







tumi
E-Bus Mission



Deep Dive City
Delhi
India

 ebus.transformative-mobility.org
 @TUMInitiative
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 Transformative Urban Mobility Initiative

General information about the city¹



Population
16.8 million (2011)
20.5 million (2021)



Average temperature
24 °C



Number of car ownership
157 vehicles per 1,000 people



Renewable energy share (in MW) (MOSPI)
0.2%



Annual rainfall
617 mm (annual)
119.3mm (highest)



City area
1484 km²



GDP (US Dollars)
293 billion

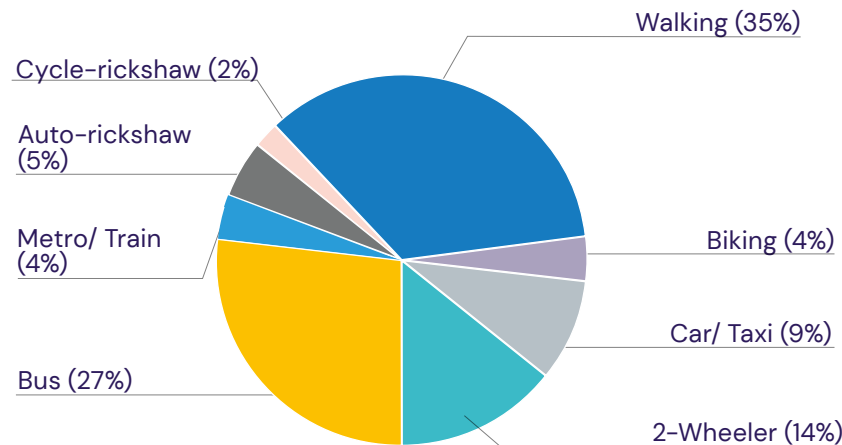


Climate risks

- High risk of earthquakes
- Floods
- Fire outbreaks
- Air Quality Index - Satisfactory

Urban Mobility System²

Modal split



Public transport modes

- City buses operated by Delhi Transport Corporation (DTC) and Delhi Integrated Multi-Modal Transit System (DIMTS) Ltd
- Autorickshaws
- Metro
- Cycle-rikshaws

Avg distance travelled per day by bus

218 km cluster buses
190 km DTC buses

Fleet utilisation

86.69%



Carried passengers

Avg Daily Bus Ridership: 2.4 million
Delhi Transport Corporation-1.5 million
and Cluster buses operated by DIMTS-900,000

Total no. of routes

650

Avg. fleet age

7 years

Climate and Urban Mobility Policies

Vision for net zero urban mobility



Delhi has a policy to have 25% of all new vehicle registrations to be electric by 2024. The vision is to bring down transport emissions by ensuring early success in the electrification of city bus services and establishing a durable foundation for faster mobility adoption.

Experiences

- 2018: Delhi Govt presented its 'Green Budget' for procuring 1,000 e-buses;
- 2019: Issued a global tender for 375 e-buses;
- DIMTS completed a feasibility study on e-buses;
- 2020: Another 575 buses were tendered out in clusters;
- Delhi receives its first (12 m) AC low floor prototype buses;
- 2021: Delhi with a demand of 1,500 (12 m) low floor AC e-buses, participated in the Grand Challenge floated by Convergence Energy Services Limited (CESL);
- In 2022, Delhi subscribed 1,500 (12 m) low floor AC and 100 (9.5m) AC double decker e-buses through the Grand Challenge floated by CESL.

Electrification model

DTC takes the major role to manage the e-bus network and the operator consortium (OEM + bus operators + energy service providers) carries out the operation and maintenance of the e-buses. The operator consortium receives a payment from DTC on passenger km travelled by e-buses.

References:
1. <https://www.indiatimes.com/trending/social-relevance/top-10-richest-cities-in-india-2021-552132.html?picid=2181871>
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2. CTS Study of Delhi, 2018
Delhi Transport Corporation (DTC) & Delhi Integrated Multi-modal Transit Systems (DIMTS)

Electric Buses

Targets for electric bus adaption

- 1 610 e-buses by 2022
- 2 50% electrification by 2027

Procurement and planned projects

- Aug 2022: 152 (12 m) AC low-floor e-buses have been procured;
- 3 depots have been electrified.

Planned projects

- Aug-Sept 2022: 300 (12 m) AC e-buses;
- 2023: procure 100 (9.5 m) e-buses & to electrify 26 depots;
- Grand Challenge tender: receive 1,500 (12 m) low floor AC e-buses.

Bus technology share



7,141
ICE – Buses

152
E-Buses

Political commitments

- Developing a city-wide framework for timely electrification of depots, Taking note of all envisaged external challenges;
- Using cleaner and zero emission fuels to increase accessibility and reliability on public transport.



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Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH
Bonn und Eschborn

E info@giz.de
I www.giz.de

Friedrich-Ebert-Allee 36 + 40
53113 Bonn
T +49 228 44 60-0
F +49 228 4460-17 66

Dag-Hammarskjöld-Weg 1 - 5
65760 Eschborn
T +49 6196 79-0
F +49 6196 79-11 15

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