India's INDC 2015: An Assessment

P.R. Shukla

Indian Institute of Management, Ahmedabad



India's INDC: Key Themes

- 1. Healthy and sustainable way of living based on conservation and moderation.
- 2. Climate-friendly & cleaner path than others at same level of economic development
- 3. To reduce emissions intensity of GDP by 33 to 35 % by 2030 from 2005 level
- 4. About 40 per cent electric power installed capacity from non-fossil fuel based energy by 2030 (with the help of technology transfer and low cost international finance)
- 5. Additional carbon sink of 2.5 to 3 billion ton of CO2e by 2030
- 6. Adaptation by enhancing investments in development programs in vulnerable sectors
- 7. Mobilize domestic and international funds for mitigation & adaptation actions to fill resource gap.
- 8. Build capacities, create domestic framework and international architecture for quick diffusion of cutting edge climate technology and joint collaborative R&D

INDC Target (Quantitative)

Base year: 2005

Target year: 2030

Quantitative Features:

- 1. 33-35% reduction of CO2 Intensity of GDP
- 2. 40% Electric Power Capacity from non-fossil sources
- 3. Additional Carbon Sink (2.5 to 3 Bil. Ton of CO2 by 2030)



Emissions Target (2030)

	2005	2010	2030	
Intensity Index	100	91.21	65	67
CO2e (Bt)	1.41	1.98	5.97	6.15
GDP (Tr. Rs - 2004-05)	35.43	52.83	230.59	230.59
CO2e/GDP (Ton/Mil Rs)	39.83	37.48	25.89	26.68
Population (Billion)	1.12	1.19	1.475	1.475
CO2e/Capita (Ton)	1.25	1.66	4.05	4.17



Action Plan

Objective	Actions		
1. Reduce emissions intensit of GDP by 33 to 35 % by 2030 from 2005 level	 New, efficient and cleaner in thermal power technologies Reduce Transport emissions Energy Efficiency Climate Resilient Infrastructure Zero Effect, Zero Defect Policy 		
2. 40 % electric power capacity from non-fossil fuel based energy by 2030 (helped by technology transfer and low cost international finance)	 175 GW solar + wind + biomass by 2022; continue scale up Aggressive Hydropower Development 63 GW Nuclear Power by 2032 		
3. Additional carbon sink of 2.5 to 3 billion ton of CO26 by 2030	 Implementation of 'Green India Mission' and other afforestation programs 140,000 km long tree line on both sides of national highways 		

Problem 1: Additional Finance

- 1. Implementing adaptation actions in agriculture, forestry, fisheries, infrastructure, water resources and ecosystems will cost USD 206 billion between 2015 and 2030
- 2. Mitigation activities for moderate low carbon development would cost around USD 834 billion till 2030
- 3. A substantial scaling up of the climate action plans would require greater resources. A preliminary estimate suggests that at least USD 2.5 trillion will be required for meeting India's climate change actions between now and 2030



^{*} All USD in 2014-15 prices.

Problem 2: Technology Transfer

THIS SLIDE IS UNDER PREPARATION. WE WILL SPECIFY THE TECHNOLOGY NEEDS, COOPERATION AND SCALING UP DOMESTIC INDUSTRY FOR KOW CARBON PRODUCTS AND SERVICES



PROBLEM 3: LINKING WITH SDGs

THIS SLIDE IS UNDER PREPARATION. WE WILL COMPARE OUR DDPP RESULTS FOR TWO DIFFERENT SCENARIOS (CONVENTIONAL AND SUSTAINABLE) AND SHOW THE ADVANTAGE AS WELL AS IMPLEMENTATION ISSUES VIS-À-VIS TWO SCENARIOS

Necessity towards LCS (2°C Target)

THIS SLIDE IS UNDER PREPARATION.

COMPARISON WILL BE WITH OUR DDPP
RESULTS AND THE GAP IN INDC



Expectations from Paris

- 1. A balanced agreement with all components mitigation, adaptation, technology, finance and capacity building-consistent with the principles and provisions of the Convention
- 2. New, additional and predictable finances from developed and developing countries for mitigation, adaptation, technology transfer and capacity building
- 3. Provision of technology development, transfer & diffusion
- 4. Paris Agreement must incorporate loss and damage and make operational Warsaw International Mechanism