



Global Energy Dialogue India and Natural Gas

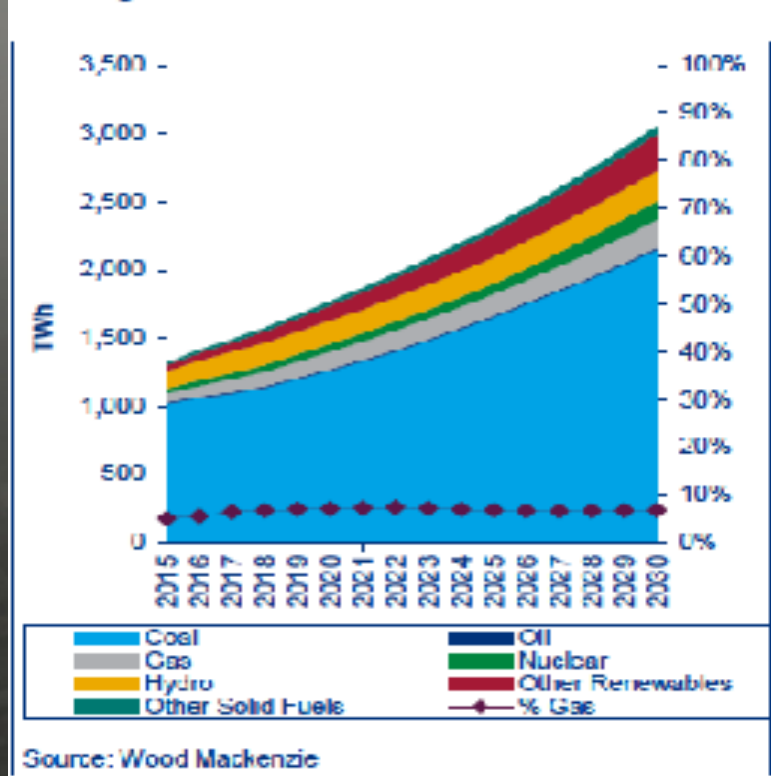
Martin Houston
November 30th
2016 New Delhi, India

Smog Chokes Delhi, Leaving Residents 'Cowering by Our Air Purifiers'

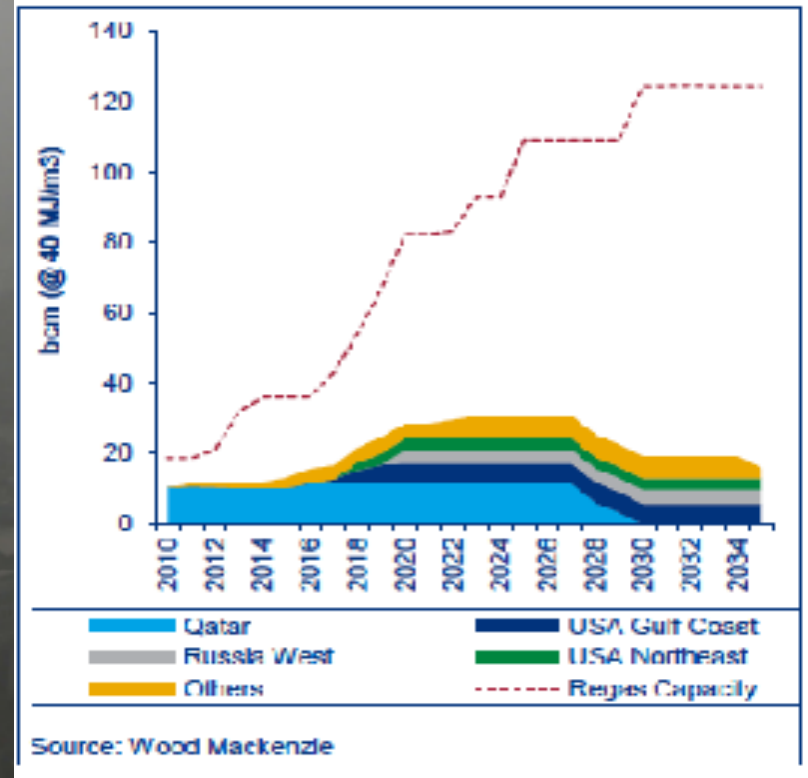
Levels of the most dangerous particles soared over the weekend in some places to more than 16 times the limit India's government considers safe.

By ELLEN BARRY NOV. 7, 2016

Power generation mix



Contracted volumes



India's choice

- The gas industry has many masters with differing (and conflicting) priorities
- Many gas pricing mechanisms - six since 2013
- Control over infra development inhibits progress but the last mile needs it
- Praying for rain (or trans-national pipelines) is not a winning strategy
- Domestic E&P gas will respond to gas on gas competition (from LNG)
- Affordability will be a product of free market reform
- The hidden cost of coal will be higher than the long term cost of imported gas
- Coal burning needs more regulation with emissions and particulate controls
- Reputation matters in the LNG world - contracts are contracts
- All of the problems are internal - this is the good news

Moving the needle

- The world is offering a minimum of five years cheap LNG - access it now
- The US will offer long term cheaper LNG - build on the GAIL portfolio position
- LNG is inherently fungible - use the flexibility to manage risk, not trade for gain
- Prioritize the infra to import LNG and distribute re-gasified LNG
- FSRUs and LNG to power can help, but connections to the grids are still critical
- The long term US-sourced LNG price will stimulate domestic E&P
- Renewables creep is a less effective all-round path than gas stimulus
- State enterprises need to be aligned along common objectives with domestic focus
- Above all, **markets can decide** if allowed to operate with limited intervention