

# Multilevel governance for climate change in India



2020

## Summary

India's National Action Plan on Climate Change (NAPCC) was created in 2008. This broad national policy was the basis on which the Nationally Determined Contribution (NDC) was prepared. India's federal structure distributes powers at national and state levels, and the implementation of the NAPCC is envisioned through the formulation of State Action Plans for Climate Change (SAPCC). Implementation of these will require clear Monitoring, Reporting and Verification (MRV) systems and access to finance.

Under the current system, climate data collection and communication across different levels of government could be improved. Local governments' access to climate finance is also limited due to lack of mandate and knowledge on funding sources, limited technical capacity to design and implement bankable projects with clear risk mitigation, and absence of engagement with donors and financiers. These challenges all point toward a need for strengthened vertical integration to create better conditions for the implementation of the NDC and for India's climate adaptation and mitigation strategies at sub-national levels.

## FACTS & FIGURES

Per capita greenhouse gas emissions (2015 estimate):

**2.7 tonnes CO<sub>2</sub>e**

Governance structure:

**Democratic republic**

Human Development Index (2019):

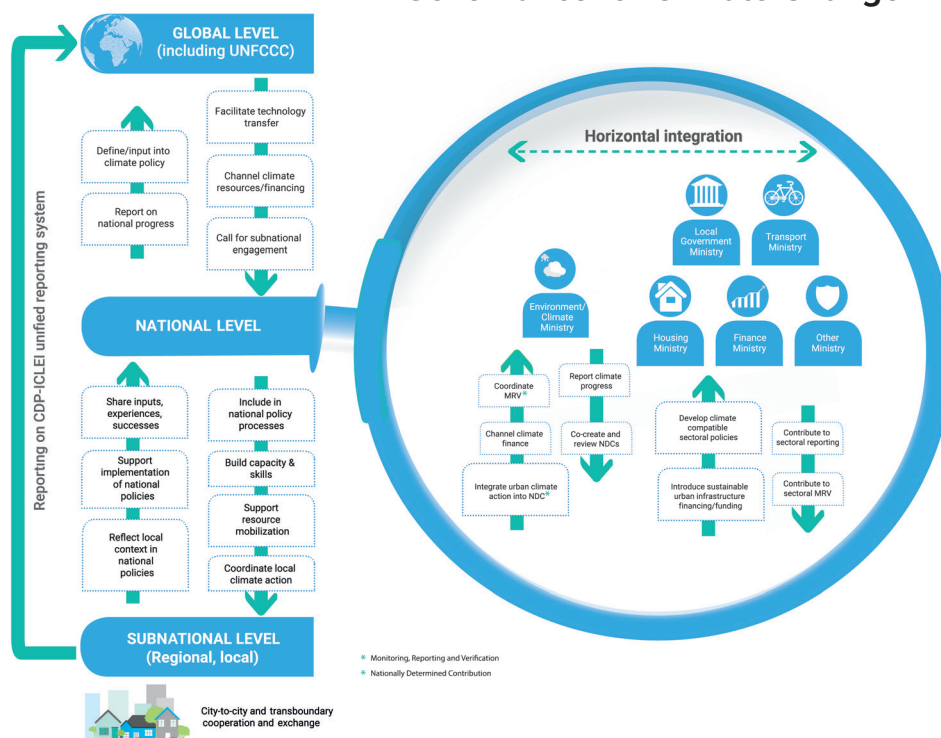
**129/189**

% urban population (2015):

**34%**



## The Vertical and Horizontal Dimensions of Multilevel Governance for Climate Change



## New project resource

This diagram has been produced by the Urban-LEDS project to show the important components of multi-level governance for climate change action. Only by supporting systems of collaboration between and within national and local government can we ensure climate change can be tackled successfully while meeting development goals.

## Enabling framework #1:

### National policies and strategies

India's NDC builds on a strong existing policy framework, including the National Environment Policy (NEP) 2006, the National Action Plan on Climate Change (2008), the Energy Conservation Act (2001), the National Electricity Policy (2005), the Integrated Energy Policy (2016) and the National Policy for Farmers (2007). National policy directives are implemented through joint efforts at central, state and local levels. For example, the National Action Plan for Climate Change designates national missions that outline the priorities for mitigation and adaptation to climate change and sets the agenda for states to mainstream climate change concerns in the planning processes.

#### Urban content in India's NDC

The significance of urbanization and importance of urban centers and their stakeholders for achieving the national commitments is recognized, and urban missions are identified to promote climate resilience in cities. The central and state governments have provided programmatic guidance and granted incentives to urban centers for climate resilient and energy efficient policies, regulations and financing in conventional infrastructure, renewables, technology-based smart solutions, waste to wealth, and transportation and mobility. UN-Habitat's [Sustainable Urbanisation in the NDCs](#) report found that India's NDC has a strong urban context and falls under Cluster A defined as "Group of NDCs with urban mention within headers" with mitigation measures identified covering most urban sectors.

#### India's on-going mitigation and adaptation strategies

##### Mitigation:

- I. Clean energy production and distribution (e.g. National Solar Mission)
- II. Enhancing Energy Efficiency (e.g. National Mission for Enhanced Energy Efficiency (NMEEE))
- III. Developing climate resilient urban centers (e.g. Smart Cities Mission)
- IV. Promoting waste to wealth conversion (e.g. 'Swachh Bharat Mission')
- V. Safe, Smart and Sustainable Green Transportation Network (e.g. National Electric Mobility Mission Plan 2020 (NEMMP))

##### Adaptation:

- I. Water (e.g. National Water Mission (NWM))
- II. Health (Health Mission)
- III. Coastal regions & islands (e.g. Mangroves for the Future (MFF) initiative)
- IV. Disaster management (National Cyclone Risk Mitigation Programme (NCRMP))
- V. Knowledge management & capacity building (Indian Network on Climate Change Assessment (INCCA))



145-kilowatt solar PV system installed at the Aji Water Treatment Plant, Rajkot © Rajkot Municipal Corporation

## Enabling framework #2:

### Monitoring, Reporting and Verification (MRV)

India is implementing many programmes and policies in the energy, transport, industry, agriculture and forestry sectors, which also contribute to GHG mitigation. Monitoring, Reporting and Verification (MRV) systems are useful to estimate emissions and to measure the performance of projects and possible improvements. There is currently no dedicated urban/city focused MRV reporting system. Instead MRV is organised by sector. Further, most of the schemes that are under the Ministry of Housing and Urban Affairs (e.g. the Smart Cities Mission or Atal Mission for Rejuvenation Urban Transformation), have no MRV mechanisms to measure GHG emissions directly, as that is not a central priority of these schemes. Since climate change and associated international

reporting on MRV is under the preview of Ministry of Environment, Forest and Climate Change, there is an absence of a streamlined MRV mechanism that tracks and reports all the data pertaining to GHG emissions from the urban contributors. India is currently in the process of developing a National Inventory Management System (NIMS) that will coordinate consistently with the supporting institutions with adequate capacity for the preparation of National Communications and Biennial Update Reports on a continuous basis. In addition, a recent initiative called the Climate SmartCities Assessment Framework has been initiated by the Ministry of Housing and Urban Affairs is a pioneering effort to collate climate information from the 100 smart cities in India.

#### CSCAF – Climatesmart Cities Assessment Framework

MoHUA has initiated the “ClimateSMART Cities Assessment Framework” to incentivize a holistic, climate responsive development in the 100 Smart Cities under the Smart City Mission. This is a first-of-its-kind public assessment framework on climate-relevant parameters. The objective is to provide a clear roadmap for the cities and in effect, urban India as a

whole, towards combating Climate Change (mitigation and adaptation) while planning their actions, including investments. The key outcomes that are expected to emerge from the assessment: where do you stand and what to do to improve? What you can do and what you need help with? Who else is in a similar situation and how can you learn from them?

## Enabling framework #3:

### Financing the climate transition

Preliminary estimates indicate that India would need around US\$ 206 billion (at 2014-15 prices) between 2015 and 2030 for implementing adaptation actions in key areas like agriculture, forestry, fisheries, infrastructure, water resources and ecosystems. Total estimates for meeting India's climate change actions between 2015 and 2030 is at US\$ 2.5 trillion (at 2014-15 prices). Climate Finance in India comes from multiple sources including national (domestic budgets and private funds) and international (multilateral and bilateral aid agencies, and multinational private firms).

The main national funds include the Climate Change Action Programme (CCAP), the National Adaptation Fund on Climate Change (NAFCC) and the National Disaster Response Fund (NDRF). Urban Local Bodies (ULBs) receive intergovernmental transfers from national government (if a ULB is part of a national flagship mission) or transfers from states. These funds at national level are often earmarked for different sectors – e.g. power, renewable energy, agriculture etc. and

do not have an urban focus. States can tap into these funding sources provided the plan is aligned with the priorities of each fund. National Missions do provide support for the attainment of related urbanisation goals. The Mission on Sustainable Habitat has implemented sector-based measures including new national building codes, the development of long-term transport plans for cities and water supply projects, among others, while the Smart Cities Mission has many objectives that can contribute to climate-compatible urban development (e.g promotion of cycling and walking, climate adaptation, mixed-land use planning).

Most secondary municipalities are largely dependent on intergovernmental transfers for income; with low capacity for mobilisation of existing resources via, for example property taxes, and limited experience in attracting and spending climate finance. Municipalities may need to look beyond the traditional sources of funding and models of financing infrastructure projects to meet their service delivery objectives and the needs of their citizens.

#### BEST PRACTICE EXAMPLE

### Turning carbon subsidy into carbon taxation

*India has cut subsidies and increased taxes on fossil fuels (petrol and diesel) turning a carbon subsidy regime into one of carbon taxation. Further, in its effort to rationalize and target subsidies, India has launched ‘Direct Benefit Transfer Scheme’ for cooking gas, where subsidy will be transferred directly into the bank accounts of the targeted beneficiaries. These actions have led to an implicit carbon tax (USD 140 per ton for petrol and USD 64 per ton for diesel) in absolute terms. This is substantially above what is now considered a reasonable initial tax on CO<sub>2</sub> emissions of USD 25- USD 35 per ton as per international standards. These national measures have the potential to support local governments in reaching their own city-wide transport and energy goals.*



## Opportunities and recommendations for enhancing multilevel governance

### Establish a dedicated Climate Change Department at the State Level

These departments would oversee planning, implementation and monitoring, and have the mandate to facilitate the coordination between other state departments. Their responsibilities would include making roadmaps, coordinating funding with the central government as well as different agencies and working together with the municipal Project Management Units to ensure the mutual understanding of priorities regarding climate change and Low Emission Development Strategies. In many States, existing environment department or State funded institutions have already taken up this role like EPTRI (Environment Protection Training and Research Institute) in Telangana and EPCO (Environmental Planning & Coordination Organisation) in Madhya Pradesh.

### Build capacity and harmonise the collection of data by a central body for urban sector

Such an entity could contribute in developing harmonised data

collection and reporting formats that are similar across the country and in line with India's NDC. Coordination between stakeholders on multiple levels should be applied to ensure transparent and structured reporting. Increasing technical capacity at the sub-national level is also critical through training and institutionalisation of best practices.

### Develop a climate change preparedness index

A central government body could create an index to rank states based on their performance on some key performance indicators such as climate change adaptation and mitigation measures, availability of finance for implementing key climate-related projects, and institutional framework for MRV.

### Mainstream climate change objectives into existing central and state policy and finance flows

By synergising local urban objectives with other levels of government's climate objectives, climate action can be mainstreamed. Clearer guidelines could also

be provided on how cities and municipalities can help contribute towards the goals set in the NDC.

### Explore use of municipal bonds

Municipal bonds are attractive as the expected revenues in e.g. water supply and sewerage projects can be predicted with a reasonable level of certainty. The bond market can contribute to the financing of climate adaptation technologies, improvements in energy efficiency and reduction of emissions.

### Encourage the establishment of Public-Private Partnerships (PPPs)

These partnerships can support government funding, while financing innovative and efficient projects, as the private sector is more likely to invest in higher-risk projects. These mechanisms can be beneficial for projects on the city-level, but it is important to implement them in a way that can be integrated in local systems.

### The Urban-LEDS project

The Urban-LEDS II project addresses integrated low emission and resilient development in more than 60 cities in 8 countries.

It is implemented by UN-Habitat and ICLEI – Local Governments for Sustainability. The project is funded by the European Union.



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[https://www.yunbaogao.cn/report/index/report?reportId=5\\_17773](https://www.yunbaogao.cn/report/index/report?reportId=5_17773)

