# Proposed Iran to India Overland Gas Pipeline: Project Overview

India Oil & Gas Conference

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## Outline

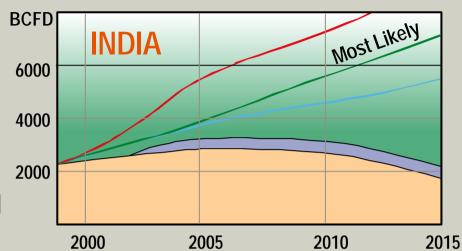
- The Fundamentals
- The Project
- The Benefits
- The Risks
- Possible mitigations
- Critical success factors
- Competitors
- The Value Proposition
- What needs to happen?
- Summary

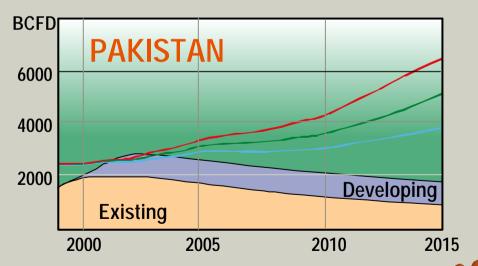


## The Fundamentals

- Abundant low cost supply Iran
  - 200 years of India's energy demand
  - Condensate rich, large scale gas development
- Existing, growing energy demand
  India (and Pakistan)
- Technically simple
  - High pressure pipe tried and tested, local capabilities
  - Compression phased with growth in demand

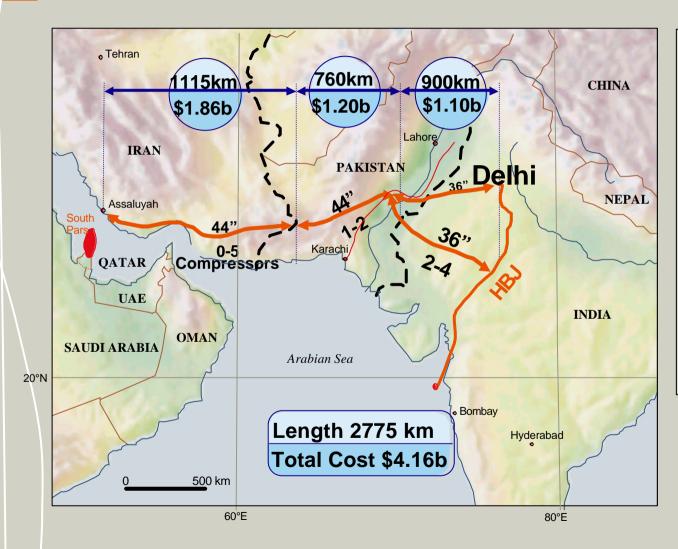
Simply the lowest cost supply of large volumes of gas for the decades to come...





**bhp**bill

# The Project



- Throughput:
  - 1.5 to 3.0BCFD
  - 3.8% pa growth
- · Class 900, x80
- MAOP 2220psig
- 44" to border
- 36"from border



## The Benefits

### India:

- Affordable, unlimited supply
- Economic growth
- Diversity of supply

#### Iran:

- Diversification from oil revenue
- Long term foreign exchange earnings

## Pakistan:

- Affordable, unlimited supply
- Internationally benchmarked compensation for transit





## The Risks

- Reserves 100+ years supply of the 2010 unconstrained demand
- The market infrastructure, ability to pay
- Politics can commercial imperatives prevail over politics?
- Security of supply some real, some perceived
- Finance will only be available if all of the above are mitigated



# **Possible Mitigations**

#### **POLITICAL:**

- Government guarantees
- Understanding
- Acceptance
- 2 x bilateral agreements
- Energy Charter

#### **PHYSICAL:**

- Motion detectors
- Gas storage
- Fuel back up
- Satellite monitoring
- Mutual dependence

#### **CONTRACTUAL:**

- T o P
- ·SoP
- Sovereign guarantees
- 2 Contracts

#### **FINANCIAL:**

- MLA covenants
- Escrow accounts

A combination of these will be required...

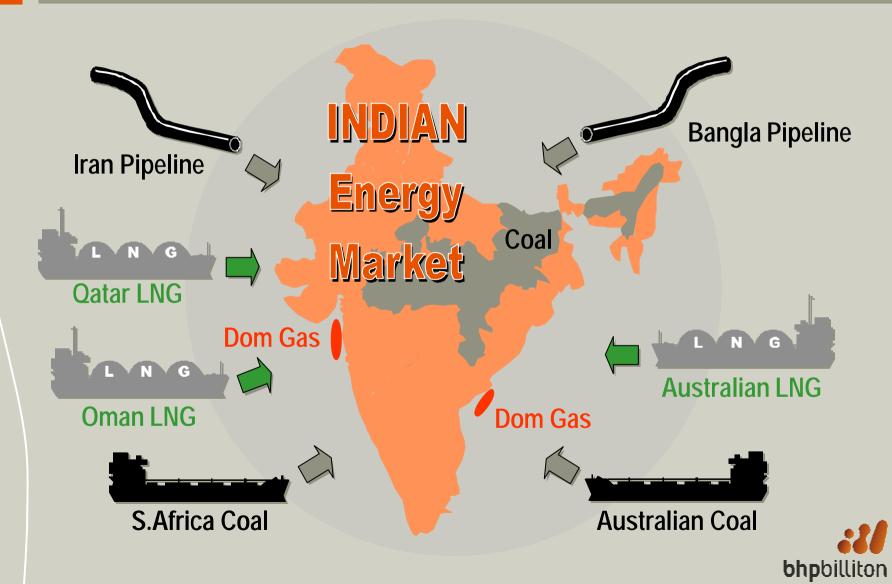


## **Critical success factors**

- ✓ Gas delivered to customers at competitive AND affordable price
- ✓ Credible supply
- Creditworthy buyers
- Co-paced development of receiving & distribution infrastructure
- ✓ Strong sponsors
- ✓ Sound economic fundamentals
- ✓ Flexible customer tailored value proposition
- Mutual dependence to minimise concerns over security of supply and...
- Shared will to address political issues to allow mutual commercial benefits to prevail !!!

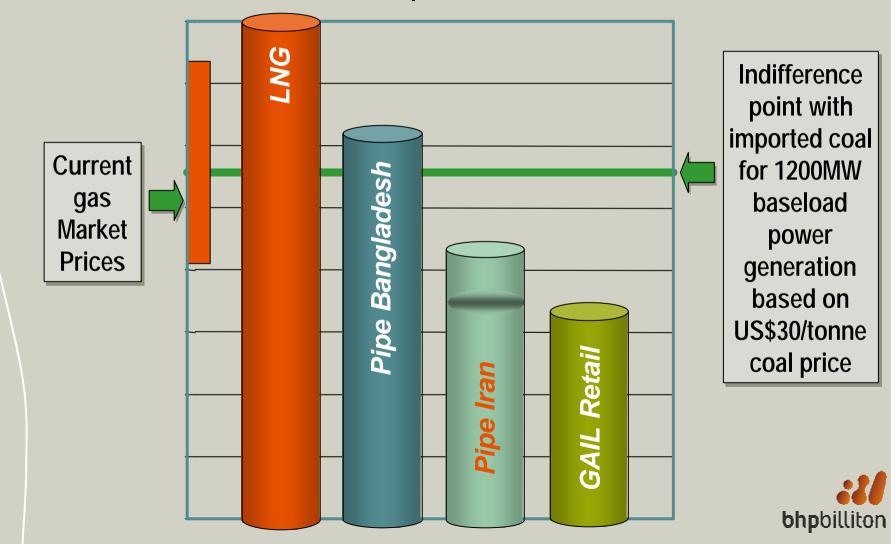


# Co-opetition = Security and Low Cost



# The Value Proposition - \$10billion saved over 25 yrs

Delivered to Delhi @ \$18/bbl oil price



## What needs to happen?

- Explicit Government(s) support
- Two bilateral treaties or best one trilateral
- Establish regulatory framework
- Integrated participation of key sponsors from source to market
- Complete feasibility study
- Set up sponsors leading to consortium
- Arrange financing
- Execute
- First gas to Indian border: 36 months from financial closure



# Summary

- Project fundamentals are strong
- Provides long term affordable energy supply
- Political hurdles can be overcome economic incentives
- Pre-feasibility results are encouraging
- There are a few visionary companies believing in the project



## Role of BHPBilliton

- BHPBilliton world's leading diversified resources company
- Servicing India's energy needs for the past 15 years
- Has been promoting gas exports from Iran since 1993
- Completed feasibility study from Iran to Pakistan
- BHPB mandated by NIOC to lead the study and execution
- Pre-feasibility work nearing completion

