

ADVISORIES

**Developing a City Climate Action Plan
Using ClimateResilientCITIES Methodology**

***eco-Climate BUDGET* Balance for the City**



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Preface



Rapid urbanization in India has resulted in more than 30% of its population residing in urban areas, which is expected to increase to 40% and contribute upto 75% of the country's gross domestic product (GDP) by 2030. Cities, therefore, truly exemplify themselves as engines of India's future growth. Local governments face a major challenge in ensuring that this rapid urban transformation keeps pace with urban infrastructure and services that are coming under tremendous pressure from growing climate risks.

The role of local governments in tackling climate change has been acknowledged by major global agendas such as Sustainable Development Goals (SDGs), New Urban Agenda, the Action Agenda for Nature and People, and Paris Agreement. Cities are critical to address the climate challenges through framing suitable strategies and policies, incorporating such interventions into ongoing urban development, and building partnerships required for effective climate actions. It will not be wrong to state that the choices and actions taken by cities today will have long-term impact on its developmental trajectory as well as its ability to deal with climate change.

National policies and programmes are extremely crucial to provide a framework for city level actions. The Ministry of Housing and Urban Affairs (MoHUA) plays a significant role in this through its various ongoing programmes such as the Smart Cities Mission, the Swachh Bharat Mission, AMRUT scheme and the Housing for All by 2022 Mission, among others. These programmes provide strategic entry points for climate action at the city level which directly and indirectly contribute towards low carbon and climate resilient urban development. Further, the newly launched initiative by the Government of India – 'ClimateSMART Cities Assessment Framework (CSCAF)' is a significant step in enhancing cities understanding of urban climate challenges, where they stand and what they can do to improve.

As part of the ongoing activities under the CSCAF, we are glad to showcase the advisories on 'City Climate Action Planning' and 'eco-Climate BUDGET'. These two advisories are based on ICLEI's projects and toolkits that have been tried and tested in various cities across India. These advisories would help local governments in identifying opportunity to plan for both climate change adaptation and mitigation challenges simultaneously and encouraging cities to consider the climate impacts of developmental projects and address such impacts by allocating resources from different funding sources such as Central/State schemes or programmes and international funding.

ICLEI-Local Government for Sustainability would like to thank the MoHUA, local governments and other stakeholders involved for their support. Going forward, we hope that these advisories will help Indian cities to develop and implement climate resilient and environmentally sustainable practices. We also believe that the momentum built through CSCAF and learnings emerging from it would be useful to design national and state policies/programmes on climate smart cities.

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Introduction – Understating the Need for a City Climate Action Plan

Included as one of the key indicators in the ClimateSMART Cities Assessment Framework, the Local Governments (LGs) are encouraged to develop a 'Climate Action Plan' for their city. The intent of a comprehensive climate action plan spanning all the municipal sectors (water, waste, sewerage, urban planning etc.) is to guide sustainable development in the cities.

Developing a 'Climate Action Plan' provides LGs with an opportunity to address both climate change adaptation challenges and mitigation potential simultaneously. The Climate action plan process is based on the premise that institutionalization of climate action planning is key to developing a vision of a climate resilient city. The success of the plan lies in the implementation of prioritized actions, which would also ensure mainstreaming environmental sustainability in city development.

Further, it is envisaged that the implementation of the Climate Action Planning will be only effective when identified prioritised actions are included in annual municipal budgets and opportunities for funding are sought through the several financing and urban improvement schemes at the disposal of the local governments such as AMRUT, Smart Cities Mission, and Swacch Bharat Mission etc.

The ClimateResilientCITIES Methodology¹ was implemented either in parts or in whole in several cities in India. The methodology, which allows for both climate change adaptation and mitigation planning simultaneously, is described in subsequent sections.

ClimateResilientCITIES Methodology²

ClimateResilientCITIES methodology is tailor made for LGs, providing step by step guidance for the development of a climate resilient city action plan that addresses both, climate change adaptation and climate change mitigation. This process is based on the premise that climate resilience

refers to both climate change mitigation (reduction of GHG emissions) and adaptation (addressing climate change impacts such as sea level rise, precipitation changes, temperature changes and extreme events), and linkages therein.

The ClimateResilientCITIES Action Plan Process is a 9-step process in 3 phases: Analyze, Act and Accelerate; outlining how climate fragility can be assessed and climate resilient options (to achieve low emissions development and climate adaptive development) can be identified and integrated into urban development policies, plans and processes. It consists of a wide range of tools and guidance notes to support LGs to deliver effective local climate action. The following section briefly highlights the phases and 9 steps involved in the process that any city or local government can use to develop a city resilient climate action plan.

Phase I: ANALYZE

The "Analyze" Phase informs policy and strategic decision-making at the start of the process. This phase includes setting up of institutional mechanisms to develop and implement the plan, and review city baseline information including urban services as well as the climate profile that includes both GHG emissions and city level climate projections that impact the urban systems.

The outcomes emerging out of this phase are:

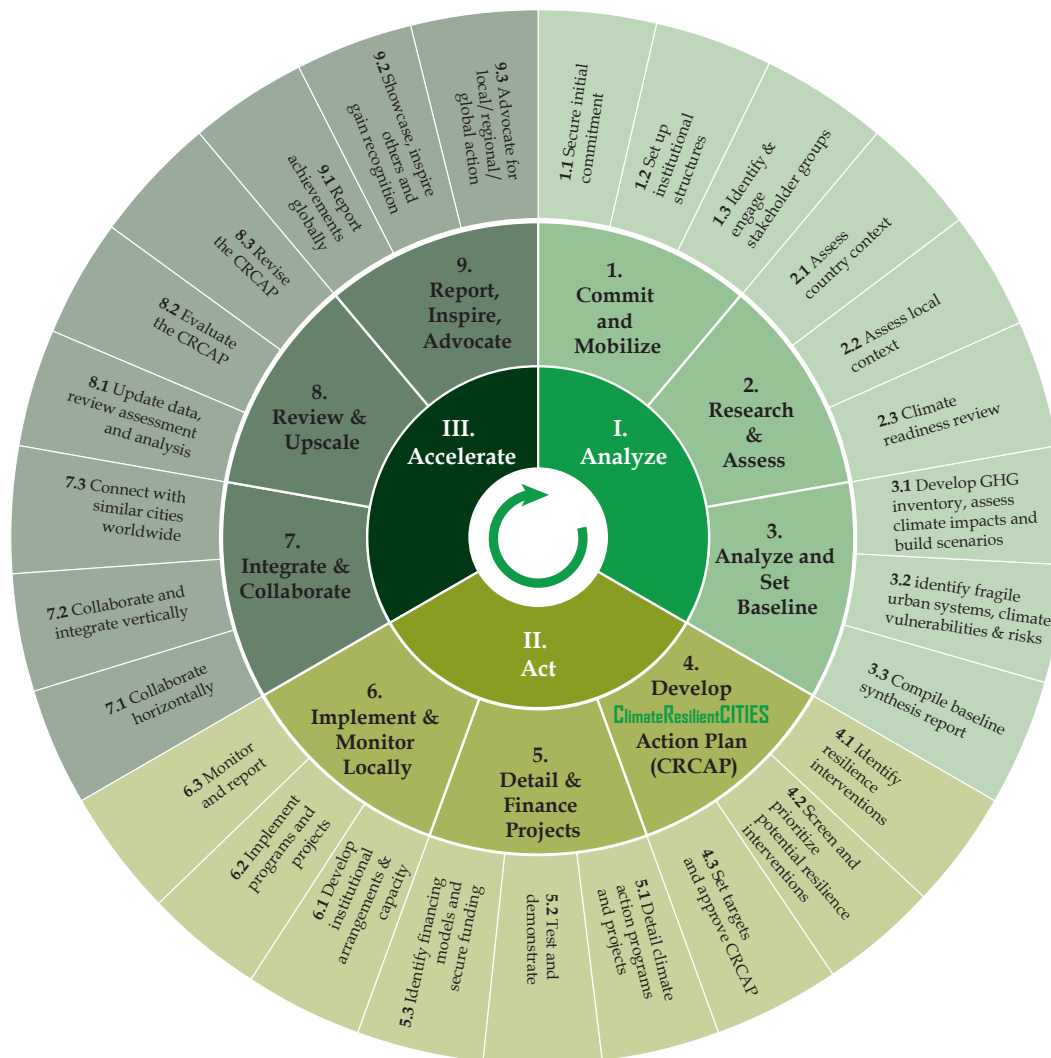
- Declaration of commitment by LG to climate resilient development for the local community.
- Climate Action Planning Process initiated within the LG and community.
- Overview of baseline regarding urban systems, emissions in the city, climate projections and scenarios.

Step 1: Commit & Mobilize

This phase is vital wherein the LG has to mobilize itself and ensure buy-in of other parastatal agencies active in the city to initiate the process for development of the

1. The process is built on ICLEI's Cities for Climate Protection (CCP) Campaign, ICLEI's flagship mitigation program; the GreenClimateCities (GCC) program and ICLEI's adaptation toolkit, the ICLEI Asian Cities Climate Change Resilience Network (ACCCRN) Process or IAP toolkit.

2. For more details on the process kindly refer to <http://capacitiesindia.org/crcap-methodology/>



climate action plan. Further, the city will have to create institutional structures (climate core committee) and local stakeholders' (individuals/community representatives) to promote ownership of the Action Plan within the LG as well as the community.

Step 2: Research & Assess

This step involves exploring local policy/legal, governance, economic, social and environmental contexts at the local level, which would impact climate resilient development in the City. This baseline assessment is of urban systems is critical for further assessment of how climate change impacts influence urban development activities, and to identify the kind of support required by the local government to address such impacts.

Step 3: Analyze and Set Baseline

In this step the city will be developing a baseline GHG emissions inventory identifying different sources of GHG emissions. Based on the baseline inventory, the local government can demonstrate leadership by pursuing mitigation actions. This step further examines fragile urban systems through a climate lens to identify vulnerable areas and populations within the city. Both these above information will then be collated to develop a baseline synthesis report for further actions/steps.

Phase II: ACT

The "Act" Phase outlines the planning and implementation approach which needs to be undertaken by the city. The

outcomes emerging out of this phase are:

- A comprehensive action plan on building climate resilience for the city.
- Climate resilience measures initiated (adaptation and mitigation).
- Institutionalized monitoring and evaluation system in use.

Step 4: Develop Climate Resilient City Action Plan (CRCAP)

In this step, the local government will use the information and analysis from the previous phases to identify the priority resilience actions, set up GHG emissions reduction targets for the city and develop the CRCAP. These interventions are prioritised on the basis of their feasibility (cost and financing perspective) and applicability (addressing specific priority areas like poverty reduction/ climate resilience) to the city. A critical sub step is also to get the formal Council approval for the developed CRCAP, which offers an opportunity for political review, recommendations and adoption of the Action Plan.

Step 5: Detail and Finance Projects

This stage involves implementation of projects identified in the action plan. Priority and approved projects from the earlier step will be detailed out in terms of comprehensive planning, including the development of various financial model options that would ascertain the actual outflow of funds, payback periods, etc. This step will have to be executed in consultation with experts so as to develop a clear business case per project. During this step the city with help of experts could also explore possibility of implementing pilot project(s) and the lessons emerging from this could be utilised for scaling up the technology or business model(s). The scale up requires finances, and at this stage the city could seek help from experts to explore and secure innovative funding resources for implementation like municipal bonds etc.

Step 6: Implement and Monitor Locally

Ensuring effective implementation of the interventions requires institutional setup, capacity building and an inclusive Monitoring & Evaluation (M&E) mechanism. In this step the local government will have to develop and adopt a monitoring and evaluation (M&E) system for

internal monitoring of CRCAP implementation as well ensure training of its staff to enable implementation of the action plan.

Phase III: ACCELERATE

The “Accelerate” Phase outlines how to determine progress and scale-up results. The outcomes emerging out of this phase are:

- Increasing ambition of the CRCAP.
- On-going and increasing GHG reductions and increased climate adaptive capacities for LGs.
- New policy and projects identified to accelerate action, reflecting increased city ambitions.

Step 7: Integrate and Collaborate

At this stage the local government will have to ensure integration and collaboration (both horizontal and vertical) and expand the collaboration to cities worldwide. Horizontal integration refers to cooperation and coordination between different local governments in an area (e.g. a province or a region). Synergistic collaboration with neighbouring municipalities may also enable a local government to achieve the necessary scale for a strategy which might not be viable for a city, e.g. regional waste management facility, bulk purchasing consortium for renewable energy, or sustainable public transport networks. The local government could provide valuable feedback to State or National policies and programmes thereby creating bottom up approach or Vertical integration. The cities could also join city networks or associations within a country, region or internationally thereby creating opportunities to share information and knowledge on approaches to tackling challenges and finding suitable solutions, connecting to peers.

Step 8: Review and Upscale

In this step the local government will have to conduct a systematic and comprehensive review of systems, processes, capacities, partners and actions and an assessment of targets vs. results according to developed M&E process using all previous tools of the toolkit. This would help in identifying successes, challenges, and barriers and the degree to which the process has been institutionalized and integrated into city planning. Based

on the evaluation process the city could identify new sector areas, as well as revised priorities and actions which will be included into the revised CRCAP for the subsequent action plan period.

Step 9: Report, Inspire, Advocate

In the last step, the city can report, showcase and advocate the CRCAP process and its implementation in the cities at local, national and international forums such as One Planet City Challenge (OPCC) by WWF etc. This step would provide a platform cities to showcase its achievements at the same time create a network with peer cities and other key stakeholders like financial institutions, bi/multilateral

institutions who could help the local government in scaling up their efforts through knowledge, capacity building and financial resources.

TIMELINE

Developing a CRCAP for a city would depend on the level for institutional capacity, availability of information and stakeholder involvement. Climate Resilient Cities Action Plans are usually prepared every 3-5 years, with a long term vision for 15-20 years that is determined by the local authority. Typically, a preparation of such a report would require around 6-9 months.



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Context

Indian cities are increasingly challenged by urban growth, challenges to provide basic services to all and climate change risks and are looking for solutions and support for dealing with these challenges. However, climate change is yet to become a key topic in city administrations. In many cities, interests and needs are mainly driven by insufficient basic infrastructure services that bear a high risk for the health of the population and the environment. Possible additional future risks arising from a changing climate - such as increasing heat stress, inundations, water shortages, environmental health risks and migration to urban areas - are not yet addressed sufficiently. As a result, majority of the city budgets do not allocate finances to action for climate change mitigation or adaptation, but largely focus on urban development, without addressing future climate risks.

Climate Budget

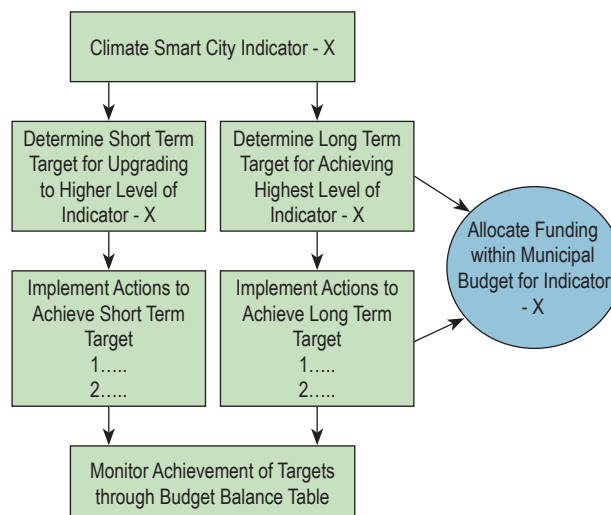
Rising climate risks to the urban environment however, necessitates that a portion of the municipal budget be allocated for climate related activities that are over and above the routine infrastructure development activities carried out by the local government. These actions could focus on the Climate Smart City Framework indicators, but are not to be restricted to these indicators only and can cater to a large array of actions that the city can undertake that support climate mitigation or adaptation. This allocated budget would formulate the climate budget for the city. This budget could be accessed for developmental projects, if the projects can support reduction of carbon emissions or be adaptive to the changing climate, such as rising temperatures or changing precipitation levels.

The objectives of formulating a Climate Budget in cities are threefold:

- It will encourage municipal officials to think about the climate impacts of each developmental activity in order to be able to access more funds from the municipal budget.
- It will enable municipal officials to take action to counter climate impacts
- It will attract international climate funds by showcasing local action and proactive approach of local governments

Methodology

The methodology of climate budgeting is depicted in the diagram below:



The process of developing a climate budget in the city will consist of the following steps:

Step 1: Develop an Overall Climate Action Plan for the City

The local government needs to assess potential future climate risks that the city is likely to face, either through secondary studies or through a primary assessment conducted by local or national institutes. Local governments would need to identify future risks to the various urban systems in the city due to such future climate risks, and through stakeholder consultations develop an action plan that would address such risks in each of these urban systems. From the municipal budget, the local government must set aside a certain % separately for climate action. This is the Municipal Climate Budget. This budget can be used for activities identified in the action plan or additional activities in the urban development projects that will support climate mitigation or adaptation.

Step 2: Identify Interventions

The local government will identify interventions that can support the indicators of the Climate Smart City Assessment Framework, developed by Ministry of Housing and Urban Affairs, from the action plan. On the basis of

the city’s developmental vision, the local government must select interventions from the climate action plan that will support the Climate Smart City Assessment Framework.

Step 3: Set Targets

The local government will set targets to achieve different levels of each Climate Smart City indicator identified. The local government will assess the baseline level with regards to the Climate Smart City indicators, and accordingly define their short term and long term targets. For each target, they will set time limits for their achievement. They can then identify actions that will be undertaken in a year (financial year corresponding to their municipal budget) that will support the achievement of the short term target. These actions will be funded through the municipal climate budget. This can be pictorially depicted through the eco-Climate BUDGET as shown below:

Climate Smart City Indicator	Extent of Non-Revenue Water (NRW)	Rejuvenation and Conservation of urban water bodies and open spaces
Baseline Value for Current Year 2019	60%	No assessment and rejuvenation
Short-Term Target to go to Level 1	40%-50%	Assessment of urban water bodies, green cover, open spaces
Long-Term Target 2025	<20%	Increase in area and percentage of green cover and water bodies
Actions Planned	Repair of leakage Change of pipeline	Mapping of green cover and blue spaces Mapping of encroachment over water bodies, fallow land, natural drains Preparation of heat island map.
Budget Allocated	INR 5 Crore	INR 50 Lakhs

Step 4: Implement Actions

The local government will over the period of the next financial year take up actions identified in the eco-Climate BUDGET to achieve the short term targets identified.

Step 5: Support Implementation from Municipal Climate Budget

These climate actions can be supported from the municipal climate budget. The actions selected from the overall climate action plan could be

- new infrastructure entirely funded by the Municipal Climate Budget
- new part added to existing plans of infrastructure development, where only the new part is funded by the Municipal Climate Budget and remaining from the existing infrastructure budget of the city.

The financial allocations from the municipal budget will need to be monitored in the context of the achievement of the targets.

Step 6: Prepare eco-Climate BUDGET Balance for the City

In order to monitor and evaluate the achievement of targets, an ecoBUDGET balance table needs to be created. This table should be presented and ratified by local government council in the form of a public document that will showcase the climate actions taken by the city. The pictorial depiction of the budget balance is shown below:

Climate Smart City Indicator	Baseline Value for current year 2019	Short-Term Target to go to Level 1	Long-Term Target to go to Highest Level	Actions taken	Current year Value 2020	Evaluation
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Sector: Green Spaces

Rejuvenation of urban spaces

No assessment and rejuvenation

Assessment of urban water bodies, green cover, open spaces

25% increase in Area and Percentage of green cover and water bodies

Heat Island Map prepared
GIS mapping of natural assets
Mapping of encroachment

Detailed assessment conducted, as per Level 1 requirement



Timeline

The timeline for developing and implementing the eco-Climate BUDGET should be annual and synced with the municipal budget timelines

Institutional Mechanism

The municipal body will set up a Climate Cell to deal with environmental and climate change related matters that will consist of one senior and one junior environmental scientist or environmental engineer as the primary staff. The primary responsibility of developing the action plan and preparing the eco-Climate BUDGET will lie with the

Climate Cell. However, since climate change action planning is a cross cutting issue, the Climate Cell will need to engage with other departments such as the engineering department, health department and the finance department, among others. In order to formulate an action plan, they would also need to interact with local stakeholders, such as NGOs, institutes and development organisations, apart from municipal departments.

The Cell would be responsible for developing the eco-Climate BUDGET and the Budget Balance sheet annually to report to the municipal council for ratification and approvals.

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