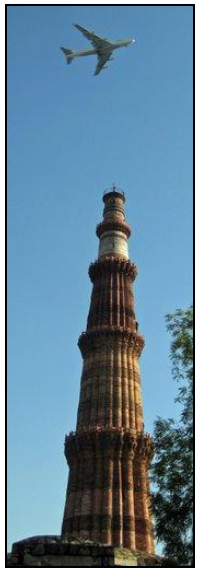
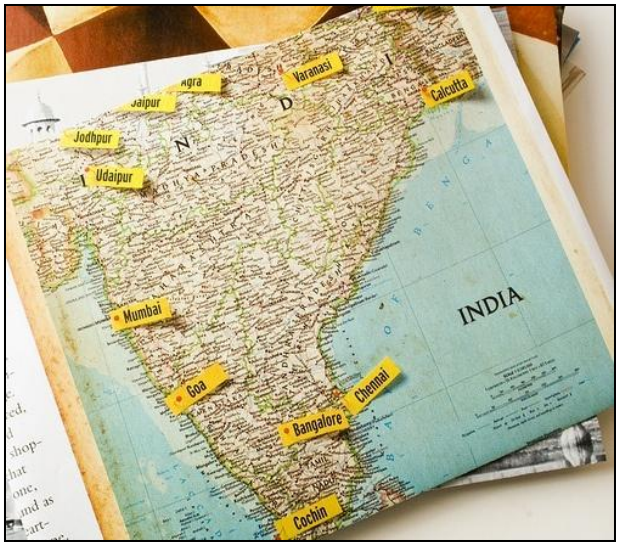
Action in India on Climate Change

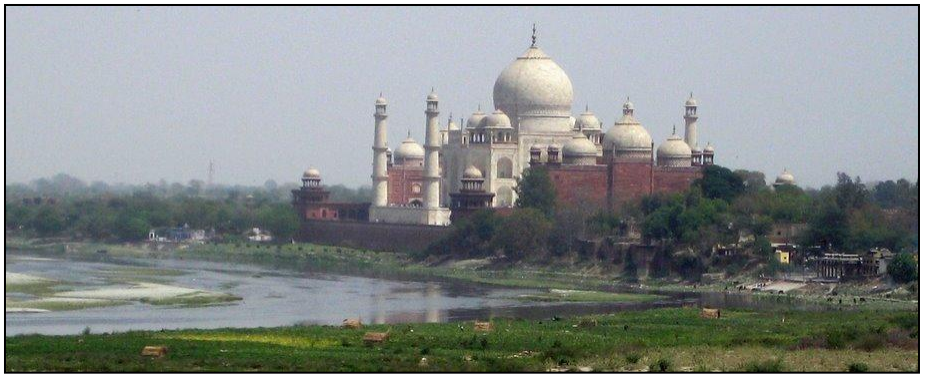
Jacob Scherr

Natural Resources Defense Council

India Rising







- Currently world's 4th largest CO2 emitter

- Predicted to become most populous country by 2030

- By 2025, middle class could grow from 50 million to more than 500 million people

- Much of the infrastructure, up to 80 percent, that will exist in India in 2030 has yet to be built.

	Carbon dioxide emissions:					
	Total emissions (MtCO2)	CO_2 emissions annual change (%)	CO_2 emissions share of world total (%)	Population share (%)	CO_2 emissions per capita (tCO_2)	CO_2 emissions per unit GDP (tCO_2 per $1,000,000)
	2004	1990-2004	2004	2004	2004	2005
1. United States	6,045.8	1.8	20.9	4.6	20.6	475.2
2. China	5,007.1	7.8	17.3	20.2	3.8	1,045.8
3. Russian Federation	1,524.1	-1.9	5.3	2.2	10.6	923.5
4. India	**1,342.1**	**6.9**	**4.6**	**17.4**	**1.2**	**500.5**

Sources: UN Human Development Report 2007/2008, WRI Climate Analysis Indicator Tools (CAIT) 2005

India – vulnerable to climate change

- Monsoon
- Himalayan Glaciers
- Sea Level Rise

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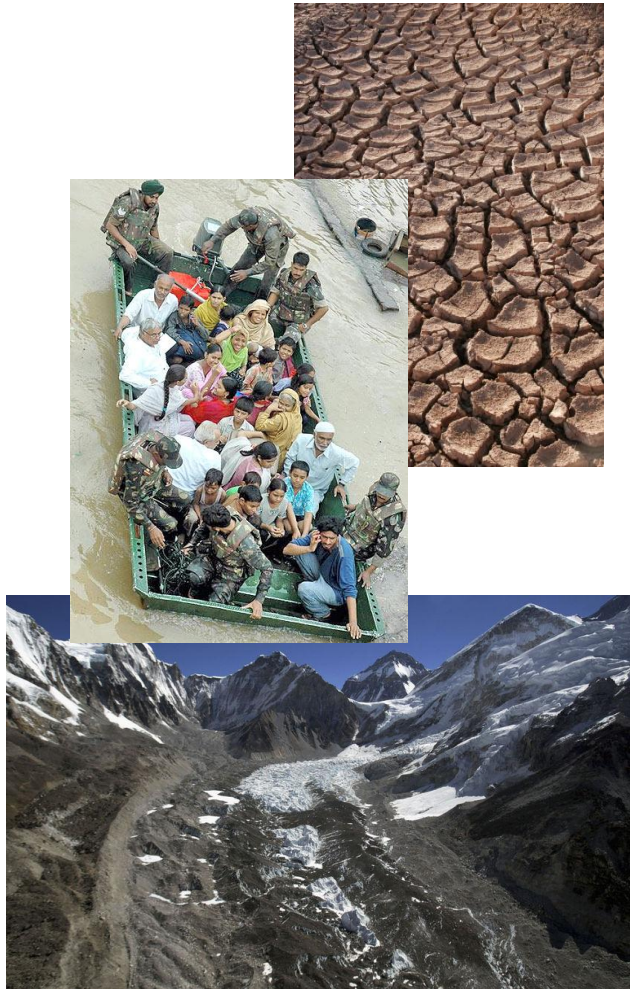
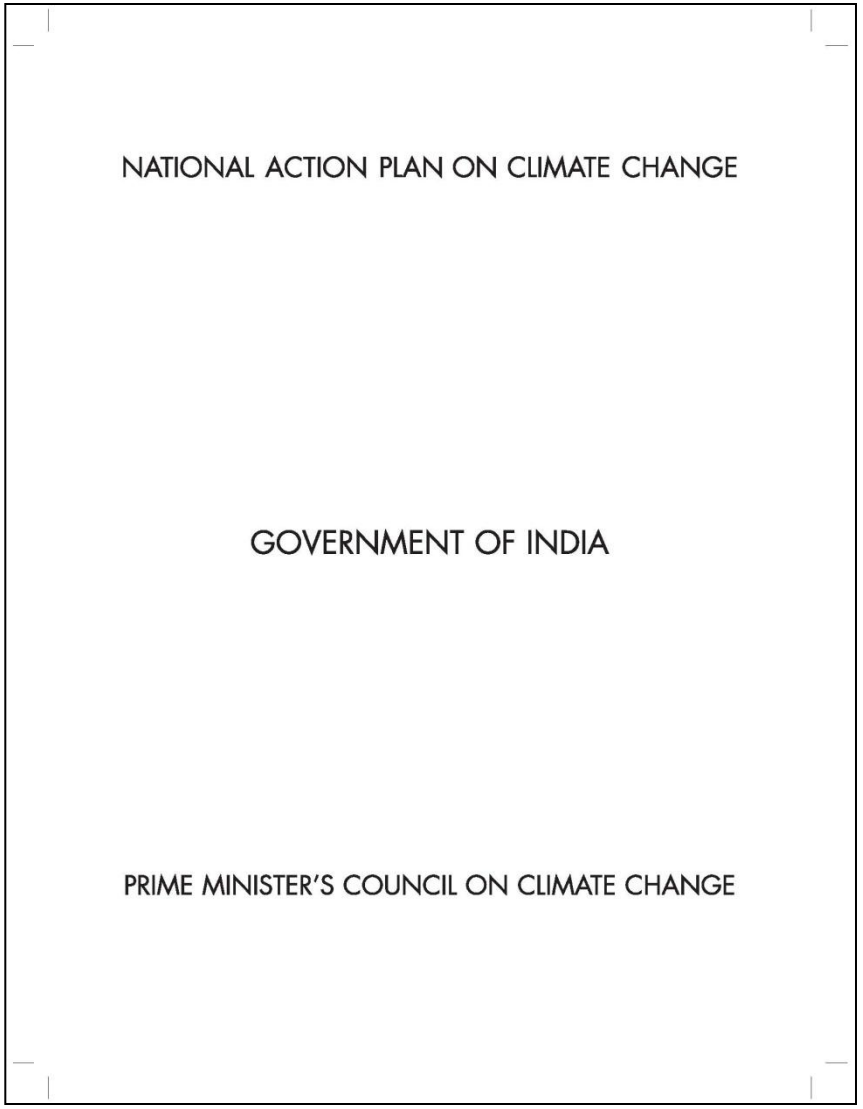



AP

- National Solar Mission
- National Mission on Enhanced Energy Efficiency
- National Mission on Sustainable Habitat
- National Water Mission
- National Mission for Sustaining the Himalayan Eco-system
- National Mission for a Green India
- National Mission for Sustainable Agriculture
- National Mission on Strategic Knowledge for Climate Change

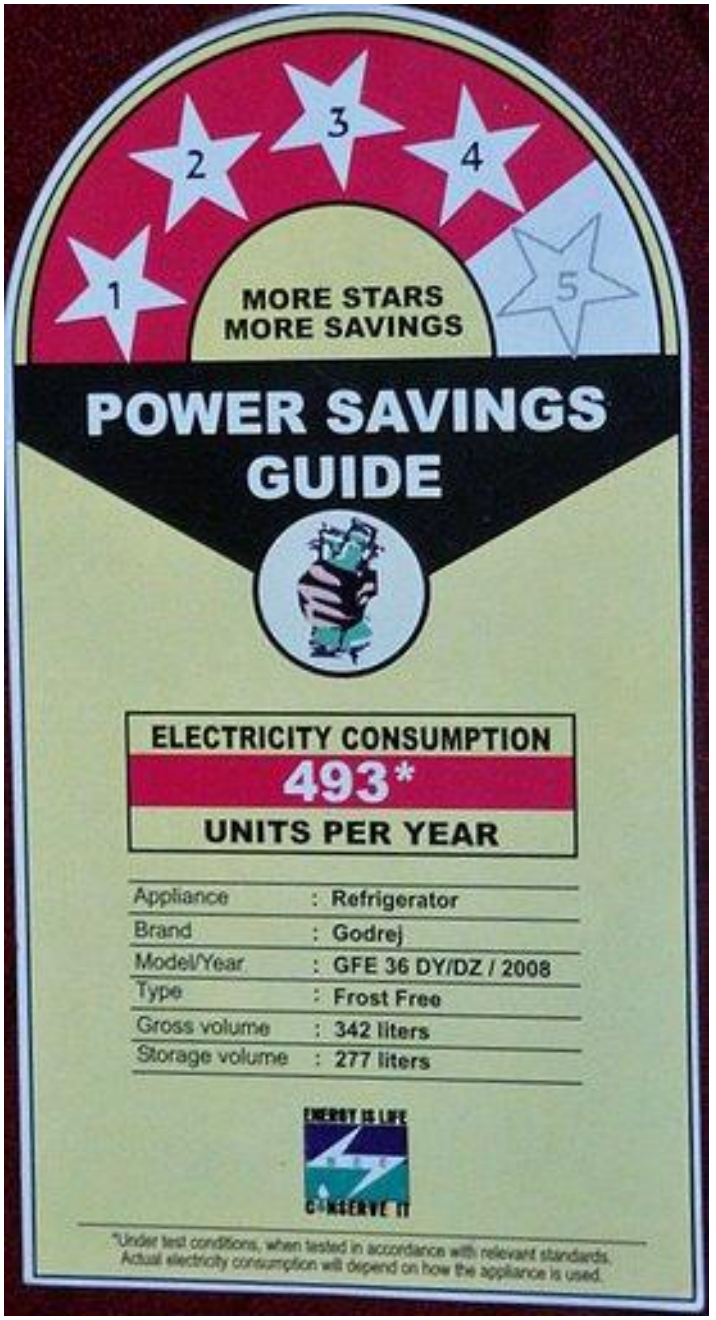


Solar Mission

- Goal set to develop 20 gigawatts of solar power by 2022.
- Between 2010 and 2013, plans to develop 1,100 megawatts of solar energy with both grid-connected solar power plants and decentralized solar projects.
- Funding incentives to solar power operators, include capital subsidies of up to 30 percent, low-interest loans, and feed-in-tariffs for rooftop solar and large grid-connected solar projects.

Energy Efficiency Mission

- Goal set to reduce annual energy consumption by 5% by 2015
- Innovate *Perform, Achieve and Trade (PAT) Mechanism* proposed for energy intensive industrial facilities and power plants
- Efficiency standards have been put in place for refrigerators, air conditioners, tube-lights, and transformers.



Green Buildings

- 1,000 LEED-certified buildings and $4 billion green building market expected by 2012
- Energy Conservation Building Code issued in July 2009 and expected to become mandatory in next two years.

Transportation

- Mandatory fuel-efficiency standards on all cars and trucks by 2011.
- Conversion of its bus, taxi, and city vehicle fleets to compressed natural gas.
- New metro rail and bus rapid transit systems in number of major cities, including Delhi and Mumbai

National Green Mission

- May 2010 draft calls for doubling the rate of forest cover restoration and removing 43 million tons CO2e each year, or 6.35 percent of India's annual greenhouse gas emissions, by 2020. ".

Financial Measures

- "Coal tax" of 50 Rupees per metric ton announced in February 2010, with revenues going to a National Clean Energy Fund to finance clean energy research and development.
- Repeal in June 2010 of subsidies for gasoline and lowered subsidies for diesel and kerosene, and reduced import duties on renewable energy equipment.
- Exemption created for some renewable energy machinery, like wind turbine parts, from a domestic production tax on new goods.

Data and Analysis

- Release in May of India's GHG emissions data for 2007, making India the first developing country to publish updated official numbers

- Comprehensive science program with its Indian Network of Climate Change Assessment (INCCA), involving 120 research institutions, will release an assessment of the impacts of climate change on water, agriculture, forests and human health.

- In 2013, India will become one of the first developing nations to launch a dedicated satellite to monitor its emissions.

- Global Advisory Network Group on Environmental Sciences (GANGES) for climate research and policy analysis.

International Cooperation

- Just prior to COP15, India announced its first-ever domestic emissions target— a 20 to 25 percent cut from 2005 emission levels by 2020.
- in November 2009, Prime Minister Singh and President Obama launched a *Green Partnership, including Program to Advance Clean Energy (PACE),* focused on research and deployment of clean energy technologies.
- United States and India will co-lead the *Super-efficient Equipment and Appliances Deployment (SEAD) Initiative*, which will improve incentive and labeling programs, strengthening standards, and funding research and development.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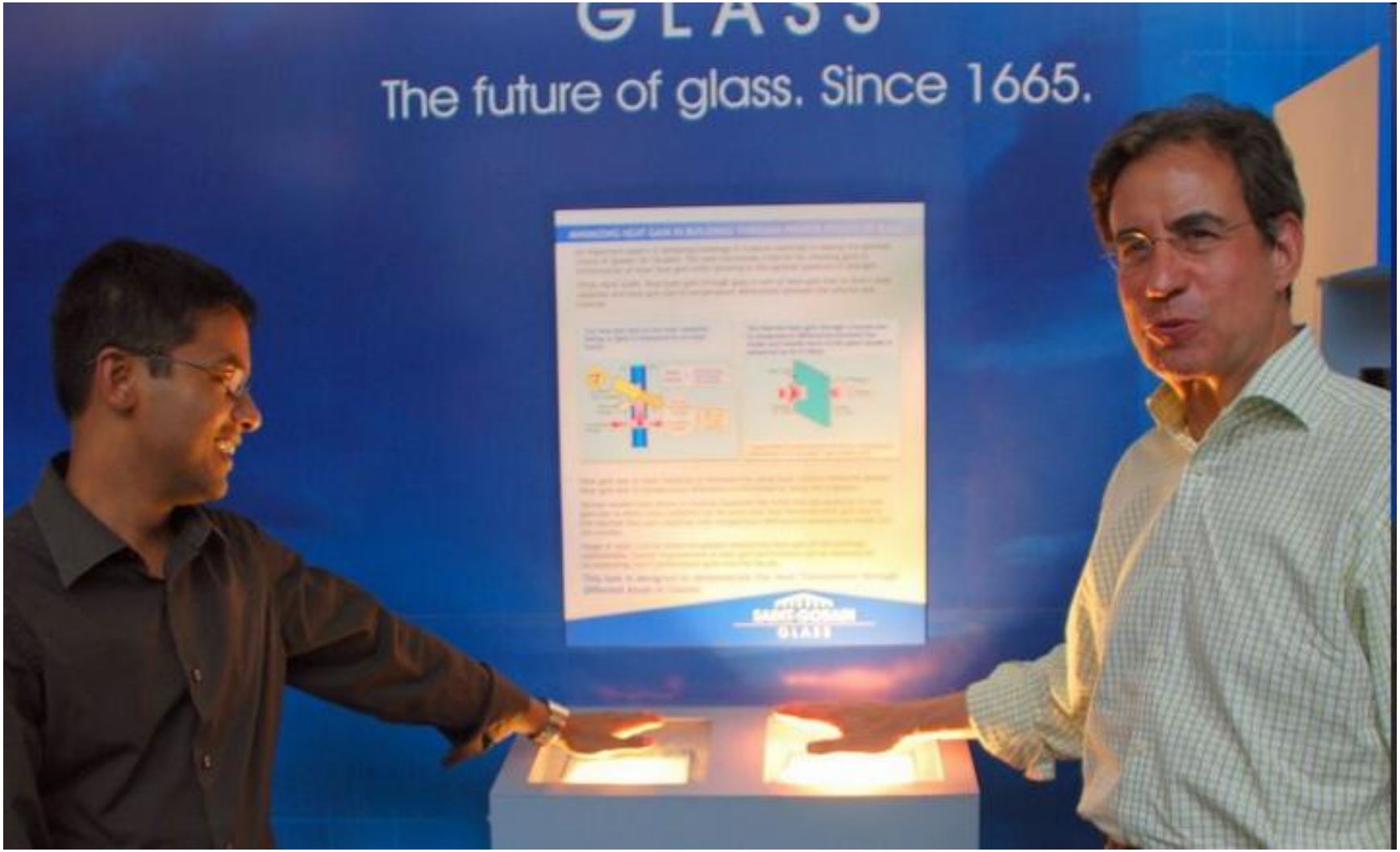
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