



LOW CARBON MOBILITY PLAN FOR BHUBANESWAR

Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT)

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Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT)

- **Duration:** The 4- year long
- **Objective:** strengthen the ULBs & Smart City SPVs in planning, implementing & steering sustainable urban mobility.

Commissioned by - German Federal Ministry for Economic Cooperation and Development (BMZ)

Lead Partner Ministry- Ministry of Housing and Urban Affairs (MoHUA), Government of India

Implementing Agencies- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH & the consortium (comprising GFA, WRI India and Wuppertal Institute)

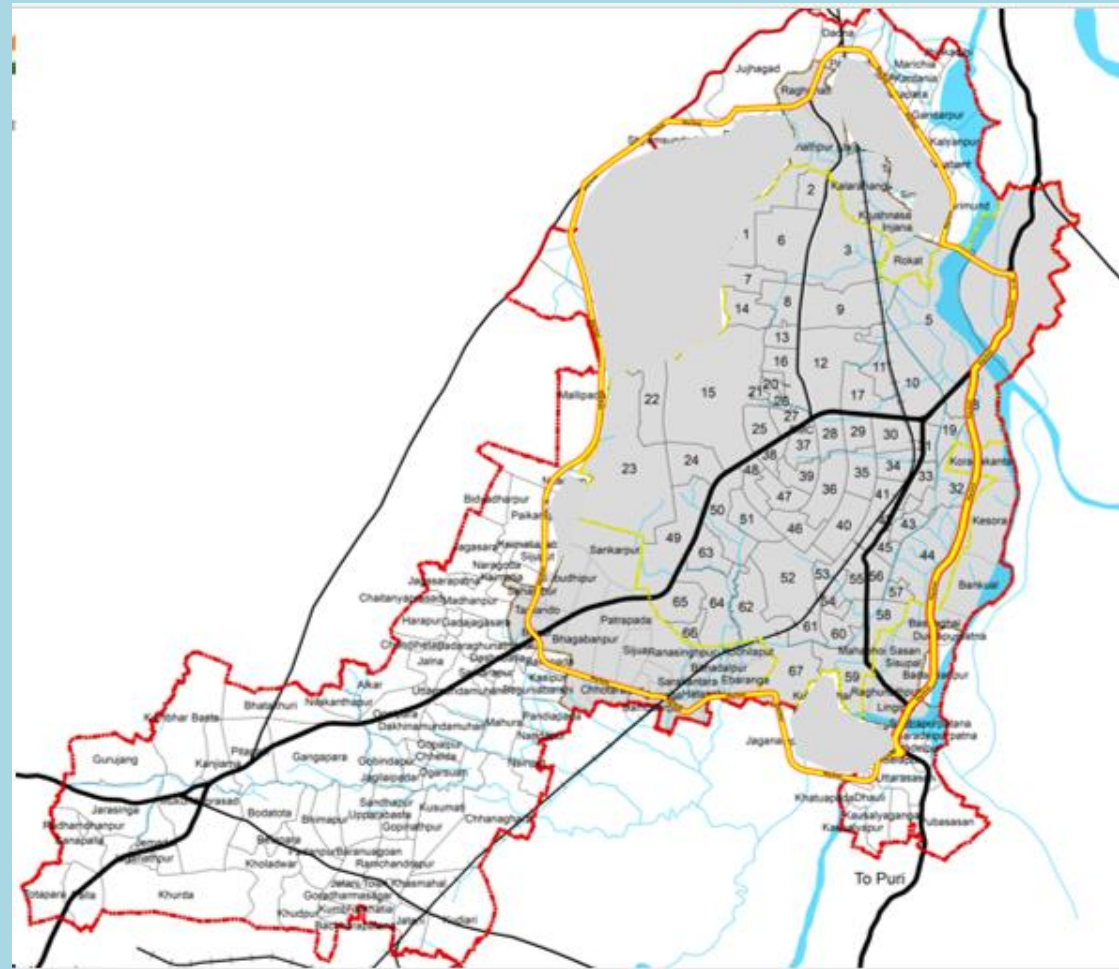
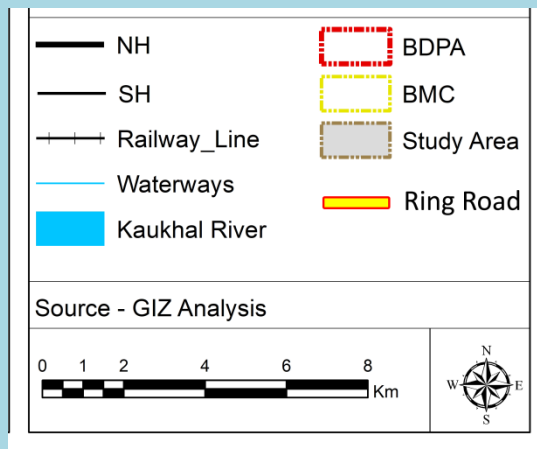


Ongoing activities for Bhubaneswar: SMART-SUT

- ✓ Preparation of **Low Carbon Mobility Plan**
- ✓ preparation of Parking Policy & Management Plan
- ✓ Review of Street Design Guidelines & Pilot project
- ✓ Input to the ongoing Comprehensive Development Plan

LCMP Study Area

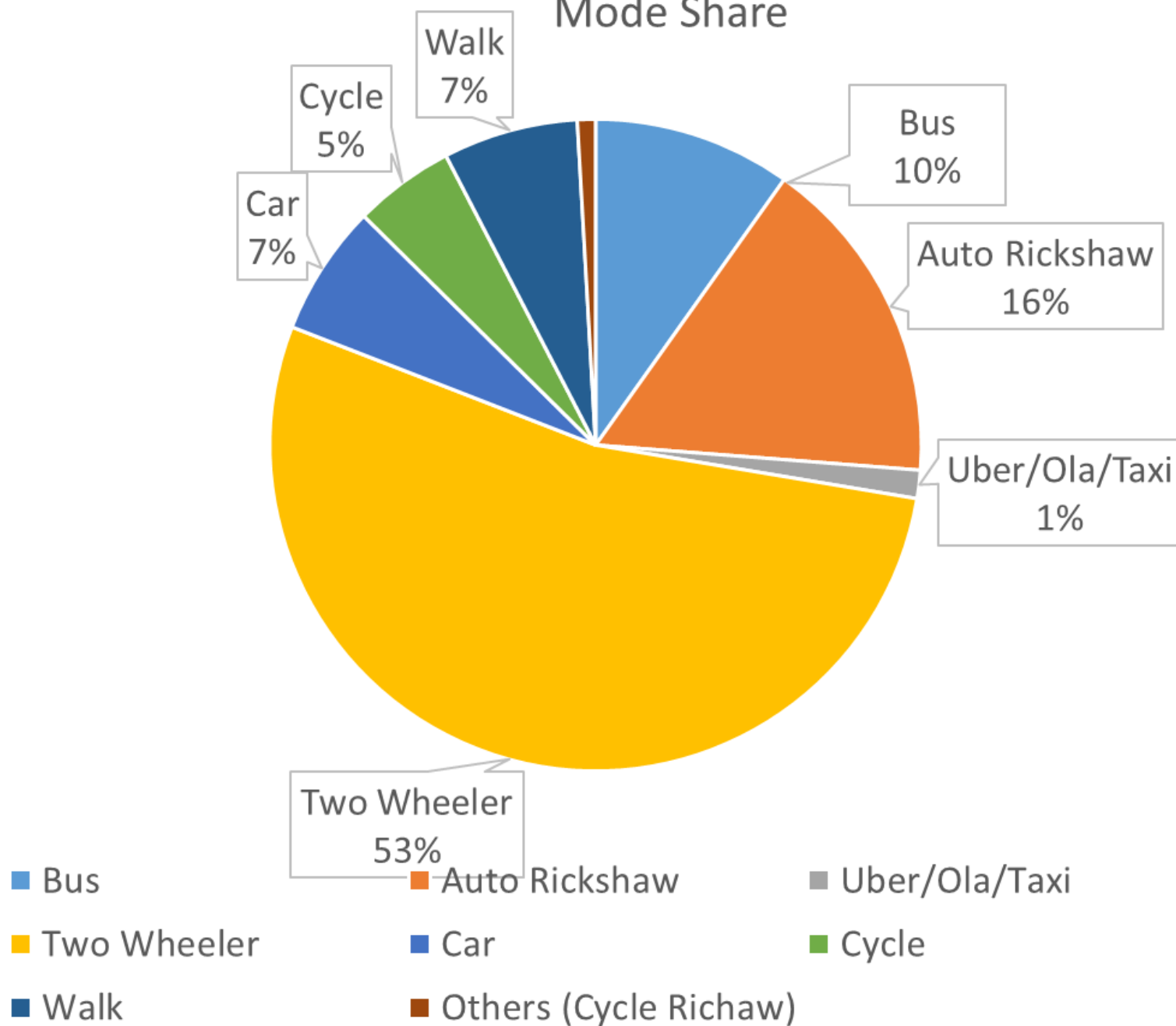
Population: 2018: 11Lacs
2040: 20Lacs



Key Mobility facts

- Average Vehicular Growth Rate: 11%/annum
- Road Length: 1498 km
- Foot Path: 120 km
- Cycle Track: 40 km
- Bus: 200: Daily Ridership 85000
- IPT: Auto: 20,000, Taxi:5000
- Fatal Incidences: 226

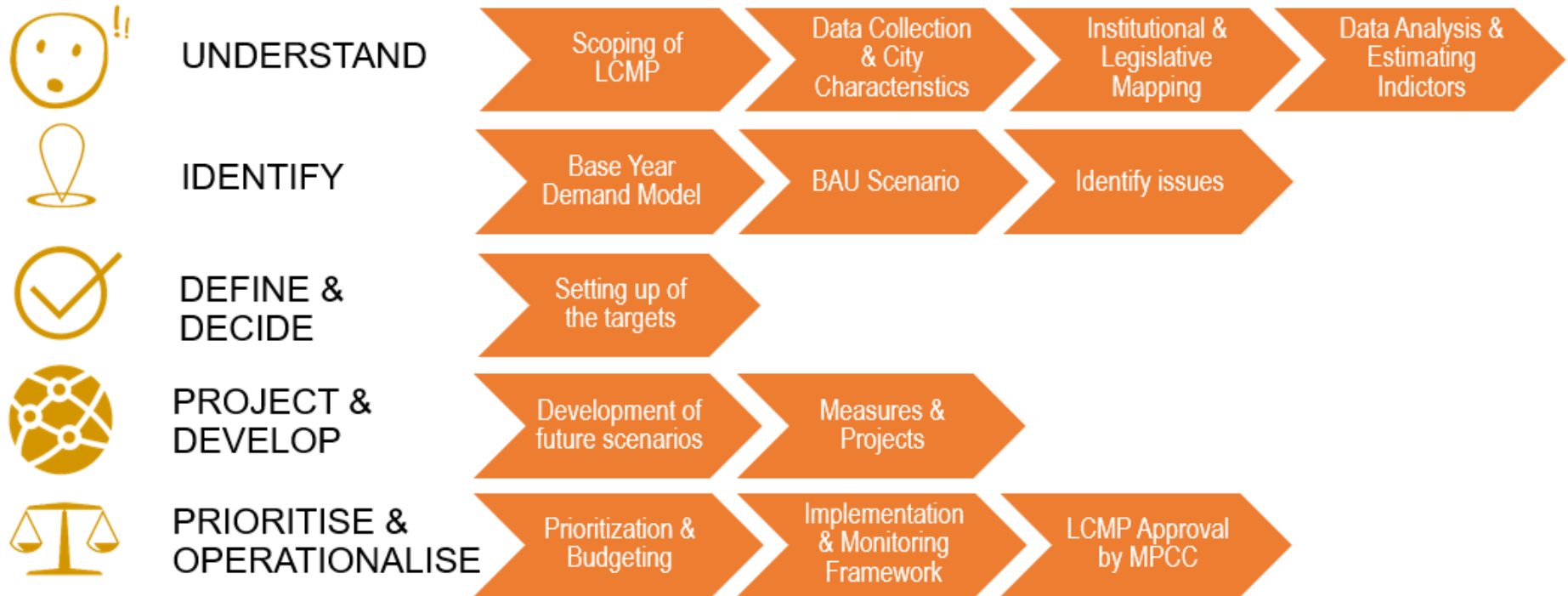
Mode Share



Why Low Carbon Mobility Plan?

- Unsustainable Growth Trend leading to congestion, unorganised parking, road safety issues and pollution
- The city has undertaken various individual initiatives but lacking long term vision to guide the mobility planning towards the sustainable future.
- The LCMP will provide a vision for 2040 with goals, targets, proposals for policies and measures.
- **Vision:** compact development, eco-city, child-friendly city, transit-oriented development, economic hub, accessibility and mobility, liveable city with diverse choices and focus on local heritage

Structure & Processes of LCMP Plan



Guided by:

**Committees: Mobility Plan
Coordination Committee
(MPCC) & Working Group
(WG)**

Focus Group Discussion

Focus Group Discussion



Focus Group Discussion

Key issues identified during FGD

Road Safety:

Universal Accessibility:

Lack of Public Space:

Pollution

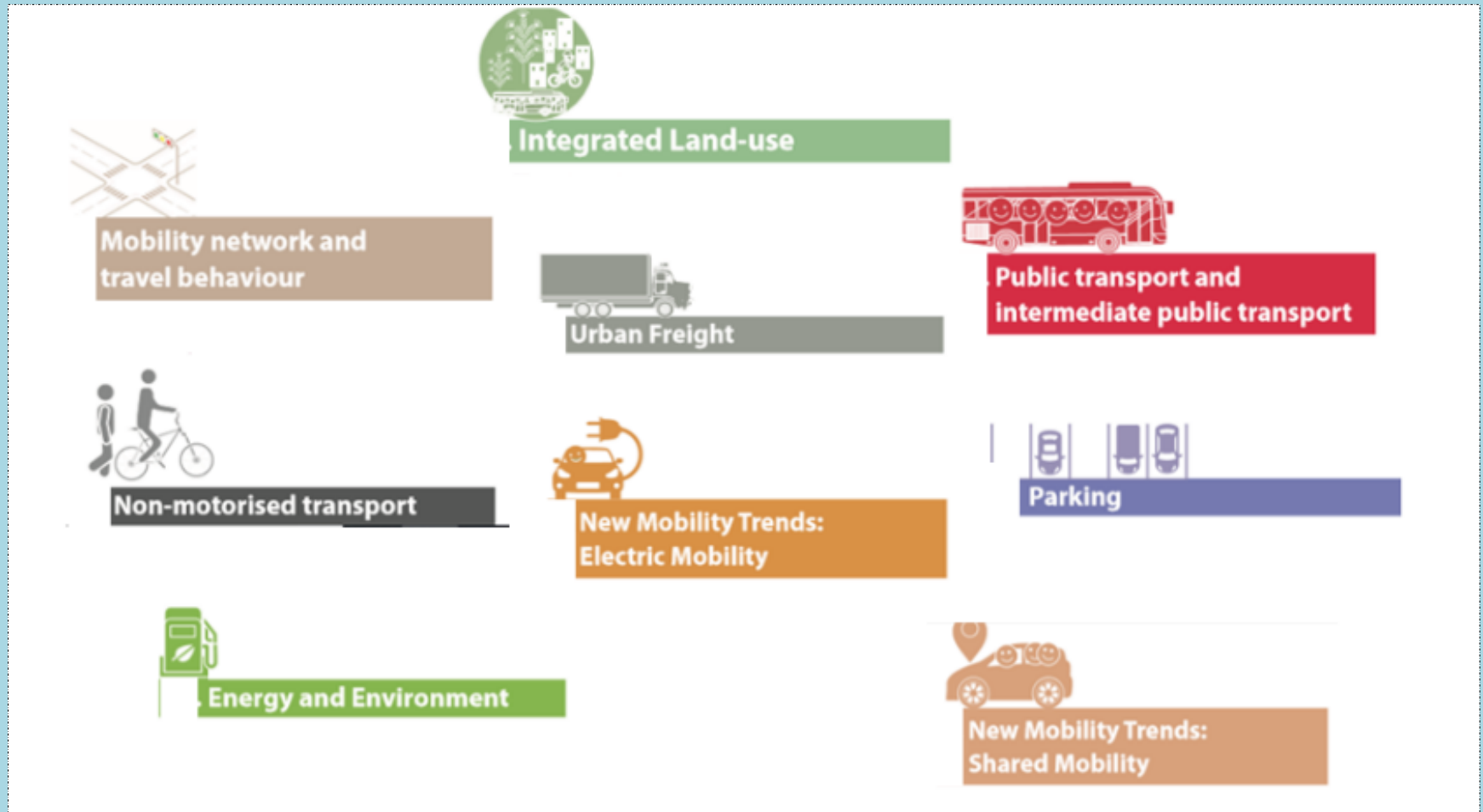
“Pollution is increasing day by day. If required measures are not taken, everyone will have to wear masks on face to protect themselves from chronic diseases.”

- Ayush, 13, SSM School

“The carbon monoxide emitted by the vehicles is highly poisonous for all living beings. Due to this people may suffer with skin cancer and other serious diseases.”

- Sambut Swaroop, 12, SSM School

Key Intervention Areas of LCMP



Public Transport & Intermediate Public Transport (IPT)

- City wide public Transport network
- Integrated PT/IPT feeder system
- Bus Priority Corridors
- Integrated ticketing
- ITS based information system, like real time Passenger Information System

Non-Motorised Transport

An Integrated NMT network with PT System

- Implementing a network of cycling and walking infrastructure
- Barrier Free Access
- Implementation of Street Design Guidelines including NMT friendly intersections

Mobility Network & Travel Demand Management

- Connectivity, Completeness of Street Network
- Traffic Management
- Parking Policy Formulation
- A Freight network with logistics hubs, warehouses and through freight to be diverted to Ring Road (considered)

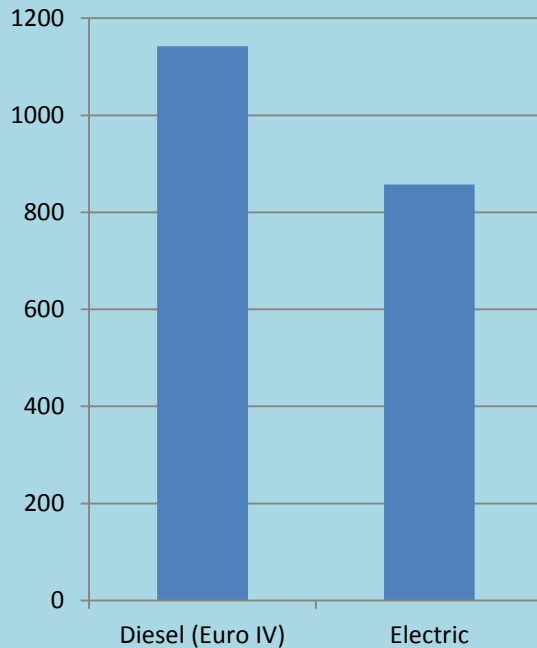
E-Mobility

A significant share of electric buses, three-wheelers, two-wheelers, light commercial vehicles

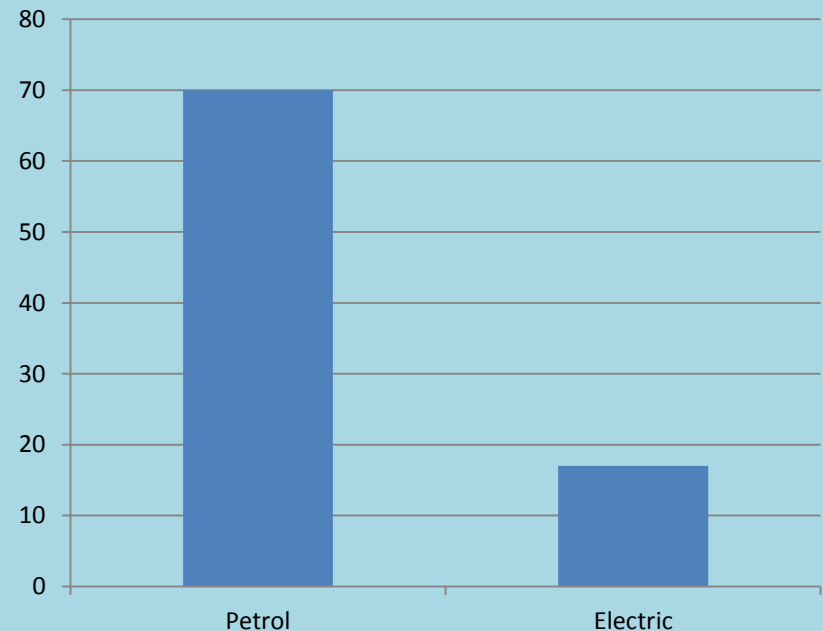
Electric buses about save 25% CO₂ emissions compared to diesel buses

Two wheelers save 78% CO₂ emissions

gCO₂/km WTW



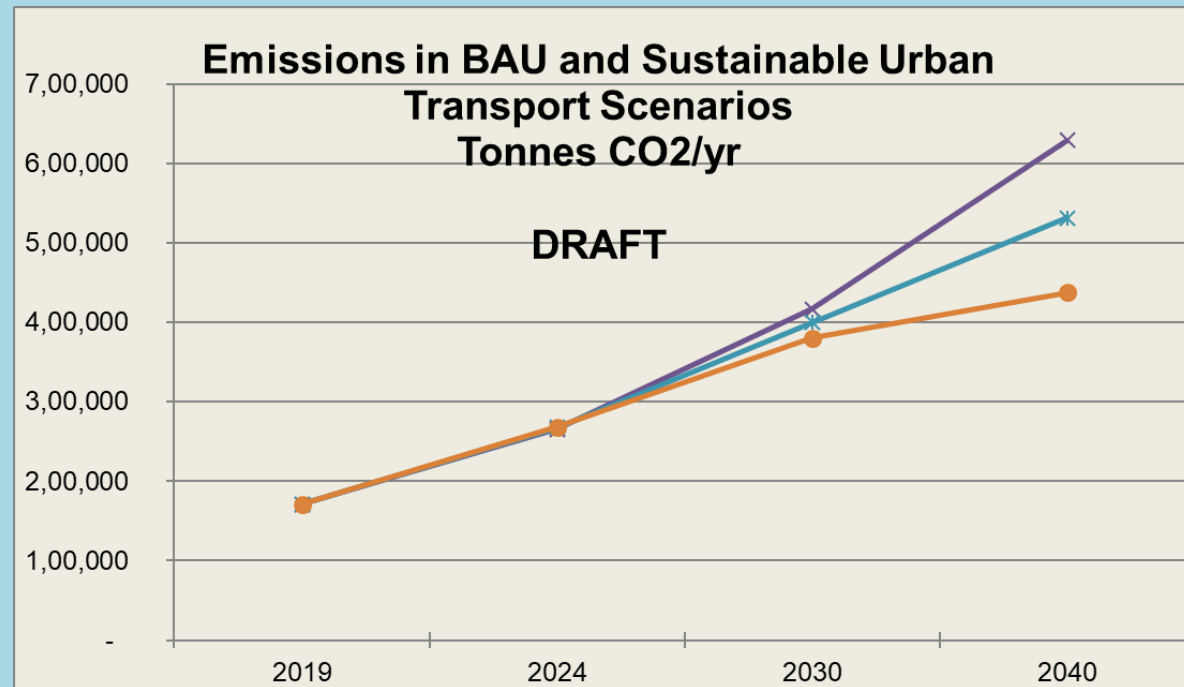
gCO₂/km WTW

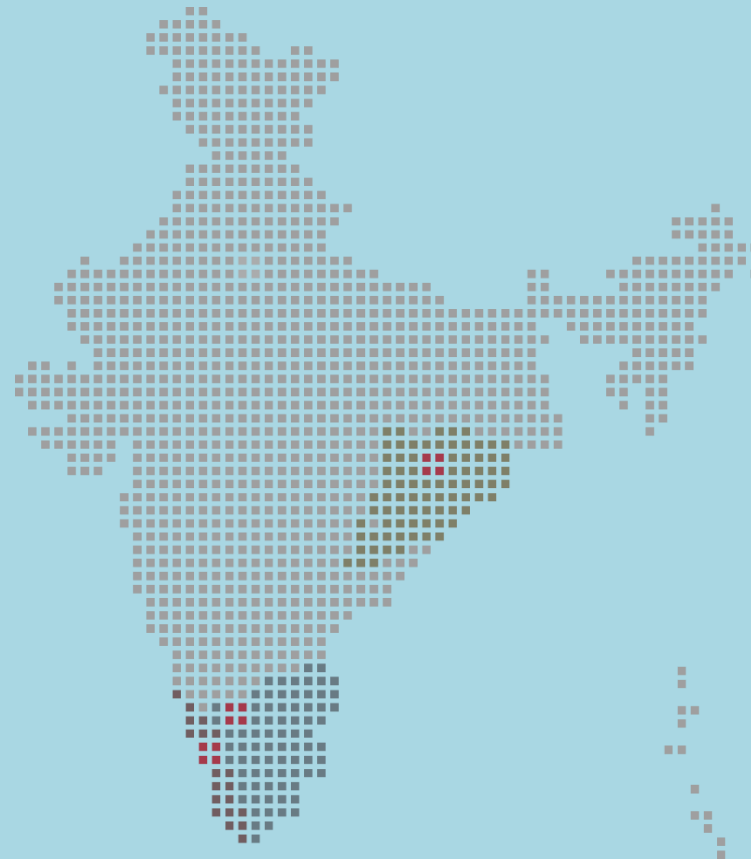


Source: TEEMP model, applied to Indian urban conditions
Emissions from fuel production and consumption
Electricity grid: 820 gCO₂/kWh

Impact on Greenhouse Gas Emissions

- GHG Emissions due to LCMP plans will drop by 20-30% in 2040 from the present GHG emissions





Thank You