UNFCCC Workshop on NA I Mitigation Actions

India's Development Needs and Mitigation Actions

Presentation
By India

4th April 2011 Bangkok

Indian Mitigation Action: A Voluntary Action

'… *will endeavour to* ***reduce emissions intensity of its GDP by 20-25% by 2020*** *in comparison to the 2005 level*.' (excludes agricultural emissions, which are not increasing).

- As per this target, India's non-agricultural emissions are likely to be ~ **2.6 T**/capita in 2020 (assuming 8% GDP growth), against the global energy emissions of **4.4 T**/ capita (2005) and Annex-I energy emissions of **12 T**/ capita (2005).

- Reducing emissions intensity is difficult for India in face of massive development imperative to lift **470 million people out of poverty**; build homes, roads and other infrastructure.

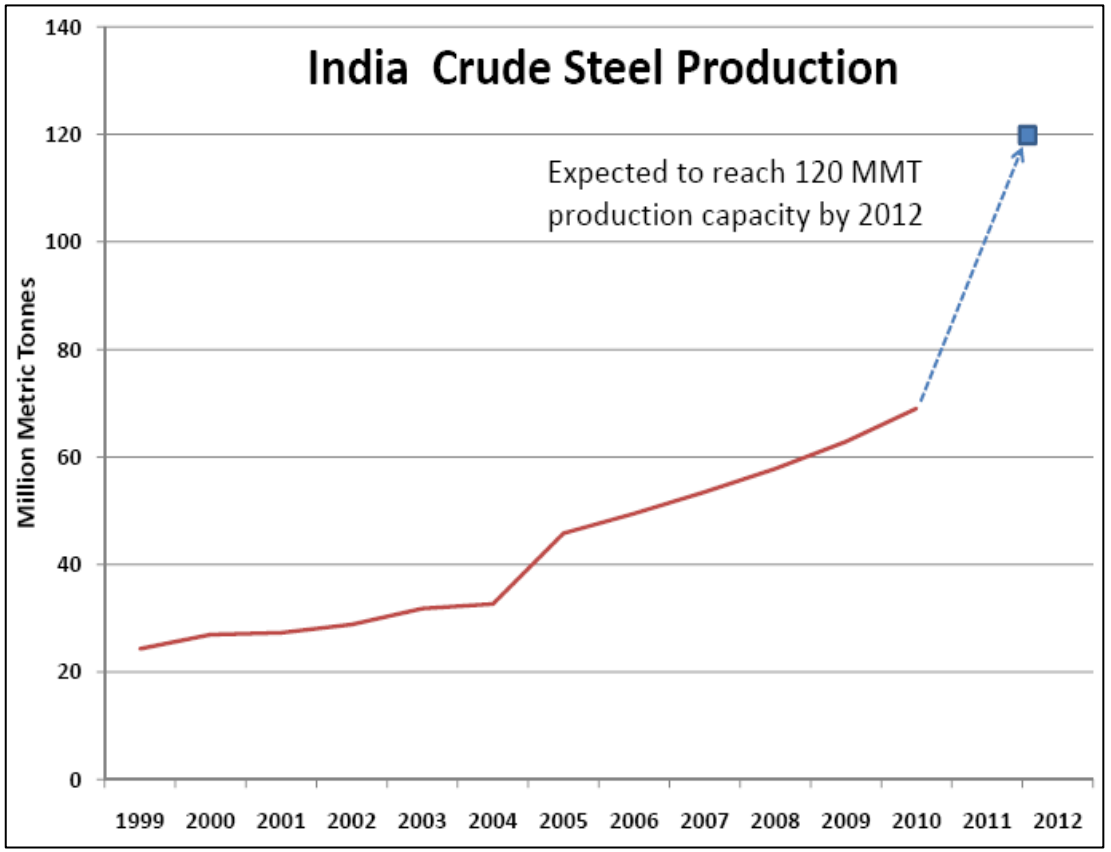
Rise in Demand of Energy Intensive Goods

In the phase of industrialization and building infrastructure the production of steel and cement is increasing very substantially.

By 2012, India's crude steel production will be 4 times what it was in 2002. It will be still less than 9% of present global production.

Indian Cement industry is one of the most efficient in electricity use and efficiency of industries is substantially increasing.

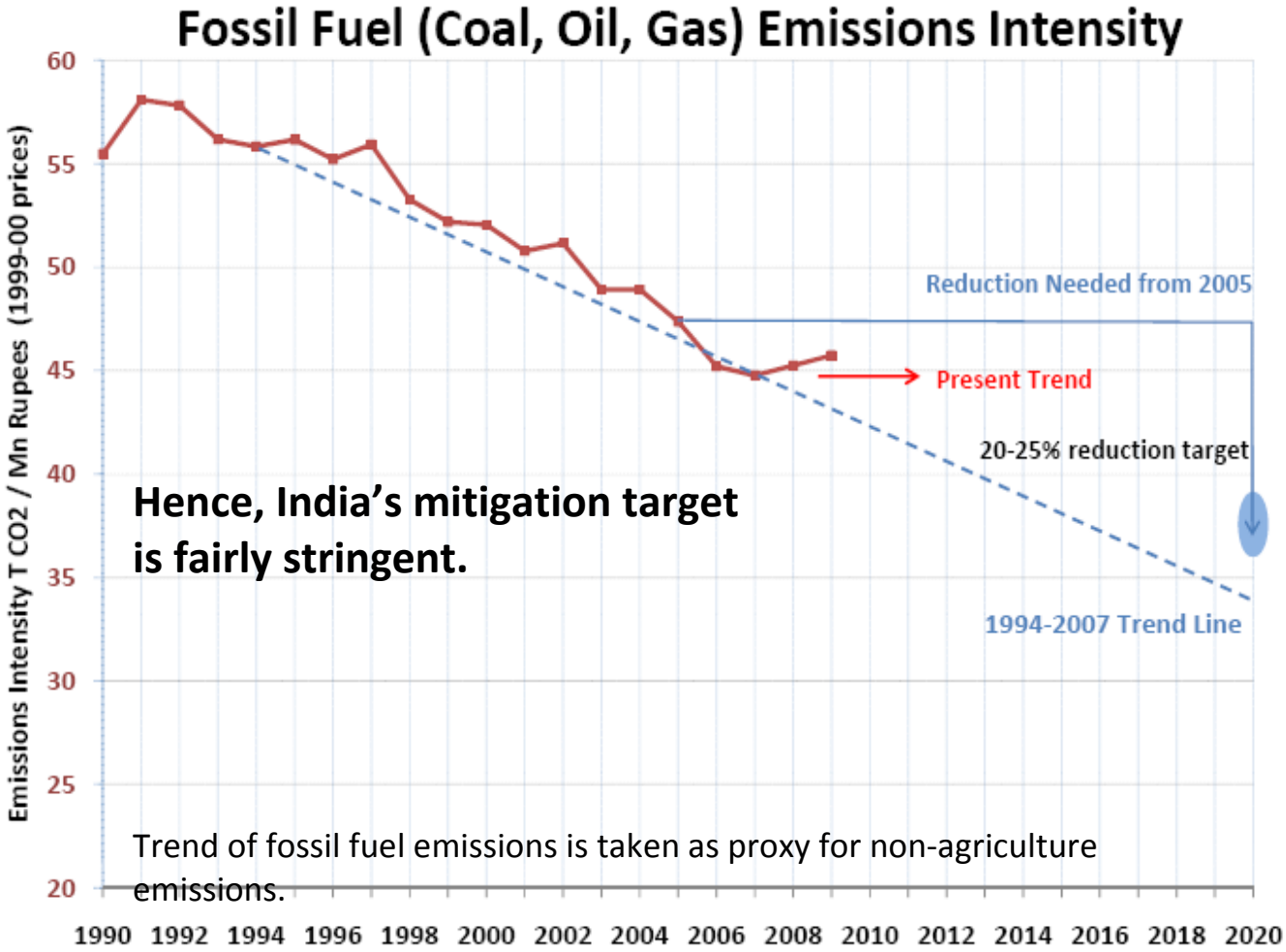
Despite the rising efficiency, the overall energy needs for development are growing.



Past emission trend is not indicative of future

As countries go through different phases of development, past intensity trends cannot be treated as BAU for national emissions trend.

A trend of increase in intensity during industrialization was seen in many industrialized, and recently industrializing countries.



Specific actions planned and underway

- Coal cess (**3.2 $ PPP**/ton) from 2010 resulting in annual fund ~ **$ 2 Billion (PPP)**
- National Mission for Enhancing Energy Efficiency (NMEEE), with annual saving of **25 MT CO_2** by 2015.

Benefits and costs of some of the mitigation actions (NAMAs) are listed below. The **incremental cost** of these NAMAs should be supported by Annex-I parties, depending on ambition of their own targets.

Action	Brief Description	Estimated Benefit (MT CO2/yr in 2020)	Estimated Additional cost ($ Billion /yr)
National Solar Mission	22,000 MW of solar by 2022 (600 MW contracted in 2010)	31	5.1
Nuclear Energy	20,000 MW by 2020	99	8.2
Renewable Energy	72,000 MW by 2022	104	4.3
Green India Mission	20 Mn Ha to be afforested / eco-restored	43	1.0
	TOTAL	**~ 275 MT CO2**	**~ $ 19 Bn/yr**