turkmenistan are currently being investigated

- India has a rather unusual dual gas pricing system
  - APM gas produced by state-owned companies and
  - Non-APM gas from private companies and joint ventures (JVs)
- Until mid-2010, prices differed widely from around \$2/MBtu for APM gas to almost \$6/MBtu for the most expensive non-APM gas
- Two major changes took place in May 2010
  - Increase of APM prices from \$1.8/MBtu to \$4.2 Mbtu: this is an important step forward in order to encourage further investments in the upstream sector
  - The government has the right to fix the price in the Production Sharing Contract (PSC)
- This compared to LNG acquired sometimes at international gas prices (\$15/MBtu in 2012)

## Gas pricing (2)

- India will have to be an attractive market for future LNG or pipeline suppliers
- LNG markets can be expected to be until end 2014, when the new wave of LNG supplies arrive from Australia and later from North America
  - Increasing competition from China as well as from historical LNG importers such as Japan and Korea
- Crucially, there is also no spot market in Asia
  - It could provide a viable alternative to oil indexation, on which most of the new Australian projects coming on line towards the middle of the decade are based

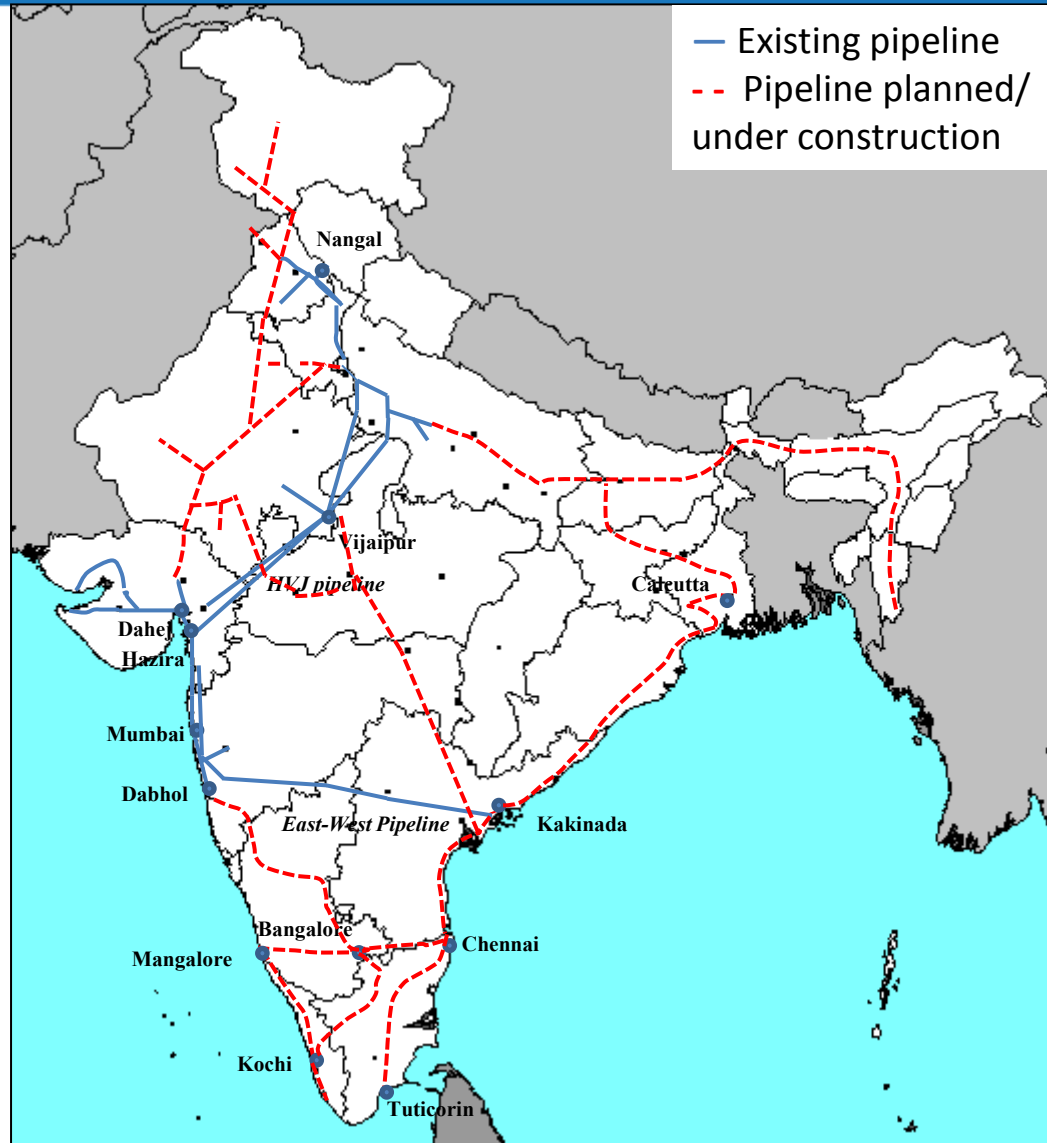
- Developing the downstream market implies to attract investments from both public and private companies to develop the transmission, distribution and retail business
- Need of a stable and transparent regulatory framework and an equal treatment compared to state-owned companies.
- The Petroleum and Natural Gas Regulatory Board (PNGRB) Act (2006) is a step in the right direction.
- A key question is now to what extent the Board's powers will be further enhanced, which implies to clearly define its role and powers in downstream markets – regulation of transmission, LNG, or city gas.



# Transmission and infrastructure

- Network developed mostly in the North-West
- This changed with the construction of the East-West pipeline linking KG-D6 to the markets in the North-West
- But many cities do not have access to gas supplies, due to the lack of transmission network,
  - Notably in the East and South
  - New LNG terminals provide an alternative
- Need for a regulatory framework giving the adequate incentives for the new infrastructure to be built

# Transmission and infrastructure



**THANK YOU FOR YOUR ATTENTION**