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: 11 Lacs  
2040: 20 Lacs
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
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

- Integrated Land-use
- Mobility network and travel behaviour
- Urban Freight
- Non-motorised transport
- Public transport and intermediate public transport
- Energy and Environment
- New Mobility Trends: Electric Mobility
- New Mobility Trends: Shared Mobility
- Parking
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

Source: TEEMP model, applied to Indian urban conditions
Emissions from fuel production and consumption
Electricity grid: 820 gCO2/kWh
• GHG Emissions due to LCMP plans will drop by 20-30% in 2040 from the present GHG emissions.
Thank You