

TUMI E-Bus Mission on Tour in India

Rohan S. Modi: 13th - 15th October 2022

Starting from the last quarter of this year, i.e. October 2022, the TUMI E-Bus Mission is on a tour to organize several in person events across the three partner regions of Africa, Asia and Latin America. With different regional objectives, the on-tour events are organized with aims to facilitate:

- Market Dialogue: to encourage close dialogues between Network Cities & the private sector.
- Financial Dialogue: to encourage close dialogues between Network Cities & financing institutes
- Full scale electrification roadmap development.
- Peer to peer learning: to encourage exchange between cities.
- Technical study trips: organization of study trips to various e-bus project facilities.

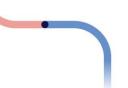
Starting with the first event from <u>3rd – 7th October 2022 in Dakar, Senegal</u>, the tour arrived in New Delhi in the second week of October from 13th – 15th October 2022.

1. TUMI E-Bus Mission City Dialogue in New Dehli



Photo: ICLEI South Asia

The TUMI E-Bus Mission partners (ICLEI & UITP) co-hosted a City Dialogue to accelerate the transition towards sustainable e-mobility in Indian cities. The event witnessed an active





participation of over 120 people coming from 18 urban local bodies, 6 state government agencies, 11 public transport agencies, federal level institutions, public sector enterprises, financing institutions, the private sector, NGOs and leading consulting organizations.

1.1. Day 1

On the first day, the dialogue deliberated on the need for a city-level vision and a roadmap for a long-term planning approach in four sessions:

- i. Importance of city level e-mobility vision to prioritise high impact areas: moderated by Dr. Himani Jain, Senior Programme Lead (Mobility) *CEEW*, the participants discussed the case studies from the cities of Surat, Rajkot, Kochi and Pune. The session identified:
 - a. the capacity building needs of relevant staffs.
 - b. need for a scientific and mathematical model/approach for identifying charging infrastructure locations
 - c. need to think about the ways to manage the e-waste in future.
- ii. **Electrification of Public Transport**: the session was led by Rupa Nandy, Head *UITP India*, and elaborated on the cases from Goa, Indore, Nashik and Bhubneshwar. The session concluded on the importance of constant government support for the public transport sector and how performance of retrofitted vehicles, operator's willingness to transition to EV and existing bus contracts are important considerations for a successful EV transition.
- iii. City level action to accelerable sustainable electrification of freight: Amit Bhatt,
 Managing Director ICCT India, along with other panel members discussed on the case
 examples of Shimla, Panaji and Kochi under the EcoLogistics initiative of ICLEI, which
 supported the cities to focus on freight sector electrification. The session emphasized on:
 - a. why should electricity generation from RE, like solar energy, be focused on EV charging needs?
 - b. importance of data to optimize delivery and energy access.
 - c. importance of reducing the public charging tariff to enhance public acceptance.
 - d. need of a common platform by the Government of India for urban local bodies to transition to EVs and wide scale awareness by the Union & state governments.
- iv. E-rickshaws: the driver of electrification in Indian cities: led by Mr. Sudeept Maiti,
 Program Head Transport, WRI India, the session focused on e-rickshaws as one of the



sectoral transitions that have far-reaching effects on accessibility for the last strata of people. The session discussed on:

- a. the need to analyze the user side perspective of transport, focusing on gender and mobility.
- reasons for economic profitability for the drivers with a payback period of 8-9 months.
- c. reasons for high interest rates for e-rickshaws.
- d. challenges & recommendations related to e-rickshaw operation.



Photo: ICLEI South Asia

1.2. Day 2

In the second day, discussions took a deeper dive on how to accelerate the adoption of electric buses and was divided in the following four sessions.



- i. Dialogue among the Network Cities: here Mr. Amegh Gopinath, Technical Advisor GIZ India, facilitated an active exchange among the various network cities like Surat, Indore, Nashik, Rajkot and Mumbai. The discussion points were:
 - a. the need to address the city specific as well as some common challenges.
 - b. use of data in decision making processes.
 - c. need for financial support from the governments.
 - d. addressing the behavioral change in e-bus users.



Photo: ICLEI South Asia

- ii. **Market Dialogue**: the session was moderated by Ms. Krishna Desai, Technical Expert *GIZ India*, between the OEMs & the Network Cities, and the discussions progressed around:
 - a. OEMs sharing their experiencee and challenges for e-bus operations.
 - b. how are active wider market consultations needed to be improved around procurement calls?
 - c. challenges related to intercity e-bus projects.
- iii. **Financial Dialogue**: here Ms. Rana Amani, Technical Advisor *GIZ India*, facilitated a discussion between the Network Cities and around four financing institutions around the





topic of financing challenges, innovative financing models, etc. The session further deliberated on:

- a. application process for financing options.
- b. needs to improve the charging infrastructure manufacturing in India.
- c. tailored financing options for tier II cities.
- d. cCC as long-term model for e-bus procurement.
- iv. Finally, Mr. Laghu Parashar, Program Manager *GIZ India*, facilitated an open discussion between cities and the financing institutions. The session attracted a broad range of topical discussions like:
 - a. digital transformation of online systems in public transportation.
 - b. experiences from Bhopal, Kochi, Leh and Kolkata.
 - c. roles of different institutions in planning, scheduling, and operations of e-bus projects.
 - d. including preferable steps for integrating e-buses like feasibility study to identify optimal routes, route analysis, understand trip lengths, charging type, payback period and integrate.
 - e. importance of analyzing the data & market situation before the allocation of funds by cities.

1.3. Day 3

On the final day, a site visit to Delhi Integrated Multi Modal Transit System Ltd. (DIMTS) was organized to demystify the complexities involved in the fast-charging infrastructure for electric buses. Mr. Dirk Steffes-Enn, Deputy Head, Economic Cooperation and Development Division,



German Embassy along with 19 city & state representatives were a part of this enriching technical visit.



The visit involved physical demonstration of e-bus operation by DTC and DIMTS officials. Additionally, a detailed discussion together with Mr. C. K. Goyal, wherein he provided insights related to e-bus operation and addressed the queries from the participants.

Thank you to the contributions of ICLEI South Asia & UITP India. Thank you to our TUMI E-Bus Mission Partners:















