KUALA LUMPUR 2012 WORLD GAS CONFERENCE

25th world gas conference

"Gas: Sustaining Future Global Growth"

Fuelling The Tiger

Prabhat Singh

Director (Marketing)

GAIL (India) Limited

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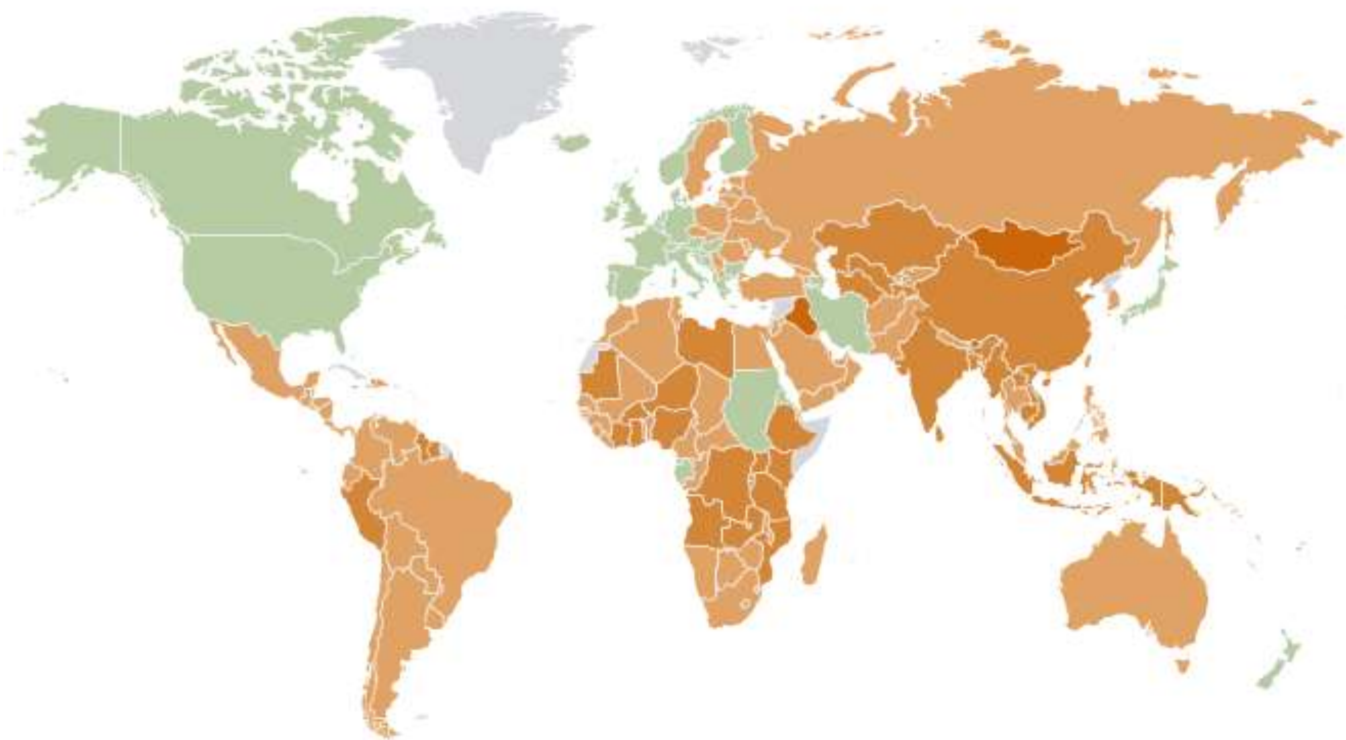
Emerging Economies to Drive Growth



Estimated Growth in Real GDP, 2014

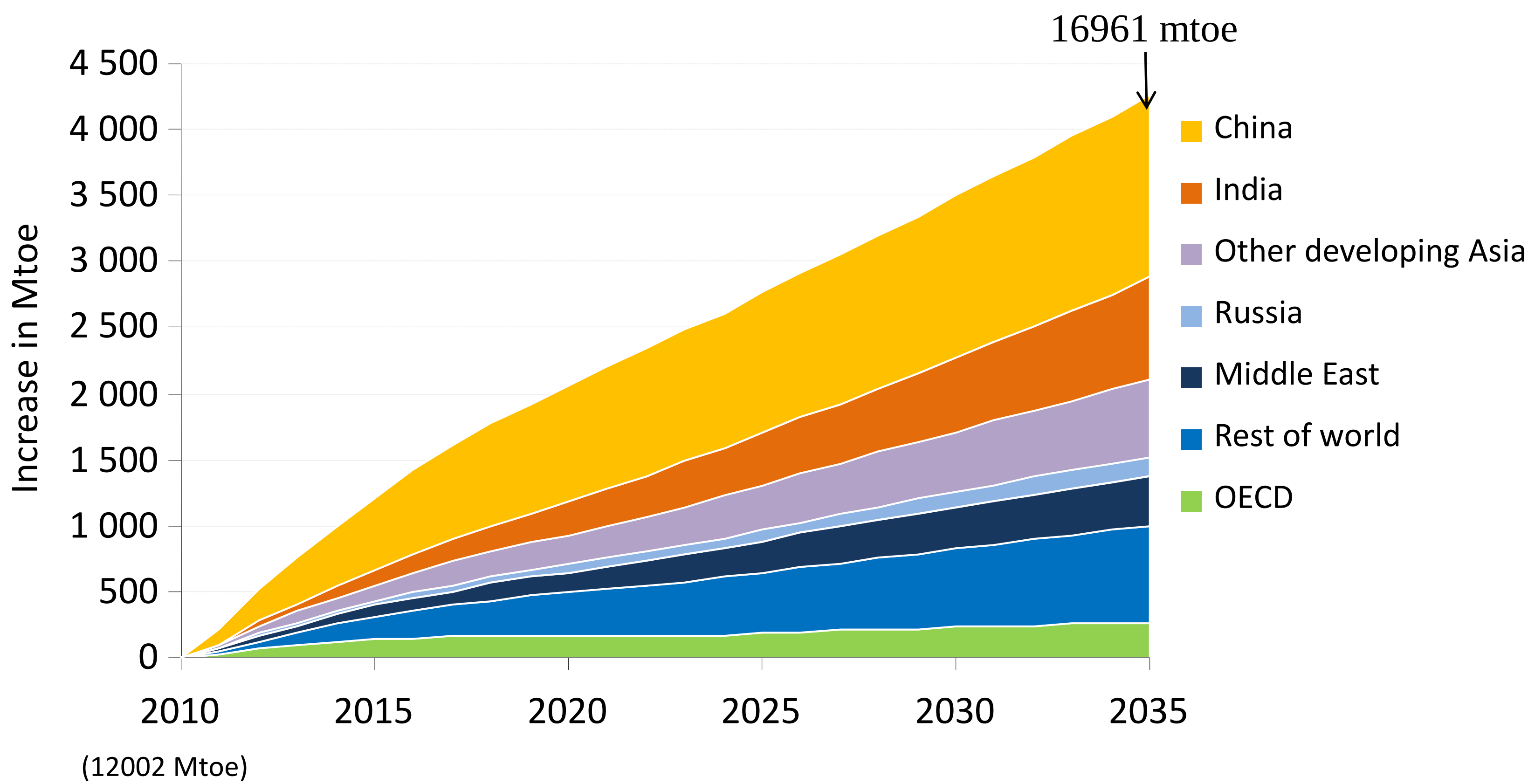
Emerging & Developing Economies	: 6.2%
Advanced Economies	: 2.4%
World	: 4.4%

Annual percent change

- 10% or more
- 6% - 10%
- 3% - 6%
- 0% - 3%
- less than 0%
- no data

Source: IMF

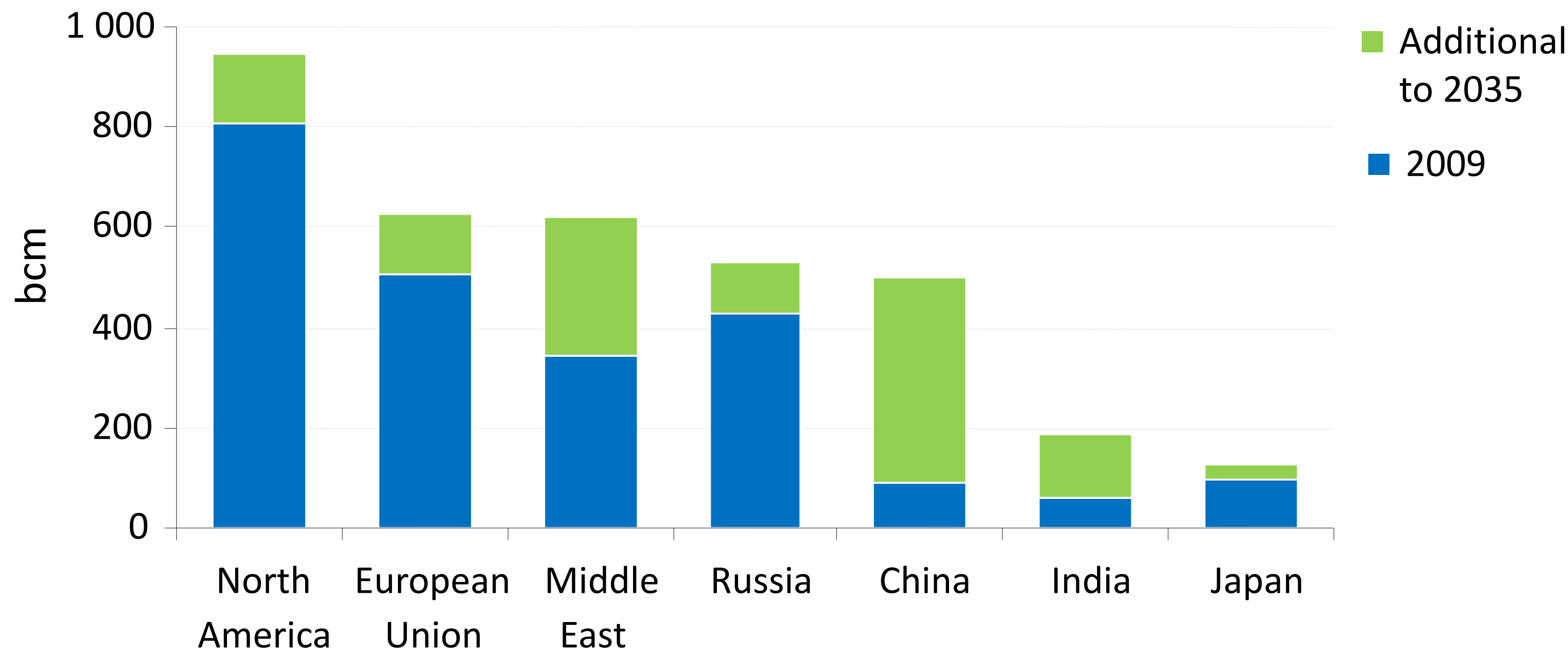
Incremental Growth in Global Energy Demand



Source: IEA

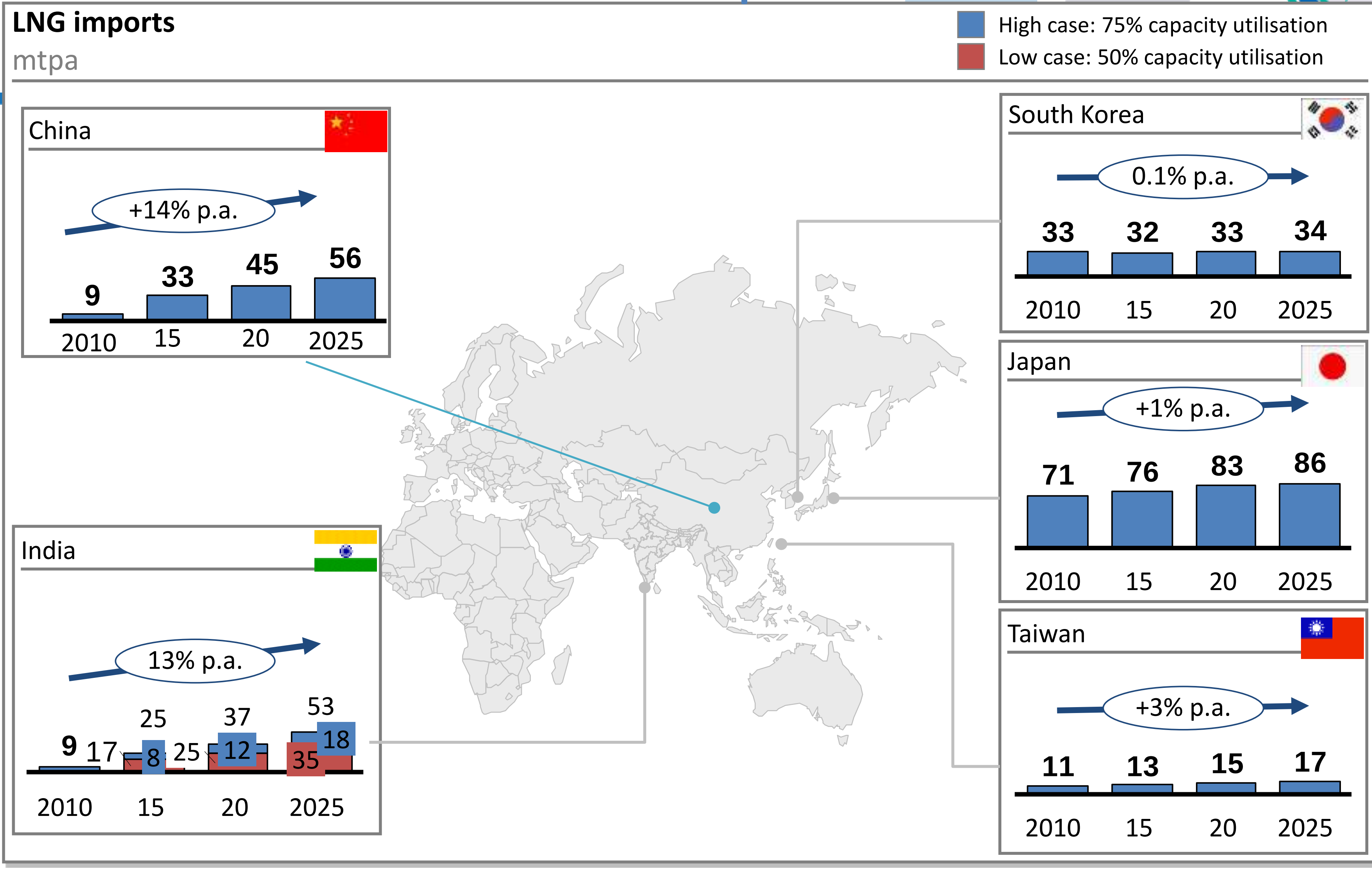
Strong Outlook for Gas Consumption

Natural gas demand by region, 2009 - 2035



Source: IEA-WEO 2011

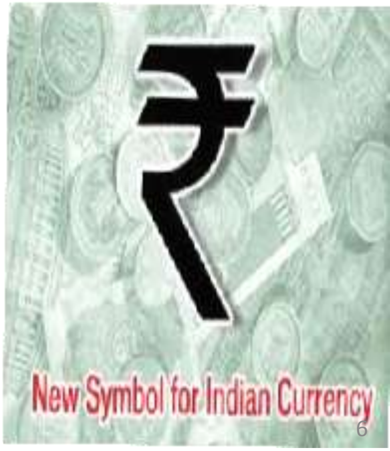
India could be Asia's most important LNG market



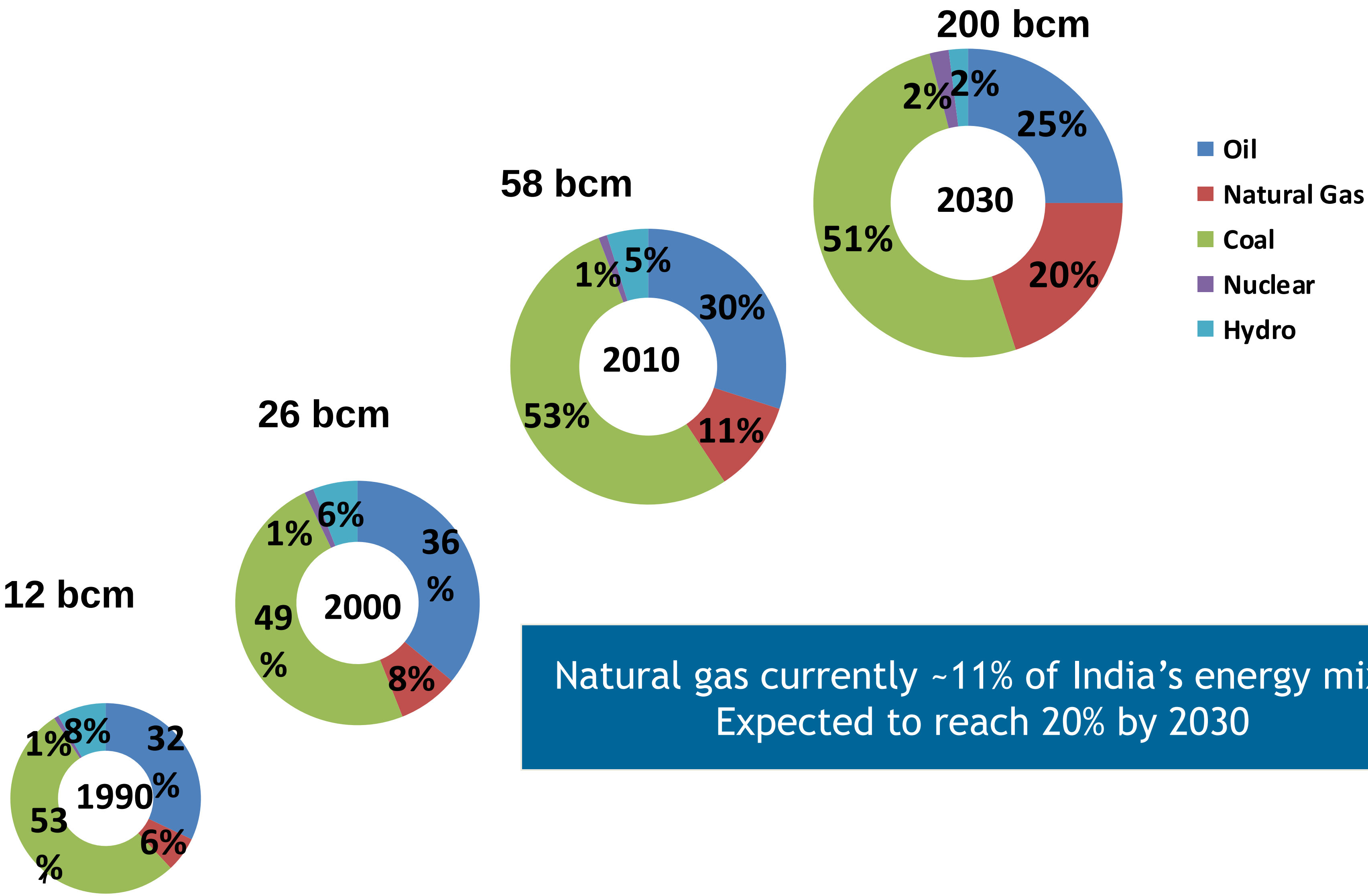
India has Large Incremental Demand. China's Shale gas potential can leave India with the largest incremental demand

SOURCE:; MoPNG; McKinsey analysis

India’s Growing Appetite for Energy



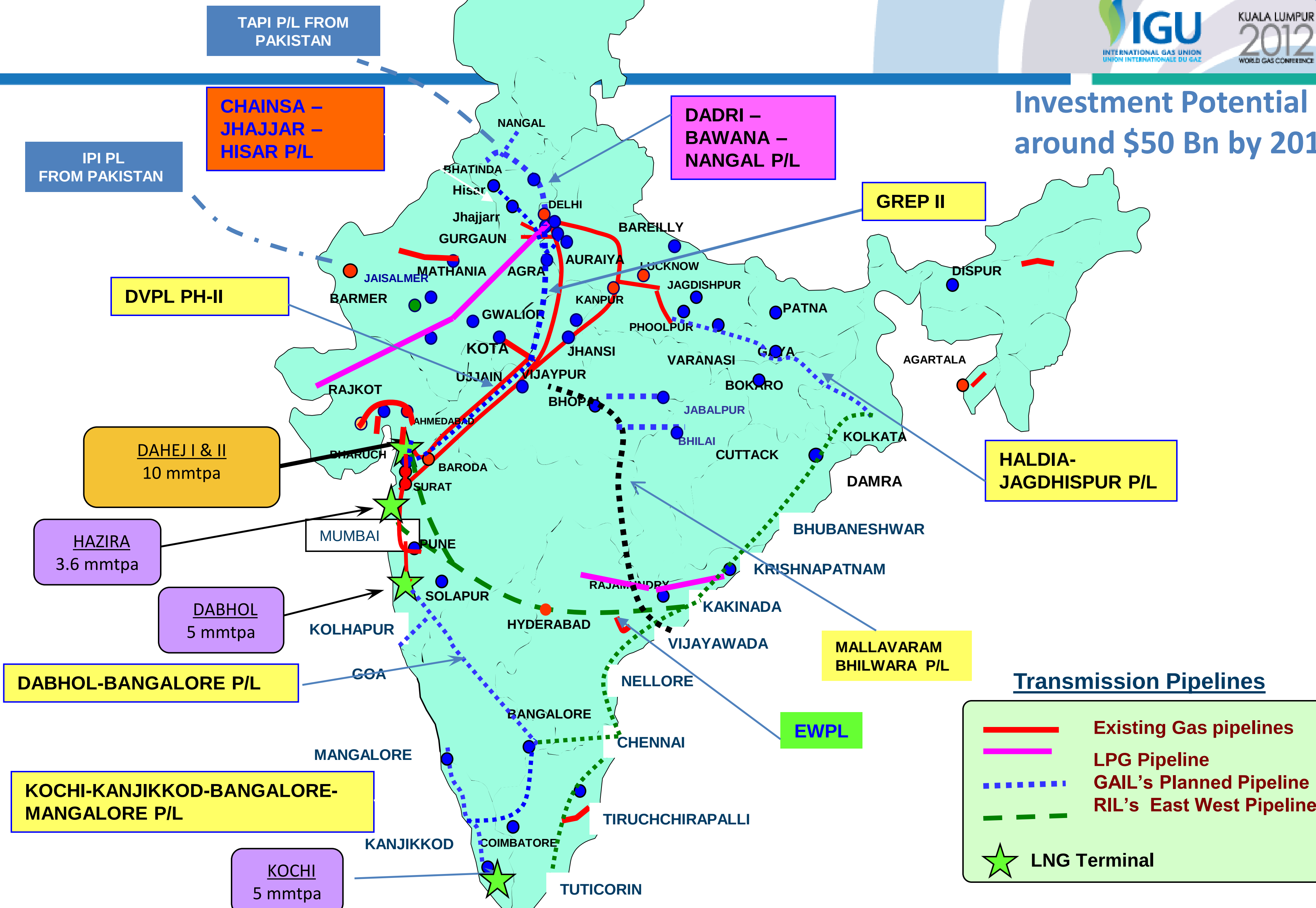
India’s Evolving Energy Mix



Natural gas currently ~11% of India’s energy mix; Expected to reach 20% by 2030

Adequate Natural Gas Infrastructure

Investment Potential of around $50 Bn by 2015



Dahej Terminal-operational

✓Capacity-10 MMTPA , Commissioned in June, 2009.

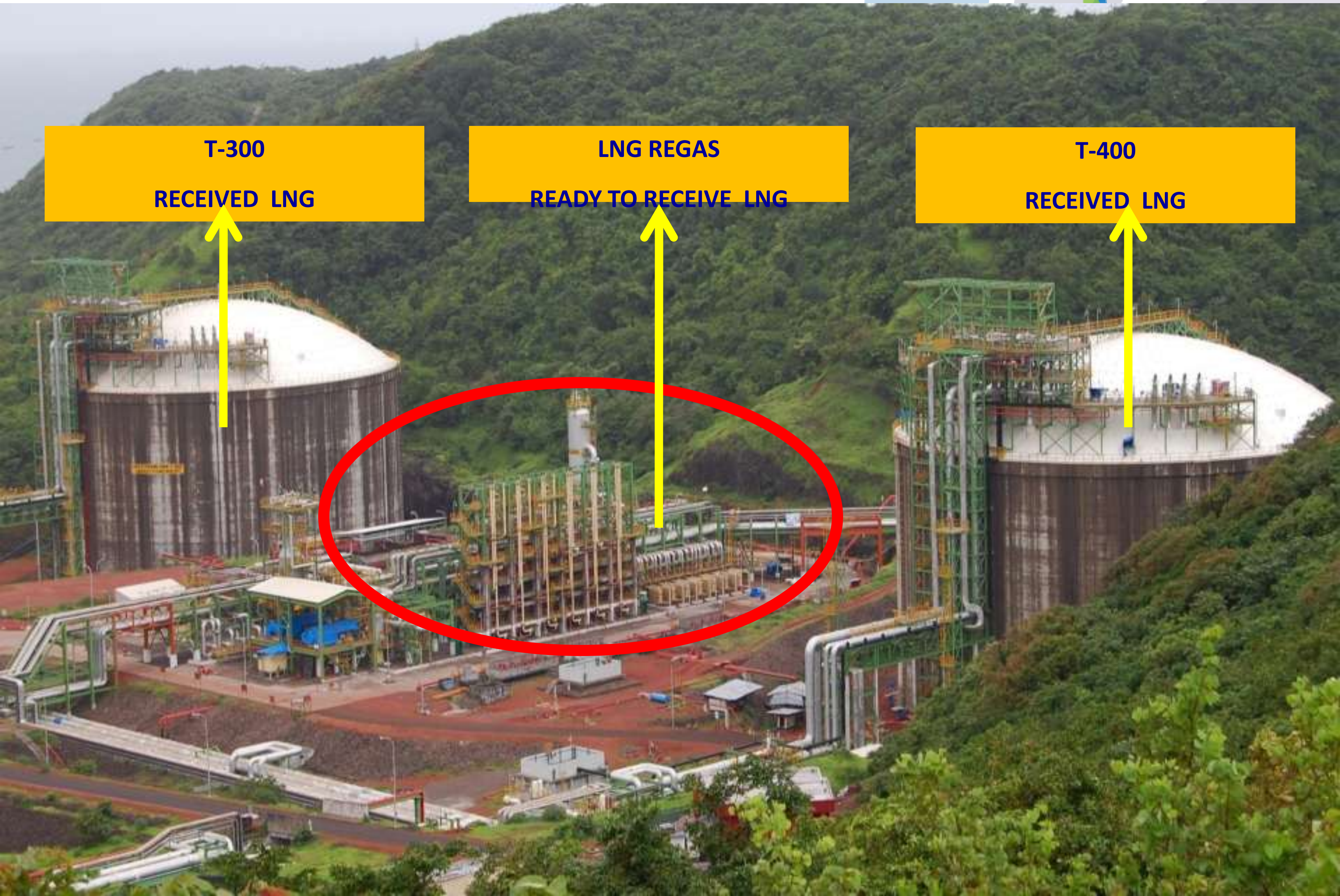
✓60% marketing rights with GAIL

✓PLL Dahej RLNG - Serving 20% of the total gas demand of the country.

✓Second LNG Jetty at Dahej under construction

✓ Capacity augmentation from 10 MMTPA to 15 MMTPA by 2014-15 in process

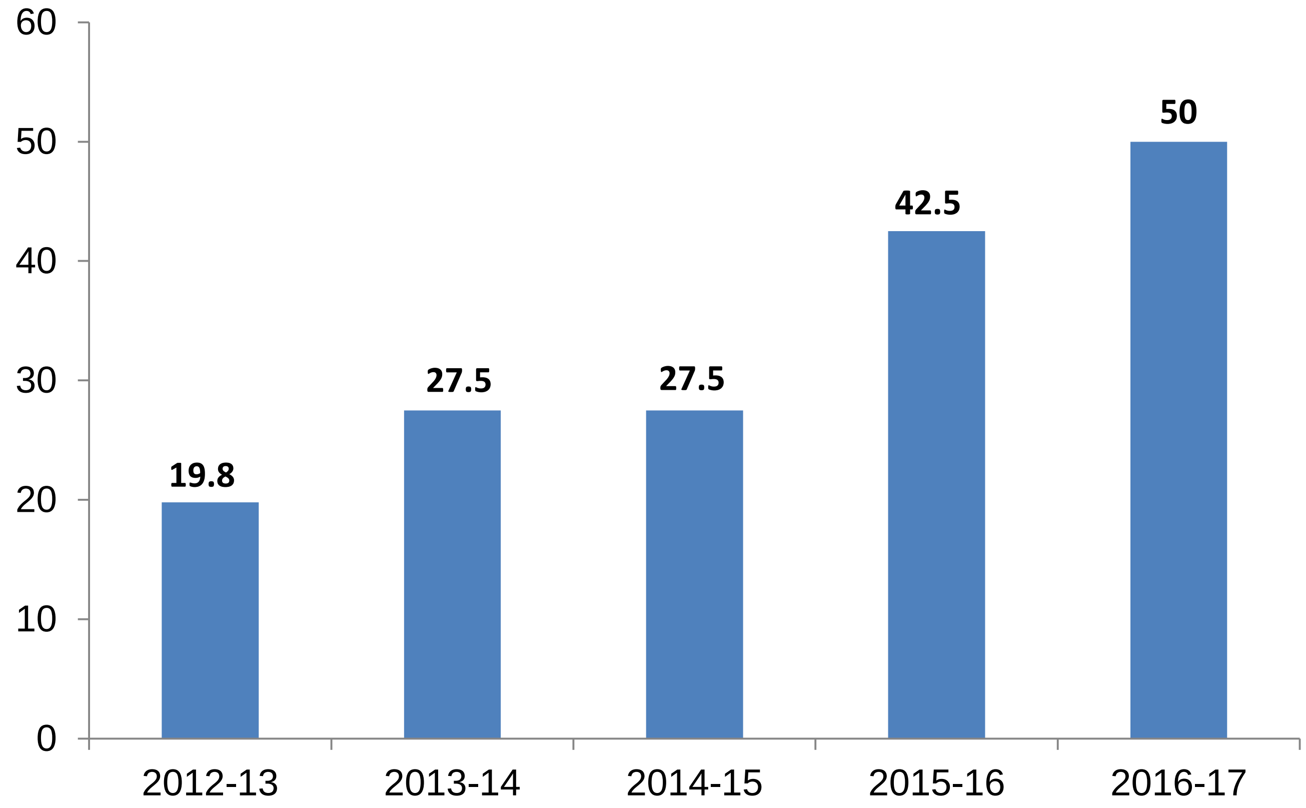
Dabhol LNG Terminal-Under Commissioning



2.5 Mmtpa Kochi LNG Terminal- Under Construction

Kochi LNG Terminal

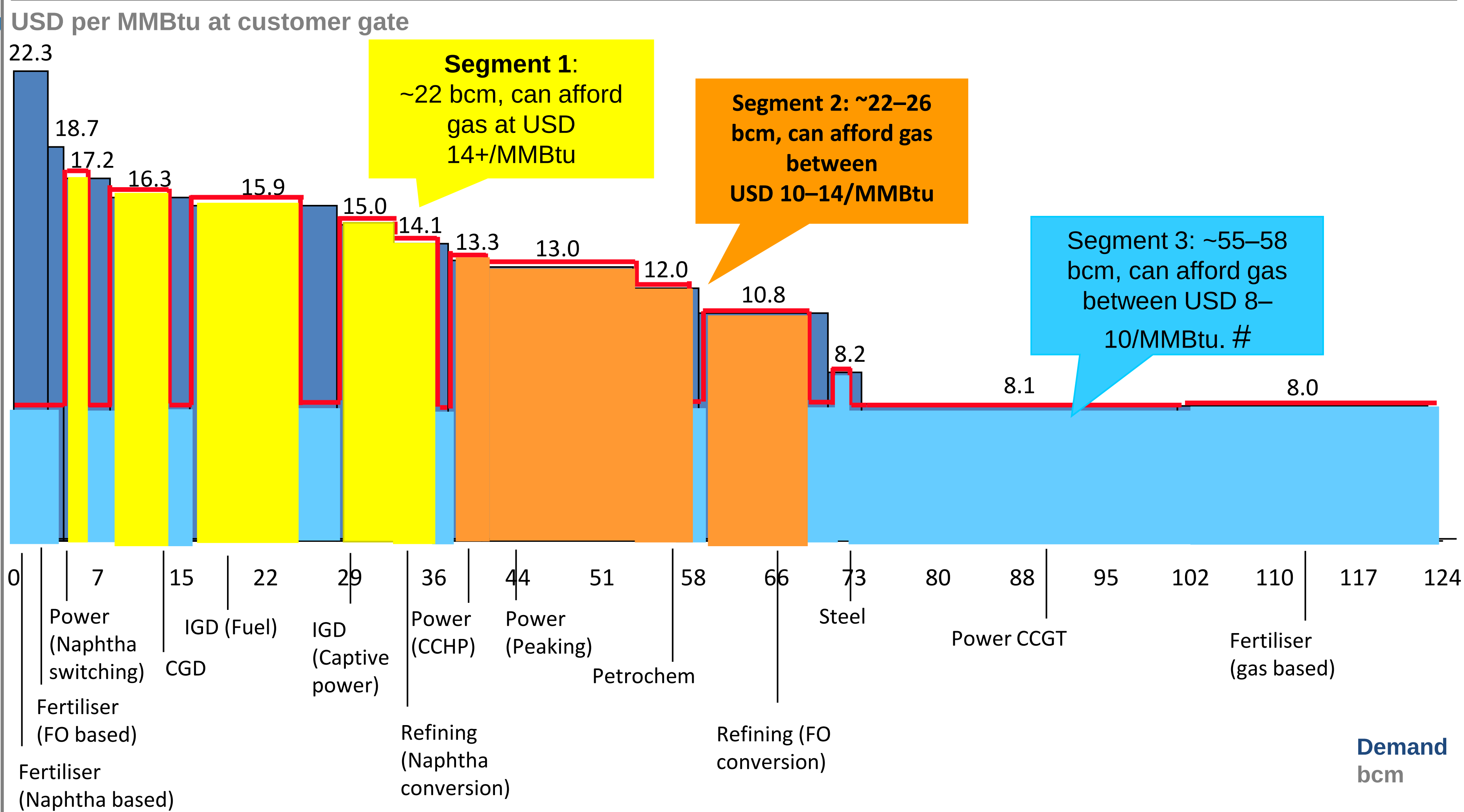
LNG Regassification Capacity



By 2017, long term LNG contracts required for at least 23 MTPA of onstream regas capacity (excluding planned regas projects for 15 MTPA)

Pricing Strategy Key to Unlock India Market

Customer's ability to pay (red line denotes switching cost based on allocation policies/competing fuels)



 # At current coal & fertilizer pricing. Will change as power and fertilizer policy reforms progress

SOURCE: McKinsey and public information

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.

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

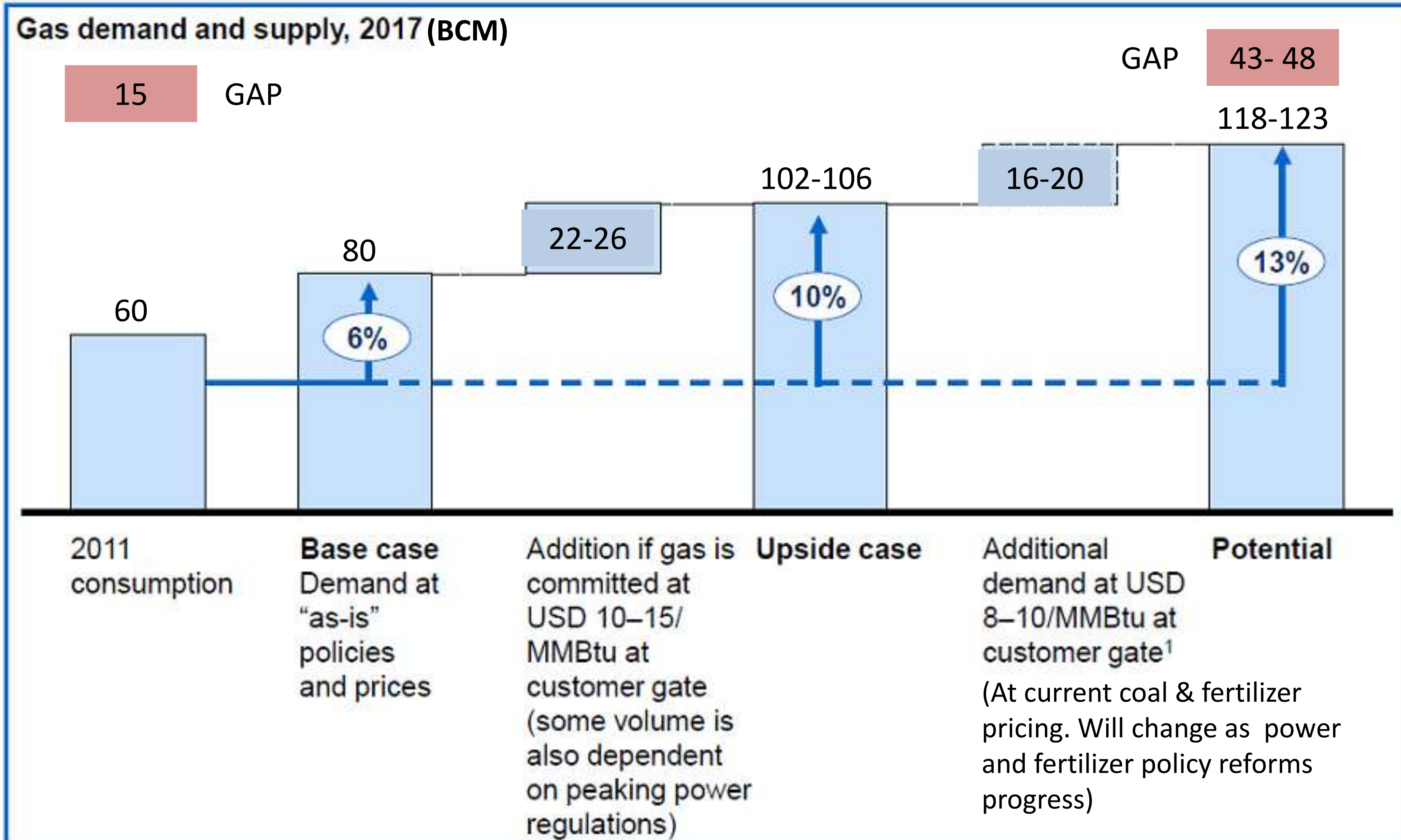
TAPI GSA Signed

- In May 2012, GAIL signed GSA with its counterpart , paving the way for ambitious TAPI pipeline.
- GAIL will receive 14 BCM / Year from the project.
- Transit Fee already finalised between stakeholders

Partnerships – The Prime Imperative

Thank You

Gap Between Demand and Supply



SOURCE: McKinsey and public information

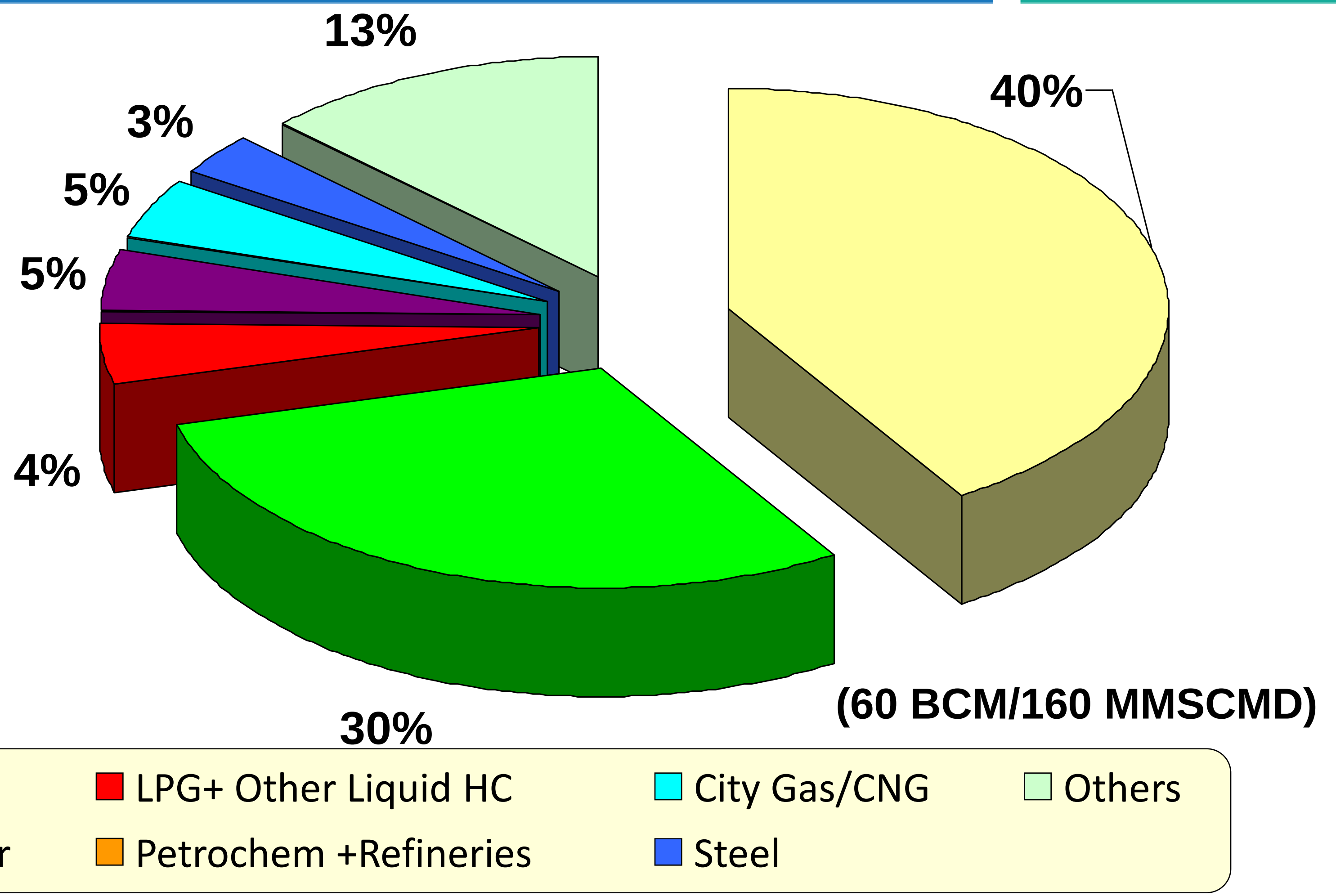
India's Energy Scenario

- GDP valued at ~ \$2 Trillion (2011-12) ; 2011-12 Gr Rate ~ 7%
- Projected to be 2nd largest economy in the world by 2040 or so
- 4th largest energy consumer globally (524 MTOE); Expected to be 3rd largest by 2020
- 10 year consumption in energy growth @5.9%
- 11th Largest Gas consumer in the world (60 bcm)
- 8th largest LNG importer (11.5 MMTPA); LNG meets 30% of total demand
- Oil and Gas Industry Size estimated at ~ \$300 Billion (~ 15% of India's GDP)
- Oil and Gas accounted for 1/3rd of India's total imports

India requires Energy supply of 3-4 times within next two decades

India – Gas Market Profile

Sector wise Gas Consumption



Power And Fertiliser - Anchor Markets

Industrial And City Gas - Growing Markets

GAIL – Market Leader in India's Gas Sector

Business Portfolio

Transmission

- NG Transport Capacity 190 MMSCMD (~9500 Kms.)
- LPG Transport Capacity 3.8 MMTPA

  (~2050 Kms.)

Trading

- Gas Marketing with volume of 87 MMSCMD
- Covering 16 States across the Country

Petrochemicals

- Significant Player (~ 20%)
- Capacity 450 KTA Polymers
- Upgradation upto 900 KTA
- 70% stake in BCPL (280 KTA) with 100 % Mktg rights

LHC

- Sizeable contribution
- 7 Plant across India
- Capacity ~1.4 MMTPA
  - LPG Capacity ~1.1 MMTPA

Business Portfolio

E&P

- Securing Gas Supply or Equity Oil / Gas
- 26 Domestic Blocks
- 2 Overseas (Myanmar)
- 20% working interest in Shale Asset in U.S.A

Diversification

- PLL - LNG Dahej-10 MMT
  Kochi-2.5 MMT
- Dabhol-5 MMT
- Renewables (wind , Solar)- 120MW installed Wind Power capacity
- RGPPL – Power (2184 MW)
- GSEG – Power (156 MW)

Retail

- High Growth Area
- 8 JVs
- Incorporated wholly owned subsidiary, GAIL GAS Ltd.

  (Meerut, Dewas , Kota, Sonepat)

GAILTel

- Leveraging OFC
- Countrywide Presence
- Carriers Carrier Service Provider
- 13000 KM – OFC Network

Continuing Regulatory and Policy Reforms

	Regulations	Potential regulations under discussion/ consideration
A Upstream	▪ New Exploration Licensing Policy (NELP I-IX) ▪ Award of licenses through ICB ▪ Deregulation of LNG terminals ▪ 100 per cent FDI in upstream ▪ & LNG terminals	▪ Open Acreage Licensing Policy (OALP) in lieu of NELP – to enable bidding for any acreage anytime, instead of for fixed blocks and at fixed timeslots ▪ Policy for unconventional resources
B Midstream	▪ Independent Regulator in place since 2007 ▪ Integrated Gas Grid and interconnected infrastructure by 2015 ▪ Non-discriminatory open access to infrastructure – Third party carriage allowed on pipelines with mandated 25 % extra capacity – Pipeline laying through competitive bidding	▪ Pipeline tariff revision for the national gas grid ▪ Uniform postal tariff/uniform grid tariff to avoid cascading effect ▪ Unbundling of transportation and trading in future
C Downstream sectors	▪ Arm's length transactions between mid-stream and downstream companies ▪ Open access and private participation in power generation and distribution ▪ Nutrient based subsidy, import parity pricing and higher price cap for fertiliser sector	▪ Tax rationalisation/introduction of GST ▪ Declared Goods Status for natural gas ▪ Peaking power regulation to enable time of day tariffs ▪ Evaluating national gas highways to promote gas
D Pricing	▪ Administered pricing mechanism (APM) ▪ Production sharing contracts (PSCs) ▪ Market price gas (MPG)	▪ Price pooling

GAIL: A Preferred Partner

- India’s Premier Integrated Natural Gas Company since 1984
- 57%+ stake of Government of India
- Ranked world’s No. 1 company in Downstream Operation and 2nd among Gas utilities in Asia in Platts Global Ranking of Energy Companies
- 2011-12 Turnover over $7.7 billion and PAT of $0.7 billion

  To reach $26 Bn Revenues by 2020
- 13%+ CAGR in 10 Year Turnover; 14%+ CAGR in 10 Year PAT

Partnership Options in the Gas value Chain

- Opportunities for:
  - Partnership in LNG Regas Terminals
  - Joint LNG Liquefaction assets overseas
  - Setting up gas storage facilities in India
  - Developing Trading Exchange in India
- Long term LNG contracts required for ~38 MTPA of unmet demand in India
- Consumers in Indian market have shown good appetite and reasonable affordability for market driven price of gas / LNG
- With emerging global scenario, India would be important market for Long Term and spot LNG in years to come

Other Partnership Options

- ✓ Oil/Gas Exploration through NELP/CBM
- ✓ Trans - National Pipelines
- ✓ Gas based end-use industries (Petrochemicals, City Gas Ventures)
- ✓ Technology Based Partnerships
  - Shale Gas
  - Coal Gasification
  - Gas Storage
  - Methane to Olefins
  - Waste to Biogas
  - Improved mobility solutions based on gas