

# ITF Work in Decarbonising Transport

## Highlights from

- NDC Transport Initiative for Asia (NDC-TIA) - India
- Decarbonising Transport in Emerging Economies (DTEE) - India

**Dr Guineng CHEN**

Team Lead, ITF/OECD

15<sup>th</sup> Regional EST Forum in Asia

25 October 2023, Kuala Lumpur, Malaysia

## **Intergovernmental Organisation**

linked to OECD  
66 member countries

## **Think Tank**

Policy analysis and research  
Modelling, data and statistics

## **Annual Summit**

Forum for Ministers,  
industry, research



## The DT initiative provides decision-makers with tools to identify CO<sub>2</sub> mitigation measures that deliver on their climate commitment.



- ✓ Launched in 2016 after the Paris agreement
- ✓ Provides targeted analytical assistance for countries and partners
- ✓ Gathers and shares evidence for best practices
- ✓ Shapes the climate change debate by building a global policy dialogue

See: <https://www.itf-oecd.org/decarbonising-transport>

Or scan the QR code to access the page



## Pathway Development (past and present)

- ✓ [Decarbonising Transport in \*\*Europe\*\*](#) (funded by EC)
- ✓ [Decarbonising Transport in \*\*Latin American Cities\*\*](#) (funded by IDB)
- ✓ [Decarbonising Transport in \*\*Emerging Economies\*\*](#) (Azerbaijan, Argentina, India, Morocco) (funded by IKI)
- ✓ [NDC – \*\*Transport Initiative for Asia\*\*](#) (China, Vietnam, **India**) (funded by IKI)
- ✓ [Decarbonising Pathways for Urban Mobility in \*\*Mongolia\*\*](#) (funded by IKI)
- ✓ [Decarbonising Pathways for Urban Mobility in \*\*Uzbekistan\*\*](#) (funded by IKI)
- ✓ [Decarbonising Pathways for Freight Transport in the \*\*Philippines\*\*](#) (funded by IKI)

# Highlights of Selected ITF Decarbonising Transport Studies: DTEE + NDC-TIA in India



DTEE



Supported by:



Funded by

on the basis of a decision  
by the German Bundestag

## DTEE + NDC-TIA: Synergised Objectives

### Support for Stakeholder Platform

- Multi-stakeholder dialogue
- Modeling capacity advancement
- Technical support, reports, outreach

### Quantitative Assessment Framework

- Strategic CO2 modeling tool
- Base year emissions assessment
- Policy scenario impacts (2050)
- User-friendly, tailored visuals

### Capacity Enhancement

- CO2 reduction pathways
- Mitigation policy measures
- Activities: Workshops, training, manuals

### Policy Dialogue

- Regional findings dissemination
- Activities: Policy events, website, reports

## Reviewing existing transport policy and modelling in India



Decarbonising India's  
Transport System  
Charting the Way Forward



See: <https://www.itf-oecd.org/decarbonising-india-transport-system>

## Life cycle analysis for decarbonising transport in India

Decarbonising Transport in India:  
Learning From Life Cycle Assessment  
Workshop Summary

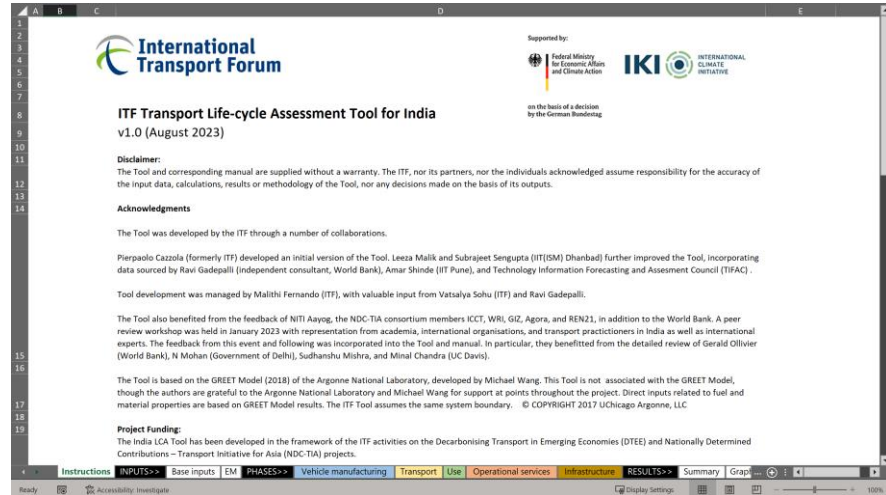
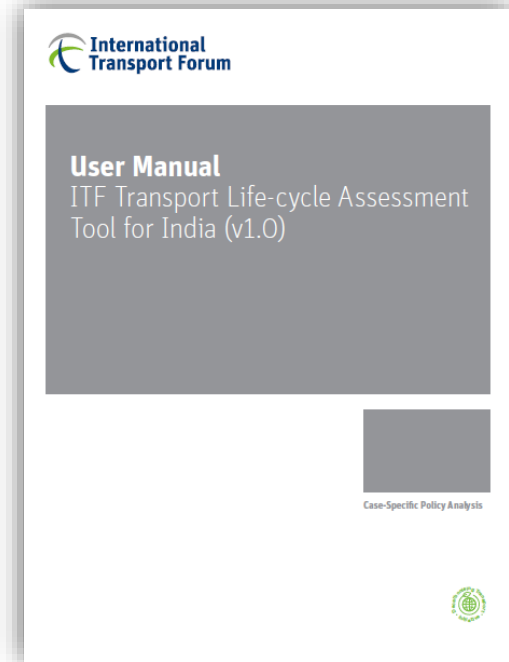


See: <https://www.itf-oecd.org/decarbonising-transport-india-learning-life-cycle-assessment>

# ITF Transport Life-cycle Assessment Tool for India



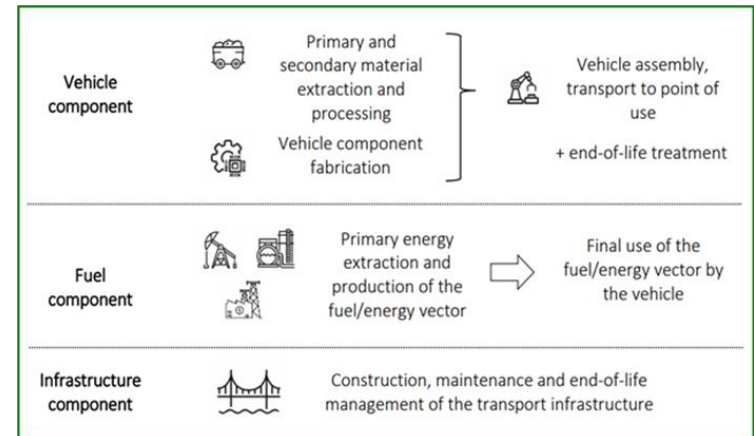
Download the tool





## The ITF Transport Life Cycle Analysis Tool for India

- It helps **understand holistically** the implications of changes in transport modes, vehicles and fuels in the Indian transport sector.
- It provides insights on **how these different choices impact transport emissions** from a holistic perspective.



## Partnerships



**MANIPAL INSTITUTE  
OF TECHNOLOGY**  
MANIPAL  
*A Constituent Institution of Manipal University*



**THE WORLD BANK**  
IBRD • IDA | WORLD BANK GROUP

**UCDAVIS**

India ZEV Research Centre



[Download the report](#)



**Life-Cycle Assessment  
of Passenger Transport**

**An Indian Case Study**

# Technical study on Life Cycle Assessment of Passenger Transport in India

- Jointly developed with the World Bank
- Focuses on the **Indian passenger transport** sector
- **Lifecycle phases** include: vehicle and battery manufacturing, transporting the vehicle to the point of sale, vehicle usage, and related infrastructure
- **Results** from three electricity grid evolution scenarios on GHG emissions per pkm, vkm and vehicle.

## 25 VEHICLE CATEGORIES



Private two-wheeler – ICE/BEV (Scooter)



Private two-wheeler – ICE/BEV (Motorcycle)



Shared two-wheeler – ICE/BEV (Scooter)



Shared two-wheeler – ICE/BEV (Motorcycle)



Three-wheeler – ICE/BEV



Bus AC- ICE/BEV -9m



Bus AC- ICE/BEV -12m

Bus Non-AC- ICE/BEV -9m

Bus Non-AC- ICE/BEV -12m

Coach Bus AC ICE/BEV 12 m

Private car – ICE/BEV

Taxi/Ridehailing-ICE/BEV

Metro/urban train

## Recommendations

**Initiate a modal shift from private vehicles to buses and prioritise their electrification**

**Promote electric two- and three-wheelers**

**Encourage a shift in the car fleet towards shared electric vehicles**

**Choose corridors with high passenger demand for new metro lines**

**Accelerate the transition to battery electric vehicles and complement it with the provision of cleaner energy**

**Mainstream lifecycle assessment into public policy and investment decisions**

## What's coming up?

### **Advancing Freight Electrification in India:**

- Collaborating with UC Davis India ZEV Research Centre
- Policy pathway for India's freight transition, to be published in early Q2 2024

### **LCA Tool Update:**

- Second release underway, includes freight vehicles
- Currently collecting primary data
- Expected to be available in 2024

A decorative graphic on the left side of the slide consists of a grid of overlapping leaf shapes. The leaves are in various shades of green and yellow, arranged in a pattern that tapers to the right.

# Thank you!

## Contact the project team

**Ms Malithi Fernando**, Policy Analyst, ITF  
Project Manager

[Malithi.FERNANDO@itf-oecd.org](mailto:Malithi.FERNANDO@itf-oecd.org)

**Ms Vatsalya Sohu**, Policy Analyst, ITF  
Deputy Project Manager

[Vatsalya.SOHU@itf-oecd.org](mailto:Vatsalya.SOHU@itf-oecd.org)