Low-Carbon Energy Transition: Motivating SOEs

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Layout of the presentation

- India’s energy profile
- Presence of State-Owned Enterprises in India
- Energy transition in India
- Instruments used for motivating SOEs in India – Historically
- Going forward
India’s energy profile

- Industry consumes more than half of the total energy in the economy
- Structurally, it has not changed over the past many years (graph)
- India’s per capita energy consumption in 2013 in the domestic sector is 150 kWh
Importance of SOEs in the energy sector

**CRUDE OIL PRODUCTION (BY OWNERSHIP)**
- State owned: 69%
- Private/Joint Venture: 31%

**NATURAL GAS PRODUCTION (BY OWNERSHIP)**
- State owned: 74%
- Private/JV: 26%
Importance of SOEs in the energy sector

**Power Generation Capacity (by Ownership)**
- State owned
- Private/Joint Venture

**Coal Production (by Ownership)**
- State owned
- Private/Joint Venture
SOEs in the energy sector

Coal
• CIL
• Six state-owned subsidiaries of CIL which are BCCL, ECL, CCL, WCL, MCL, SECL
• Singareni Collieries Company Limited (SCCL)

Oil and Gas
• Upstream: IOCL, ONGC, OIL
• Downstream: IOCL, BPCL, HPCL, (subsidiaries such as NRL, MRPL, CPCL)
• Gas (Transport and Distribution): GAIL, Petronet LNG, GSPC, IGL, MGL, GGCL

Hydro and Nuclear
• Upstream: IOCL, ONGC, OIL
• Downstream: IOCL, BPCL, HPCL, (subsidiaries such as NRL, MRPL, CPCL)
• Gas (Transport and Distribution): GAIL, Petronet LNG, GSPC, IGL, MGL, GGCL
Decarbonisation in India – A primer

India’s emphasis on decarbonisation has been through:

• **Renewable Energy**
  • Announcement of 175 GW of RE capacity by 2022 (National Solar and Wind Mission)
  • The INDC talks of 40% capacity through ‘non-fossil’

• **Energy Efficiency**
  • Perform-Achieve-Trade (PAT) scheme: Energy efficiency based trading scheme. The first cycle of PAT was from 2011-2014 and it has managed to reduce energy consumption by 8 Mtoe
  • UJALA scheme and LED programme
Instruments historically used to manage SOEs (1/2)

• **Institutional**
  - Setting up the Bureau of Energy Efficiency
    - Energy Conservation Building Codes
    - PAT
    - Standards and labelling programme
    - Bringing together SOEs on one table to discuss the problems – EESL

• **Mandates**
  - Price discrimination under for coal – power (regulated) and others
  - Priority sector allocation of natural gas
  - 2013, LPG for downstream companies were cross subsidised by upstream Payouts
Instruments historically used to manage SOEs (2/2)

- **Fiscal incentives (Carbon tax – implicit and explicit)**
- Source: Economic Survey of India 2015, Chapter 9

![Figure 9.6: Implications of Alternative Coal Taxation; Coal Price Increase and CO₂ Reduction](image)

![Figure 9.3: Implicit Carbon Tax From Increasing Excise duty on Petrol and Diesel, May 2014- January, 2015. (US$/tCO₂)](image)
What differentiates a SOE from a private sector unit?

- Ability to look beyond EBITA margins and PAT
- Budgetary allocations
  - Specific allocation for different budget head
- Social\Political involvement
  - Part of the vision of the government
- Disclosures
  - More open to disclosures about environment and sustainability measures

Example: Energy Efficiency Services Limited (EESL)
- Innovative business models
- ‘Demand Aggregation’ (achieving economies of scale), aiming at higher level authority keeping federalism in mind
- International Solar Alliance (ISA)
Conclusion

• Currently there have more mandates or instructions for SOEs
• There have been no incentive based instruments to “motivate”
• Given that SOEs dominate the Indian Energy space, policies, instruments and institutions that keep in mind the peculiarities of SOEs are need of the hour (Policy innovation)
Thank You

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