

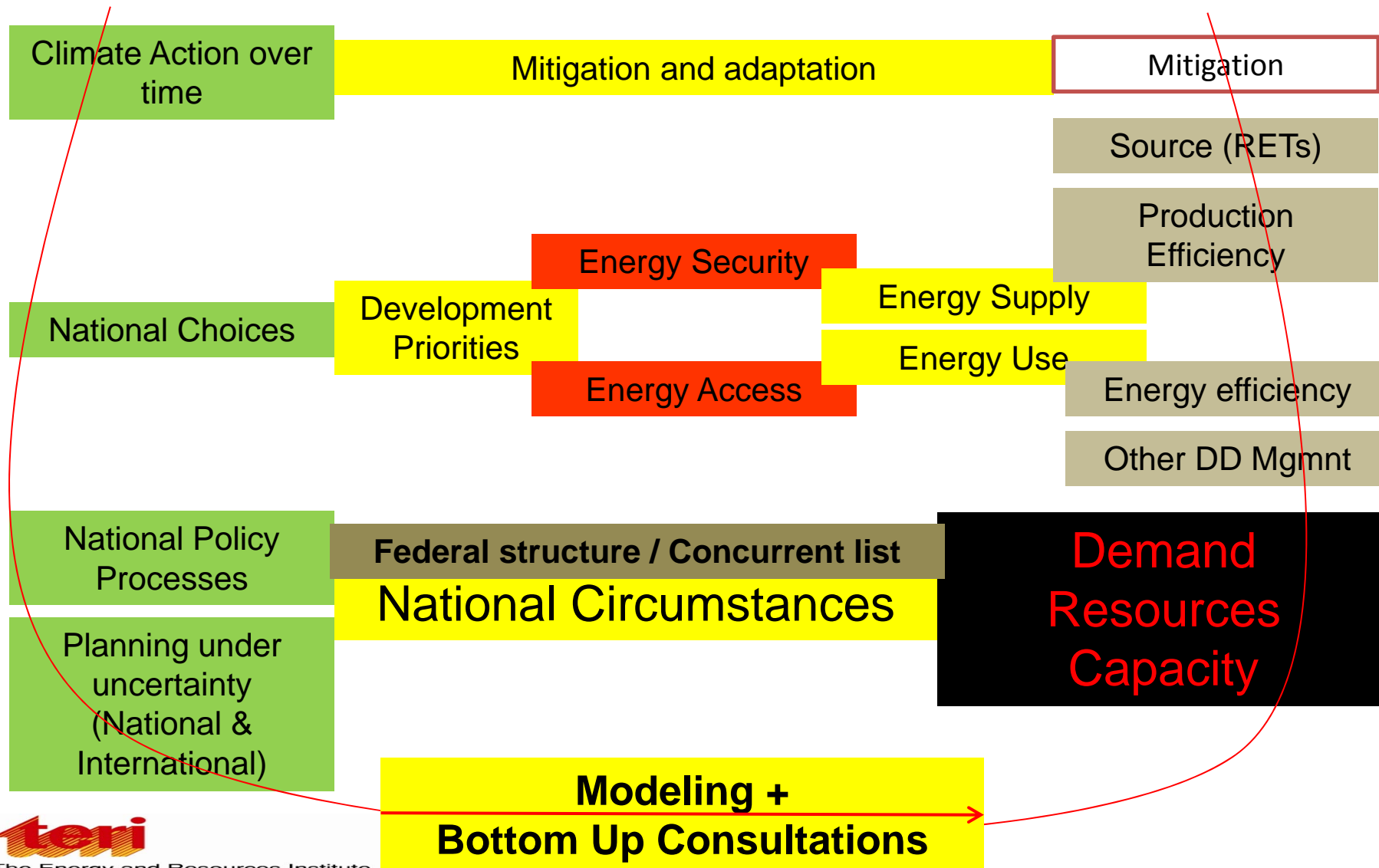
# **INDCs and Energy Sector Context, Opportunities and Challenges**

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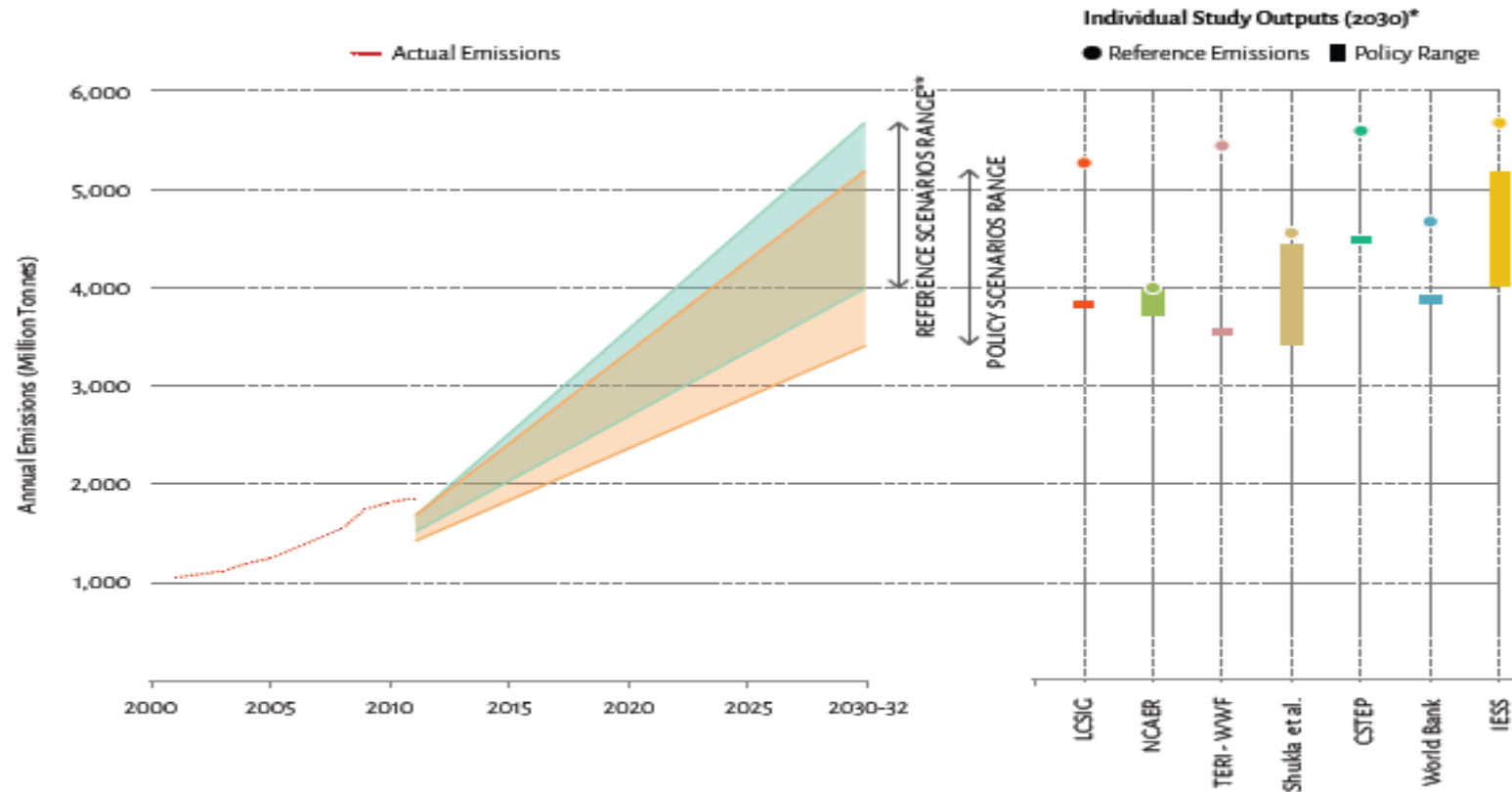
**24<sup>th</sup> ASIA PACIFIC SEMINAR on Climate Change**  
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# INDC and Energy Sector: Process



# Emission Trend: Past and Projected



\* The range of study end-years is 2030/31/32. See Appendix, Table A4.

\*\* Reference scenarios are not equivalently defined, but in general, attempt to reflect full implementation of currently committed policies.

# A closer look at India's Emissions Profile

	1994	2007	CAGR (%)
Electricity	355.03 (28.4%)	719.30 (37.8%)	5.6
Transport	80.28 (6.4%)	142.04 (7.5%)	4.5
Residential	78.89 (6.3%)	137.84 (7.2%)	4.4
Other Energy	78.93 (6.3%)	100.87 (5.3%)	1.9
Cement	60.87 (4.9%)	129.92 (6.8%)	6.0
Iron & Steel	90.53 (7.2%)	117.32 (6.2%)	2.0
Other Industry	125.41 (10.0%)	165.31 (8.7%)	2.2
Agriculture	344.48 (27.6%)	334.41 (17.6%)	-0.2
Waste	23.23 (1.9%)	57.73 (3.0%)	7.3
Total without LULUCF	1251.95	1904.73	3.3
LULUCF	14.29	-177.03	
Total with LULUCF	1228.54	1727.71	2.9

Note: Figure in brackets indicate percentage emissions from each sector with respect to total GHG emissions without LULUCF in 1994 and 2007 respectively

# Specific targets and policies

- **Renewable Energy Target of 165 GW by 2022**
  - Embedding into NAPCC and Annual Budgets
  - Mission on Solar (100GW) and Wind (60GW)
  - Biofuel Mission
  
- **Energy saving targets**
  - PAT Scheme for Large Industrial Units
  - Smart Cities Initiative
  - BEE
  
- **National Clean Energy Fund**

# INDCs and Targets: Caution

- **INDCs are not yet decided. Likely to be a continuation of Copenhagen Pledge.**
- **Likely timeframe of INDC is 2030**
  - Compare to current RE and EE targets of 2022 which are
  - Aspirational targets driven by national interests and aggressive policy scenarios, and
  - May not find place in INDCs (e.g. EU does not include 27% RE and EE targets in her INDCs)
- **INDCs will have two parts: Domestic and Conditional**

# Challenges in energy sector

- **Commercial viability of alternate technologies**
- **Supporting Infrastructure**
  - Charging of electric vehicles,
  - Evacuation capacity of Grid
- **Stranded assets and economic trade-offs**
- **MRV associated with targets, penalties and incentives**
- **Human capital**

Thank you  
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