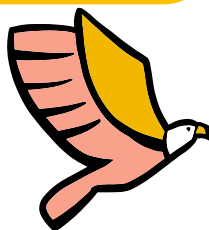




tumi
E-Bus Mission



Deep Dive City
Jakarta
Indonesia

ebus.transformative-mobility.org
[@TUMInitiative](https://twitter.com/TUMInitiative)
[@transformativemobility](https://facebook.com/transformativemobility)
[Transformative Urban Mobility Initiative](https://youtube.com/transformativeurbanmobility)


General Information about the City^{1,2,3}

 **Population**
10.5 million


 **City area**
661.5 km²



 **Average temperature**
27 °C

 **Annual rainfall**
1500 mm/year

 **Climate risks**
Flood

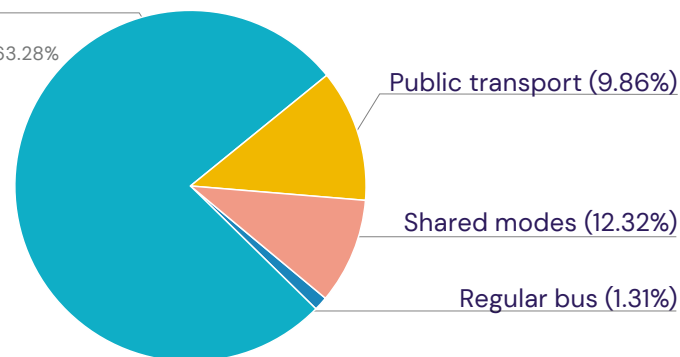
 **Number of car ownership**
Private car: 3.365.467
Motorcycle: 16.141.380

 **GDP (US Dollars)**
321 billion

Urban Mobility System⁴

Modal split

Private transport
(77.81%)
Cars: 14.53%
Motorcycles: 63.28%



Public transport modes

- Bus Rapid Transit (BRT) Transjakarta
- Light Rail Transit (LRT)
- Mass Rapid Transit (MRT)
- Greater Jakarta Commuter Line (Commuterline)
- Airport train (Railink)
- Bus
- Microbus

Total no. of routes / buses

4,079 buses

- 251 routes
- BRT services – 55 routes
 - Direct Services – 69 routes
 - RoyalTrans – 13 routes
 - Border Route – 14 routes
 - Affordable Housing Route – 21 routes
 - Tourism Route – 7 routes
 - Mikto Trans – 72 routes



Carried passengers
(Avg. daily demand)

2.56 million (2019)

Gender equity

- Mikto Trans – Passenger data:
Male – 35% & Female – 65%
- Transjakarta staff:
Male – 85.26% & Female – 14.73%
- Transjakarta driver:
Male – 97.1% & Female – 2.9%

Climate and Urban Mobility Policies

Vision for net zero urban mobility

The aim is to emphasise on decarbonization in the transportation and mobility sector.

The National Mass Public Transport Electrification Roadmap (on progress by the Ministry of Transport) specifies:

- 90% electric public transport by 2030;
- Increase public transport's modal share to 60% by 2030.



Electrification model

- Gross Contract
- Maintenance held by OEM

The business model for the 100 e-bus pilot phase instructs that the operator is responsible to procure and maintain electric buses, provide charging infrastructure and a depot for the buses.

For large scale electrification, Transjakarta appoints operator under BTS scheme for procuring, operating, maintaining the e-buses under the BDMI (Bus, Depot, Maintenance, Insurance) scheme.

Political commitments

- Jakarta Governor Instruction No. 66/2019 on Air Quality Control specifies to accelerate public transport fleet renewal and implement a more stringent emission standard on it;
- Jakarta Governor Regulation No. 03/2020 on Vehicle Ownership Transfer-Tax, exempts tax for Battery Electric Vehicle, and also from ownership transfer tax until December 2024;
- Jakarta Regional Secretary Instruction No. 01/2021 on Regional Strategic Activities Acceleration Action Plan includes a target for Transjakarta to implement electric buses in 2021;
- Transjakarta's Long Term Corporate Plan 2020-2030 targets to operate 83% e-buses in 2030 (12,172 fleet).

References:

- 1 <https://www.bps.go.id/pressrelease/2021/01/21/1854/hasilensus-penduduk-2020.html>
- 2 https://statistik.jakarta.go.id/media/2020/11/Buku_Statistik_2020.pdf
- 3 <https://jakarta.bps.go.id/indikator/17/786/1/jumlah-kendaraanbermotor-menurut-jenis-kendaraan-unit-di-provinsi-dki-jakarta.html>
- 4 Jakarta Transport Agency, 2020
- 5 <https://otomotif.kompas.com/read/2021/08/05/144100615/30-bus-listrik-siap-mengaspal-di-jakarta>
- 6 location-asia-indonesia-jakarta-2021-07-12-08-33-02.pdf Pemerintah Target Porsi Energi Terbarukan Capai 48 Persen Hingga 2030 (kompas.com) https://statistik.jakarta.go.id/media/2020/11/Buku_Statistik_2020.pdf

Electric Buses^{5,6}

Targets for electric bus adaption

- 1 2,775 e-buses by 2023.
- 2 50% fleet electrification by 2025.
- 3 Full electrification + procurement of 10,051 e-buses by 2030.

Experiences

Transjakarta has started to run e-bus trial from different manufacturers since 2019:

- 2019: BYD Electric Single Bus;
- 2020: BYD Electric Single Bus and BYD Medium bus;
- 2021: Higer Electric Single Bus.

Ongoing and planned projects

Jakarta initiated a 100 E-Bus Trial Project as part of the sustainable transport and mobility strategies. The goal is to procure only zero-emission buses from 2025 and ensure a major area of the city is zero-emission by 2030. Currently, 30 e-buses have been procured and will be operated soon.

Bus technology share



3758
ICE – Buses

0

Hybrid-Buses

2

E-Buses



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Status

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