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City guide for two and three wheeler management and electrification

Transport

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Two-wheeler (2W) and three-wheeler (3W) vehicles make up a large proportion of vehicles in Asian and African cities and are an essential mode of goods and passenger transport. In most cities, 2W and 3W vehicles are emission-intensive and inefficiently managed. They're usually not integrated with public transport and aren't recognised in transport planning, management, and regulations, causing major congestion, pollution and road safety challenges. The integrated management and electrification of 2W and 3W vehicles therefore is critical to ensure sustainable, affordable, and equitable transport in low- and middle-income countries.

This guide aims to provide Asian and African city officials with policy pathways for 2W and 3W vehicle management and electrification. The report is available to download in English, Spanish, Bahasa Indonesian, and Vietnamese, and includes:

- The most up-to-date and geographically relevant information on challenges related to 2W and 3W vehicle management and electrification.
- Recommendations for advancing 2W and 3W vehicle management and electrification.
- An overview of best practices and learnings by cities that are leading the transition.

Some key takeaways for cities from the report are:

- City governments have a key role to play in 2W and 3W vehicle management and electrification. To enable this urgent transition, cities will need to demonstrate strong political will and have well-defined authority in place. A clear direction will set the foundation for policy implementation, the

rollout of supporting infrastructure and the coordination of multi-sectoral partnerships required to manage these vehicles.

- Better management and integration of 2W and 3W vehicles can help address major congestion and road safety challenges. Certain cities have defaulted to banning the use of 2W and 3W vehicles to address congestion and safety challenges. Such bans can have severe impacts on a city's equity, affordability, accessibility, connectivity, and general economic productivity. In some cases, these bans could even lead to increases in car ownership rates. Policymakers attempting to regulate 2W and 3W management and electrification should adopt a holistic view of their transport systems, and consider rebound effects and the potential for integrating 2W and 3W with other modes.

- Electric 2W and 3W vehicles present a significant opportunity for cleaner air, improved public health, and reduced climate pollution. Falling technology costs, the rising cost of fossil fuels, and stricter emissions regulations are accelerating the transition to electric 2W and 3W vehicles. The move towards electric vehicles (EVs) has primarily been led by private sector innovation so far, but there is scope for cities to proactively enable the transition. Owing to the lower running and maintenance costs, 2W and 3W fleets, such as those used for public transport, are ideal candidates for leading the transition.

- The management and electrification of 2W and 3W is an urgent challenge. With rising income levels and vehicle ownership in many African and Asia cities, the 2W market is expected to experience significant growth in this decade. A slow transition to electric and efficient management in the next few years would mean an unplanned influx of hundreds of millions of additional fossil fuel-powered 2W and 3W vehicles on Asian and African roads for the lifetime of these vehicles, which can range from 4-7 years in Africa or 12-15 years in India.

10 guiding pathways for cities' action on 2W and 3W management and electrification from the report are summarised in the infographic below. The rationale for each, recommendations for how to get started and examples from cities already implementing actions are included in the full report.

1 CREATE THE POLITICAL WILL

Set an ambition and clear policy.

2 MAKE MOBILITY MORE INCLUSIVE

Embed diversity, equity, social inclusion, and safety into 2W and 3W EV planning.

3 BUILD INTERNAL COMPETENCIES

Strengthen institutional mechanisms and reduce administrative barriers.

4 IDENTIFY EARLY ADOPTION OPPORTUNITIES AND LEAD BY EXAMPLE

Prioritise green procurement and high-utilisation fleets.

5 COMPLEMENT PUBLIC TRANSPORT

Integrate 2W and 3W EVs into public transport.

6 USE COLLABORATIVE MODELS

Engage with a variety of stakeholders and partners.

7 FACILITATE INFRASTRUCTURE CREATION

Foster private sector investments in charging and battery swapping.

8 IMPROVE EV COMPETITIVENESS

Use exemptions, discounts, and incentives for EVs.

9 MAKE ROADS FRIENDLIER TO ELECTRIC 2W AND 3W VEHICLES

Regulate vehicle access.

10 FACTOR IN REGIONAL CONCERNS

Address prominent transition barriers specific to Asian and African cities.

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