







## **Summary**

# **Paving the Path:**

# **Decarbonising Transport in India and the Region**

A Decarbonising Transport in Emerging Economies (DTEE) and NDC Transport Initiative for Asia (NDC-TIA) event



Supported by:











#### ■ABOUT THE EVENT

The International Transport Forum was delighted to host "Paving the Path: Decarbonising Transport in India and the Region." The two-day, invitation-only event brought together Indian and international stakeholders from the transport community to reinforce cooperation on decarbonising transport. It aimed to facilitate the cross-border exchange of insights and experiences among regional counterparts grappling with analogous challenges in decarbonising their transportation systems. The event also facilitated networking between transport researchers, private and public sector professionals, as well as high-level figures in the transport space. During the event, experts from the International Transport Forum and partner organizations (UC Davis India ZEV Research Centre, Wuppertal Institute) shared findings and policy outcomes of various initiatives related to decarbonising the Indian transport system. It provided an opportunity to:

- Showcase the work completed in India under the Decarbonising Transport in Emerging Economies (DTEE) and NDC Transport Initiative for Asia (NDC-TIA) projects, including the ITF Transport Life-cycle Assessment Tool, Life-cycle Assessment of Passenger Transport: An Indian Case Study, Transport needs assessment in Indian cities, and Pathway to Zero Emission Trucking in India.
- Exchange knowledge and experiences between countries in the region that face similar transport decarbonisation challenges.

The event was part of the projects "Decarbonising Transport in Emerging Economies" (DTEE) and "NDC Transport Initiative for Asia" (NDC-TIA), which formed part of the International Transport Forum's "Decarbonising Transport initiative" (DTi) and was funded by the German Federal Ministry for Economic Affairs and Climate Action and its International Climate Initiative (IKI). For more details on the organizations and projects mentioned, please see the background information at the end of this document. Speakers and participants were confirmed prior to the event, and the final program was shared accordingly.



## DAY 1: 28 MARCH 2024

The inaugural day of the event served as an important platform for facilitating cross-border collaboration and knowledge exchange, with a particular emphasis on regional efforts to decarbonize transport, through the outcomes of the DTEE project. A presentation from NITI Aayog established the tone by highlighting the evolving priorities within India's transportation sector and underlining the significance of regional partnerships in navigating this transition. This regional perspective was complemented by presentations from a diverse range of organizations, each offering distinct insights derived from their experiences in their respective countries.

The ITF presented accomplishments from the DTEE project, presenting the ITF Transport Life-Cycle Analysis tools and a corresponding study, tailored to the Indian context, thereby laying the foundation for cross-border knowledge dissemination. Discussions surrounding the development of lifecycle assessment tools for freight transport provided a valuable opportunity to address common challenges and explore collaborative solutions.

The Wuppertal Institute organized sessions focusing on transport needs assessments, city-centric initiatives, and regional experiences, which provided an opportunity for sharing best practices and lessons learned from various countries across the region, thus contributing to a comprehensive understanding of decarbonization efforts that transcend national borders.









#### DAY 2: 29 MARCH 2024

Building on the momentum of the first day, the second day of the event continued to amplify the regional dimension of decarbonizing transport, facilitating deeper cross-border exchanges and collaboration focusing on the outputs of the NDCTIA project. A presentation by UC Davis offered compelling insights into the cost-competitiveness of transitioning to zero-emission trucks in India while also drawing parallels with experiences from other countries in the region.

Discussions on powering electric vehicles with renewable energy sources resonated strongly with regional stakeholders, providing a common ground for exploring shared challenges and opportunities in the session organised by GIZ India. ICCT's presentation on reviews of policy opportunities for accelerating EV uptake further underscored the importance of leveraging regional perspectives to inform policy formulation and implementation.

Presentations on the ITF Transport Outlook and on sustainable freight transport principles in Asia and the Pacific provided a panoramic view of regional dynamics, fostering a deeper understanding of common challenges and collaborative pathways forward. Through these nuanced discussions and exchanges, participants not only gained valuable insights into regional best practices but also forged enduring partnerships and networks aimed at driving sustainable transport agendas across borders.









## **Background Information**

#### ■INTERNATIONAL TRANSPORT FORUM

The International Transport Forum (ITF) at the OECD is an intergovernmental organisation with 62 member countries. It acts as a think tank for transport policy that covers all modes of transport. The ITF's mission is to foster a deeper understanding of the role of transport in economic growth, environmental sustainability and social inclusion and to raise the public profile of transport policy. The ITF acts as a platform for discussion of transport policy issues. It analyses trends, shares knowledge and promotes exchange among transport decision-makers and civil society.

# ■ DECARBONISING TRANSPORT IN EMERGING ECONOMIES (DTEE)

As part of the Decarbonising Transport initiative, the Decarbonising Transport in Emerging Economies (DTEE) project aims to help national governments and other stakeholders to identify measures and establish pathways to reduce transport GHG emissions in transport and meet their climate goals and NDCs, while also fostering their economic and social development. The project is implemented by the ITF in collaboration with The Wuppertal Institute (WI). It focuses on four ITF member countries: Argentina, Morocco, India and Azerbaijan. It is centred on the development of modelling tools that allow the assessment of greenhouse gas emissions (GHGs) in transport and help elaborate policy strategies to mitigate them.

The activities of the DTEE project are developed in close co-ordination with each of the countries' national government agencies, also involving local policymakers and other stakeholders from industry, academia and non-governmental/civil society organisations. NITI Aayog is the nodal agency liaising with the ITF and WI in the case of India.

The DTEE India project focuses on the development of a modelling tool capable to assess GHG emissions in the transport sector, taking a life-cycle perspective. DTEE India activities will also include support for the build-up of local capacity, with the aim to improve future transport research and policy development beyond the project duration.

The DTEE project is part of the International Climate Initiative (IKI). IKI is working under the leadership of the Federal Ministry for Economic Affairs and Climate Action, in close co-operation with its founder, the Federal Ministry of Environment and the Federal Foreign Office.

## ■NDC TRANSPORT INITIATIVE IN ASIA (NDC-TIA)

The NDC Transport Initiative for Asia (NDC-TIA) supports China, India and Vietnam in the definition of policies enabling to meet the objectives of their Nationally Determined Contributions (NDCs). The NDC-TIA is a joint project of seven organisations and is co-ordinated by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. In addition to the ITF and GIZ, NDC-TIA is implemented by International Council on Clean Transportation (ICCT), World Resources Institute (WRI), Agora Verkehrswende (AGORA), Partnership on Sustainable, Low Carbon Transport (SLoCaT) Foundation and Renewable Energy Policy Network for the 21st Century (REN21). The consortium connects with regional stakeholders and other Asian countries in order to encourage taking a comprehensive approach to decarbonise transport. NDC-TIA is under the umbrella of the International Climate

Initiative (IKI). IKI is working under the leadership of the Federal Ministry for Economic Affairs and Climate Action, in close co-operation with its founder, the Federal Ministry of Environment and the Federal Foreign Office.

The ITF is primarily involved in the India component of the NDC-TIA. As in the case of DTEE, NITI Aayog is the nodal agency for the NDC-TIA project in India. The focus of the NDC-TIA activities carried out by the ITF in India is on the build-up of capacity to take action on GHG emission mitigation in the transport sector. In particular, the ITF involvement in the NDC-TIA India project leverages the life-cycle assessment tool developed in the DTEE India project to help local research and academic institutions supporting the government in the definition of GHG emission mitigation policies in transport.

### ■THE DECARBONISING TRANSPORT INITIATIVE

The ITF Decarbonising Transport (DT) initiative promotes carbon-neutral mobility to help stop climate change. It provides decision-makers with tools to select CO2 mitigation measures that deliver on their climate commitment. Specifically, it:

- builds a catalogue of effective CO2 mitigation measures, the Transport Climate Action Directory.
- provides targeted analytical assistance for countries and partners to identify climate actions that work.
- gathers and shares evidence for best practices that will accelerate the transition to carbonneutral mobility.
- shapes the climate change debate by building a global policy dialogue and bringing the transport perspective to the broader climate change discussions.

The Decarbonising Transport initiative is organised in five work streams:

- **Tracking progress**: The initiative evaluates how current mitigation measures contribute to reaching objectives for reducing transport CO2.
- **In-depth sectoral studies**: The initiative identifies effective policies for decarbonising urban passenger transport, road freight transport, maritime transport, aviation and inter-urban transport.
- **Focus studies**: The initiative analyses specific decarbonisation issues and feeds the results into other work streams.
- **National pathways**: The initiative assesses available policy levers for decarbonising transport from a country perspective. Projects may also examine regional or sub-national levels.
- **Policy Dialogue**: The initiative organises global dialogue on transport and climate change through high-level roundtables, policy briefings and technical workshops. It acts as a conduit for transport sector input to climate change negotiations.

#### ■ WUPPERTAL INSTITUTE

The Wuppertal Institute sees itself as a think tank for sustainability research focused on impacts and practical application. The organisation's activities are centred on developing transformation processes aimed at shaping a climate-friendly and resource-efficient world. The overriding goal of the Institute's

work is to help ensure that the planetary boundaries are respected. The Wuppertal Institute has put this goal into concrete terms with a guiding vision of a climate-neutral and resource-light society.

The UN-Habitat Collaborating Center, a Research Unit at the Wuppertal Institute, supports transformative living labs in Asia, Europe, Africa, and Latin America. The Urban Living Lab Center provides a space for collaboration among implementation-oriented initiatives in the field of urban climate action. Its objective is to build on a range of research, innovation, and development cooperation projects and to provide a platform for actors and projects to broaden and sustain urban transformation actions.

#### ■UC DAVIS INDIA ZEV RESEARCH CENTRE

The Institute of Transportation Studies at UC Davis (ITS-Davis) is the leading university centre in the world on sustainable transportation, hosting the National Center on Sustainable Transportation since 2013 (awarded by the U.S. Department of Transportation) and managing large research initiatives on transport, energy, environmental, and social issues. The UC Davis India ZEV Research Centre launched in 2022 works on advancing clean transportation transitions in India, both nationally and subnationally. Its work cuts across research and policy related to vehicle electrification, hard-to-abate segments like trucks, critical minerals and supply chains, and international cooperation. In addition, the UC Davis India Centre also aims to improve the US-India and California-India partnership on clean energy, transport, and climate action.

#### GIZ

GIZ, the Deutsche Gesellschaft für Internationale Zusammenarbeit, is a renowned German government-owned international development agency. GIZ has established itself as a global leader in providing sustainable development solutions and technical expertise. Operating in over 120 countries worldwide, GIZ collaborates with governments, businesses, and civil society organizations to address pressing global challenges such as poverty alleviation, climate change mitigation, and economic development. The organization's diverse range of projects encompasses areas such as education, healthcare, environmental conservation, and governance, all aimed at improving the livelihoods of people around the world and fostering sustainable development. In India, GIZ is working on the thematic areas of Energy; Environment, Climate Change, and Biodiversity; Sustainable Urban and Industrial Development; Sustainable Economic Development.

In recent years, GIZ has been actively involved in promoting the growth of Electric Vehicle (EV) infrastructure and Renewable Energy (RE) sources worldwide. Recognizing the importance of reducing greenhouse gas emissions and transitioning to cleaner transportation and energy systems, GIZ has been instrumental in developing strategies and plans for enhancing grid flexibility. This includes initiatives aimed at integrating a higher proportion of renewable energy sources into the grid, implementing advanced energy storage solutions, and fostering smart grid technologies.