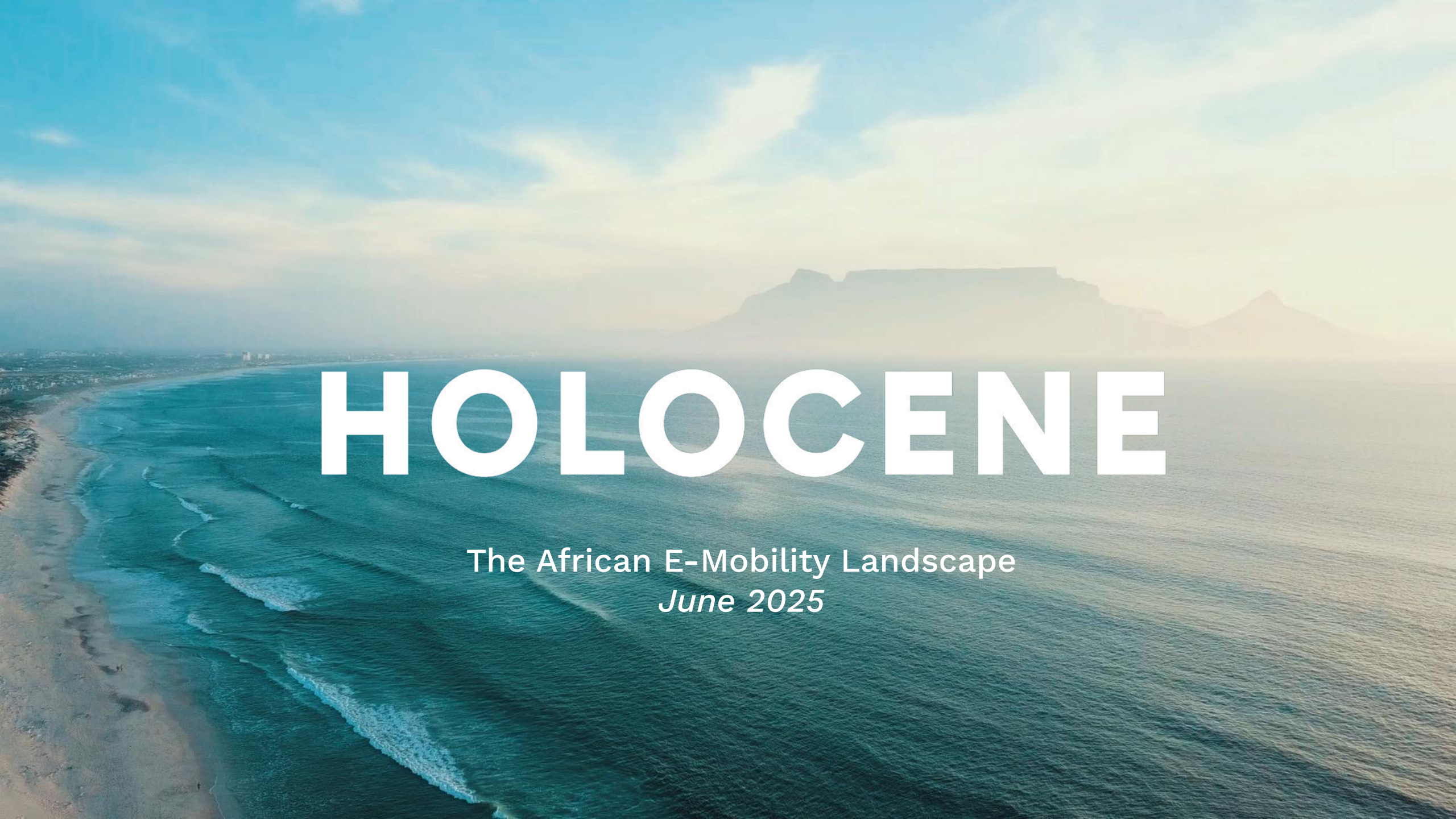


An aerial photograph of a coastline. In the foreground, waves with white foam are breaking onto a sandy beach. The ocean extends to the horizon, with a large, flat-topped mountain (Table Mountain) visible in the background under a hazy, blue sky.

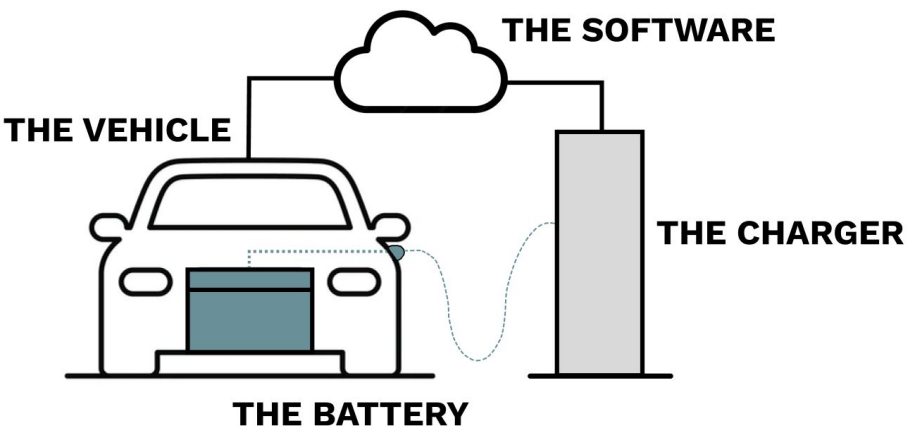
HOLOCENE

The African E-Mobility Landscape
June 2025

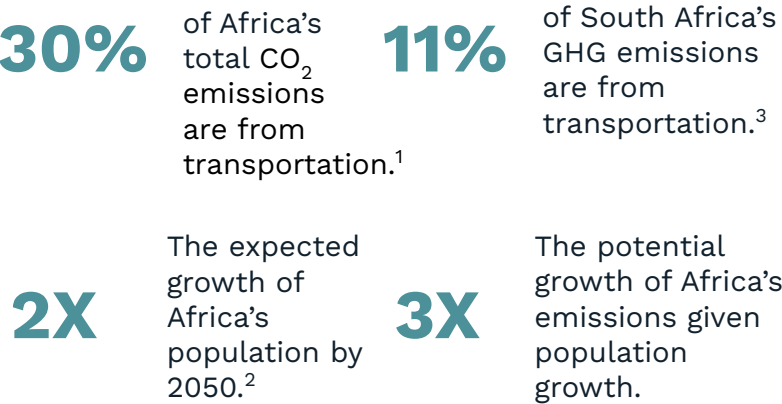
African electric mobility overview

What is it?

Electric Mobility (e-mobility) refers to transportation powered fully by electricity rather than internal combustion engines (ICE). The term encompasses not only electric vehicles (EVs) themselves, but also the battery, the charger/battery swapping infrastructure, and the software network that may power operational services or tools that allow the fleets to run.



Why is it important?



A well-executed EV transition could reduce transportation emissions by up to 80%.

What's the opportunity?

Africa's transportation sector is positioned for rapid growth, driven by population expansion and a large lag in motorisation rates – held back historically by limited vehicle affordability and access.⁴

Africa's motorization rate:

73 vehicles per
1,000 people

Global motorization rate:

300 vehicles per
1,000 people



As mobility demand rises, EVs offer a strategic path to scale transport more affordably and sustainably — with lower total costs of ownership and longer expected lifespans.

There are many EV types in active use but two wheelers and buses remain the most popular and primed for EV transition given existing usage patterns and technical developments.

Buses and 2Ws alone represent a \$60B market opportunity.

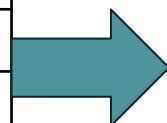
	2 Wheelers (2W)	Buses
# of ICE Vehicles in Africa ⁵	27 Million	1 Million
# of Existing EVs in Africa ⁵	~37,000	< 1,000
Current Penetration	0.14%	<0.10%
Potential EV Market Size	\$20 B	\$40 B

E-mobility business and revenue models

Vehicle Asset Business Models

It's rare for African companies to have their own technical IP around EV hardware, the majority assemble or provide vehicles from European and Asian OEMs.

Model	Description
EV Manufacturer	Design and manufacture EVs or their core components
EV Assembler	Import hardware kits for local assembly and adaptation
Vehicle Importer / Reseller	Import fully assembled EVs and sell/lease them locally
Battery & Charging Operator	Build and operate charging stations and/or battery swap networks



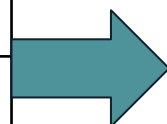
Vehicle Asset Revenue Models

The vehicle assets are monetized through one of the revenue models below.

Revenue Model	Description
Upfront Sale	One-time purchase of a vehicle
Lease / Lease-to-Own	Vehicle is leased by individual with fixed daily/weekly/monthly payments which can lead to ownership when full amount is paid
Pay-as-you-go (PAYG)	Driver pays per kilometer (km) driver or a fixed amount per day / week / month
Battery Swap Fees	The driver pays a fee per swap. This can be either a fixed fee, a charge based on the energy used, or a charge based on the distance traveled
Charging Usage Fees	EV provider charging for energy usage, usually by the kilowatt-hour

Services Business Models

Model	Description
Fleet Financier	Provides EVs with financing plans, often via driver platforms
Marketplace Operator	Platform that matches EVs with end-users (riders, logistics clients, delivery)- often includes integrated payments, ratings, and commissions
Fleet Manager	Software platforms providing route planning, driver monitoring, compliance, and asset optimization
Servicing & Maintenance Provider	Vehicle maintenance and repair services tailored for EVs
Charging Network Manager	Software to manage and optimize charging station operations, usage, and payments



Services Revenue Models

Revenue Model	Description
Revenue Share / Commission	A company earns a percentage commission on each transaction or ride it facilitates between drivers and end-users
SaaS / Platform Licensing	Revenue from sustained payments for usage of software tools. Can be a fixed recurring fee or linked to the number of devices (vehicles, chargers, trackers, etc.).
Embedded Services	Insurance, maintenance, repairs, etc. bundled into packages for the customer
Advertising	Vehicle providers partnering with B2B partners charge a fee to tailor bike to the business (logo, colours, etc.)
Battery Enablement Revenues	EV vehicle sellers linked to a specific battery provider earn a share of battery swapping/charging revenues as a form of commission

The players in African e-mobility

	Vehicle Suppliers (Manufacturers, Importers, Assemblers, Turnkey Sales)	Battery and Charging Focus	Fleet Management	Pure Financers	Pure Public Charging
2W & 3Ws 					
Buses & Trucks 					
Cars, Vans. & Minibuses 					
Vehicle Agnostic					

A few market leaders



BASIGO (Kenya, 2021)

What: Full hardware and software solution for e-buses and a platform tool to finance + run ops
Funding: \$74M Series A (\$38M equity, \$33M debt)
Revenue model: PAYG (\$6.8k deposit then \$0.44/km)
Traction: 74 buses, 50 charging depots, aiming for 1,000+ buses by end of 2026



SPIRO (Kenya, 2019)

What: Battery-swap + EV 2W operator with fleet software and swapping station infrastructure
Funding: \$179M total (\$65M equity, \$113M debt)
Revenue model: Lease-to-own (~\$5/day) + battery swap fees
Traction: 15,000+ bikes, 600+ swap stations, 9M+ swaps across 6 countries



MOOVE* (Nigeria, 2019)

What: Fintech platform offering EV and non-EV lease-to-own products via embedded payments
Funding: \$421M+ (\$241M equity, \$180M debt)
Revenue model: Revenue-share leasing with integrated repayment
Traction: 20,000+ drivers, 30M+ trips, 13+ cities across 4 continents

*Moove has EV and non-EV offerings

E-mobility regulation

Government-enacted policy levers

Import Duty: A tariff on bringing a vehicle into the country. Paid at customs, varies by vehicle assembly type.

Import VAT (Value Add Tax): A tax on the vehicle's value after duties are applied. Charged at import, usually ~15–18%.

VAT on Sale: VAT charged again when the vehicle is sold locally — typically paid by the end-user.

Excise Duty: A tax on specific goods like vehicles, based on engine size, emissions, or classification.

Income Tax Benefits: Corporate tax holidays or deductions for EV manufacturers and charging infrastructure developers.

SEZ Manufacturing Incentives: Special economic zones offering tax breaks, land access, and customs support for local production.

Vehicle assembly types - import/export classifications¹⁵

FBU

Fully Built Unit (FBU). A complete vehicle is imported in ready-to-use condition. No assembly is required locally. Highest import duties apply.

SKD

Semi-Knocked Down (SKD). Partially disassembled vehicles, with major components (like chassis + drivetrain) imported and final assembly done locally.

CKD

Completely Knocked Down (CKD). Vehicle is entirely disassembled into components and imported for full local assembly. Lowest duties and often duty exemptions.



South Africa

Strong industrial policy, but lacking consumer-facing incentives. World's most carbon intensive major economy.

- 25% import duty on FBUs, no VAT or excise exemptions yet⁶
- 150% tax reduction for EV manufacturers starting in 2026⁷
- Aim to increase local component in vehicle manufacturing to 60% by 2035⁷
- Aiming for a 30% renewable powered grid by 2030. Currently the grid is ~13% renewable and over 71% coal powered⁸



Ethiopia

Africa's most aggressive EV policy, but with little private side movement.

- No VAT or excise for EVs. Import duties are 0% for CKDs, 5% for SKDs, and 15% for FBUs⁹
- ICE vehicle imports are banned as of 2024¹⁰
- Targeting 440K EVs by 2030¹⁰
- Grid is close to 100% renewables



Rwanda

Africa's most comprehensive policy and a pilot location for startups.

- 0% import duty, VAT, excise for all EVs, batteries, chargers, and parts¹¹
- VAT on sale also exempt¹¹
- Land provided for EV charging initiatives by government¹²
- EV assemblers in the SEZ zones have tax holidays¹²



Kenya

Private sector leads while government policies are catching up.

- 0% import duty, VAT, excise duty³
- Aiming for 30% reduction in emissions by 2030¹⁴
- Target mandate for commercial builders to allot 5% of parking space to EVs¹³
- Majority of e-mobility startups (BasiGo, Roam, Ampersand) HQ'd or operational in Kenya



Nigeria

Highly ambitious but results to be determined.

- EVs exempt from 35% import duty, chargers are VAT/duty-free¹⁵
- Country committed to 100% zero-emission sales for new cars & vans by 2040¹⁶
- 10 year corporate tax holiday for local EV assemblers¹⁷
- Revitalizing legacy assembly plants to become EV hubs

Insights and the Path Forward



Battery costs will largely shape margins

Batteries can drive > 50% of an EV's cost. Improvements in battery tech and manufacturing will be some of the biggest factors to reshape what types of business models can exist and the upside of profit margins.



Consumer incentives are missing across Africa's EV regulations

EV subsidies don't reach end-users — unlike residential solar in South Africa, where direct incentives drove adoption. Most EV policies focus on manufacturing or lower import, not making EVs accessible to the masses.



Last mile delivery is the ripest for electrification

2Ws and 3Ws offer the best TCO, lowest capex, and fastest returns — requiring far less infrastructure and working capital than larger vehicles. It's the most viable entry point for scale given the short term wins.



An EV's climate impact depends heavily on the grid that powers it

In countries with fossil-heavy electricity grids, EVs still reduce emissions but far less effectively. Transformative climate impact requires pairing electric transport with cleaner grids run on renewables.



EV data is invaluable and still underutilized

Startups collect vast amounts of operational data (charging patterns, swap behavior, fleet efficiency), but few are turning this into revenue. The “data layer” is still nascent, yet has real potential to be standalone products or revenue streams.



Operational excellence is the real moat in Africa

In a market with fewer technical moats, winners won't have the flashiest tech — they'll have the sharpest execution. Uptime, route efficiency, financing recovery, and driver retention are the real differentiators.



Localized business models will out edge

Tax regimes, grid reliability, energy prices, and consumer behavior differ widely across African markets. A model that works in Kigali might flop in Lagos — regional customization is essential to scale.



Figuring out the right capital stack is paramount to a company's survival

E-mobility is asset-heavy, and success depends on blending venture capital, asset-backed debt, concessional funding, and project finance — each matched to the right part of the business at the right stage.

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