

**REGIONAL CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE:
STRENGTHENING THE CAPACITY FOR ENVIRONMENTAL AND
CLIMATE CHANGE LAWS IN ASIA AND THE PACIFIC**

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SESSION 8: CLIMATE CHANGE / CLEAN ENERGY LAW

Climate Change Legislation and NDCs Implementation - India

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Rationale for Regulatory Framework

- ❑ The present international climate change regime is embodied in the *1992 UN Framework Convention on Climate Change* (UNFCCC) and the *1997 Kyoto Protocol* – main thrust is on the **mitigation of greenhouse gas (GHG) emissions** in a cost-effective manner to attain objective of ‘stabilization’. The 2015 Paris Agreement sought to change the approach to GHG mitigation by bringing in *Nationally Determined Contributions* (NDC).
- ❑ Climate change has been accepted as ‘*common concerns of humankind*’.(UNGA Reso. 43/53 of 06 Dec. 1988). Applying principle of ***differentiation***, different countries bear different levels of responsibility for their contribution to atmospheric GHG concentrations.
- ❑ In terms of ***historical contribution*** to GHG emissions, developed countries are to ‘***take the lead***’ – developing countries are considered least responsible for it.



GHG Emissions Scenario - INDIA

- ❑ India faces the challenge of **sustaining its rapid economic growth**.
- ❑ India has ratified the UNFCCC (1 November 1993) as well as the Kyoto Protocol (26 August, 2002) and the Paris Agreement (02 October 2016).
- ❑ The per capita GHG emissions of India are insignificant as compared to the global average –the net GHG emissions from India are reported to be 1727.71 million tons of CO₂ equivalents in 2007— at 5th position behind USA, China, EU and Russia.
- ❑ The power, steel, cement, residential, and transport sectors are among the main sectors that contribute to GHG emissions and, in turn, offer potential opportunities for reduction.



Relevant National Policies

- ❑ **National Forest Policy, 1988:** To ensure environmental stability and maintenance of ecological balance, including atmospheric equilibrium.
 - *National Forestry Action Program* to bring 33% of the area of the country under tree/forest cover via afforestation by 2012 (as compared to about 24% in 2003) and to arrest deforestation.
- ❑ **Draft National Forest Policy, 2018:** Climate change impacts the structure, composition and functions of forest ecosystems. Strategic actions such as sustainable forest management will be taken to strengthen forest-based climate change mitigation and adaptation.
- ❑ **National Environment Policy, 2006:** Recognized inclusion of environmental considerations in sectoral policy-making, institutionalizing mechanisms to operationalize environmental concerns, strengthen relevant linkages among various agencies.
 - Emphasizes “*large-scale resources would clearly be required for adaptation measures for climate change impacts, if catastrophic human misery is to be avoided.*”
 - *Mitigation measures cover* watershed management, coastal zone planning & regulation, forestry management, agricultural technologies etc.



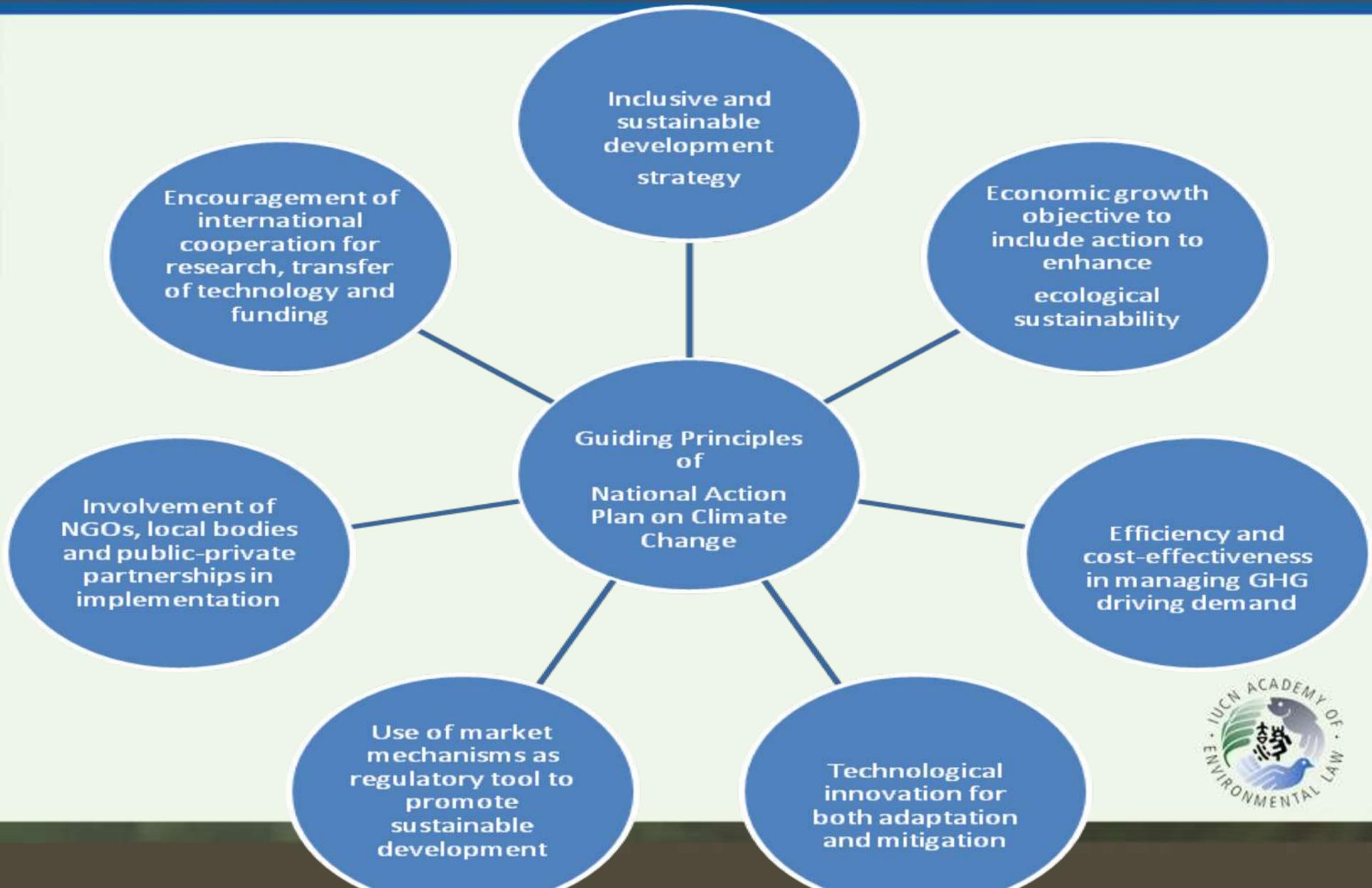
□ ***NAPCC (2008)***- seeks to put into action multi-pronged, long-term and integrated strategies for achieving less carbon-intensive growth pattern as well as renewable sources of energy and high energy efficiency. Laid down **eight core missions**:

- (i) pursuing solar energy;
- (ii) urging energy efficiency;
- (iii) creating a sustainable habitat;
- (iv) conserving water;
- (v) preserving the Himalayan ecosystem;
- (vi) creating a “green” India;
- (vii) creating sustainable agriculture; and
- (viii) establishing a strategic knowledge platform for climate change.

□ Pledges that India’s per capita GHG emissions “*will at no point exceed that of developed countries even as we pursue our development objectives.*”



Guiding Principles of NAPCC



Some Gaps in the Overarching Policies–I

Framework	Present status	Gaps	Needed improvements
General legal Framework	EPA, Air Act <i>etc.</i>	Scattered laws and regulations	Comprehensive and coherent legislation
National Environment Policy	Emphasis on the need for adaptation to climate change, and the scope for incorporating these in relevant programmes with the over-riding priority of the right to development. Inclusion of environmental considerations in sectoral policy making. Emphasis on the need to institutionalise mechanisms in order to operationalise environmental concerns at all levels of government	Sources of the GHG emissions in various sectors are not given due consideration. It does not address the need to reduce GHG emissions from its various sources scattered all over the various sectors of the Indian economy on the ground that India's existing policies for sustainable development result in a relatively GHG-benign growth path.	Comprehensive environment policy on the need to reduce GHG emissions from its various sources scattered all over the various sectors of the Indian economy
Institutional framework	CPCB, SPCB, MoEF	Specific GHG supervisory and regulatory body	GHG supervisory and regulatory body
Dispute settlement	The National Green Tribunal (NGT)	Lack of in-house expertise on GHG-related disputes, narrow scope of the NGT Act, 2010 with Air Pollution and Water Pollution Act, no innovative provision on disputes concerning GHG	Need for appointment of judicial and expert members with background in climate change and GHG regulation
Sectoral regulations	Some industry-specific regulations	Do not cover all sources of GHG emissions across various sectors	Sector-specific climate regulations integrated with overall regulations

Some Gaps in the Overarching Policies–II

- ❑ *Need for a Comprehensive GHG Law:* present regulations are scattered over number of laws. A comprehensive legislation is needed with the primary aim of regulating and limiting GHG emissions in various sectors of the economy.
- ❑ *Need for a Comprehensive GHG Regulatory Institution:* in view of the growing complexities of economic development and the technical issues involved, it seems necessary to institutionalize a specialized supervisory and regulatory body for regulating GHG emissions in India.
- ❑ *Need for More Robust Sectoral Policies:* need to develop sector-specific climate policies, measures and regulations that could mitigate GHG emissions as well as be integrated with the objective of sustainable development of the economy.
- ❑ *Need for Indicative Targets & Time Frame:* there are no targets or time frames for mitigating GHG emissions from the sources.
- ❑ *Need for Market-Based Schemes:* in the light of the emerging trend in regulatory schemes, there is a need to shift from a command-and-control regulatory system to a more market-based compliance system.



Paris Agreement 2015: Indian NDCs -I

- ❑ India has committed to cutting its greenhouse gas (GHG) emissions intensity by 33 to 35 percent below 2005 levels by 2030
- ❑ Aims to achieve 40 percent of its electricity generation from non-fossil sources by the same year.
- ❑ India's economic plan gives priority to clean energy to fuel economic growth, and includes ambitious targets of 100 gigawatts (GW) of solar power and 60 GW of wind power by 2022.
- ❑ India was instrumental in forging an agreement to cut heat-trapping pollutants known as hydrofluorocarbons (HFCs) under the 2016 Kigali Amendment to the Montreal Protocol

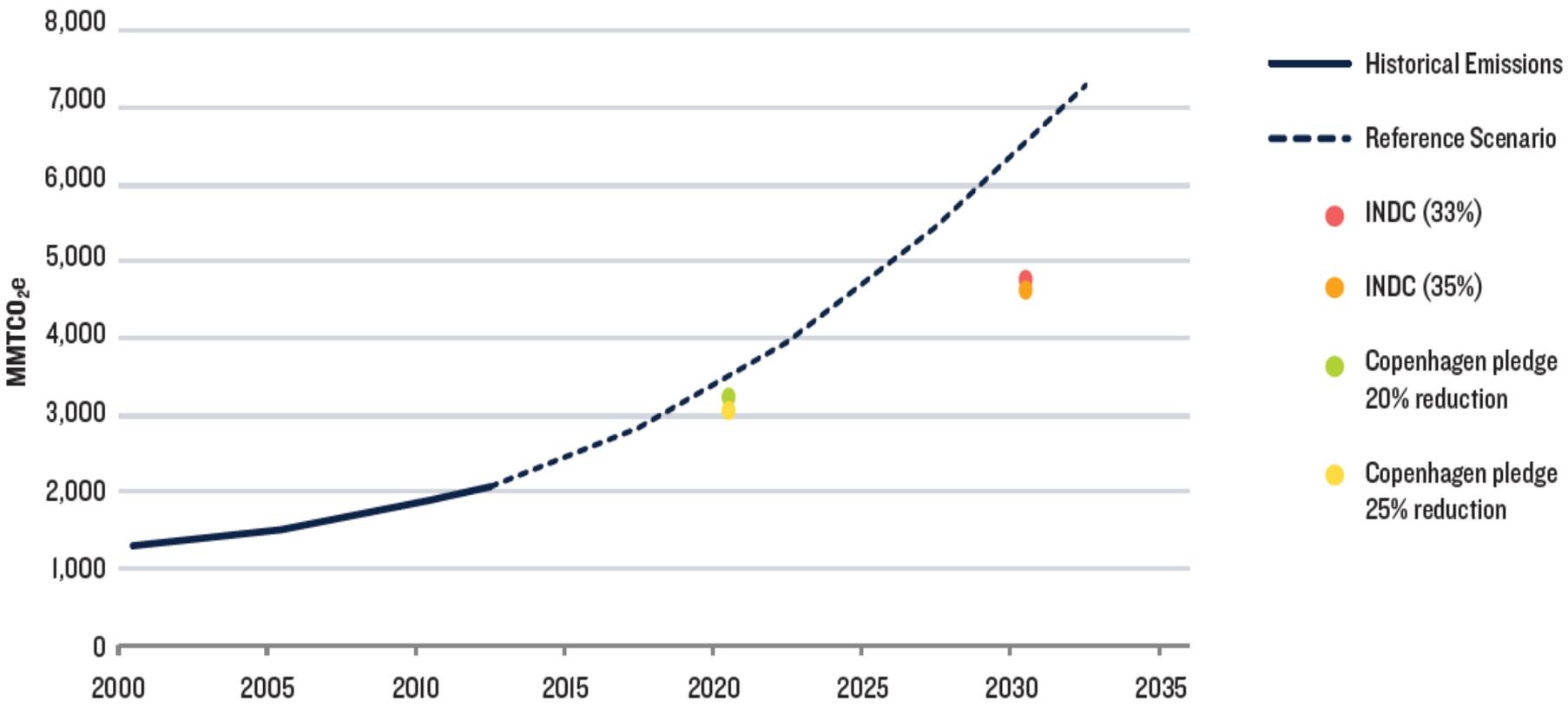


- ❑ With annual gross domestic product (GDP) growth of 6 to 7 percent expected through at least 2030, India is one of the world's fastest-growing economies, and is now the world's third-largest energy consumer and GHG emitter, even though per capita and historical emissions are low.
- ❑ With more than 200 million people without access to modern electricity, India is committed to deploying expansive solar and wind energy capacity and adopting an array of ambitious climate actions.
- ❑ In 2017, India cancelled 13.7 GW of planned coal plants, reduced coal imports by 21.7 percent, and announced that no new plants would be built until at least 2026.



Paris Agreement 2015: Indian NDCs -III

INDIA'S GHG EMISSIONS INCLUDING LULUCF



Source: Natural Resources Defense Council; Reference Scenario, based on Government of India Biennial Update Report, emissions projections from IESS 2047's Least Effort Scenario, India's INDC submission to the UNFCCC and calculations using World Bank 2005 GDP and OECD GDP growth projections of 5.8 percent.

Paris Agreement 2015: Indian NDCs -IV

INDIA'S CLIMATE PLEDGE

The Paris Agreement entered into force on November 4, 2016, and was formally adopted by India on October 2, 2016.⁶ The agreement enshrines climate pledges, or Nationally Determined Contributions (NDCs), from individual countries that outline domestic plans to reduce GHG emissions after 2020.

India's pledge lays out a comprehensive approach to curb the worst impacts of climate change while fostering economic growth, increasing energy access, creating jobs, protecting biodiversity, building resilience in communities to climate impacts, and providing cleaner air and water for its citizens. India's pledge includes the following commitments:⁷

- To put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation.
- To adopt a path that is climate-friendly and cleaner than the one followed hitherto by others at a corresponding level of economic development.
- To reduce the emissions intensity of its GDP by 33 to 35 by 2030 from 2005 levels.⁸
- To achieve about 40 cumulative electric power installed capacity from non-fossil-fuel energy resources by 2030 with the help of technology transfer and low-cost international finance, including support from the Green Climate Fund.
- To create an additional carbon sink of 2.5 to 3 billion tons of carbon dioxide equivalent through additional forest and tree cover by 2030.
- To better adapt to climate change by enhancing investments in development programs in sectors vulnerable to climate change, particularly agriculture, water resources, the Himalayan region, coastal regions, health, and disaster management.
- To mobilize domestic funds and new or additional funds from developed countries to implement the above mitigation and adaptation actions, in view of the resources required and the resource gap.
- To build capacities and create domestic and international frameworks for quick diffusion of cutting-edge climate technology in India and for collaborative research and development for future technologies.