INDIAN ENERGY GAME

A multi-player game designed as an educational tool to help participants understand the complexity of designing energy policy in India.

OBJECTIVE

India needs an energy policy that addresses the decreasing coal reserves, increasing demand, technological challenges and environmental issues. Comprehending problems which arise in such complex socio-technical systems is non-trivial. The Indian Energy Game has been designed to understand the following:
a) The challenges faced by different agencies in meeting targets.
b) The decision making process and negotiations between the agencies.

GAME PLAY

The participants are allowed to experience the consequences of environmental, social, technological, and geopolitical factors.

They assume roles of different ministries in the Indian Government that build energy capacity in the country. These Ministries are responsible for controlling the fuel sources that different generation techniques use.

The game is played in two rounds: in the first round the participants need to design an energy mixture for India's 12th Five-Year plan and in the second round they design an energy mixture for India's 13th Five-Year plan. Constraints such as social costs, environmental costs, fuel shortages, national security and technology barriers to name a few, shape the players' decisions.

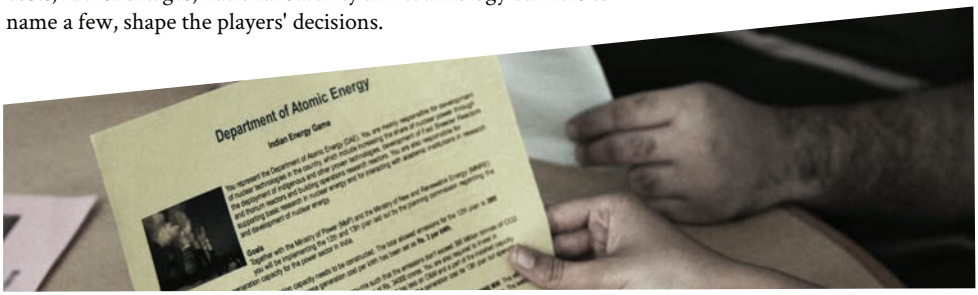
Intended Audience
General Public, Energy Policy Planners.

Keywords
Multi-party negotiation, Conflict resolution, Energy Policy, Planning.

Type
Paper-based/ table-top

Duration
1hour - 1.5hour

No. of people
6 -12 players



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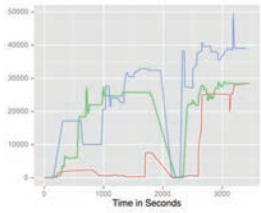
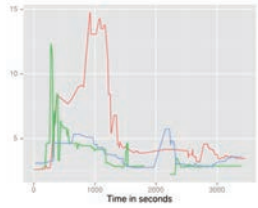


CO_2 emissions in million tonnes



Cost of Generation on Rs/kWh

OBSERVATION

During the course of the game, the participants experience the various environmental, societal, geopolitical, and economic constraints faced by the decision makers while planning for energy policy in India.

This helps players understand the constraints faced by policy makers, the importance of cooperation and the dynamics of negotiation & information sharing. We observed in multiple sessions of the game that the teams do not share information in the first round of the game and face the consequences of the same. This eventually results in the teams sharing amongst themselves in the second round.

To give another example, we observed in multiple sessions of the game that the participants seem to understand that large hydroelectric projects, although inexpensive, displace a lot of people and have severe environmental costs.

Acknowledgement

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