



# Centre for Sustainable Mobility



# KEY PARTNERS AND CLIENTELE

- All India Cycle Manufacturers' Association (AICMA)
- Children's Investment Fund Foundation (CIFF)
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Directorate of Urban Land Transport (DULT), Karnataka
- Environmental Defense Fund (EDF)
- European Union (EU)
- Logistics Division, Ministry of Commerce and Industry
- Ministry of Housing & Urban Affairs
- Ministry of Road Transport and Highways
- Ministry of Environment, Forests & Climate Change
- NITI Aayog
- RMI India
- Energy Systems Catapult
- SHAKTI Sustainable Energy Foundation
- Surat Municipal Corporation
- Transport Department, Government of Delhi



# ABOUT US

**The Energy and Resources Institute (TERI)** is a not-for-profit research organization working in India and globally in the fields of energy, environment, and sustainable development.

**The Centre for Sustainable Mobility (CSM)** at TERI aims to promote energy-efficient, environment-friendly, sustainable and inclusive development of the country's transport sector. The centre adopts a multidisciplinary approach in providing low carbon transport solutions to various stakeholders, made possible by its diverse team of research professionals trained in the fields of transport and urban planning, economics and engineering.

## Urban Transport

- Urban transport planning
- Non-motorized transport
- Public transport
- Informal modes of transport

## Regional Transport

- Conventional rail systems
- High speed rail
- Ports and shipping

## Freight Transport

- Low-Carbon Technologies for Freight Movement
- Efficient Last Mile Deliveries
- Regulatory and Policy Support for Logistics Planning
- Road, Rail and Waterways for transportation

# OUR SERVICES

**Policy Research and Analysis** to assist and support policy-makers in decision making

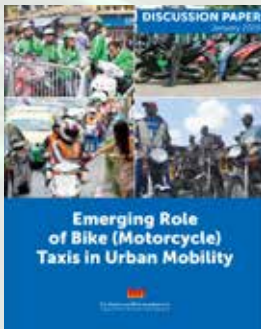
**Energy and Environment Analysis** to develop energy and emission inventories

**Capacity Building** to enhance technical capability of public officials to plan, design and implement policies/plans

**Knowledge Creation and Dissemination** to bridge existing knowledge gap and facilitate exchange of ideas

# Policy Research and Analysis

*We assist policy makers and industries in decision making on issues pertaining to urban and regional transport, to facilitate a holistic approach towards current and future policy making*



## **Role and Impact of Motorcycle Taxis in Indian Cities - A Consultative Approach**

The study undertaken by TERI team was focused on assessing the presence and potential of bike taxis in Urban Mobility. The study has identified the learnings from the case studies from different countries and laid down the policy suggestions for using bike taxis as mode of last mile connectivity.



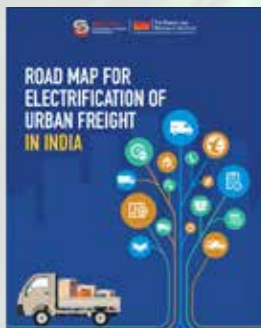
## **Policy Framework for Charging Infrastructure – Impact of EVs on Grid**

As sustainable transportation systems play a crucial role in achieving NDC targets, TERI has tried to project the future trends for energy demand and electricity demand load with the adoption of EVs in the city of Delhi. The study also critically analyses the policy interventions for electricity demand management.



## **Roadmap for Electrification of the Urban Freight Sector in India**

TERI with the support of Shakti Sustainable Energy Foundation undertook case studies for adoption of EVs for urban freight activities. The study further identifies suitable urban freight activities for electrification along techno-economic feasibility. The short, medium and long-term policy measures to accelerate the electrification were also identified.



## **Strategies to Increase Railway's Share in Freight Transport in India**

Focusing on the decarbonising transportation in India, TERI with support from RMI and CIFF has undertaken a study to devise strategies to increase railway's share in freight transportation. The study is focused upon optimising terminal operations, rolling out suitable freight marketing policies and setting rational tariff structure.

# Energy and Environment Analysis

*Our work encompasses the formulation of energy and emission inventories and mitigation strategies to promote energy efficient low carbon growth of the transport sector*



## **Decarbonization of Transport Sector in India: Present Status and Future Pathways**

TERI with support from CIFF undertook the study to assess the current and future energy demand from transportation sector. The study further investigates adoption of EVs and estimates the charging load using EV-load estimation model.

## **Development of a Web-Based Cost and Emission Calculator**

TERI with the support of Logistics Division, MoCI and GIZ is developing a web-based freight cost and emission calculator, where user can manually feed the freight tonnage and origin and destination; and the calculator will show the cost and emission associated with different modes of transport (i.e. air, road, rail and water). The development of calculator is aimed at helping logistics operators to make informed choice for freight transportation. Based on this study, Indian Railways has introduced the concept of **Rail Green Points** for their freight operations.

# Capacity Building

*We prepare toolkits to assist public officials in planning, designing and implementing sustainable transport policies, plans and projects*



## **Decarbonising Urban Freight in Surat and Bengaluru**

In continuation with the study on electrification of urban freight in India, TERI undertook pilot projects in Surat and Bengaluru with support from EDF. The key activities were focused on discussions with stakeholders, capacity building workshops and on ground implementation of EVs for urban freight. The techno-economic and environmental feasibility was assessed.

## **Stakeholder Engagement and Workshops**

- TERI has conducted 3 workshops during 2020-2021 in Surat, sensitizing logistics operators regarding the utility of EVs in their supply chain.

- The round table discussions with government stakeholders of Surat and Bengaluru were also carried out to understand the challenges and plan out possible solutions for decarbonizing urban freight activities.

## Key Partnership

*TERI has entered into active MoU with DULT, Bengaluru to leverage policy changes for achieving sustainable transport in Karnataka.*

*TERI is also a member of 'City Logistics Co-ordination Committee', Bengaluru.*

## Knowledge Creation and Dissemination

*We help researchers and stakeholders by providing them with necessary and reliable literature, data and information of sustainable transport systems*



### **Sustainable Urban Freight Coalition**

Sustainable Urban Freight Coalition is a platform to bring all the stakeholders related to urban freight on one platform. The coalition is aimed at leveraging sustainable freight transportation by means of discussions, problem solving and capacity building. The website works as a knowledge repository focused on leveraging sustainable freight transportation.

### **National Transport Decarbonization Council**

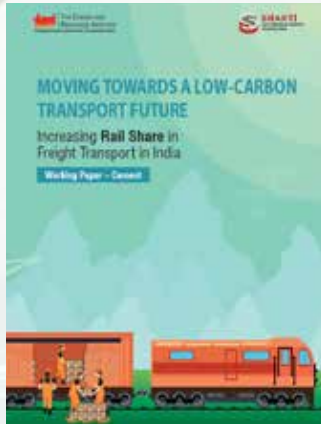
TERI has developed a neutral platform that will help the government and various departments to come together to examine high-impact policy solutions and pathways that lead to transport decarbonization.

### **Digital Library on Green Mobility**

TERI with support from GIZ has developed an online platform for sharing ideas, knowledge, and draft documents among the different stakeholders of various organizations and institutions from India and abroad involved in Low Carbon Transport in India

# Key Publications

*We prepare knowledge products in the form of study reports, policy briefs, journal articles and research papers to address knowledge gaps on sustainable transport issues*



- COP26 Charter of Actions
- Moving Towards a Low Carbon Transport Future Increasing Rail Share in Freight Transport in India
- Roadmap for Electrification of Urban Freight in India
- Sustainable Urban Freight Initiatives in India – State of Play
- Reducing Carbon Footprint of National Highways in India
- Enhancing Climate Resilience of National Highways in India

## Key Events

- Virtual Stakeholder Roundtable on Sustainable Mobility
- Launch of Sustainable Urban Freight Coalition
- Discussion on Roadmap for Electrification in India
- Launch of Digital Library on Green Mobility
- Webinar on Impact of Covid-19 on Urban Mobility



## **Contact Us**

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