Deep Dive City
Ahmedabad
India

General information about the city

- **Population**
  - 5.7 million (2011)
  - 8.2 million (2021)

- **City area**
  - 505 km²

- **Average temperature**
  - 27 °C

- **Annual rainfall**
  - 800 mm/year

- **Climate risks**
  - Heat waves
  - Air Quality Index – Satisfactory

- **Number of car ownership**
  - 350 vehicles (including two-wheelers) per 1000 people (2018)

- **GDP (US Dollars)**
  - 68 billion (2021)

Urban Mobility System

- **Modal split**
  - Daily trips 6,649,834
  - Walking (13.2%)
  - Auto-rickshaw (9.1%)
  - 2-Wheelers (35%)
  - Biking (18.8%)
  - Car (8.9%)
  - Public Transport (AMTS/BRTS) (15%)

- **Carried passengers**
  - AMTS: 515,073
  - BRTS: 160,000

- **Total no. of routes**
  - AMTS operates 204
  - BRTS operates 16

- **Avg distance travelled per day by bus**
  - 200 km

- **Fleet utilisation**
  - 88%

- **Avg. fleet age**
  - 5 years
Climate and Urban Mobility Policies

Vision for net zero urban mobility
The electric buses in Ahmedabad are in line with the vision to provide green and sustainable transport solutions. The city aims to become the first Indian city to convert its entire fleet of public transport buses into e-vehicles. It also has plans to increase its share of public transport and active mobility in the coming years.

Procurement and planned projects
FAME I
- 50 AC e-buses of which 40 buses procured under FAME-I and 10 buses from Additional State VGF (18 are swappable) by Ashok Leyland (Aug, 2019);

FAME II
- 50 AC e-buses by JBM Auto (May, 2021);
- 40 AC e-buses by JBM Auto (Aug, 2021);
- 60 AC e-buses by TATA Motors (Dec, 2021);

Planned projects
- 300 (9 m) AC e-buses to be procured under FAME-II by 2023.

Electrification Model
GCC contractual model consists of the AJL taking the major role to manage the bus network and the operator consortium (OEM + bus operators + energy service providers) carrying out the operation and maintenance of the e-buses. The operator consortium receives payment from AJL on passenger km travelled by e-buses.

References:
Ahmedabad - GDP $68 Billion
Public Transport System in the City – GIDB, GoG
2. SLBUT (utbenchmark.in)
http://utbenchmark.in/UsersidePages/CityProfile.aspx?City=1
AMTS, AJL., 2019
3. AMTS Vision Plan – 2035, May 2021

Electric Buses

Targets for electric bus adaption

| 1 | Ahmedabad Municipal Corporation (AMC) has announced to procure another 300 (9 m) e-buses by 2023. |
| 2 | Ahmedabad has the long plan to electrify their fleet in a phased manner. Full electrification by 2024. |

Bus technology share

| 1067 | Electric Buses |
| 0 | ICE – Buses |
| 202 | Hybrid-Buses |
| 0 | E-Buses |

Political commitments
- Clean and Green Public Transport initiatives by Government of India through DHI under FAME I and FAME II schemes;
- The Chief Minister Urban Bus Scheme (CMUBS): The Gujarat state government and the city authorities each offer a viability gap funding (VGF) of Rs. 12.50/ km towards operations expenditure of every new city bus (electric or ICE).

Experiences
AJL undertook a pilot of battery swapping technology of 18 e-buses in partnership with Ashok Leyland as Bus OEM and Sun mobility as energy service provider.

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