



THE OXFORD
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Global Agreements? National and Regional Policies Perspectives on India

Anupama Sen

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Three Parts to the India Narrative

1. The National Policy Position
 - Acknowledgment of the facts (the data)
 - Policy (National Action Plan on Climate Change)
2. The (Parallel) National Policy Position on ‘Energy Security’
 - Related to economic growth
 - Has led to the pursuit of unsustainable (and contrarian) options: e.g. power from imported coal
3. Poverty Alleviation and Distributional Objectives
 - Problems (subsidies; pricing)
 - Opportunities ? (solutions from scratch)



1. The National Policy Position:

Some data

- **Macro indicators:**
 - Popn – 1.2 Bn (Urban Popn– 30%); 2010 GDP per capita (2005 PPP\$) - 3,040 (Agri – 19%, Industry -26%, Services – 55%); 2010 **Real GDP growth -8.5%**;
- **Primary Energy Use (2012):**
 - Total 559 mtoe of which **Coal – 53%**; Oil – 29%, Gas-10% . Hydro-5%, Renewables- 2%, Nuclear -1%
 - Within total installed power capacity (200 GW), **coal dominates (57%)**.
 - The **residential and industrial sectors** account for the majority of final energy consumption (67%)
- **Emissions:** 1,727 million tonnes or 1.4 million tonnes per capita (2007). Energy accounts for majority (58%) and within energy, electricity generation (65%)
- **Projections:** Emissions predicted to rise
 - IEA: 1,804 million tonnes by 2015 and 3,384 million tonnes by 2030
 - Mckinsey: 3,312 million tonnes by 2020 and 5,742 million tonnes by 2030
 - **Even with ‘Forced Renewables’ scenario coal will account for 41% of primary energy consumption by 2030 (Planning Commission).**



National Action Plan on Climate Change

- Launched in 2010: 8 'National Missions'
- To generate 15% of energy requirements by 2020 from renewables
- Generation based incentives
- To deploy 20,000MW of solar capacity by 2020
- Renewable Purchase Obligations for State Utilities
- Renewable Energy Certificates traded on Power Exchanges
- FiTs for wind and solar
- Energy Efficiency through Perform Achieve Trade (PAT) mechanism (although associated rebound effects)
- National Mission on Sustainable Habitat
- Tax on coal (2011) to create Clean Energy Fund



2. The (Parallel) National Policy Position on Energy Security

- Sustaining economic growth and growth in primary energy supply (policy literature on economic growth and energy consumption)
- Chronic power deficits (9% overall, 12% peak); July 2012 blackout affected 20 states and 600 Mn people
- Imports have been consistently increasing between 1990-2011
 - Oil: 80% ; LNG: 30%; Coal: 11%
- Unsustainable policies
 - Ultra Mega Power Plants, based on imported coal; Tata Mundra
 - Equity oil
- A push for nuclear energy (but public opposition)
- No communication at national level on dialogue between climate policy and energy security



3. Poverty Alleviation and Distributional Objectives

- **Energy poverty:** Over 70% of population in rural areas; over half have no access to modern commercial energy
- **Income poverty:** A third of the population lives below the poverty line; largest number of poor people in any one country
- **Gradual reform of the pricing system** for petroleum products and natural gas since 2010. Subsidy targeted through the ' Unique Identification Number' programme, launched in 2011. Subsidy taken directly onto the budget; expected to be more transparent.
- **Major overhaul of the system** needs to continue
 - Next general election in 2014 – opposition does not favour nuclear energy but emphasises renewables
 - Realistically this means India will end up importing more energy at high costs
- **Extending access:** smaller scale systems being piloted (distributed generation)
 - This could be an opportunity for bottom-up solutions
 - However, at the National Level (and in international negotiations) there appears to be an almost contradictory view on poverty in India



Some concluding comments

- **Regionalisation of Indian politics**
 - All National Plans subject to ratification by state assemblies / governments; some states better than others
 - Coalition politics plays a role
- **Markets versus planning**
 - India gradually moving from centrally planned and administered to market-based economy
 - Shared goals on climate, but diverging paths (India/ developing world vs developed nations) ?
 - Markets for solar RECS appear to have bypassed political hurdles faced by conventional energy
- **Regional Agreements**
 - SAARC (languishing) cooperation from neighbouring countries could aid bringing the national and international narratives closer (E.g. energy trade (hydro) with Bhutan)