The Role of Cities in Enabling Safe e-2 and 3 Wheeler Circulation

UNEP Global 2 and 3 Wheeler Conference, Bangkok





C40 is a network of mayors of nearly 100 world-leading cities collaborating to deliver the urgent action needed right now to confront the climate crisis. Together, we can create a future where everyone, everywhere can thrive.



CITIES AT THE FOREFRONT OF CLIMATE ACTION



Cities produce over 70% of the world's GHG emissions

Whilst only occupying 2% of the world's land mass.



Cities can be nimble and innovative, and drive change

This provides an opportunity for cities to be the first to trail new solutions and pilot new initiatives - like large scale electrification of 2 and 3 wheelers



Mayors are prioritising a green, just recovery

Dynamic mayors are prioritising inclusive and equitable action which creates opportunity post-covid as well as combating climate change



CITIES ARE THE HUB OF 2 AND 3 WHEELER TRANSPORT



2 and 3 Wheelers are at the core of urban mobility

A low cost, high maneuverability option in congested city environments



Cities feel the costs of 2 and 3 wheelers, as well as the gains

2 and 3 wheelers contribute towards emissions, noise and air pollution and congestion - but we are already seeing the shift



Safety must come first in cities

We must tackle road safety and congestion challenges, but bans can have unintended consequences



WHAT IS THE ROLE OF CITIES IN THE E2 AND 3 WHEELER TRANSITION?

Draft findings from the C40 City GuideAlissa Raj, C40 Cities



CITIES CAN ENSURE SAFETY, EQUITY AND INTEGRATION



Cities must take back control of the transition

A transition led by the cities are best placed to placing safety, equity and integration first.



Strong political will for broad change is necessary

The transition has the scope to be transformative for urban mobility and cities will see success with strong ambition and political will.



Multi-sectoral partnerships will be key

Cities will provide strong foundations and key infrastructure, whilst the private sector and national governments will also play a key role.



10 PATHWAYS FOR CITIES

- Create political will
- 2 Complement public transport
- Make mobility more inclusive
- Build internal competencies
- 5 Use collaborative models

- 6 Facilitate infrastructure creation
- Improve EV competitiveness
- 8 Identify early adoption opportunities
- Make roads friendlier to 2 and 3 wheelers
- Factor in regional concerns



CITY PERSPECTIVES ROUNDTABLE

Mariama Whitmore

Freetown, Sierra Leone

Aini Anas

Jakarta, Indonesia

Maximiliano Parisi

Buenos Aires, Argentina

Alissa Raj

C40 Cities



THANK YOU

C40 CITIES







2/3Wheeler Electrification

11 October 2023 UNEP 2/3 Wheeler Conference

Jakarta Transportation Agency



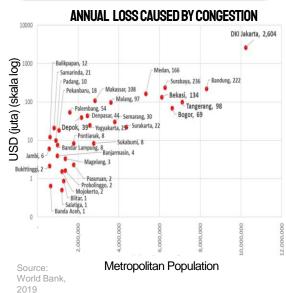
DESCRIPTION OF JAKARTA



- Jakarta: city of business, economy, and tourism
- Area of approximately 661. 52 km²
 Population: 10.64 million (2022)
- Metro Population: 35 million Trip/Day (from Bogor, Tangerang, Depok, Bekasi)
- Commuter per day ± 3 million Trips
- Economic growth 2022: 5,25%
- Density: 17.017 people/km²

JAKARTA TRANSPORTATION ISSUES

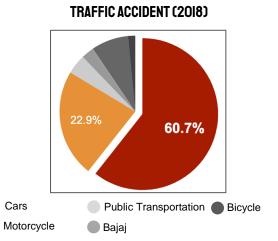
(01) Congestion



Estimated losses due to traffic jams in Jabodetabek, according to the World Bank, reach IDR 42.4 trillion per year from losses in travel time and fuel consumption.

02) Traffic Accident

Taxi



The motorcycle has the highest traffic accident rate (60,7%) compared to other modes of motorized vehicles (Source: Ditlantas Polda Metro Jaya, 2018).

Trucks

(03) Energy Comsumption



Source: DLH DKI Jakarta

- •The largest energy consumption comes from the transportation sector (48%)
- •The most consumed type of energy is fuel (51%)

JAKARTA TRANSPORTATION ISSUES

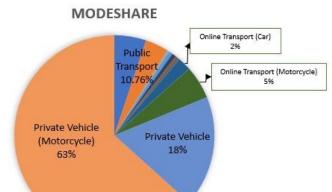
(04) Greenhouse Gas Emissions



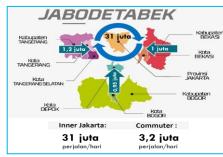
Source: DLH DKI Jakarta

Fossil fuels are the largest emission for transportation sector

05 Modal Share



Jabodetabek Trips



Motorized Vehicles in DKI Jakarta

Vehicle	2020	2021	2022
Car	3.365.467	3.544.491	3.766.059
Bus	35.266	36.339	37.180
Truck	679.708	713.059	748.395
Motorcycle	16.141.380	16.711.638	17.304.447
Total	24.266.996	25.263.077	26.370.535

Source: BPS Jakarta







JAKARTA TRANSPORTATION ISSUES



Deretan pengendara sepeda motor saat terjebak macet di Jalan Gatot Subroto, Jakarta Selatan, Selasa (9/5/2023). Direktorat Lalu Lintas Polda Metro Jaya mencatat, 54 persen kemacetan terpusat pada jam sibuk, yakni pada pukul 06.00 hingga pukul 09.00 serta jam pulang kantor, yaitu di atas pukul 15.00.





REGULATIONS

Regulations	Contents	
Presidential Decree No 55 / 2019 : Acceleration of the Battery Electric Vehicle Program for Road Transportation;	Industrial Development, Incentive Schemes, Provision of Infrastructure, Technical Regulations, Waste Handling	
Instruction of the President of the Republic of Indonesia No 7 /2022: the Use of Battery Electric Vehicles as Official Vehicles and/or Individual Vehicles for Central Government and Regional Governments.	Using Battery Electric Vehicles as Official Vehicles and/or Individual Vehicles for Central Government and Regional Governments	
Minister of Industry Regulation No 21/2023 Amendments to Regulation of the Minister of Industry Number 6/2023: Guidelines for Providing Government Assistance for the Purchase of Two- Wheeler Battery-Based Electric Motorized Vehicles	 Subsidy for Two Wheeler Battery Based Electric Motor Vehicle Zero tax for Two Wheeler Battery Based 	



2 WHEELER BATTERY BASED ELECTRIC MOTOR VEHICLE IMPLEMENTATION SUPPORT



MENTERI PERINDUSTRIAN REPUBLIK INDONESIA

PERATURAN MENTERI PERINDUSTRIAN REPUBLIK INDONESIA NOMOR 21 TAHUN 2023 TENTANG

PERUBAHAN ATAS PERATURAN MENTERI PERINDUSTRIAN NOMOR 6 TAHUN 2023 TENTANG PEDOMAN PEMBERIAN BANTUAN PEMERINTAH UNTUK PEMBELIAN KENDARAAN BERMOTOR LISTRIK BERBASIS BATERAI RODA DUA

DENGAN RAHMAT TUHAN YANG MAHA ESA

MENTERI PERINDUSTRIAN REPUBLIK INDONESIA

Menimbang : a. bahwa untuk percepatan industrialisasi dan peningkatan populasi kendaraan bermotor listrik berbasis baterai (battery electric vehicle) untuk transportasi jalan di masyarakat, perlu memperluas cakupan penerima bantuan pemerintah untuk pembelian kendaraan bermotor listrik berbasis baterai (battery electric vehicle) roda dua:

Minister Regulation Industry No 21/2023 Amendments to Regulation of the Minister of Industry Number 6/2023: Guidelines for Providing Government Assistance for the Purchase of Two-Wheeler Battery-Based Flectric Motorized Vehicles

- ☐ Start 20 March 2023, Central Government Subsidy 7 Million Rupiah (450USD) for 1 unit Two Wheeler Battery Based Electric Motor Vehicle and Zero tax
- 200.000 Unit (2023) and 600.000 (2024)



JAKARTA BATTERY-BASED ELECTRIC MOTOR VEHICLE STRATEGY

Trial Electric Bus

(PT Transportasi Jakarta)

- Static Trial
- Trial without passengers
- Trial with passengers

Pilot Project

100 Electric Bus Transjakarta

Monitoring & Evaluation

(Jakarta Transportation Agency and Stakeholders)

Implementation

(Jakarta Transportation Agency and Stakeholders)

- 10,047 Electric Buses by 2030; (50% in 2027 and 100% in 2030);
- Battery-based Electric Motor Vehicle Power Supply Infrastructure
- Procurement and/or financing;
- Environmental Protection.



C40 Fossil-Fuel-Free

Streets Declaration

September 2019









BATTERY ELECTRIC VEHICLE AS OFFICIAL VEHICLES FOR JAKARTA PROVINCIAL GOVERNMENT

<u>Instruction of the President of the Republic of Indonesia No 7 /2022</u>

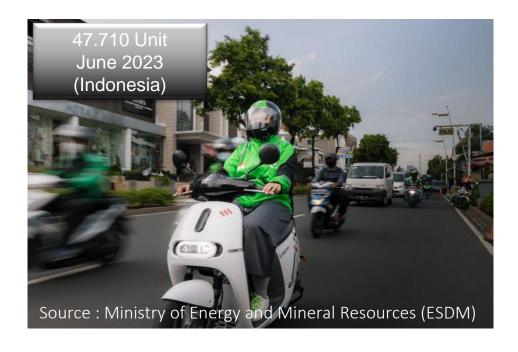
In addition to supporting the improvement of air quality in Jakarta, the procurement of electric motorcycle also conforms to RI Presidential Instruction No. 7 of 2022. Following up on these instructions, starting August 2023 the Jakarta Transportation Agency operate 186 electric motorcycle for official vehicles and this will increase gradually to 800 units.







OBSTACLES



Public Challenges

- 1. Expensive.
- 2. Cruising range of electric vehicles.
- 3. Lack of charging station infrastructure.
- 4. Lack of financial company open installment services for purchasing electric vehicle.













The role of cities in enabling safe E2&3 W - regulation Global Electric Two - and Three - Wheeler Conference

11 October 2023

The United Nations Conference Center - Bangkok

Guillermo Maximiliano Parisi

Urban Logistics City Manager Undersecretary of Mobility Planning Transportation & Public Works Secretary - Buenos Aires City Government

Some context about Argentina and Buenos Aires City



Mobility context

COVID-19 changed the way we move













2W market context in Argentina*

+ 4.5 M to 7 M 2W but only 0.2% E2W

2021 & 2022 more 2W than 4W sales

2022 + 2.000 E2W sales (+90% an.) (2021 vs 2020 + 800%)

80% 2W below 250 cc (most common 50-150 cc)

Principal use: personal mobility and goods/food delivery. Recent appearance of Moto-taxis (Didi operator, Uber competence).

Most 2W are local assembly and most E2W are chinese importation (75%)

* not considering bikes or pedelecs: not registration needed for those

^{*96%} of individual mothorized mobility is by car. Near 4% is by 2W.

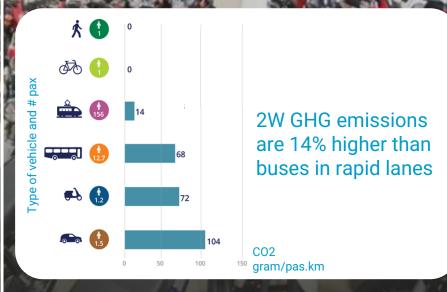
Consequences of 2W increase in Buenos Aires

Road and Vehicle Safety



48% of fatal victims in BA were 2W drivers (40% nationwide).
56% of fatal victims are under 35 years.
Need to apply a specific safety policy.

Enviromental



This issue can be easily managed by electrification of 2W although we work hard to regain passengers in public buses system





Argentine Standard Bureau Institute hasn't yet established clear guidelines about pedal trikes and pedelec trikes manufacturing.

Different stakeholders like local entrepreneurs and small manufacturers innovate most of all in urban logistics and last mile applications.



ICE 3W y E3W are considered from L2 to L5 category vehicles BUT still isn't clear legislation about carrying passengers.



BA City Govt has its own transit general regulation in which allows experimental/pilots for innovative freight and passengers vehicles

Policies & regulation for E2&3W 1- DATA CONSTRUCTION - CYCLE LANE & PBS EXPANSION 2- SECURE I FRASTRUCTURE 2- NEW TYPOLOGY OF VEHICLES IN THE PBS 3- IMPROVE LICENSING EXPERIENCE <u>8</u>= **4- LAW ENFORCEMENT** 3 - FREE STANDARD TRAVEL TIME USE IN PBS <u>გ</u> ይ'ይ 4- CYCLE LOGISTICS PROGRAM 5- CITIZEN COMMITMENT 6- FREE E2&3W REGISTRATION FINANCING FACILITIES FOR PURCHASE 2&3W FOR MICROMOBILITY & LAST MILE LOGISTICS **NEW LEZ & ULEZ IN ANALYSIS**

