Framework Convention on
Climate Change

Challenges and Barriers and Means to Just Transition policy Implementation in India

1. *Name of proposing Party or organization.*
   Ahmedabad University, India

2. *Brief description of the proposed study:*
   Current global frameworks that evaluate Just transition (JT) policies, do so by examining the (implicit and explicit) intent of policies to maximise decarbonization and minimise its negative socio-economic impacts in the economy. However, for developing countries, JT roadmaps must be informed by the question of how a low-emission development pathway can be achieved in practice. More importantly, such pathways operate within the context of national developmental priorities, ongoing structural shifts in the economy, and other path dependent factors such as levels of socio-economic development and industrialisation. The implementation of transition policies must account for such development pathways, as well as the global context of such transitions. The latter includes concerns of global equity and the application of common but differentiated responsibilities and respective capabilities in the global climate regime, for global cooperation in support of sovereign policy determination in developing countries. Additionally, it must also account for the presence of regional attendant risks to such transitions. In this context, this study proposes the development of a case study in the Indian context. It will examine policy implementation for low-emission development transition in India with a focus on key policies and strategies affecting power, transportation, urban, and industrial systems. The choice of these sectors is based on existing and proposed policies envisioned under India's current economic development and climate change policies, its Long-Term Low-Emission Development Strategy (LT-LEDS), and Nationally Determined Contribution (NDCs). The study aims to examine policy implementation challenges across these sectors in an integrated manner, to • Identify important national policies for low-emission development and broader national circumstances affecting them • Describe sector specific structural constraints to achieving such transitions such as those affecting energy access, security, and affordability • Examine labour and general employment concerns across important supply chains • Evaluate low-

emission development policy implementation in line with considerations of global equity The study will deploy both quantitative and qualitative approaches to policy analysis and evaluation. In particular, modelling approaches and scenarios from the peer-reviewed literature that are relevant to India's policy perspective would be used to reference the validity and effectiveness of India's policy implementation. The case study makes recommendations on conditions that can enable this transition and highlight key requirements from international cooperation that can support them. These may include finance, costs and availability of technologies, trade-related issues and capacities for implementation. The study team brings together strong expertise in undertaking this case study, based on the proposal leads' significant and close engagement with India's policy making processes and its articulation, both in the academic and policy making spheres. They also bring to this study close knowledge of the national and global context of climate policy making from across the world, from the perspectives of both the scientific work of the IPCC and the policy related processes of the UNFCCC.

3. *United Nations region to be covered by the case study:*
   Asia-Pacific;

4. *Country or countries to be covered by the case study*
   India

5. *Area of the case study:*
   Policy planning to implementation pathways ;

6. *Expected duration for completion of the case study (in months):*
   Approximately nine months

7. *Contribution of the submitting organization*
   Technical inputs;Authorship;

8. *Can the study be developed without financial support from the UNFCCC?*
   No

9. *If no, please provide the estimated range of required financial support in USD (Please note that the UNFCCC is not a donor organization and has limited funding):*
   10000

10. *Please provide the status of any preliminary work undertaken that could serve as a basis for the study, including a link to any available reports, if available.*
    Selected relevant publications from the author team : 1. Dhandhania K, Mittal S, & Pathak M (2025). Achieving net zero emissions in India's power sector: The dilemma between climate justice and energy justice. Energy and Climate Change, 7, 100247 https://doi.org/10.1016/j.egycc.2026.100247 2. Agrawal K, Pathak M, Unni J and Shukla PR (2024). Just Transition Away from Coal: Vulnerability Analysis of Coal Districts in India. Energy Research and Social Science 108 103355 https://doi.org/10.1016/j.erss.2023.103355 3. Dhandhania K, Unni J, and Pathak M (2025), Recognizing historic injustice in a coal-rich district: A case study of Singrauli, India, Resources Policy, 107, 105668, https://doi.org/10.1016/j.resourpol.2025.105668. 4. Ranjan A, Kanitkar T (2025). Energy requirements for sustainable human development, Energy for Sustainable Development, 85, 101648, https://doi.org/10.1016/j.esd.2024.101648 5. Kanitkar T (2024). Estimating the labour impacts of low-carbon growth pathways in India. understanding low-carbon transitions in the global south: Policy, politics, and decolonization. In: STS Conference Graz 2024., May 2024., Graz, Austria. 6. Jaiswal S, Nagarajan A, & Mythri A (2024). Projecting a food-insecure world: Equity implications of land-based mitigation in IPCC mitigation pathways. Environmental Science & Policy, 155, 103724. https://doi.org/10.1016/j.envsci.2024.103724 7. Venkataramana NT, Kanitkar T, Ramadesigan V, Banerjee R (2025). Optimizing renewable energy integration pathways: Inter-regional coordination and storage in India's power sector, Applied Energy, 394, 126134, https://doi.org/10.1016/j.apenergy.2025.126134 8. Nagarajan A (2022). The governance of plastic in India: towards a just transition for recycling in the unorganised sector. Local Environment, 27(10-11), 1394-1413.https://doi.org/10.1080/13549839.2022.2084721

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