Deep Dive City
São Paulo
Brazil

General Information about the City

- **Population**: 12.39 million (estimated population, 2021)
- **City Area**: 1,521,110.33 km²
- **Average Temperature**: 21 °C
- **Annual Rainfall**: 1412 mm/year
- **Number of Car Ownership**: 5,976,522 car fleet
  - 482 cars per 1000 inhabitants
- **GDP (US Dollars)**: 146.6 billion
  (1 USD = 5.21472 BRL)

Climate Risks

- Extreme temperature (hot) (heat waves, water scarcity)
- Flood (flash or surface flood)

Urban Mobility System

**Modal Split**

- **Car**: 27.3%
- **Motorcycle**: 2.5%
- **Bike**: 0.9%
- **Train / Metro**: 11%
- **Walking**: 31.8%
- **Bus**: 25.4%
- **Taxi / Ridehail**: 1%

**Public Transport Modes**

- Conventional Municipal Bus
- Conventional Metropolitan Bus
- Bus Rapid Transit (BRT)
- Metro
- Train
- Taxi + Ride-Hailing Apps
- Bike sharing
- Others: Vans and taxis adapted from the atende service and school buses

**Total No. of routes / buses**

- 2019
  - 1,337 routes
  - 13,981 buses

**Carried passengers**

- (Avg. daily demand)
- 2019: 8,86 M pax/day
Climate and Urban Mobility Policies

**Vision for net zero urban mobility**

The city has a target to decarbonise their public transport fleet and reduce emission:
- CO2: 50% (2028) and 100% (2038);
- MP: 90% (2028) and 95% (2038);
- NOx: 80% (2028) and 95% (2038).

**Experiences**

Several tests carried out in the city and a pilot project with 18 battery electric buses (BEV).

**Ongoing projects and planned projects**

Pilot project carried out by the operator Transwolff with 18 standard BYD electric vehicles.

**Political Commitments**

- Lei do Clima – 16802 (2018);
- PlanClima SP (2021);
- Municipal Law of Climate Change (nº 16.802/2018);

**Climate and Urban Mobility Policies Electric Buses**

**Experiences**

Several tests carried out in the city and a pilot project with 18 battery electric buses (BEV).

**Targets for electric bus adaption**

1. At least 2600 electric buses in operation by 2024.
2. 13,000 more electric buses in operation by 2038.
3. Full electrification by 2038.

**Bus Technology Share**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICE - Buses</td>
<td>13981</td>
</tr>
<tr>
<td>Hybrid-Buses</td>
<td>219</td>
</tr>
<tr>
<td>E-Buses</td>
<td>201 Trolleybuses 18 BEV</td>
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</tbody>
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**References:**