

# **Towards Empowering Access to Power in India**

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# Current situation in India's power sector

- In deep crisis – most utilities incurring losses over three decades
- Financial losses were 50% of the capital outlays (2009 – 2014)
- Supply inadequate & Line losses high (AT&C)
- Subsidies huge, ill targeted and create large negative externalities
- Per capita consumption low (India's one-fourth of world average; rural India's one-fourth of urban)
- Rural energy access – subsidised and also heavily compromised
- Climate concerns make it imperative that the current 70% dependence on fossil fuels come down
- Faced with the twin challenges of improving access and greening the energy mix

# Institutional background

- Indian Constitution - rapid economic development with social justice – state sector to play a catalytic role
- Electricity – Concurrent List of the Constitution – Government at centre and states had jurisdiction over the sector
- Electricity Supply Act 1948 laid the institutional background – State Electricity Boards (SEBs) - monopoly rights to generate, transmit and distribute electricity within the state; no new private entry allowed
- state governments vested with significant property rights (authority) over this sector

# Performance

- Till mid-70s these rights exercised combining equity with financial viability objectives
- Since the eighties parties in power engaged in opportunistic behaviour - political and financial 'rent-seeking'
- Small farmers subsidized— extended to all – race to the bottom -zero pricing for electricity –***and meters for agricultural consumption removed***

# Governance Failure & Reforms

- Opacity of agriculture consumption provided a convenient cover for increased rent seeking and inefficiencies
- Gap between demand and supply rising, line losses increasing, financial losses of SEBs mounting
- 1991, the ESA 1948, amended to bring in private sector participation in generation
- 1998, drive to unbundle the generation, transmission & distribution entities and set up regulatory commissions to monitor
- Electricity Act 2003 – landmark legislation that replaced all other existing Acts and set the stage for a redesigned institutional arrangement

# Reforms Failure

- Reforms - brought in privatization & competition without first ensuring an enabling environment – it was not easy to ensure this environment
- Circumvented the politically sensitive issue of rationalising and reigning in subsidies for agriculture consumption and metering them
- More and multiple layers of players introduced - often their incentives were at cross-purposes with each other and they operated in an environment that rewarded opportunistic behaviour
- Transaction costs in the sector increased tremendously for all the players
- Horizons for decision making shortened, coping mechanisms resorted to and overall costs increased

# Rural Energy Access

- Rural consumption - heavily subsidized - access heavily compromised
- Inadequate energy access is stifling growth potential
- Climate concerns - opened up options for renewable electricity
- rural areas have good renewable resource potential

# Way Forward

- To tackle the twin challenges -vest the consumers with property rights to 'manage' their energy
- 'Manage' because they can now be producers and consumers – 'prosumers'
- Create – '**Consumer Private Partnership**' (**CPP**) based enterprises
- The CPPs can make their 'produce or buy' decisions
- The incentives of both the partners would be aligned towards improved access, efficient management, optimal levels of renewable energy & energy efficiency, and financial profitability

## ....contd

- First start with rural consumers – source of and at the receiving end problems, have the renewable resources
- Rural consumers lack the financial capability, technological know-how and managerial expertise - leverage private sector partnership
- Once the rural enterprises stabilize and become financially viable the same can be done for the urban consumers also
- Thus the present distribution utilities can be gradually unbundled into many CPP based enterprises

# Advantages

- Energy consumption – no longer a private good – because of its public bad consequences
- The best way to influence consumer behaviour - vest them with the property rights to manage and provide the right incentives to do so
- EA 2003 provisions make this doable
- Provides opportunity to simultaneously address adequate energy access as well as climate concerns
- Reduces the direct control of state governments and paves way for independent regulation

**CHALLENGES??**

**Thank You ....**