

# Initiatives to Strengthen Modeling Capacities:

*Experience from India*

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# Modeling Activities @TERI

- TERI has been leading the modeling space in India for the past three decades
  - Energy System Modeling
  - Economic Modeling
  - Air Pollution Modeling
  - Hydrological Modeling
- Contribution towards policy making in India
  - (I)NDC formulation
  - National Communications & Biennial Update Reports
  - Mid-century strategies
  - National & State Action Plans on Climate Change
  - India's 5 year plans

# Strengthen modeling capacities: Need

- Rapid, dynamic transitions in modeling space
  - Change in technology learning curves
  - Greater awareness of need to address multiple objectives simultaneously
  - Need for more integrated modeling frameworks to delineate synergies & tradeoffs
- Development of tools
  - Models are typically huge involving several parameters and variables
    - Availability of existing databases & frameworks help
  - Tools help in holistic assessment of co-benefits, synergies and trade-offs

# Interaction between Global & National teams

- A mutually beneficial relationship
  - Brings together experts to help each other
    - Strengthen local data & issues in global models
    - Enable national teams to work with global models & frameworks
    - Exchange programs/Training/Capacity building → mutual growth
- Enhancing national/ regional modeling capacities
  - Helping national teams to develop new tools and models to engage in holistic assessment
  - National teams can conduct associated analysis through the global teams
- Better representation of countries in global models
  - Interactions help better represent socio-economic-political aspects of countries

# Thank You

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