Low-Carbon Energy Transition: Motivating SOEs

IEA Workshop, Paris, September 26, 2016

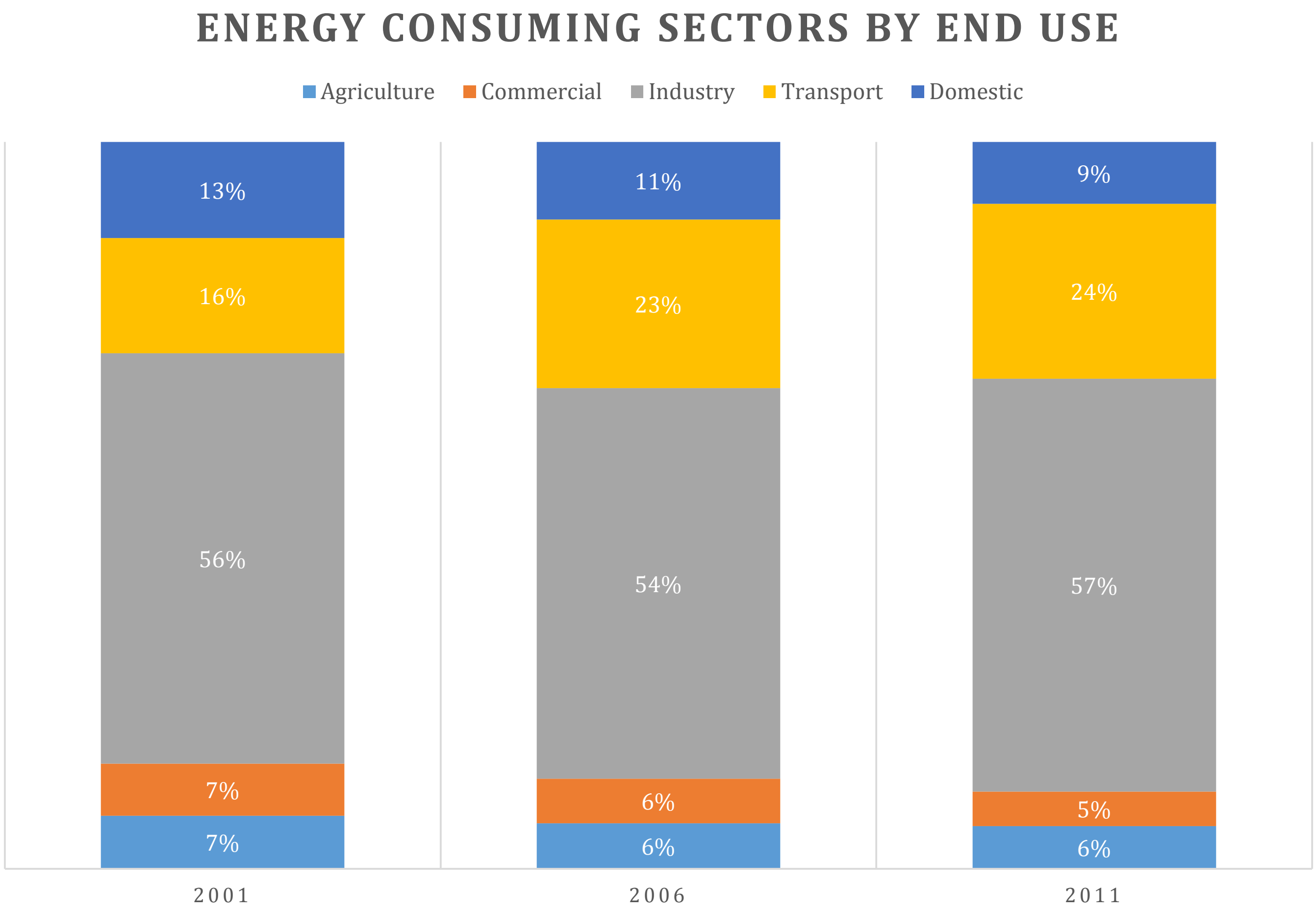
teri

The Energy and Resources Institute

Layout of the presentation

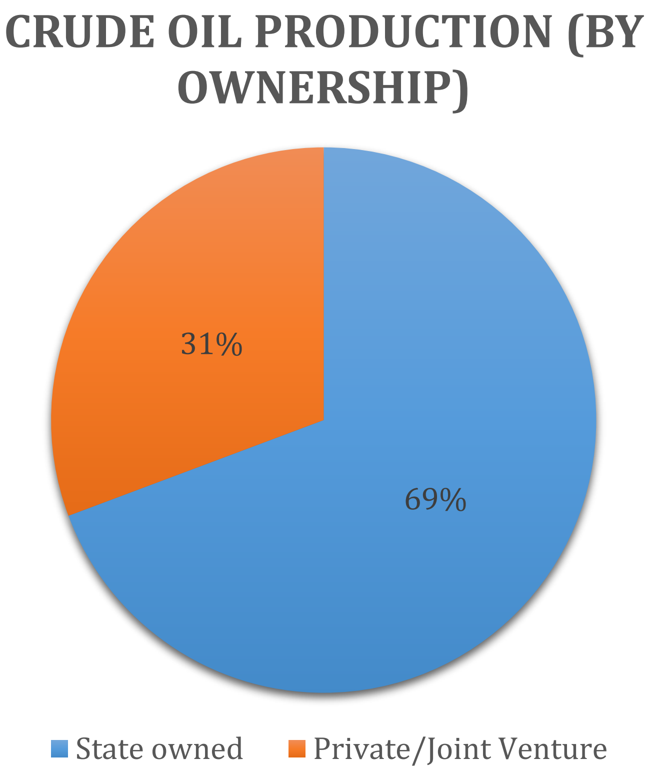
- India’s energy profile
- Presence of State-Owned Enterprises in India
- Energy transition in India
- Instruments used for motivating SOEs in India – Historically
- Going forward

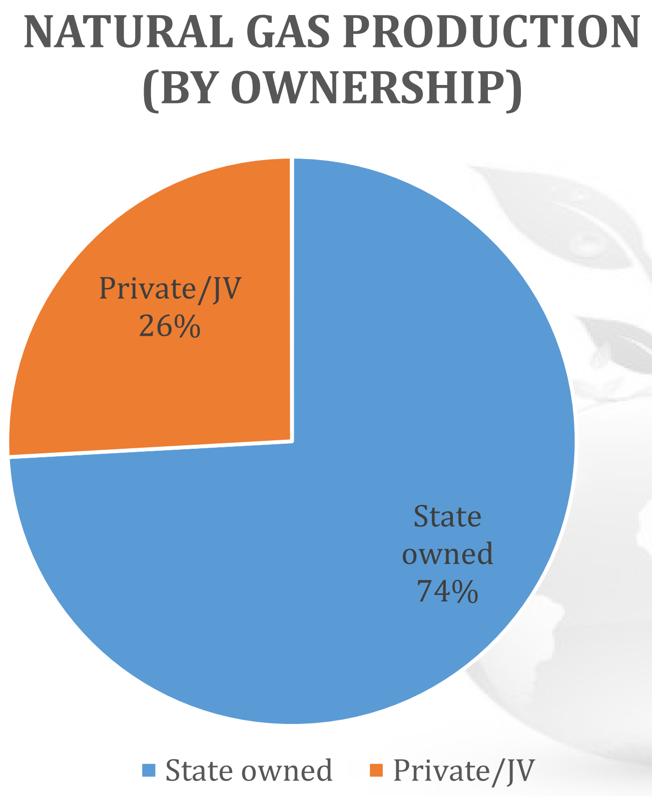
India’s energy profile



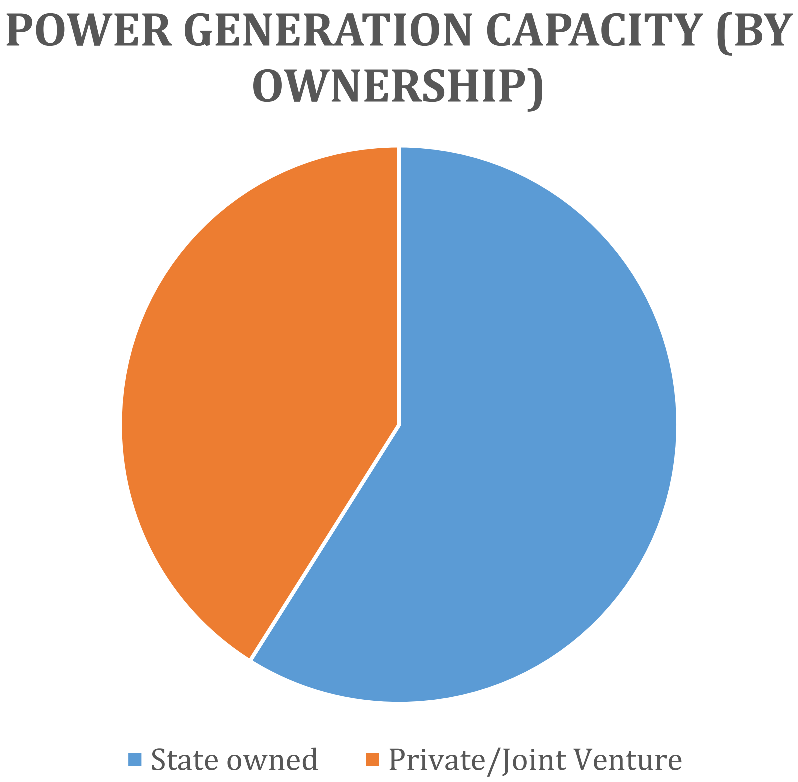
- Industry consumes more than half of the total energy in the economy
- Structurally, it has not changed over the past many years (graph)
- India’s per capita energy consumption in **2013** in the domestic sector is 150 kWh

Importance of SOEs in the energy sector





Importance of SOEs in the energy sector



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 CO_2 Reduction

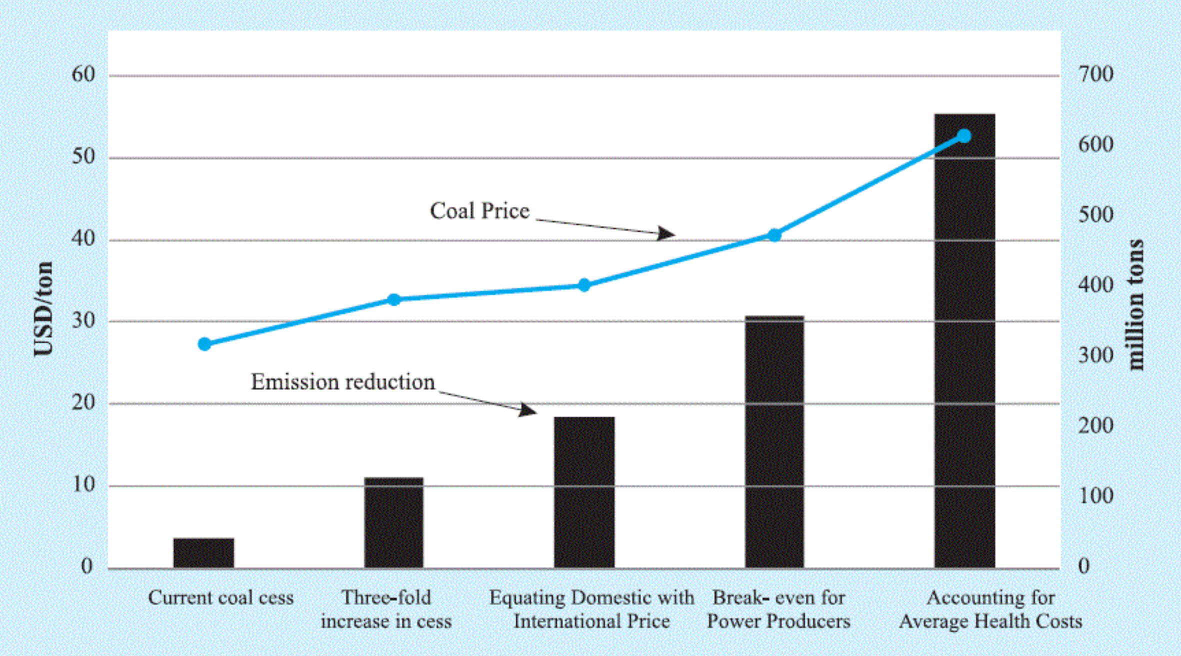
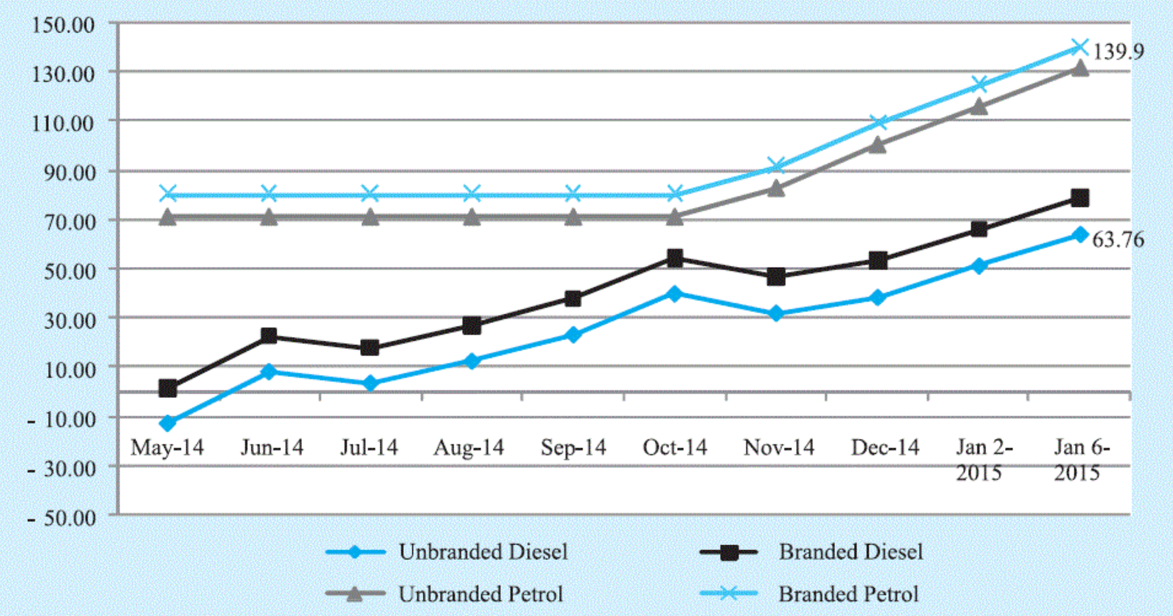


Figure 9.3: Implicit Carbon Tax From Increasing Excise duty on Petrol and Diesel, May 2014- January, 2015. (US$/tCO2)



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

aayushi.awasthy@teri.res.in