Four Narratives on Coal in India

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Rapid Switch Workshop

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Coal-Based Power Generation Continues to Dominate India’s Power Mix

IEA, World Energy Balances 2017, India
BUT....
Grid-Scale RE: Fast Capacity Growth but Moderate Generation Growth

All data from Central Electricity Authority
Coal Companies Have Historically Been Important Developmental Actors
BUT...
Coal India’s Surpluses Have Recently Spent on Many Non-Coal Projects

- Coal India Limited (CIL) has..
  - 1.3 GW of solar in construction pipeline and set a 10-year goal for 20 GW of solar generation
    - ~$1.6 billion over the next three years
  - Recently started to diversify into non-coal mining
  - Invested in fertiliser plants
    - Coal gasification to avoid urea and gas imports
  - Started pilot projects in CBM, coal-to-chemicals
    - Cleaner uses of hydrocarbons in coal
India’s (Public Sector) Banks are Facing Historic NPA Problems Cause by Coal-Based Power

- Roughly 12-13% of all loans from Indian banks!
  - Power sector responsible for a large chunk of these NPAs

- 34 thermal power projects representing about 40 GW (on a 346 GW base) are stressed
  - Roughly $51 billion worth
BUT...
Foreign Financial Participation in Indian RE has been limited, but growing quickly

Source: TFE Consulting, India’s Solar Leap
Some Indian States Have Emerged as RE Leaders
BUT...

THE GAINS FROM RE ARE EXTREMELY REGIONALLY CONCENTRATED
Coal in the Last Few Years

• Are falling thermal coal PLFs a consequence of competitiveness in power markets or other problems?
  – My Theory: Little to do with RE pressures in power market, more about continuous shocks and plant siting mistakes
    • Far too much generation capacity built in Western India 2000 - 2010
    • 2014 – Key railways lines aiding coal evacuation delayed
      – 2017 – Mine fires around Jharia (leading to rail line closure), and increased congestion around Mughalsarai further choke coal transport
    • 2015 – Coal block deallocations kills future mine pipeline instantaneously take 10-15 mn tonnes off the market for private generators
    • 2017 – Coal import ban hurts public sector genco PLFs
      – De facto blending of many public sector plants not considered
    • 2018 - Linkage rationalisation good idea, but Railways to unable to respond with rake availability and congestion management
    • Freight corridors remain largely hypothetical
• More of a story of coal-related failings, particularly in transportation and evacuation than with RE < C
Thank you!

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