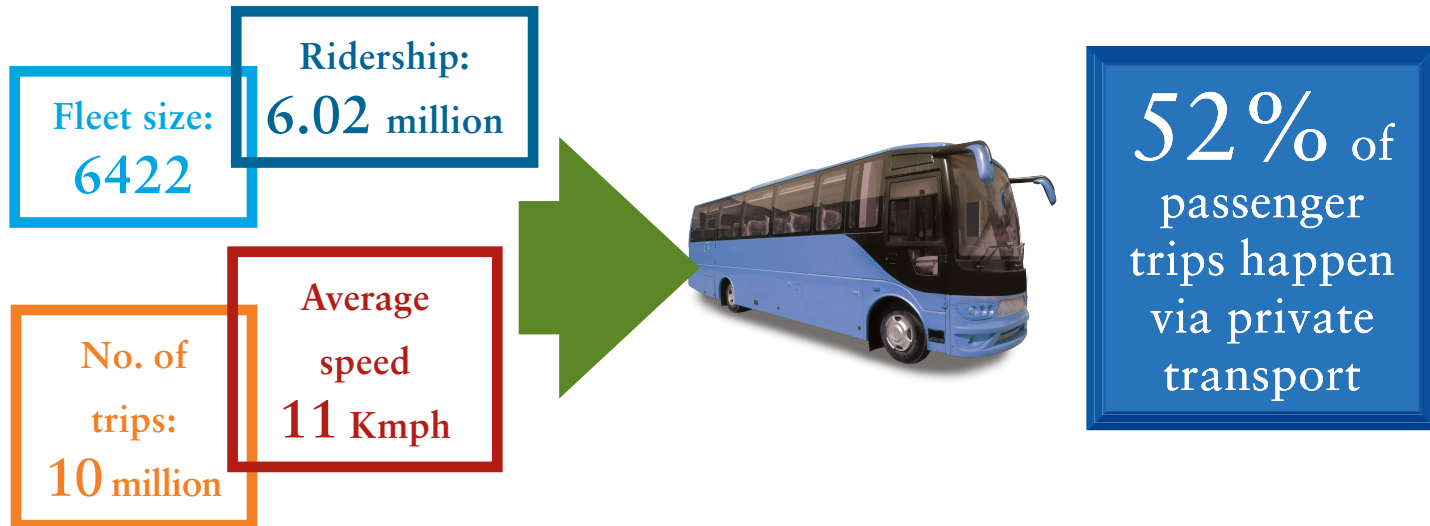


Fortifying adoption of electric buses in Bengaluru

DEVELOPING OPERATING MODELS TO PROMOTE E-BUSES



Rising use of personalized vehicles and intensification of existing economic nodes is fueling the traffic congestion and **environment pollution** in the city...

Government has setup a task force to intensify measures against air pollution and prepare **Air Quality Improvement Action Plan**

How did IFC help?

Bengaluru identified as one of the focus cities under IFC's **Eco Cities Program**

Identifying urban transport (including public transport) as a key sector responsible for high GHG emissions

Conducting market assessment, policy reviews of electric buses

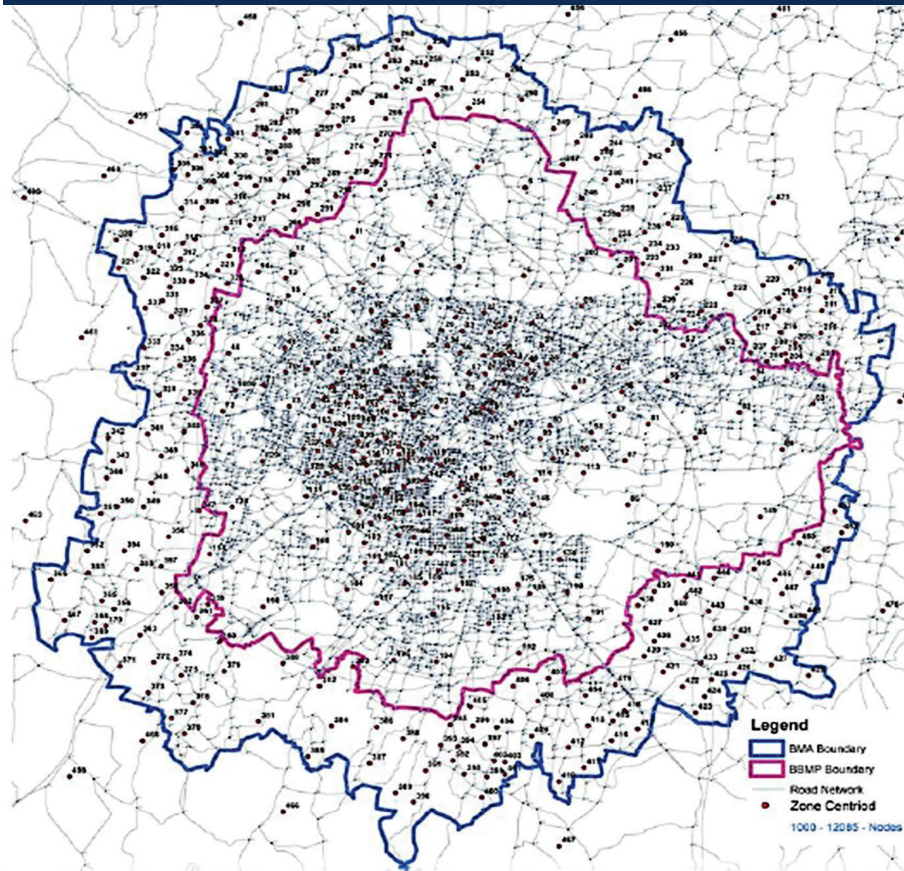
Engaging stakeholders for steering the electric bus adoption

Developing operating models for thriving Bengaluru as a green economy

Key Outcomes

- ◆ Understanding the challenges & trends associated with e-buses
- ◆ Leveraging the expertise of stakeholders to make e-bus adoption ease
- ◆ Estimating total cost of ownership of ICE and e-buses
- ◆ Allocation of risks between government and private players
- ◆ Developing multiple operating models along with viability assessment

BMTC to draft tender documents for e-buses with all standards and specifications and invite applications



Source: Bengaluru City Master Plan, Bengaluru Development Authority

Allocation of risk depending on competence of stakeholders

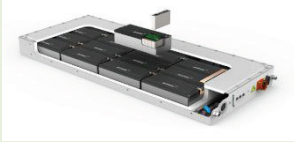
Government Authority



1

Bus Manufacturers

- Limited Strength in automotive component manufacturing
- R&D experience in battery manufacturing



2

Battery Manufacturers

- Limited Indian Manufacturers, battery technology improving rapidly (energy density improving along with reducing costs)



3

Electricity Utility

- Utility looking towards EV as a solution for optimizing intermittent generation from renewable sources & grid stability



4

Private Operators

- Strength in bus operation and maintenance
- Availability of experienced operators in India

CONTACT:

Suvranil Majumdar
Operations Officer, IFC
smajumdar@ifc.org