

# Multi-Stakeholder Dialogue on Long-Term Low-Carbon Development Strategy of Madhya Pradesh

**Date:** 18 Oct 2024 | **Time:** 10:00 AM – 05:30 PM | **Venue:** Hotel Courtyard Marriott, Bhopal

## Background

India submitted its [Long-Term Low-Carbon Development Strategy](#) (LT-LEDS) to the UNFCCC during COP 27 held in Egypt in November 2022. The LT-LEDS articulates India's strategy and action plan for the short- and long-term, considering its current Nationally Determined Contributions (NDCs) for 2030 and the net zero emissions target by 2070. India's LT-LEDS recognizes that the long-term strategy needs to be based on coordinated climate action across the economy spanning different sectors/ministries and states/union territories operating as a federalized governance structure. This implies the need for coordination between national and subnational climate action.

The State Action Plans on Climate Change (SAPCCs) will be the starting point for states to plan their long-term climate strategies in alignment with the low-carbon transition pathways and priorities outlined in India's LT-LEDS. The Madhya Pradesh SAPCC was launched in 2014 and revised in 2023. Though the period for implementation of the SAPCC is up to 2030, a long-term climate strategy can help Madhya Pradesh continue to strengthen its mitigation measures for climate change as well as effectively contribute to India's net zero target.

Madhya Pradesh is India's second-largest state in terms of geographical area and sixth-largest in terms of population. It is considered one of the most vulnerable states to climate change. [Madhya Pradesh is rich in biodiversity, has more than a quarter of its land under forests, and plenty of mineral wealth.](#) Any change in climatic conditions may adversely impact natural resource-based livelihoods and make communities more vulnerable to climate change. About [72% of the State's population](#) resides in rural areas, and their livelihoods depend primarily on natural resources like forestry, agriculture, and allied sectors.

[Studies](#) have projected that Madhya Pradesh may face severe climate risks like an increase in maximum & minimum temperatures, changes in the spatial and temporal distribution of monsoon, an increase in the intensity of rain with fewer rainy days, long summers, and many more. The [Climate Vulnerability Assessment Report for Adaptation Planning in India](#) prepared by the Department of Science & Technology (DST), Government of India has highlighted that 15 districts of Madhya Pradesh are in India's 25% most highly vulnerable category.

According to an assessment by the [GHG Platform India](#), Madhya Pradesh is the sixth highest GHG emitting State. The per capita emission in Madhya Pradesh is higher than the national average i.e., 2.65 tCO<sub>2</sub>e compared to 2.22 tCO<sub>2</sub>e. Madhya Pradesh contributes around 7.28% of the country's net GHG emissions, whereas the State contributes hardly 3.86% to India's GDP.

Rank	State	Emission (MtCO <sub>2</sub> e) 2005	Emission (MtCO <sub>2</sub> e) 2018	Per Capita (tCO <sub>2</sub> e)	Share of GHG (%)
1	Uttar Pradesh	201.5	292.50	1.32	9.91
2	Maharashtra	182.8	290.33	2.40	9.83
3	Gujarat	141.3	286.98	4.28	9.72
4	Odisha	102.6	274.54	6.15	9.30
5	Chhattisgarh	80.1	253.86	8.96	8.60
6	<b>Madhya Pradesh</b>	<b>96.75</b>	<b>214.92</b>	<b>2.65</b>	<b>7.28</b>
7	West Bengal	114.5	187.11	1.94	6.34
8	Tamil Nadu	100.05	172.83	2.29	5.85
9	Andhra Pradesh	142.90	168.80	3.25	5.72
10	Rajasthan	72.21	152.12	1.99	5.15

Source: GHG Platform India

Population growth, urbanization, and industrialization are the major drivers for the increase in GHG emissions during 2005-2018. The Energy sector was the largest contributor to GHG emissions in the State. Within the Energy sector, Public Electricity Generation was the biggest contributor of GHG emissions with a share of 67% in 2018. This was followed by emissions from Industries (~13%) and Transport (~7%). Emissions from the Industrial Processes & Product Use (IPPU) sector are largely driven by Chemical, Metal, Mineral Industries and Non-Energy Products from Fuels and Solvent Use. Mineral Industry emissions were the major contributor to IPPU emissions in Madhya Pradesh with almost 92% share in 2018.

In this context, World Resources Institute is leading a global research project on long-term climate strategies and their alignment with development goals. The project is supported by the International Climate Initiative (IKI) funded by the German government until 2026. The main project objectives include the following:

1. To strengthen capacity to inform effective long-term climate planning, in line with national development goals.
2. To produce new research, evidence, and understanding that supports effective policy adoption, to align short- and medium-term sectoral, economic, sub-national and national development plans with LT-LEDS.
3. To organize consultative processes to support planning towards achieving long-term and sustained just transitions to low-emissions and climate resiliency, while achieving development goals.

While long-term climate strategies to be communicated to the UNFCCC are designed at the national level, the implementation of the strategies needs to be operationalized at both the national and subnational levels. India's LT-LEDS recognizes the important role of state governments in climate action and will need to be operationalized at multiple levels, including at the state level.

In Madhya Pradesh, WRI India has been engaging with the State Government to inform the long-term low-carbon development strategy of the State through research, building capacity and engagement. In this context, WRI India, in collaboration with the Environmental Planning & Coordination Organisation (EPCO), Government of Madhya Pradesh is organizing a multi-stakeholder dialogue on 'Long-Term Low-Carbon Development Strategy for Madhya Pradesh' on 18 October 2024 in Bhopal.

The multistakeholder dialogue aims to facilitate discussions related to climate mitigation initiatives in Madhya Pradesh and identify research and capacity needs to inform the development of a state-level long-term low-carbon development strategy. The dialogue will bring together diverse stakeholders, including representatives from the state government, technical experts, Civil Society Organizations (CSOs) and academic institutes, to deliberate on the following key questions:

- What are the key focus areas and sectors for developing a long-term low-carbon development strategy for Madhya Pradesh?
- How should Madhya Pradesh move forward to contribute to India's targets of NDCs by 2030 and net zero emissions by 2070?
- What are the key decarbonization challenges in Madhya Pradesh and how can they be addressed?

Along with the strategy development, WRI India is also supporting EPCO in preparing the Heat Action Plans for 4 major cities of Madhya Pradesh viz. Bhopal, Indore, Jabalpur and Gwalior. This activity is part of the **Data for Cool Cities** project which aims to tackle the rising challenge of urban heat in cities worldwide. Rapid urbanization, increasing population density, and evolving climate conditions are intensifying heat stress, affecting both the environment and public health.

To address this, the project is focused on developing a comprehensive data platform leveraging advanced analytics, spatial tools, and insights from case studies conducted across various cities. This platform will support informed decision-making and guide effective heat mitigation strategies.

This workshop would help in exploring the need for and applicability of **Decision Support System (DSS)** tools that can assist in analyzing and addressing urban heat challenges. These tools will enable participants to understand how a data-driven approach can support the identification of heat stress at the state, city, and neighborhood levels, and inform the planning of targeted mitigation strategies.

During the workshop, various data-driven methodologies, ranging from state-level prioritization to city-specific and hyper-local analyses would be presented. These tools are designed to help stakeholders, including urban planners, government agencies and key stakeholders, to better grasp the complexities of urban heat, identify heat hotspots, and plan interventions accordingly.

This workshop offers an opportunity for key departments and agencies to enhance their role in combating urban heat through data-driven insights and collaborative planning. Participants will gain access to actionable data, tools, and approaches that can be seamlessly integrated into their existing frameworks, from urban planning to public health and climate resilience.

The event will also promote interdepartmental collaboration, fostering a coordinated response to urban heat stress. The collective feedback and dialogue will play a crucial role in refining the platform, ensuring that it meets the needs of diverse stakeholders and contributes to global efforts in building heat-resilient cities.

## Draft Agenda

Timing	Inaugural Session
10:00 – 10:05 AM	<ul style="list-style-type: none"> <li>Welcome of guests and Introduction</li> </ul>
10:05 – 10:10 AM	<ul style="list-style-type: none"> <li><i>Context Setting: Ms Ulka Kelkar</i>, Executive Program Director - Climate, Economics and Finance (CEF), WRI India</li> </ul>
10:10 – 10:20 AM	<ul style="list-style-type: none"> <li><i>Welcome Address: Dr Saloni Sidana</i>, IAS, ED EPCO</li> </ul>
10:20 – 10:35 AM	<ul style="list-style-type: none"> <li><b>Presentation on India's Long-Term Low-Emission Development Strategy and Overview of the Project: Mr Saransh Bajpai</b>, Associate Program Director, CEF, WRI India</li> </ul>
10:35 – 10:40 AM	<ul style="list-style-type: none"> <li><i>Address: Ms Preety Bhandari</i>, Former Senior Fellow, World Resources Institute</li> </ul>
10:40 – 10:50 AM	<ul style="list-style-type: none"> <li><i>Address: Dr Anshu Bharadwaj</i>, Programme Director, Green Transitions &amp; Climate, NITI Aayog</li> </ul>
10:50 – 11:00 AM	<ul style="list-style-type: none"> <li><i>Address: Mr Gulshan Bamra</i>, IAS, PS, Environment Department, Govt of Madhya Pradesh</li> </ul>
10:50 – 11:00 AM	<ul style="list-style-type: none"> <li><i>Special Address: Mr Neeraj Mandloi</i>, IAS, ACS, Urban Development and Housing Department, Govt of Madhya Pradesh</li> </ul>
11:00 – 11:10 AM	<ul style="list-style-type: none"> <li><i>Keynote Address: Mr Manu Shrivastava</i>, IAS, ACS, Energy and New &amp; Renewable Energy, Govt of Madhya Pradesh</li> </ul>
11:10 – 11:15 AM	<ul style="list-style-type: none"> <li><i>Vote of Thanks: Mr Lokendra Thakkar</i>, Coordinator, State Knowledge Management Centre on Climate Change, EPCO</li> </ul>
11:15 – 11:30 AM	<b>Tea Break</b>
11:30 – 11:45 AM	<b>Presentation on MP SAPCC v 2.0</b> <ul style="list-style-type: none"> <li><i>Major sectoral interventions aligning with Low Emission Development in Madhya Pradesh – Gaps &amp; Barriers (Analytical / Scientific / Capacity / Financial): SKMCCC, EPCO</i></li> </ul>
11:45 AM – 12:00 PM	<b>Q&amp;A</b>
12:00 – 12:45 PM	<b>Panel Discussion I: Opportunities &amp; challenges for decarbonization in Madhya Pradesh</b> <i>Moderator – Ms Ashwini Hingne</i> , Associate Program Director, CEF, WRI India <i>Panelists –</i> <ol style="list-style-type: none"> <li><b>Dr Navneet Mohan Kothari</b>, IAS, Commissioner, Industries, GoMP</li> <li><b>Mr Bharat Yadav</b>, IAS, Commissioner, UADD, GoMP</li> <li><b>Mr Amanbir Singh Bains</b>, IAS, Managing Director, MP Urja Vikas Nigam</li> <li><b>Dr Alexander Fisher</b>, Director, Indo-German Coordination on Climate Change, GIZ</li> <li><b>Mr Naveen Kumar</b>, Chair, MP State Task Force, National Solar Energy Federation of India</li> <li><b>Mr Yasir Ahmad</b>, International Energy Agency</li> </ol>
12:45 – 01:30 PM	<b>Panel Discussion II: Role of the States in achieving India's NDCs and LTS</b>

	<p><i>Moderator – <b>Mr Subrata Chakrabarty</b>, Associate Program Director, CEF, WRI India</i></p> <p><i>Panelists –</i></p> <ol style="list-style-type: none"> <li>1. <b>Mr B S Annigeri</b>, IFoS, APCCF (IT), GoMP</li> <li>2. <b>Mr Sandeep Bhuriya</b>, IPS, Assistant Inspector General of Police and Former Additional Transport Commissioner, Bhopal division</li> <li>3. <b>Dr S C Singadiya</b>, Additional Director, Agriculture, GoMP</li> <li>4. <b>Ms Preety Bhandari</b>, Former Senior Fellow, World Resources Institute</li> <li>5. <b>Ms Yeshika Malik</b>, Climate Change Specialist, World Bank Group</li> <li>6. <b>Ms Nidhi Madan</b>, Associate Director, Climate Finance &amp; Policy, Shakti Sustainable Energy Foundation</li> </ol>
01:30 – 01:50 PM	<b>Discussions</b>
01:50 – 02:00 PM	<b>Conclusion and Way Forward for LT-LEDS – EPCO &amp; WRI India</b>
02:00 – 03:00 PM	<b>Lunch</b>
<b>Post Lunch Session</b>	<b>Deliberations on Sub-national level Heat Action Planning (HAP) in MP</b>
03:00 – 03:05 PM	<b>Context Setting – EPCO</b>
03:05 – 03:10 PM	<b>Overview and Presentation on Data for Cool Cities Initiative – WRI India</b>
03:10 – 03:35 PM	<b>Multi-criteria region wise prioritisation – WRI India</b>
03:35 – 04:05 PM	<b>Identification of heat hotspots using LST, green cover, and land use data – WRI India</b>
04:05 – 04:30 PM	<b>Hyper-Local Analysis Showcase: Planning Urban Heat Resilient Infrastructure – WRI India</b>
04:30 – 04:45 PM	<b>Tea Break</b>
04:45 – 05:05 PM	<b>Scenarios for estimating the cooling impact of heat-resilient infrastructure – WRI India</b>
05:05 – 05:35 PM	<b>Brainstorming and Q&amp;A</b>
05:35 – 05:45 PM	<b>Concluding Remarks and Way Forward for HAP – EPCO &amp; WRI India</b>