



## ***“Partnerships: The Way Forward for Asian LNG Producers and Consumers”***



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GAIL (India) Limited  
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**GAIL (India) Limited**

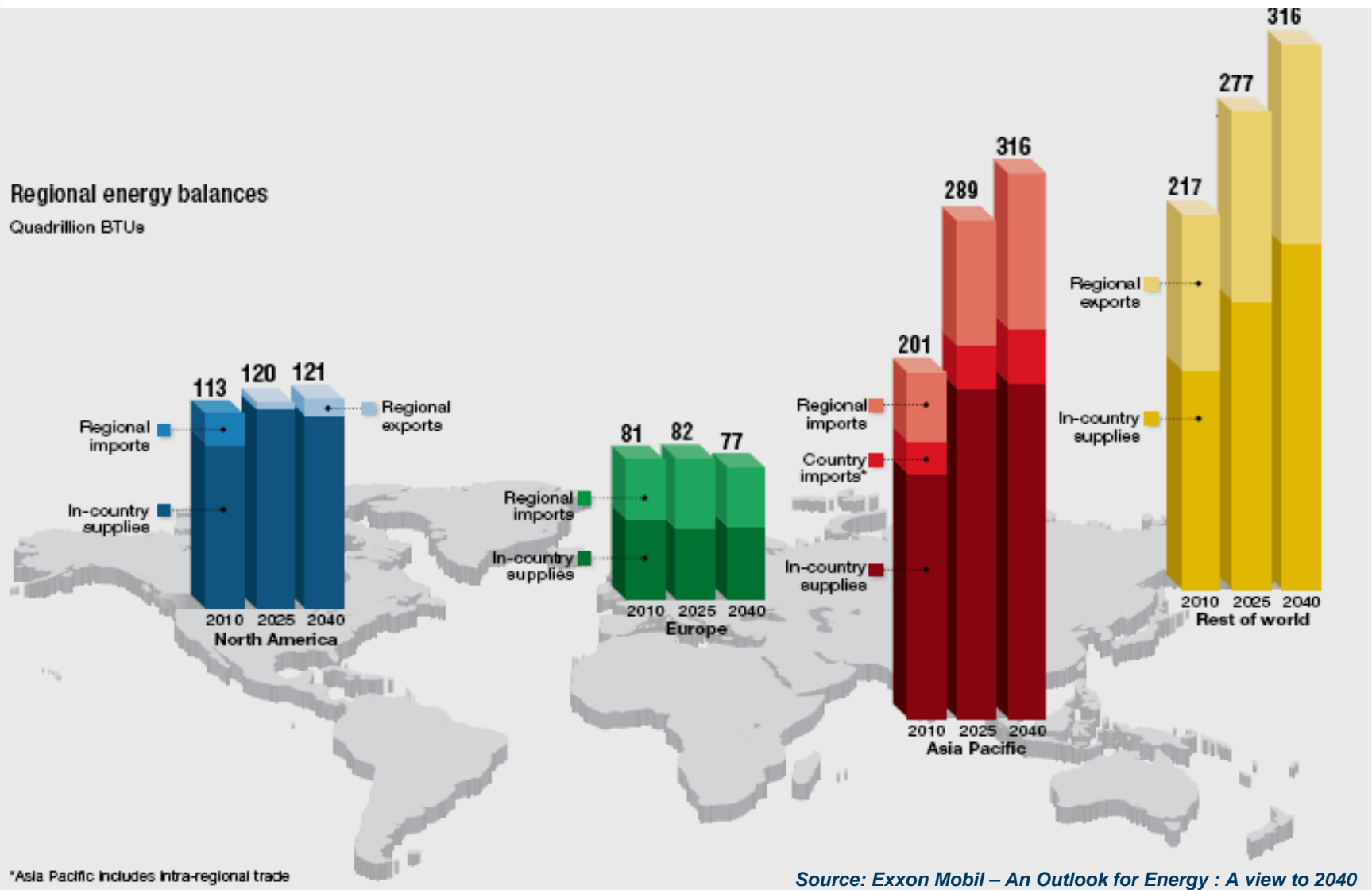


## ***Presentation Flow***

1. Rising Energy Imbalance in the World
2. Asian LNG Market
3. India Gas Story
4. Value through Partnerships
5. GAIL – The Partner of Choice
6. Conclusion



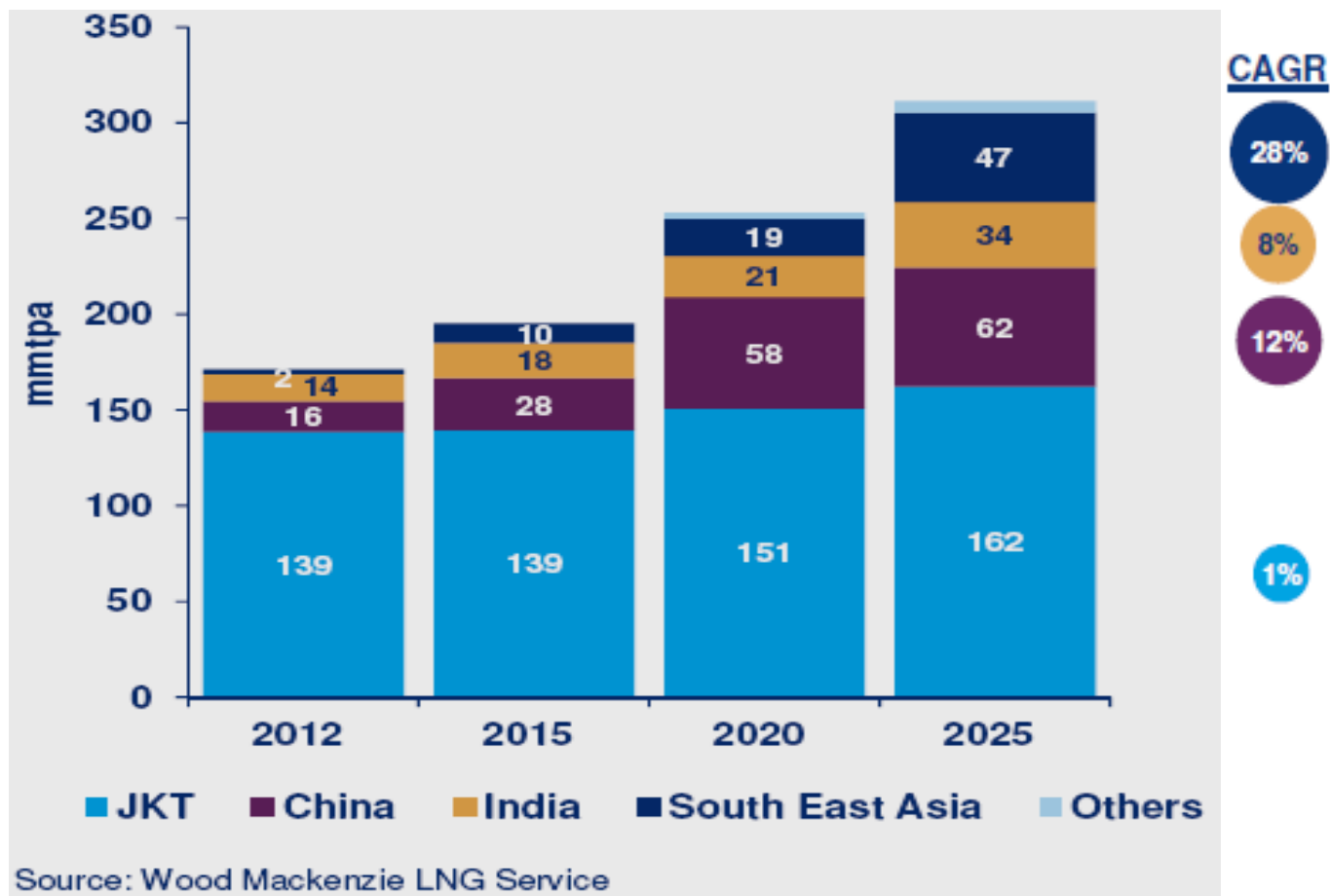
## Regional Imbalances Growing in Asia-Pacific – Imports Rising



Source: Exxon Mobil – An Outlook for Energy : A view to 2040



# Asian LNG Demand Remains Robust



**Demand for LNG almost doubling over the next decade.**

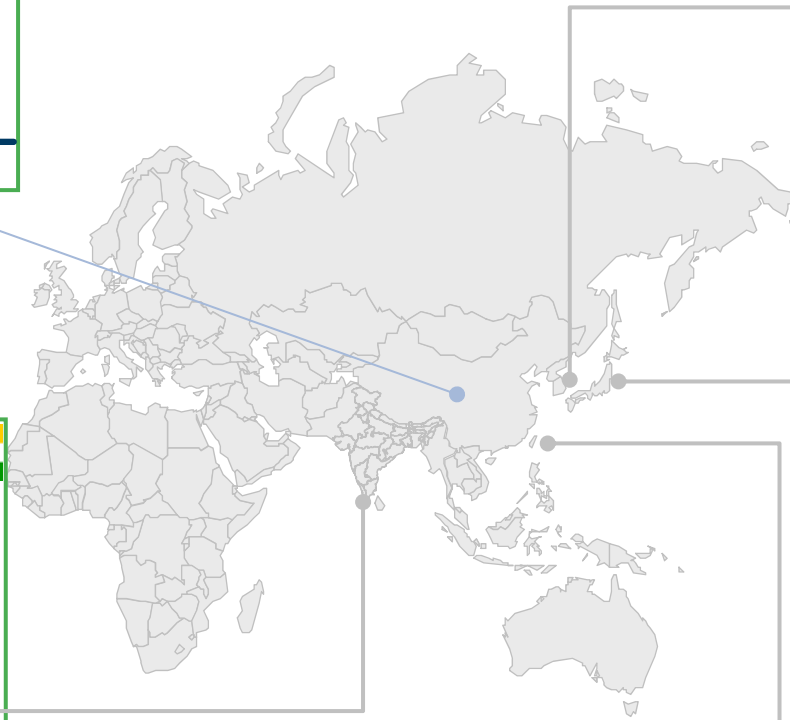
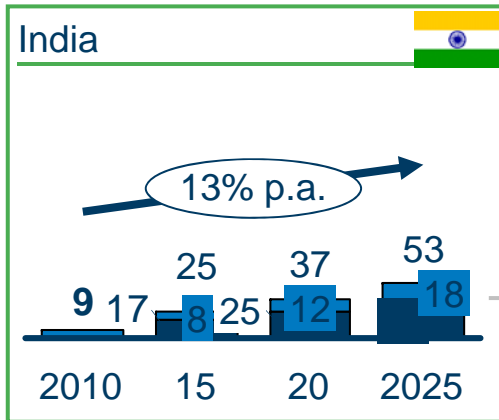
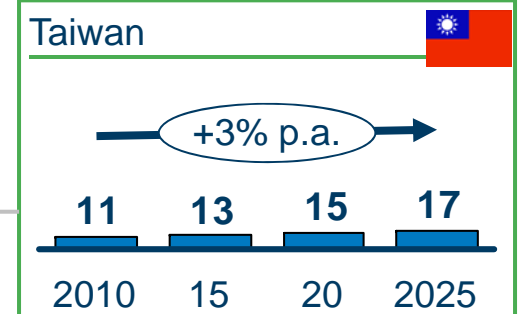
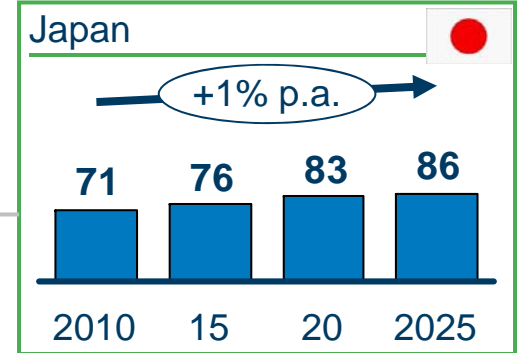
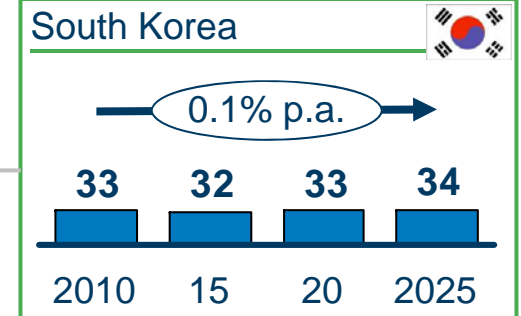
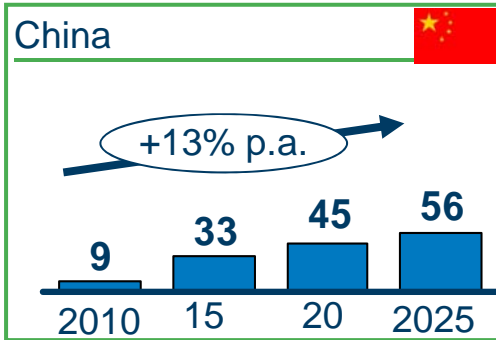


# India could be Asia's Most Important LNG market

LNG imports  
mtpa

## India has Large Incremental Demand

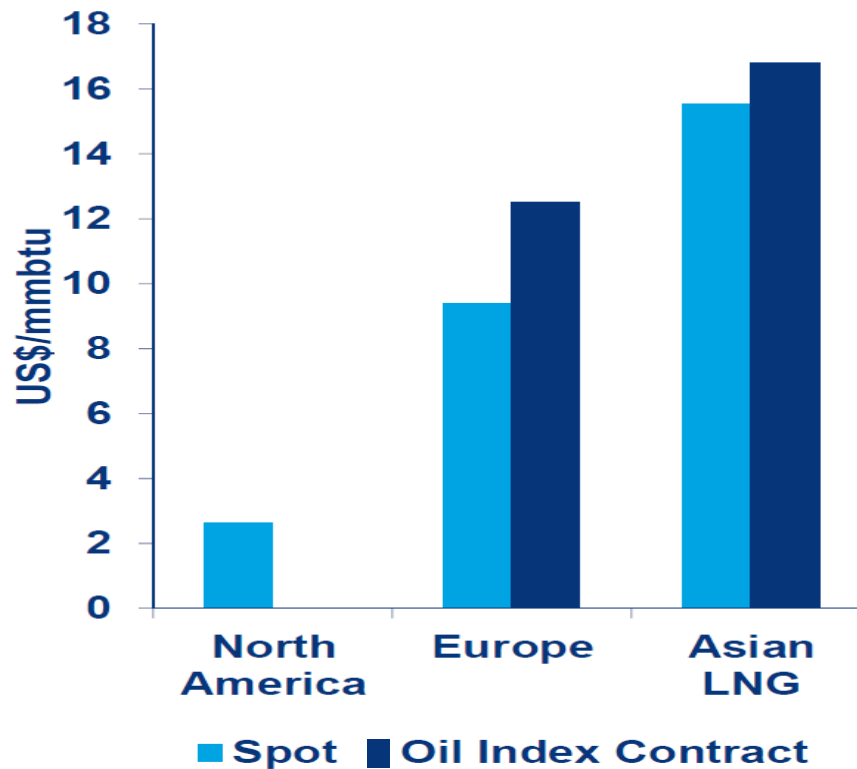
■ High case: 75% capacity utilisation  
■ Low case: 50% capacity utilisation





## Demand and Prices have No Correlation

Regional Gas Prices (2012 est)



Source: Wood Mackenzie

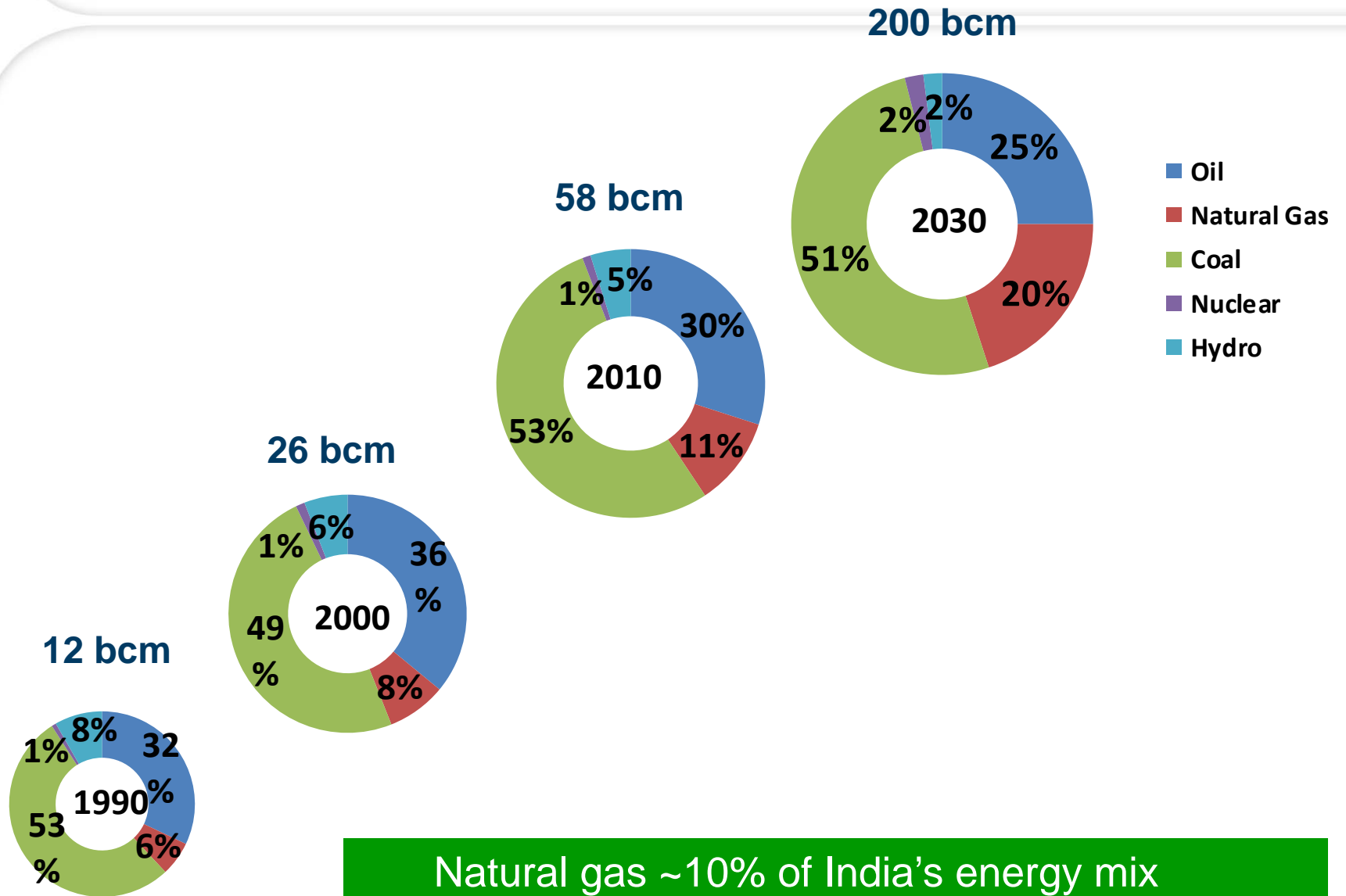
- ✓ Asia pays the highest price for gas
- ✓ Accounts for 71% of LNG demand
- ✓ New LNG Market reality: Rise of new suppliers and consumers
- ✓ India, China, Korea, Japan tied-up LNG indexed to HH from USA
- ✓ Market needs new price models to sustain growth of LNG industry



# ***India Gas Story***



## Evolving Energy Mix – Rising Share of Gas

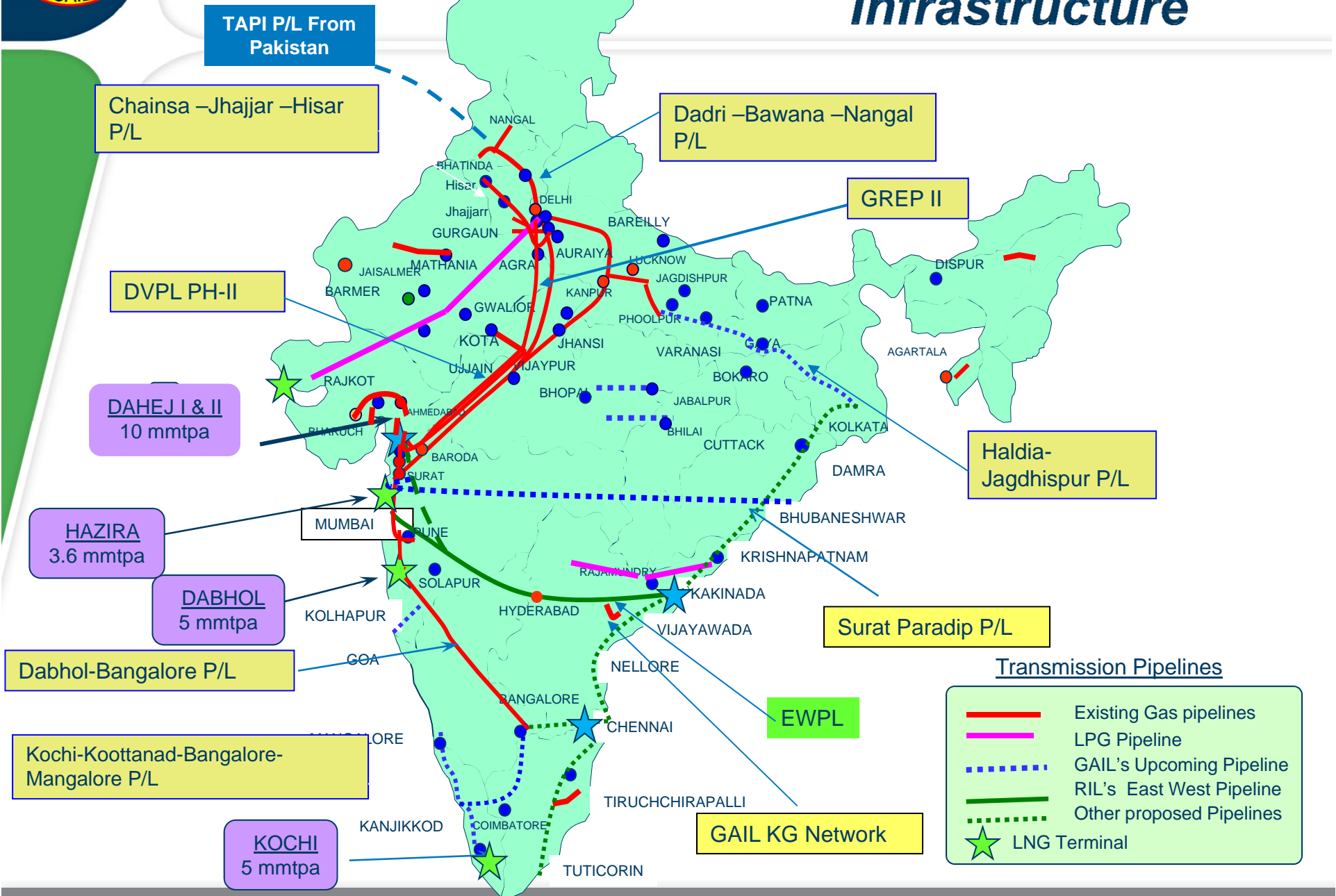


Natural gas ~10% of India's energy mix  
Expected to reach 20% by 2030





# India: Pipeline & LNG Infrastructure





## *India's Challenges and Strategies*

- National **Gas Grid**- Shaping up rapidly, to be ready by 2017
- **End-use reforms** to address price sensitivity and affordability
- Building **enhanced LNG import capacity**  
(20 MMTPA in 2013 to 35 MMTPA by 2017)
- Contract **new LNG at competitive prices and conditions**
- Develop a **portfolio of equity assets in LNG and upstream** in USA/Tanzania etc.
- Develop **capacity and capability** to create and maintain infrastructure
- Attract required **investments**



# ***Value Through Partnerships***



## *Partnerships are Key to Solve Asia's Challenges*

- ✓ Suppliers to offer innovative pricing methodologies
  - HH/Mixed Indices instead of Oil
  - Oil Prices volatile
  - Need for S curves
  
- ✓ Need to evolve an **Asian Gas Price Hub/Index**
  - LNG prices in the region to reflect current realities
  - Price setting in a competitive and transparent manner
  
- ✓ Promote a regional **Asian Cooperation Forum** for dialogue and consensus
  - **Swapping of LNG volumes** to reduce and optimise shipping costs
  - **Joint acquisition** of assets in Canada, Africa, Latin America and others



## *Partnerships are Key to Solve Asia's Challenges*

*Cntd...*

- **Joint investment** in import terminals, liquefaction terminals etc
- Signing of **tripartite LNG supply agreements** with suppliers as joint buyers would enhance flexibility and help negotiate prices
- **Knowledge sharing** in areas related to CBM, Shale Gas, UCG projects, gas exploration, pipelines etc.
- **Collaborate** to move away from oil-indexed mechanism



## ***GAIL – The Partner of Choice***

- India's Premier Integrated Natural Gas Company since 1984
- 57%+ Government of India stake
- 17%+ CAGR in 10 Year Turnover, 9%+ CAGR in 10 Year PAT
- Turnover of \$8.6 billion and PAT of \$731 million (2012-13)
- Strong presence in International Sourcing & Gas Trading, Pipeline transmission, Petrochemicals, Liquid Hydrocarbons & Gas Processing, E&P, City Gas Distribution, LNG terminals
- Global footprints in USA, Singapore, China, Myanmar, Egypt
- ~4000 Manpower Asset
- India's No. 1 Gas Company and World's No. 1 Downstream Company



## GAIL Offtake from Sabine Pass



In December 2011, GAIL signed a 20-year SPA with Sabine Pass Liquefaction, LLC for supply of 3.5 million tonnes/year of LNG.



Gazprom - GAIL



- **GAIL also signed a 20 Year Gas Purchase agreement with Gazprom, Russia for supply of 2.5 MMTPA LNG.**





## Carrizo-GAIL



- In September 2011, GAIL purchased 20 % stake in Eagle Ford shale assets of Carrizo Oil & Gas for USD 95 Mn
- GAIL is evaluating opportunities to acquire larger Shale Gas assets, primarily in the US and Canada





## TAPI GSA Signed



- In May 2012, GAIL signed GSA with TurkmenGas, paving the way for ambitious TAPI pipeline.
- GAIL will receive 14 BCM / Year from the project.



## Dominion TSA Signed



- In April 2013, GAIL signed TSA with Dominion through GAIL Global (USA) LNG LLC
- Booked 2.3 MMTPA liquefaction capacity in Cove Point LNG liquefaction terminal, USA



# Conclusion

- ✓ Greater collaboration between all stake holders to unlock the potential of LNG industry
- ✓ Creating partnership between LNG Buyers/Suppliers in Asia through a common **Asian Price Hub**
- ✓ Promote dialogue and consensus through an **Asian Cooperation Forum**
- ✓ To foster partnership, we have to be flexible and create new avenues that can facilitate cross investments
- ✓ GAIL is the Preferred and Low-Risk Indian Partner for Investments in LNG Supply Chain

Partnerships – The Prime Imperative

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***Thank You***

