



Webinar

Driving Electric Mobility Across Africa: Lessons from Lagos to Nairobi

August 31, 2026

| 14.00 – 15.00 WAT | 16.00 – 15.00 EAT |

Driving Electric Mobility Across Africa: Lessons from Lagos to Nairobi



Moderator

Samhita Shiledar
Director, Global Transportation
RMI



Panelist

Olaoluwa Faniyi
CTO/Co-founder
SunFi



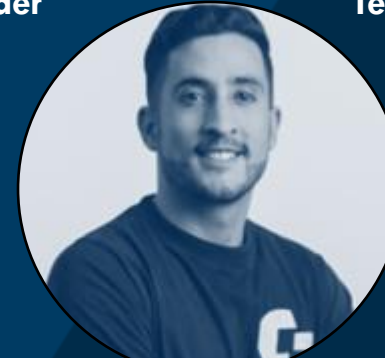
Panelist

Cynthia Kapang
Technical Advisor
GIZ Kenya



Panelist

Habib Nuhu
Market Intelligence
Shell Foundation



Panelist

Arturo Osorio
Head of Kenya
Greenwheels Fleet Management



Panelist

Dustin Kahler
EV Industry Advisor
Upeo.Earth

Agenda

- 5 Minutes | Welcome and Introduction by RMI**
- 10 Minutes | Setting the scene: EV Transition in Nigeria & Kenya**
- 30 Minutes | Panel Discussion:
Nigeria: SunFi, Shell Foundation
Kenya: GIZ Kenya, Upeo.Earth, Greenwheels Fleet Management**
- 10 Minutes | Q&A**
- 5 Minutes | Closing**

Housekeeping Items

1

Please use the Q&A box to submit your questions throughout the session

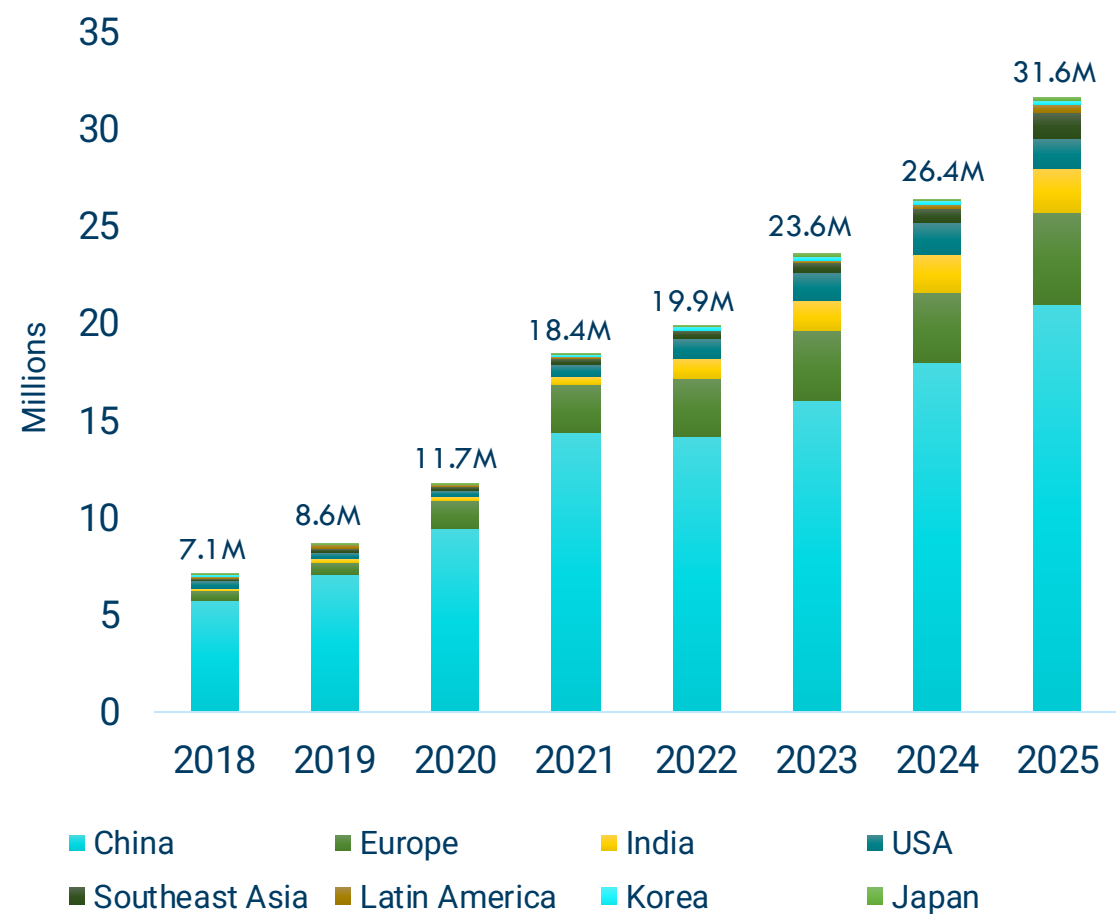
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This meeting will be recorded for note-taking purposes, please notify us if you have any concerns.

Setting the scene: EV Transition in Nigeria & Kenya

Global EV Ecosystem

EV Sales by Region



China's 2&3-wheeler segment sold 7.4M units in 2025 alone (more than the entire global car EV market in 2021)

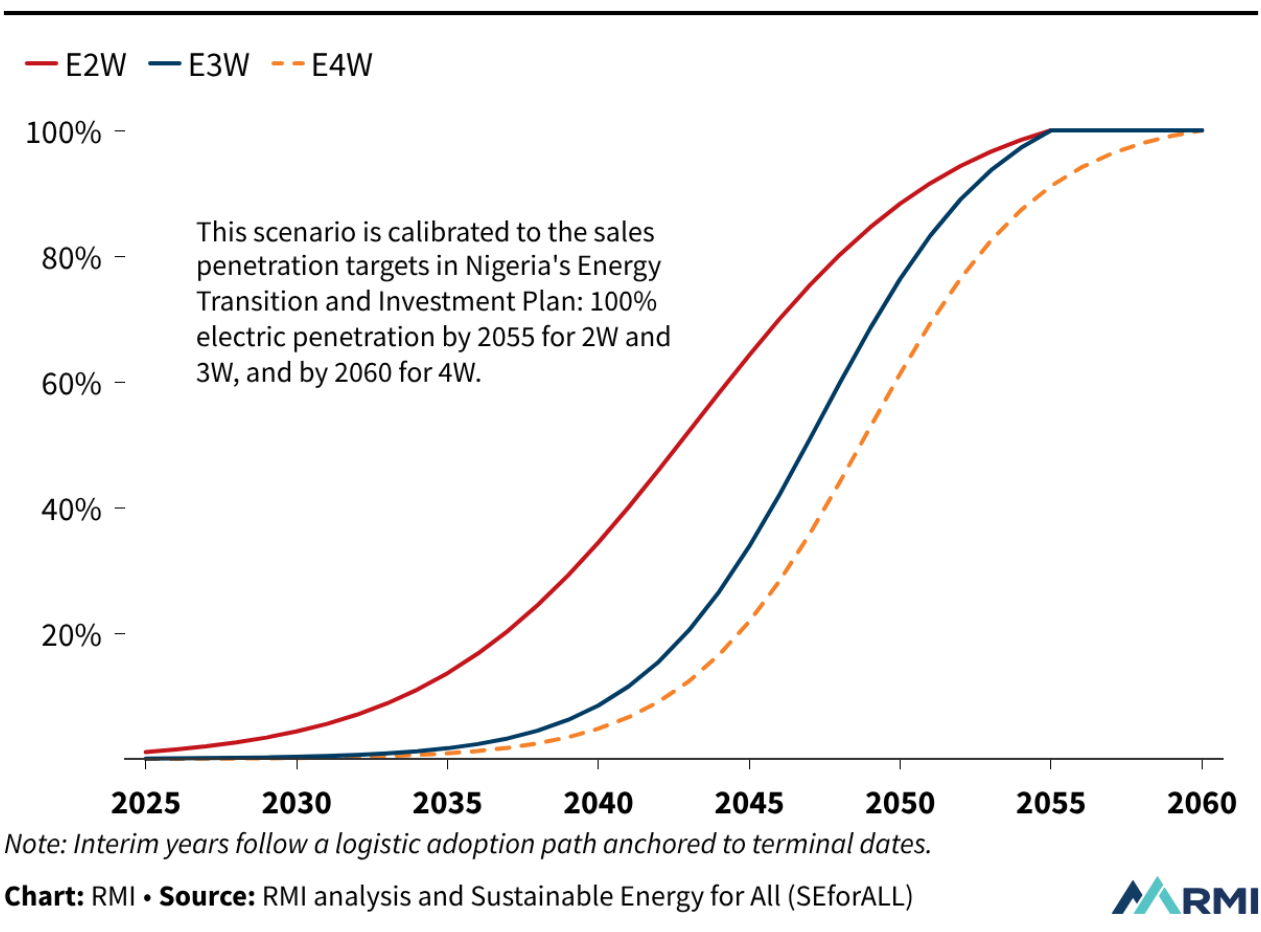
India's EV market grew 17× from 2020 to 2025; 90–95% of all sales across all years were 2- and 3-wheelers

Africa's E2W sales went from less than 1K in 2000 to over 70,000 in 2025, mirroring the pathway taken by China and India



Nigeria's EV Journey

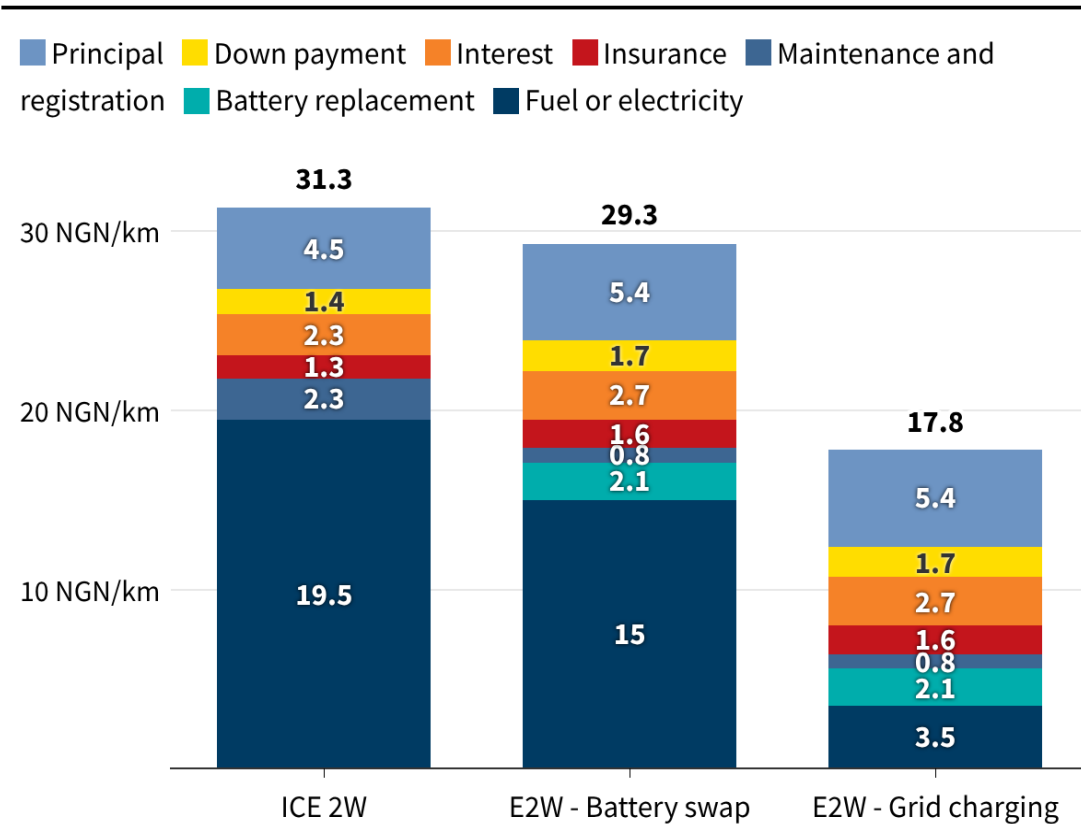
The potential for Nigerian EV market growth based on cost is high



A high-adoption EV scenario in Nigeria would lead to:

- Cumulative savings of nearly ~~N~~ \$10 trillion by 2040
- Nearly 500 Mt of cumulative CO₂ savings by 2060, and far greater reductions in GHG as the grid generation mix becomes cleaner
- High domestic demand setting the stage for HDV electrification and localization of manufacturing

Electric 2W vehicles are already cheaper in Nigeria on a per/km basis – a cost advantage that will keep growing



Note: Swap pricing is implied from per-swap fees divided by pack size, so it bundles battery ownership, station capex and margin rather than representing an electricity tariff, as plug-in charging does.

Chart: RMI • **Source:** Spiro, Bajaj, Fueltracker, RMI analysis and stakeholder interviews, Nigeria Bureau of Statistics and Nigeria Electricity Regulatory Commission

Policymakers are beginning to build an EV foundation



The combined draft “Electric Vehicle Transition and Green Mobility Bill, 2025” and Green Tax would lead to:

- Fiscal incentives for EV producers and EV buyers
- An emphasis on EV charging infrastructure build-out across the country, including fiscal incentives for charging infrastructure developers
- Significant support for local EV manufacturing
- A cost advantage for EVs, and other low-emissions vehicles relative to ICE vehicles

“This is a necessary shift that reflects the future of transportation and sustainability,” said Senate President Godswill Akpabio

There are five opportunities for Nigeria to accelerate EV adoption

Long-term roadmap

Harmonized targets and interim milestones, with clear institutional roles

Demand-side incentives

Fiscal support to bridge up-front affordability of EVs

Supply-side regulations

Mandates and fuel efficiency norms to increase the availability of EVs

Domestic manufacturing

Incentives to increase domestic value addition for EVs and components

Charging infrastructure

Planning, power and land related frameworks for infrastructure to scale

Policy and financing solutions to scale EV charging in Nigeria



POLICY SOLUTIONS

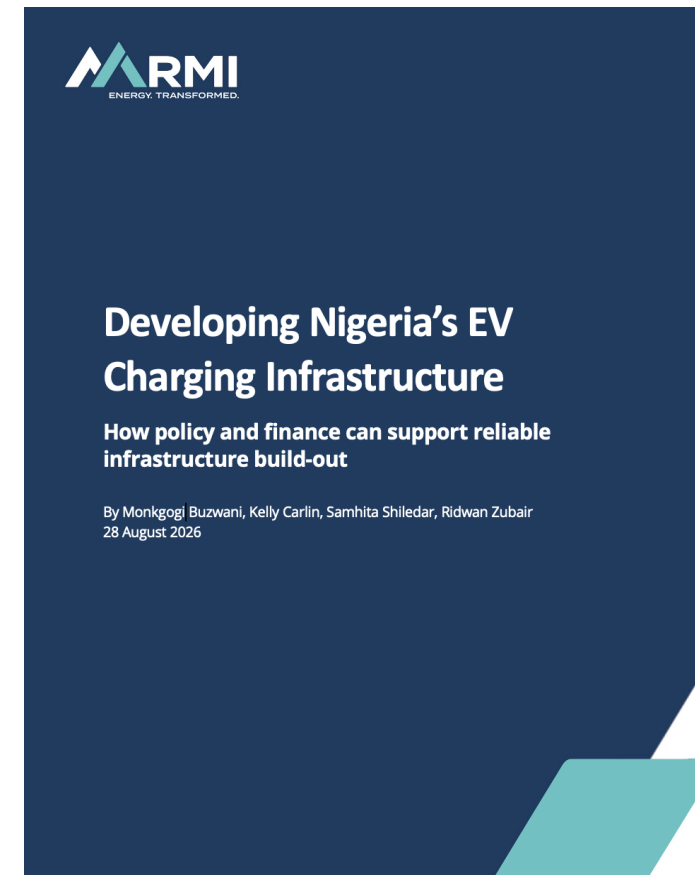
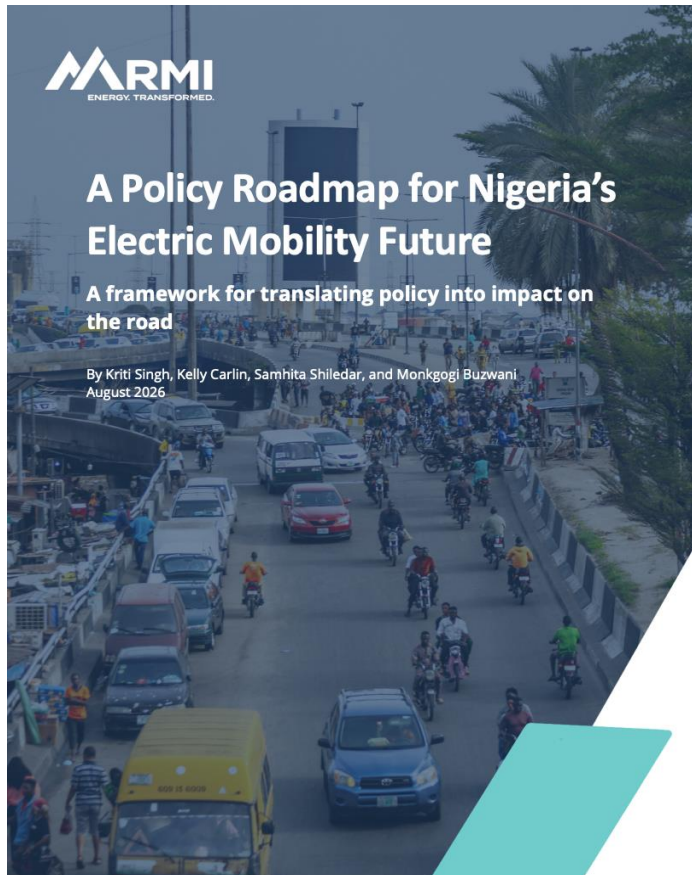
- ☐ Up-front subsidies
- ☐ Tariff design
- ☐ Land concessions
- ☐ Charging infrastructure standards
- ☐ Comprehensive roadmap and targets



FINANCING SOLUTIONS

- ☐ Demand -or revenue-based contracts and charging-as-a-service
- ☐ Catalytic capital and viability gap funding
- ☐ Credit guarantees and risk-sharing facilities
- ☐ Project financing and pooling
- ☐ Public-private partnerships

For more detail on EV policy and charging infrastructure solutions in Nigeria, see RMI's recent reports



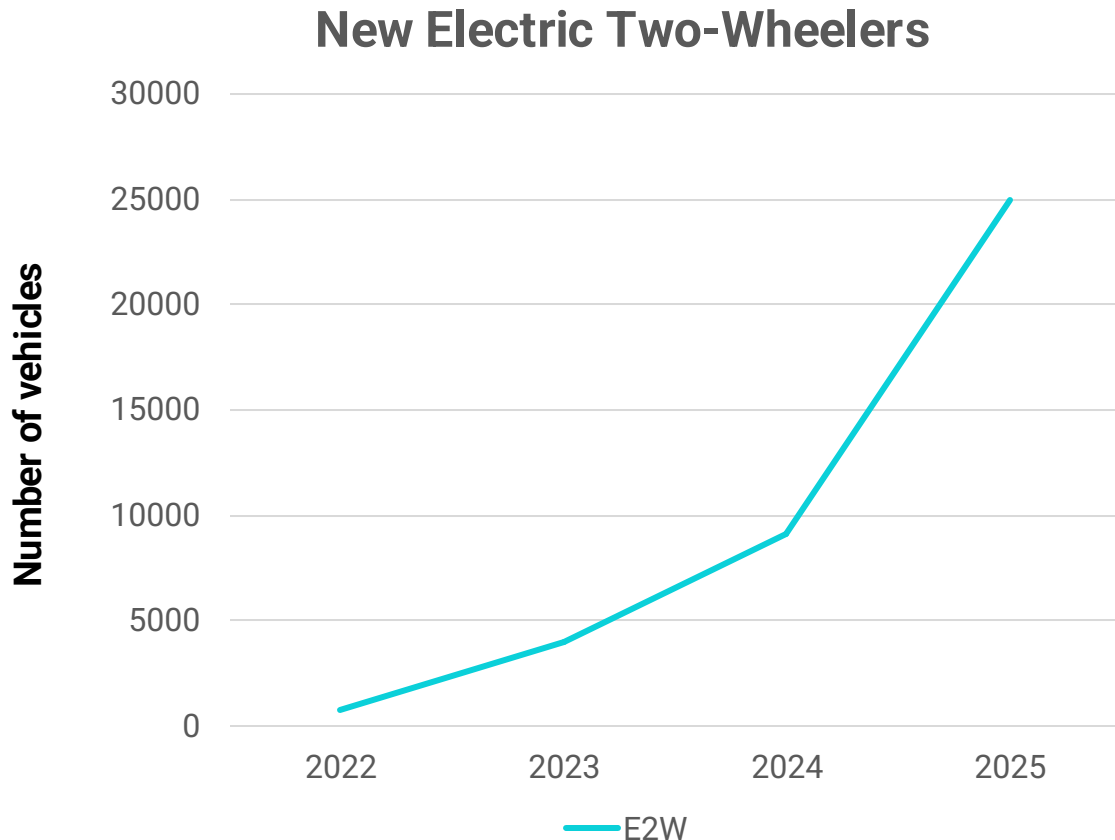
The title 'Kenya's EV Journey' is displayed in a large, white, sans-serif font, centered horizontally across the middle of the image. It is overlaid on a semi-transparent dark blue rectangular area that covers the left half of the background image.

Kenya's EV Journey



Kenya's EV market is among the fastest-growing in Africa, though growth is uneven

Growth is concentrated in commercial E2W and e-buses in Nairobi



- **Total fleet:** 2M+ motorcycles and 2.5M+passenger cars, lorries, and trucks in stock
 - Commercially-owned vehicles far outpace household-owned vehicles
- **EV fleet:**
 - Over 39,000 total EVs as of 2025
 - 90-95% are E2W
- **Charging infra:** Over 60 EV charger stations and 300 battery swapping stations
- **OEMs:** Import-driven with significant **local EV assembly**
- EV growth is **highly concentrated** in Nairobi

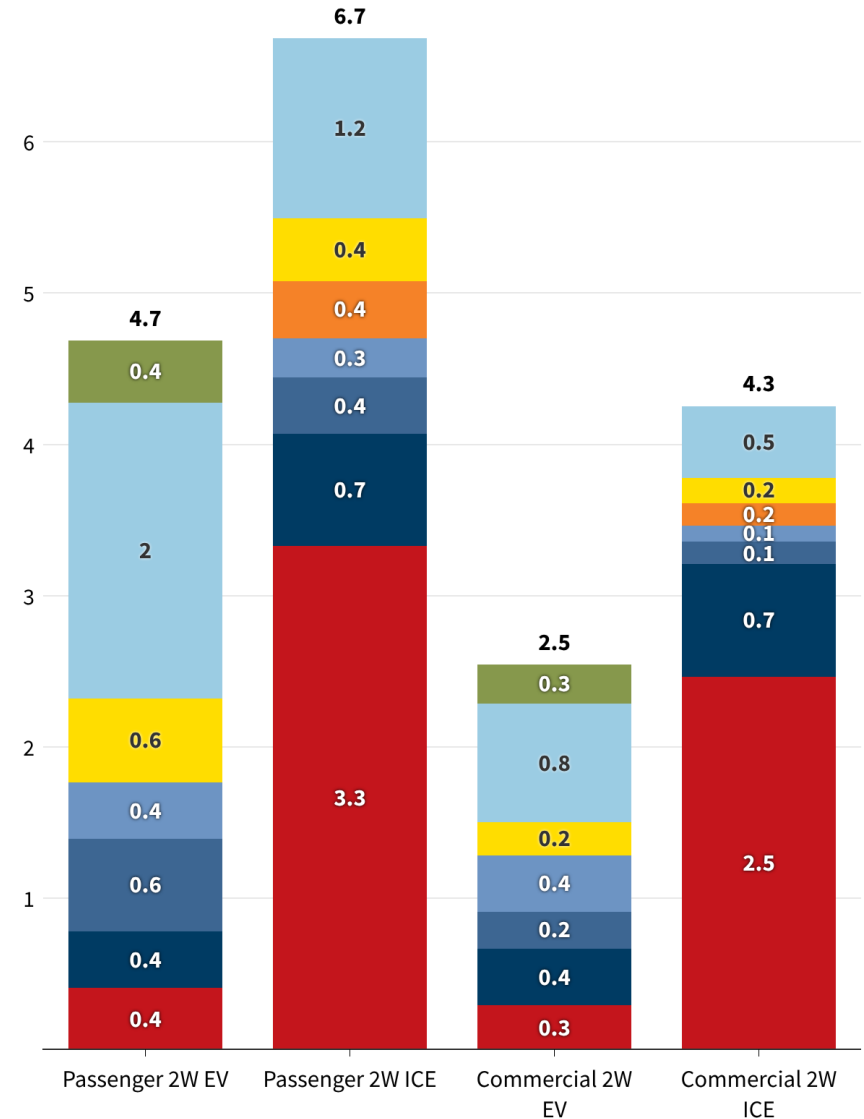
E2Ws are already cheaper on TCO basis

Despite higher insurance and battery replacement, fuel cost advantage is decisive, particularly for commercial use

Source: RMI preliminary TCO analysis

2W Total Cost of Ownership (KES/km)

Fuel/Electricity Maintenance Insurance NTSA Registration
Downpayment Interest Principal Battery Replacement



Emerging strong EV policy has supported market growth

Market Overview

- Africa's largest e-mobility ecosystem with a range of business models and a supportive policy landscape but charging infrastructure remains a key constraint
- The government has a goal for new vehicle registrations to be 100% EV by 2050
- The share of new EV registrations rose from 2.4% in 2023 to 5.4% in 2024, mainly driven by the 2W segment

Power sector

- About 90% of Kenya's generation comes from renewable sources
- Despite excess generation, grid reliability concerns persist with the electricity network still facing substantial losses (23% in 2023)

15%

Of all new EV registrations were electric motorcycles in 2025

39,324

Number of EV registrations cumulatively by 2025





Kenya has launched a broad EV policy framework

National E-Mobility Policy 2026

Impact

1	Promote local manufacture and assembly	• Establish local manufacturing and assembly of EVs • Create local upstream ecosystem for EV components	Localizing the value chain will support job growth and economic development
2	Develop and enhance e-mobility infrastructure	• Expansion of public and private charging infrastructure framework • Specialized off-peak electricity tariff • Ensure a reliable electricity grid to support EV growth	Reliable grid will ensure charging infrastructure to support EV adoption
3	Enhance local technical capacity and skills	• Develop local skills within EV manufacturing, assembly, operation and maintenance • Implement fiscal and non-fiscal incentives for OEMs	Ease of business will attract investment to local manufacturing, supporting local jobs and development
4	Adopt fiscal and non-fiscal policies	• Provide incentives to promote infrastructure development • Design incentives for EV consumers to boost EV adoption	Targeted incentives will lower cost barrier for supply, demand of EVs
5	Socioeconomic EV measures	• Enhance gender equality, and social and financial inclusion within EV ecosystem	Inclusive access to EVs will improve mobility across all income levels
6	Alternatives to fuel tax	• Develop financing sources beyond the fuel levy to use towards road maintenance and rehabilitation	Guarantees that as EV growth takes place, funds for roads are sustained

We learned that three key barriers are slowing more accelerated EV market growth



EV Policy Implementation Uncertainty

The annual finance bill process in 2026 created significant uncertainty early in 2026, and without firmer policy implementation, the private sector sees similar uncertainty in coming years. Kenya lacks a long-term e-mobility roadmap to guide the transition from early demand incentives to local manufacturing, and to extend nat'l policy to implementation and sub-national policy.



Limited EV Financing

Companies like M-KOPA and Watu offer financing but local banks remain reluctant due to concerns about high initial costs and uncertain resale values, limiting private financing involvement and keeping costs high. There's a pressing need for blended finance vehicles to reduce end-user costs. Market-rate debt (often 40%+ APR after currency and default risk) is a barrier to scale.



Charging infrastructure costs and planning

High setup costs, limited public awareness, regulatory hurdles, unreliable power supply, and difficulties securing suitable locations hinder infrastructure expansion. Most e-mobility players are focused on vehicles and charging infra, but grid impacts are not yet well-managed. Kenya Power will need help modeling and preparing for future demand.

Policy insight: The EV policy is strong, but implementation and durability will be key for long-term success

Gap: It will take time and work to link the EV policy to implementation. Support for strong EV policy can be broader and more diverse. It also will need to be linked to implementation and sub-national government

Activities that can address this gap:

- **Develop supply-side support** (e.g. R&D, manufacturing support, localization incentives) **and industrial policies** that will create local jobs and set Kenya up to be an e-mobility manufacturing hub.
- **Design demand-side policies** that stimulate EV market growth, but these also need to be durable in the face of economic and political headwinds (e.g. non-fiscal, fiscal-neutral policies).
- **Make connections from national EV policy to national-level implementation and sub-national implementation.** One way to do this is using an 'e-mobility policy center' approach – support policy implementation, and train sub-national government officials to take county-level action.
- **Build an evidence base for regional and continental scaling.** Work regionally through the EAC to scale EV solutions and incentivize local policy action. A bigger market provide further incentive for Kenyan leadership and support scaling of solutions.

Finance insight: Increase access to affordable EV financing

Gap: Affordability and the high upfront cost of EVs remain major barriers to EV market growth

Activities that can address this gap:

- **Strengthen the case for concessional finance:** build the market evidence needed to demonstrate E2W performance, affordability, and investability to banks and other capital providers.
- **Convene industry and finance around priority barriers:** bring together vehicle companies, financiers, banks, and public institutions to identify and address the market risks limiting longer-tenor and larger-scale financing.
- **Support development of scalable financing solutions:** work with financial institutions and development partners to translate identified market risks into commercially viable financing and risk-sharing approaches.
- **Develop and pilot tri-party financing partnerships** between commercial banks, E2W companies, and OEMs, using partnerships as a platform to test OEM-backed buybacks, long-term revenue contracts, or guarantees.

Charging insight: Support rapid growth of effective, financially viable charging infrastructure across the country to fit EV growth

Gap: Charging build-out and planning does not match the ambition of Kenya's EV adoption targets

Activities that could address this gap:

- **Conduct EV load forecasting** and mapping of charging needs to improve KPLC planning across multiple scenarios, and match projected EV needs to charging type and viable financial models.
- **Implement cost-sharing between utility and CPOs/battery-swap station developers** based on experiences in other African and Asian markets.
- **Coordinate between government entities to provide land concessions** for charging point operators
- **Pair T&D investments with EV charging infrastructure planning.**
- **Bring utility and government stakeholders together** to share approaches and tools (e.g. feeder maps, cost-sharing approaches, models).
- **Optimize charging plans and policy for public-private partnerships** and to attracting private sector investment.

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