Surging Electric Vehicle Imports to African Countries Illustrate a Shift in Global Technological Leadership

NOVEMBER 2026







UNIVERSITY OF MARYLAND
SCHOOL OF PUBLIC POLICY

CENTER FOR GLOBAL SUSTAINABILITY

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Suggested Citation

Yaguma, P., Fu, X., Bertram, C., Tibebu, T., Patel, R., Lou, J., Cui, R., Hultman, N. (November, 2026). "Surging electric vehicle imports to African countries illustrate a shift in global technological leadership." Center for Global Sustainability, University of Maryland. 24 pp.

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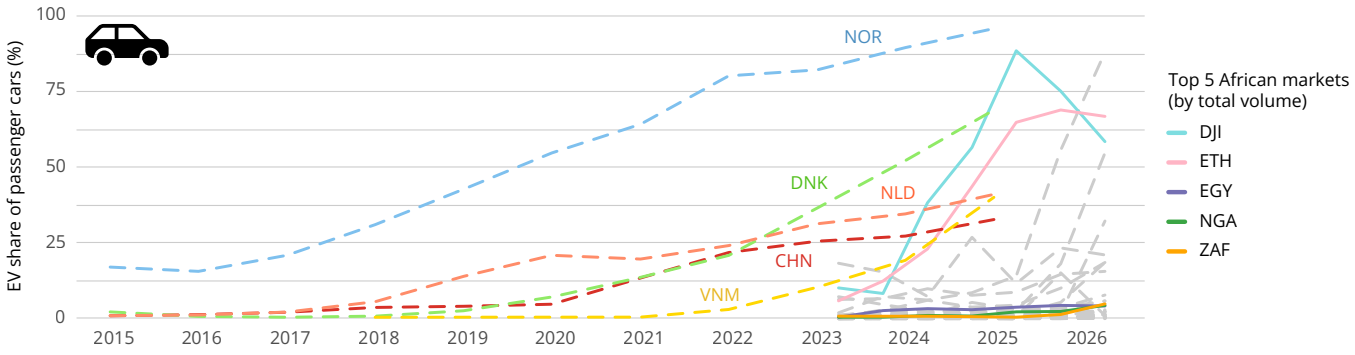
Executive summary

The electrification of mobility presents a vast opportunity for many African countries to reduce reliance on imported fuels, strengthen energy security, and improve transportation affordability. Driven by rapid cost declines over the last three years, electric mobility has become an increasingly viable pathway for leapfrogging conventional transportation technologies and advancing sustainability goals simultaneously. As electric vehicle (EV) costs continue to decline and adoption widens, these benefits will increase, and a good understanding of African EV import markets can offer valuable insights into the pace and scale of adoption on the continent. This study presents a comprehensive analysis of EV imports into African countries from 2023 to the first half of 2026 across multiple vehicle segments. The analysis reveals a recent influx of EV imports into many countries, contrary to conventional patterns of technology diffusion that position high-income countries as the pioneering adopters of new technologies. Although this is still a nascent development, the underlying shift from predominantly importing second-hand internal combustion engine vehicles (ICEVs) to now concurrently importing EVs reflects an ongoing structural transformation. This study provides a foundational analysis that can guide further exploration of EV penetration dynamics on the continent.

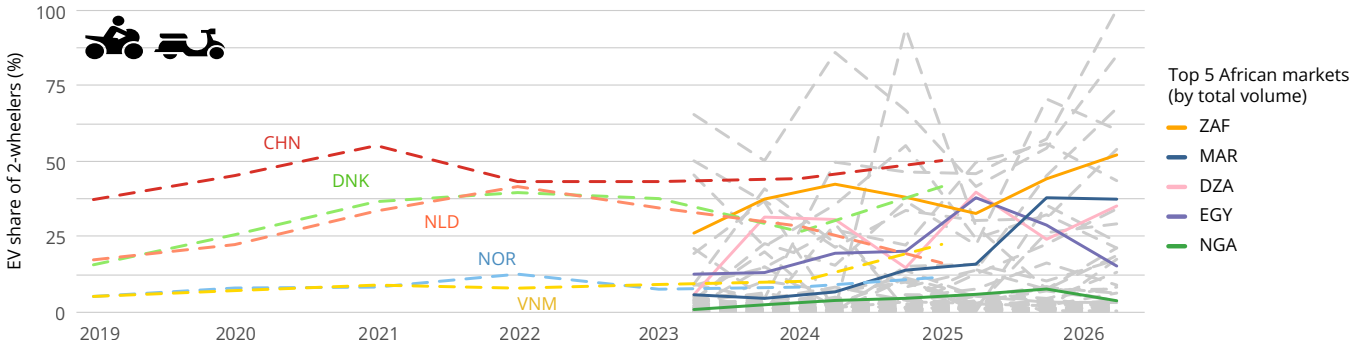
The key findings of the study are:

- The share of EVs in vehicles imported into Africa more than tripled from under 2% in 2023 to over 7% in the first half of 2026. This growth occurred across all major vehicle segments: from 0.6% to 5% for passenger cars, from 2.6% to 8% for two-wheelers, and from 0.3% to 0.6% for trucks.
- Electric passenger car imports were driven by a few key markets such as Ethiopia, Djibouti, Egypt, and Nigeria, which together made up 60% of Africa's electric car imports in 2025. On the other hand, electric two-wheeler importation is more spatially distributed across the continent, and it exhibited the strongest growth between 2023 and 2026. Electric truck imports are still in a nascent phase, with 1,670 total electric trucks imported in 2025 compared to nearly 51,000 electric passenger cars and over 661,000 electric two-wheelers imported in the same year.
- The EV import shares in countries such as Ethiopia, Djibouti, Rwanda, South Africa, Algeria, and Morocco are already comparable to sales shares in more established EV markets such as China, Norway, Denmark, the Netherlands, and Vietnam.
- Although smaller countries such as Rwanda, Mauritius, Cape Verde, and Seychelles are importing modest volumes of EVs, they have a high propensity for EV importation, as EVs made up a significant proportion of their vehicle imports in 2025 and early 2026.
- China has been the dominant exporter of BEVs to Africa across all vehicle types (electric cars, electric trucks and electric two-wheelers) since 2023, which could accelerate EV penetration and adoption in Africa. However, reliance on a few EV suppliers could leave the region vulnerable to supply chain shocks and disruptions.
- Policy leaders such as Ethiopia (ICEV import ban) and Rwanda (tax and tariff incentives) demonstrate that supportive policies can rapidly accelerate EV adoption even in low-income, low-motorisation contexts.

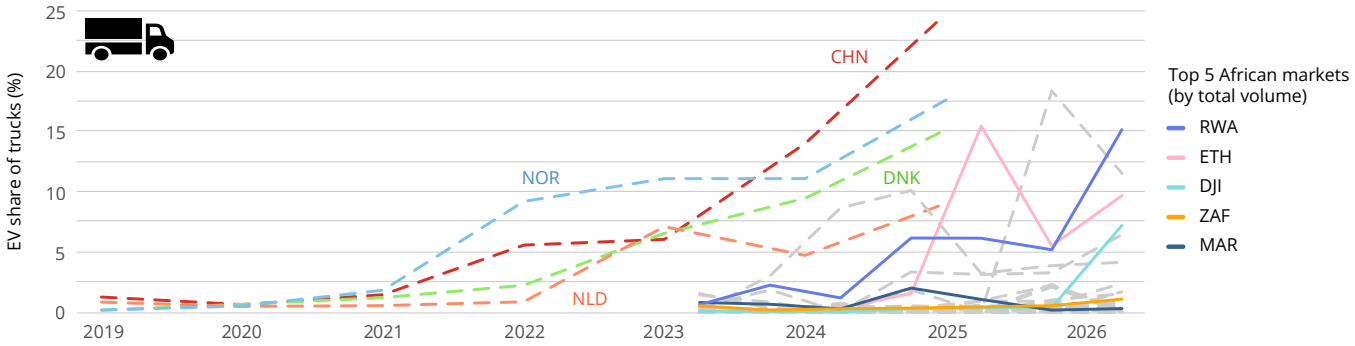
(A) Sales shares in leading global countries, and import shares in African countries (H1/23–H1/26)



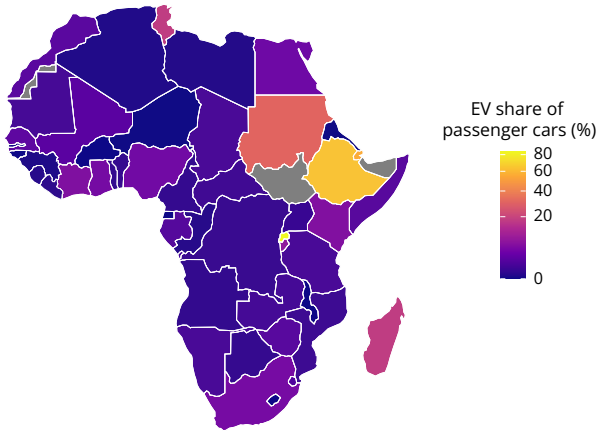
(B) Sales shares in leading global countries, and import shares in Africa



(C) Sales shares in leading global countries, and import shares in Africa



(D) Regional distribution of passenger car import shares across Africa in H1/26 (January–June 2026)



Glossary

BEV	Battery electric vehicle
E-mobility	Electric mobility
E2W	Electric two-wheeler
EV	Electric vehicle
EU	European Union
China Customs	General Administration of Customs of the People's Republic of China
HEV	Hybrid electric vehicle
ICEV	Internal combustion engine vehicle
PHEV	Plug-in hybrid electric vehicle
UN	United Nations
VAT	Value added tax

1. Introduction

The global proliferation of electric mobility (e-mobility) represents a significant transition in the transportation sector, with varied environmental, economic, and social implications.[1] This growing adoption of electric vehicles (EVs) is changing conventional patterns of vehicle use, energy consumption, and emissions. Furthermore, although highly nascent, EV adoption in emerging markets such as Africa is rapidly growing, facilitated primarily by international trade. Between 2023 and 2025, electric passenger car sales in Africa grew more than six-fold while electric two-wheeler (E2W) sales increased from less than 1,000 in 2020 to over 70,000 in 2025.[2] This growth has been driven by increasing demand in the region's key markets of Egypt, Morocco, and South Africa, and notable progress has also been registered in Ethiopia, Mauritius, Rwanda, Nigeria, Ghana, and Kenya.

The drivers of this EV-demand growth are manifold, but they centre around policies and incentives, declining costs of some vehicle brands, and more recently, global geopolitical events. For instance, despite having one of the world's lowest motorisation rates, Ethiopia's stringent import regulations and aggressive incentives have made it an emerging leader in African and global e-mobility transitions.[3] Further, the ongoing global energy crisis has made the case for transport electrification even stronger, particularly for regions heavily reliant on imported fuel or lacking ample strategic reserves to withstand such oil shocks.[4]

While the vast majority of EVs in Africa are imported, these import trends differ markedly from internal combustion engine vehicle (ICEV) import trends which are dominated by older, second-hand cars from Japan, Europe, and the USA.[5] Instead, the EV market increasingly features new exporter-entrants and automakers, new-vehicle imports, ultra-low-cost vehicle models, and domestic e-mobility startup ecosystems that have collectively reshaped the region's automotive industry.[6]

Despite these distinctive developments, continent-wide data, research and analyses of the African EV market (e.g., EV penetration) remain limited, and major sector-outlooks tend to overlook the region completely or only include a few African countries.[2,7–9] A few case studies have examined the impacts of EV adoption in Africa in relation to infrastructure as well as its role in the region's energy

transition,[10–12] and recent projections estimate that in most African countries, EVs will become cost-competitive with ICEVs before 2040.[13] Other research has investigated the barriers and opportunities to EV adoption and assessed the feasibility and market readiness for EVs in Africa.[14–16] Tools such as the *Africa EV Readiness and Impact Index*[17] have also assessed and quantified the drivers and benefits of EV adoption across the continent using an agglomeration of data and assumptions. However, this predominant focus on infrastructure and local structural conditions has left little understanding or awareness of the exogenous underpinnings of Africa's e-mobility transition, including international supply chains and technology transfers, despite the primacy of import trade to the sector. Anecdotal evidence shows that EV imports and uptake in Africa are surging,[18] but these accounts lack the empirical analysis and global scope required to reveal the major import and export trends.

To address this analytical gap, this report presents a comprehensive overview of the EV import market in Africa across time and geography for multiple vehicle segments. A closer examination of EV importation can provide valuable insights into the trajectory and diffusion of e-mobility across Africa. This holds significant implications for the sustainability of the e-mobility transition, particularly in relation to infrastructure requirements, energy demand and planning, social equity, and low carbon development.

The analysis leverages two publicly available datasets—the United Nations Comtrade dataset[19] and the General Administration of Customs of the People's Republic of China dataset[20]—to calculate shares of EV imports in every African country for passenger cars, two-wheelers, and trucks. To our knowledge, this is the first systematic continent-wide analysis of EV imports that covers multiple vehicle types and different exporter countries over recent years (from 2023 to the first half of 2026).

We find that China dominated EV exports to Africa across multiple vehicle segments in this period. Overall, EV imports into Africa more than tripled from less than 2% in 2023 to over 7% in the first half of 2026, with electric two-wheeler imports growing the most. Electric passenger car and electric truck imports are driven by a few key markets while electric two-wheeler imports exhibit a wider spatial distribution across the continent. In several countries, EVs accounted for a high proportion of total vehicle imports, indicating strong import propensity and signaling the early stages of a substantial shift to e-mobility. These findings hold significant implications for policy, infrastructure rollout, and domestic manufacturing and assembly.

2. Methods

In this study, we use two publicly available datasets—the United Nations (UN) Comtrade dataset and the General Administration of Customs of the People's Republic of China (China Customs) dataset—to calculate the share of EVs in the total vehicle imports of African countries from January 2023 to June 2026. We focus on three major vehicle types—passenger cars, trucks, and two-wheelers—and compile data on all vehicles as well as EVs to calculate the share of EVs in the imported fleets. Table 1 lists the vehicle commodity codes considered in this study.

At the time of the analysis, the UN Comtrade dataset did not include data on imports from China to African countries for the years 2025 and 2026. Given that China is a major exporter of vehicles, especially EVs to Africa, we integrate the 2025 and 2026 data from the China Customs dataset to present a more holistic picture of the vehicle import market of African countries.

To ensure consistency between the two datasets, we compared Africa's vehicle imports by vehicle type from China in 2023 and 2024 when data are available in both datasets. As shown in Figure A1 (Appendix), the number of imported vehicles in the two datasets aligns across all vehicle types and time periods, suggesting that combining the datasets does not cause inconsistency over time. Furthermore, among the major vehicle exporters to Africa, data for India in 2026 are missing. Because India primarily exports non-electric vehicles (Figure 1), this omission may not significantly alter the recorded number of EV imports; it may lead to an overestimation of EV penetration in 2026, although the "Other" countries also started exporting EVs in H2-2025 and are still missing for 2026.

The study focuses on battery electric vehicles (BEVs) only, therefore plug-in hybrid vehicles (PHEVs) and hybrid electric vehicles (HEVs) are not included in the EV import share calculations. Furthermore, the data includes both new and used vehicles, therefore the analysis does not distinguish between the two.

Table 1. Vehicle commodity codes included in this study.

Vehicle type	Commodity code	Powertrain
Passenger cars	870300	-
Passenger HEVs	870340	Hybrid
Diesel Passenger HEVs	870350	Hybrid
Passenger PHEVs	870360	Plug-in hybrid
Diesel passenger PHEVs	870370	Plug-in hybrid
Passenger BEVs	870380	Electric
Trucks	870400	-
Diesel HEV trucks	870440	Hybrid
Gasoline HEV trucks	870450	Hybrid
BEV trucks	870460	Electric
Two-wheelers	871100	-
Electric two-wheelers	871160	Electric

3. Major exporters shaping Africa's e-mobility transition

Across all the vehicle types considered in this analysis, China, Germany, Japan, and the USA were the major exporters of BEVs and PHEVs to Africa between 2023 and 2026 as shown in Figure 1. Specifically, most electric passenger cars came from China, Japan, Germany, the United Kingdom, and the USA, reflecting these countries' established hegemony in global EV manufacturing and production.[2] However, while the USA dominated PHEV exports in 2023 and 2024, China overtook it as the main exporter starting in 2025. This reflects China's growing production and cost advantage over other EV producers, which has facilitated Chinese automakers' strategic entry into emerging markets like Africa with ultra-affordable vehicles, enabled by large-scale production volumes and end-to-end control of supply chains.[3]

China's passenger car BEV exports to Africa have grown every year since 2023, and China also single-handedly dominates the export of electric two-wheelers to Africa, with export volumes growing from less than 200,000 in 2023 to over 600,000 in 2025, representing a market share of over 95%. While the aggregate number of electric truck exports remains modest, China has also exported the majority since 2023, while Spain, France, South Africa, Germany and the USA had notable export numbers in 2024 and 2025.

Although the analysis for 2026 is based on half-year export data (January to June), China appears to be on track to maintain or exceed their 2025 exports to Africa. These trends reveal China's growing dominance over Africa's EV market, occasioned by China's overproduction of EVs, protectionist tariffs on Chinese EVs in Europe and the USA, and the lower price points of many Chinese EV models which have made them affordable to mass-market African consumers.[18,21] As such, China constitutes a critical case study due to its dominant and growing market share in the African EV import market.

A closer examination of China's export trajectories shows that most Chinese electric passenger cars exported to Africa went to Djibouti, Egypt, and Ethiopia, the electric trucks went to South Africa, Ethiopia, and Djibouti, while the E2Ws went to Egypt, Morocco, and Nigeria (Figure A2 - Appendix). Some analysts suggest that Chinese EV manufacturers are routing their exports through North African nations such as Morocco to leverage their free-trade agreements with the European Union (EU), effectively using them as transshipment hubs to circumvent EU tariffs and import restrictions.[22]

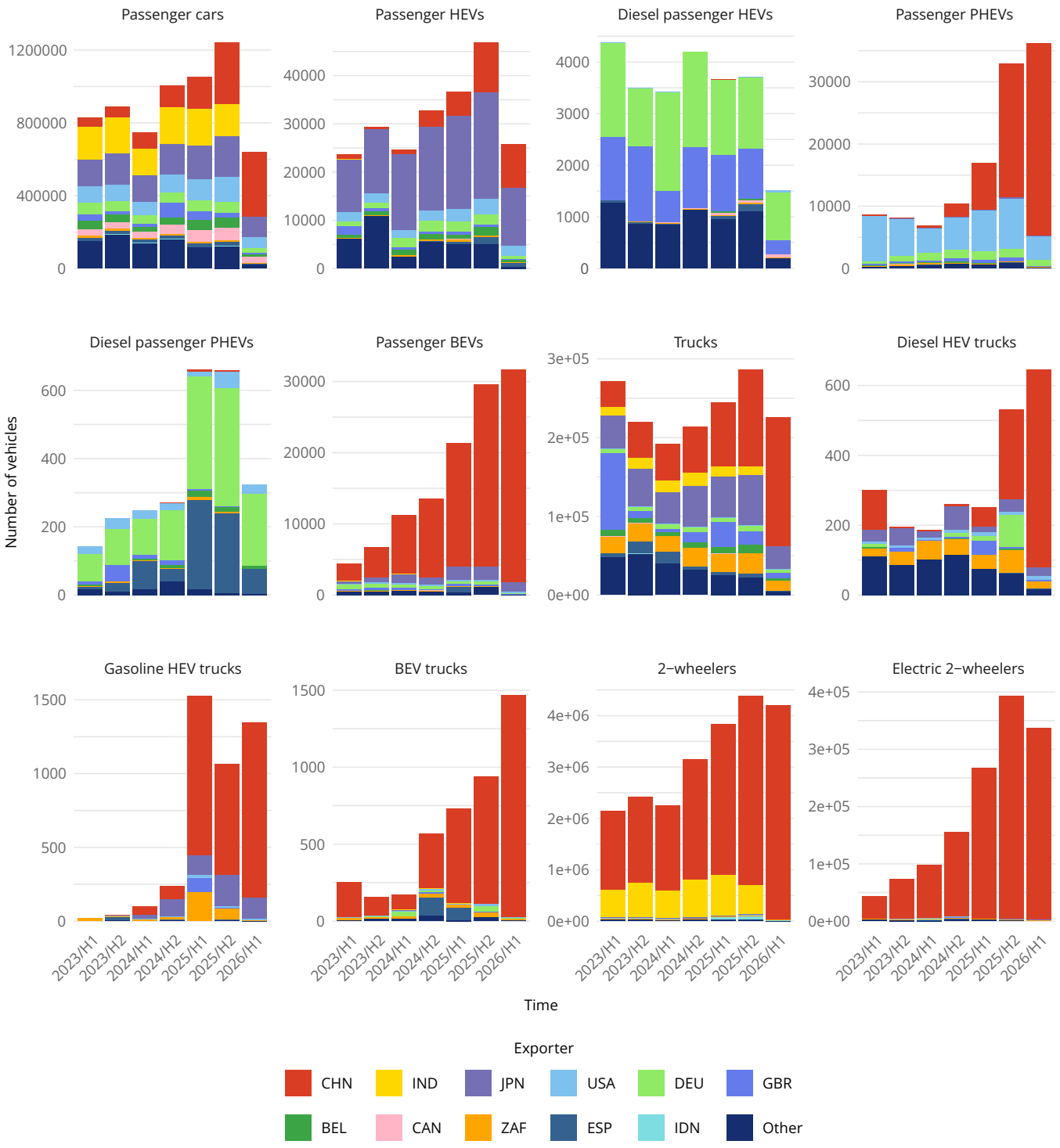


Figure 1. Global export of vehicles to Africa by vehicle type and major exporter. Data ranges from 2023 to mid-year 2026 (January to June).

4. Temporal and spatial distribution of imported EVs

To examine the distribution of EV imports across Africa, the analysis restricts its scope exclusively to BEVs for passenger cars, two-wheelers, and trucks. Other analyses such as the International Energy Agency's Global Electric Vehicle Outlook include PHEVs in their "EV sales share" estimates,[2] but here we purposely focus on vehicles that fully run on electricity and thus eliminate the need for liquid fuels.

Across all three vehicle types, the share of EVs in all vehicles imported has more than tripled over the span of a few years, increasing from under 2% in 2023 to over 6% in 2025 and over 7% by mid-2026. In absolute terms, 714,560 total EVs (including cars, two-wheelers, and trucks) were imported in 2025, up from 128,875 EVs in 2023.

Specifically, roughly 5% of all passenger cars, 8% of two-wheelers and 0.6% of trucks imported into Africa in the first half of 2026 were electric, increasing from 0.6%, 2.6%, and 0.3% in 2023 respectively. These trends suggest that EV imports are additive to Africa's vehicle stock, thereby reflecting the region's broader transition to e-mobility. Regarding spatial distribution across the continent, a few countries stand out for their EV import shares and growth since 2023 (see Figures 2 to 4) as presented in the next sections.

Electric passenger car imports grew between 2023 and 2026, driven by a few key markets

In the electric passenger car category, four countries—Djibouti, Egypt, Ethiopia, and Nigeria—together imported 60% of Africa's electric cars in 2025. The top importer, Djibouti, imported over 12,500 cars, representing a quarter of the continent's electric car imports; followed by Egypt, which imported over 7,000 cars (14% of Africa's electric car imports), and Ethiopia and Nigeria, which each imported over 5,000 cars (11% and 10% of Africa's electric car imports, respectively). It is important to note that with a current population of roughly 1.2 million,[23] Djibouti has a small domestic EV market, but it remains a major regional logistics hub and serves as an entry port for EVs destined for neighboring landlocked countries, particularly Ethiopia. Therefore, its EV imports are likely far less than is reported in international trade datasets and in this analysis.

The share of electric car imports in Djibouti and Ethiopia's total car imports were the largest import shares of any African country—82% and 67%, respectively. Rwanda's electric car imports constituted over one-third of their total car imports in 2025, and for Cape Verde, the share was around 17%. Notably, the electric car import shares in these countries (Ethiopia, Djibouti, and Rwanda) were below 10% only two years prior in 2023. These trends continued into 2026. In the first half of 2026 (January to June), 88% of Rwanda's passenger car imports were electric, while over half of Ethiopia's, Djibouti's, and Seychelles' imports were electric.

On the other hand, countries like Botswana, The Gambia, Liberia, Niger, Sudan, Somalia, and Eswatini imported zero or very few electric passenger cars in 2025 despite importing a considerable number of cars overall. For instance, The Gambia imported two electric cars out of over 15,000 cars, Liberia imported 12 electric cars out of over 10,000 cars, Botswana imported zero electric cars out of over 6,000 cars, and Sudan imported 28 electric cars out of over 9,000 cars. However, Sudan recovered the following year, and in the first half of 2026, one-third of its passenger car imports were electric. This may be explained by the return of localised stability in early 2025 following the Sudanese civil war,[24]

and the introduction of incentives in July 2025—value added tax (VAT) and customs duty waivers for fully electric vehicles—which likely kickstarted their EV market.[25]

These electric car import trends align with observations such as the 2025 Africa EV Readiness and Impact Index,[17] which categorises 11 African countries as having "high preparedness to adopt EVs at scale", including Cape Verde, Egypt, Ethiopia, Mauritius, and Rwanda. Since 2023, these countries have implemented stringent e-mobility policies that have established them as leaders in regional and global EV adoption. Ethiopia, for instance, enacted a total ban on ICEV imports in 2024, making it the first country in the world to prohibit the importation of fossil-fueled cars. Within two years of this ban, Ethiopia's EV adoption accelerated from less than 1% to nearly 6%, making it Africa's leading adopter of EVs.[26] In the first half of 2026, Ethiopia's EV import rates at 67% of passenger cars, 60% of two-wheelers, and 10% of trucks are also one of the highest in the region.

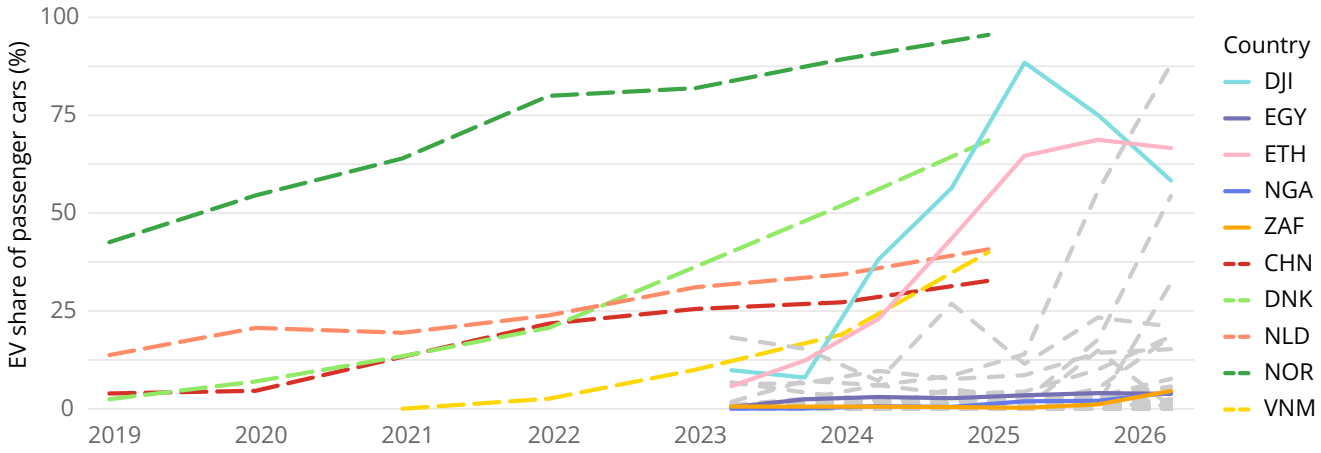
Similarly, Rwanda instituted its National Sustainable Mobility Policy in 2021, which encompasses both fiscal and non-fiscal incentives, including subsidised electricity tariffs for EV charging as well as VAT and import duty exemptions for EVs, batteries, spare parts, and associated auxiliary equipment.[27]

The island countries of Cape Verde and Mauritius exhibit similar import trends although they are pursuing divergent incentive frameworks. Cape Verde has a target to reach 100% light-duty EV sales by 2035, backed by incentives such as VAT and import duty exemptions for EVs and chargers through 2038. Consequently, by early 2026, EVs accounted for over 5% of the country's new vehicle registrations. Conversely, Mauritius rescinded its incentives in mid-2025,[28] yet EV import data from the first half of 2026 suggests that electric car import proportions are on track to surpass the 2025 proportions even as the absolute electric car import volumes contracted by nearly half year-over-year.

Furthermore, some countries, although not the top EV importers by volume, have a high import propensity for EVs, while other countries imported large volumes that made up a very small share of their total vehicle imports (Table A1). Rwanda, for instance, imported just over 1,000 electric cars in 2025 (2% of electric cars imported into Africa), but these cars made up one-third of the country's overall car imports. On the other hand, electric car imports constituted only 4% of Egypt's total car imports and 2% of Nigeria's total car imports despite the two countries importing 14% and 10% of Africa's electric cars. Therefore, despite being top importers on the continent, Egypt's and Nigeria's electric car imports still make up a very small share of their overall car imports, implying substantial potential for further import growth or domestic assembly and manufacturing.

Additionally, comparing the EV import shares in some African countries with the EV sales shares of global market leaders reveals noteworthy patterns. In 2024, Ethiopia's and Djibouti's share of passenger car EV imports trailed closely behind China's sales share as illustrated in Figure 2. By 2025, each country's import share had exceeded the sales share of China and was converging on the sales shares of global leaders such as Norway and Denmark. Although these data compare import shares against sales shares, assuming that most cars in Africa are imported rather than locally manufactured or assembled, these trends hint at countries such as Ethiopia and Djibouti emerging as global leaders in EV adoption, particularly in the passenger car segment.

(A) Time series of imported vehicles



(B) Spatial distribution of imported vehicles

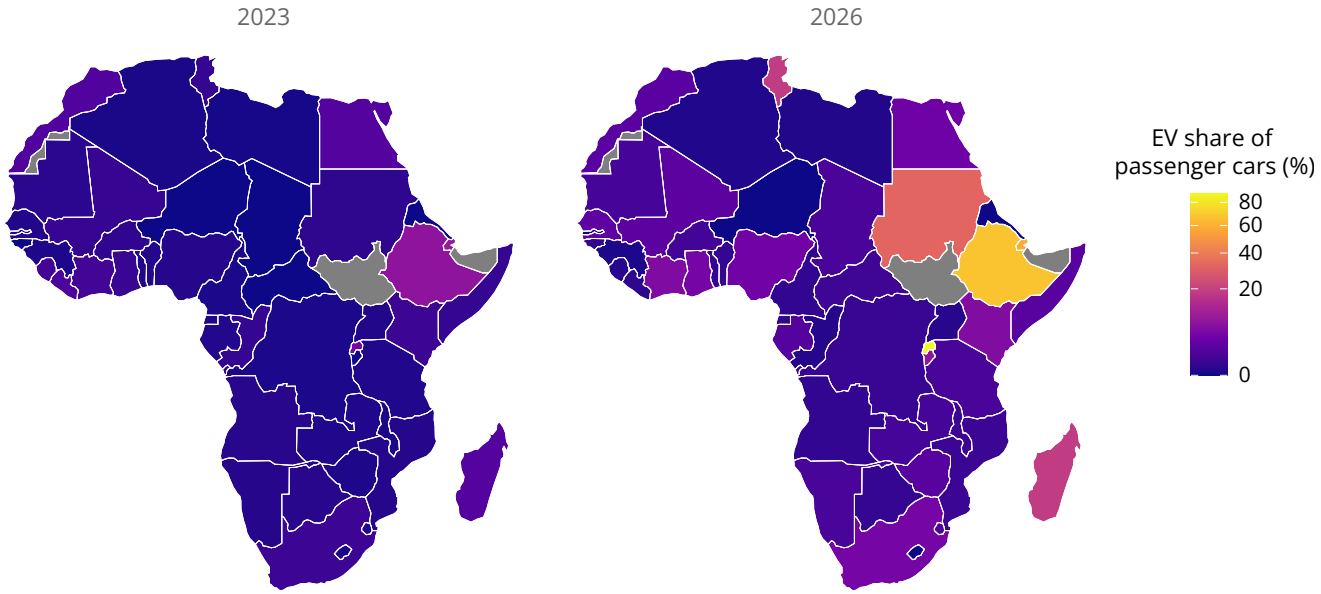


Figure 2. Temporal (A) and spatial (B) distribution of electric passenger car import shares across Africa from 2023 to mid-year 2026 (January to June). In panel (A), the top five importers in Africa are shown by colored solid lines, while the other African countries are shown by grey dashed lines. Trajectories of EV sales shares of selected countries in the world are displayed for comparison.

Electric two-wheeler imports have a broader and widening footprint across the continent

By volume, E2Ws were the most imported EV, invariably constituting over 90% of all EV imports every year from 2023 to 2026 (Figure 1). The growth of E2W imports over the same period also far outpaced that of electric passenger cars and electric trucks. These E2W-import patterns are consistent with the dominant transportation modes in the region, given the salience of motorcycles to daily mobility and mass transit in Africa (roughly one-fifth of the world's registered motorcycles are in Africa).[29] Regarding the dominant E2W importers, Egypt imported the most E2Ws in 2025 (over 200,000 E2Ws),

representing over one-third of all E2W imports in Africa. Morocco was a distant second-highest importer with over 100,000 E2Ws, and Nigeria was third with over 60,000 E2Ws. Combined, these three countries—Egypt, Morocco, and Nigeria—accounted for 57% of Africa's E2W imports in 2025. In addition, Algeria, Kenya, Rwanda, and Uganda each imported over 25,000 E2Ws in 2025.

Over time, the share of E2W imports in total two-wheeler imports has also seen consistent growth, increasing from 3% in 2023 to 8% in the first half of 2026. Compared to passenger cars and trucks, E2W imports exhibit broader coverage across the region as illustrated in Figure 3. For instance, in the first half of 2026, six countries—Seychelles[1], Libya, Namibia, Ethiopia, Mauritius, and South Africa—had over half of their two-wheeler imports being electric. Furthermore, at least one-third of the two-wheeler imports in Rwanda, Morocco, Algeria, Uganda, and Botswana in the same period are electric. In contrast, three years prior, only Libya had E2W import shares of over 50% while Equatorial Guinea, Cape Verde, and South Africa had E2W import shares over 30%.

These E2W import trends obscure the distinct regional disparities of two-wheeler usage across the continent. While E2W usage in North Africa and Southern Africa is predominantly characterised by scooters and mopeds dedicated to personal commuting and short urban trips, E2W usage in East and West Africa is predominantly motorcycles used for commercial purposes to transport goods and passengers over longer distances in both urban and rural settings.[30] As such, the concentration of E2W startups in Africa closely aligns with the commercially-driven markets, which is increasingly prompting a pivot towards domestic assembly and manufacturing.[30,31] This may diminish the importation of completely built E2Ws in these markets, as supply chains shift to importing components and parts.

Contrasting E2W adoption with other countries in other regions reveals that the import shares of E2Ws in many African countries have already exceeded the sales shares of global leaders such as Denmark, China, and Vietnam (Figure 3A).

1 All the two-wheelers imported into Seychelles were electric, although n = 13

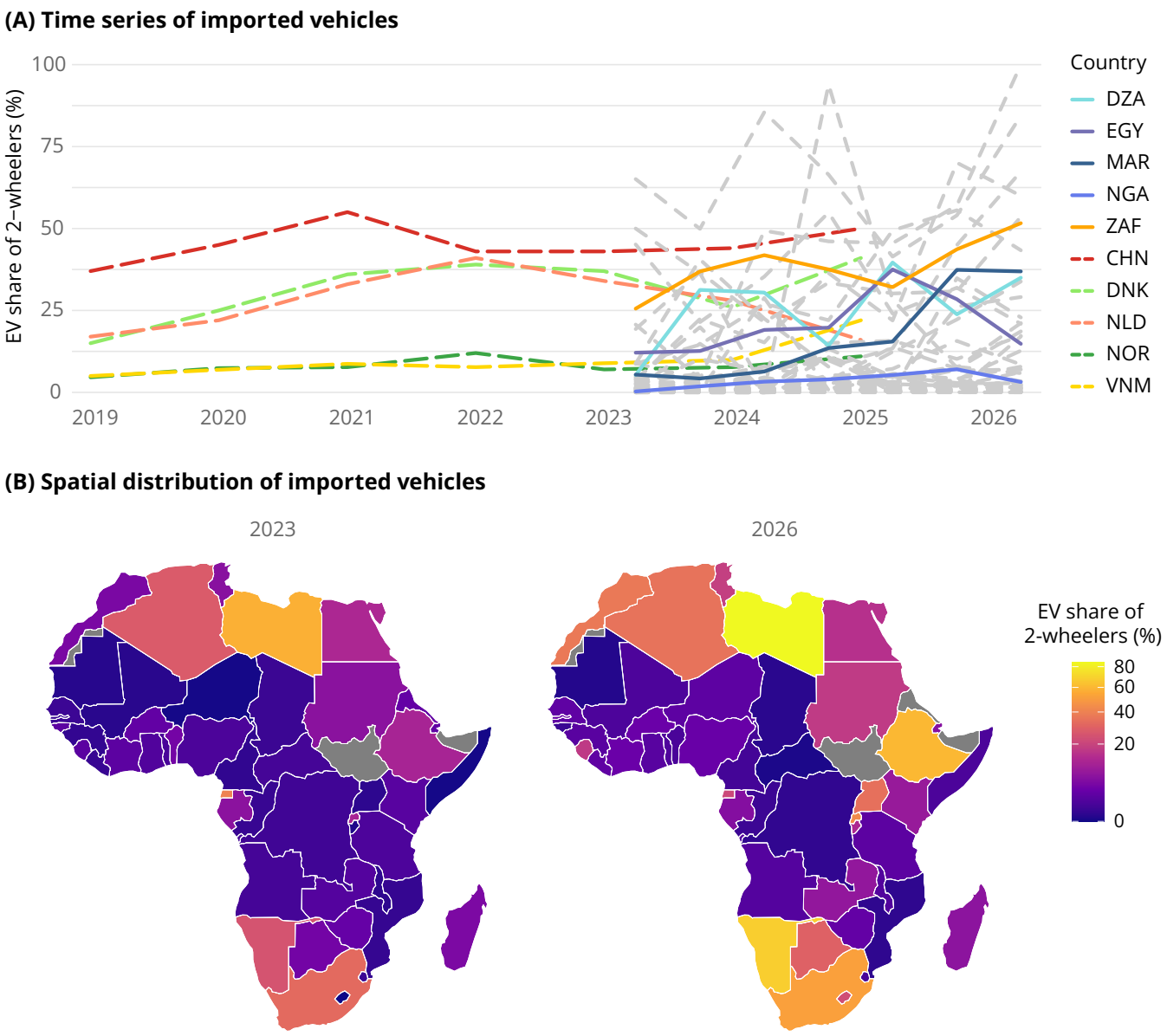


Figure 3. Temporal (A) and spatial (B) distribution of electric two-wheeler imports from 2023 to mid-year 2026 (January to June). In panel (A), the top five importers in Africa are shown by colored solid lines, while the other African countries are shown by grey dashed lines. Trajectories of EV sales shares of selected countries in the world are displayed for comparison.

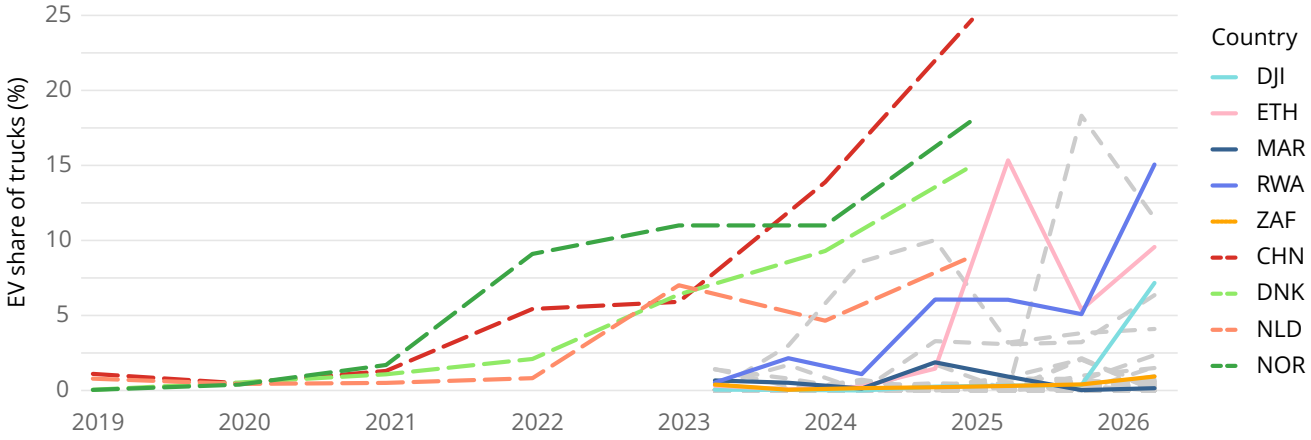
Electric truck imports are modest and concentrated in a few countries

Across all countries, the number and share of electric truck imports have been limited, increasing from 410 electric trucks in 2023 (0.1% of all truck imports) to 1,670 electric trucks in 2025 (0.3% of all truck imports), and 1,465 electric trucks in the first half of 2026 (0.6% of all truck imports). Ethiopia (298 electric trucks), South Africa (248), Morocco (127), and Nigeria (134) imported the most electric trucks in 2025, together accounting for nearly half of all electric truck imports into Africa in that year. Notwithstanding the modest electric truck imports overall, it is worth noting the steady growth in some countries. For instance, in 2023, Djibouti and Ethiopia each imported only three electric trucks;

however, in the first half of 2026 alone, Djibouti imported 326 trucks while Ethiopia imported 144 trucks. Similarly, Rwanda imported 10 electric trucks in 2023 but imported 128 electric trucks in the first half of 2026. Egypt, which imported only one truck in 2023, imported 89 trucks in the first half of 2026.

At the same time, countries like Seychelles and Ethiopia had electric truck import proportions over 10% in 2025 as shown in Figure 4. This is noteworthy given that Ethiopia imported only three electric trucks in 2023, representing 0.2% of their total truck imports, while Seychelles imported no electric trucks in 2023. The same countries dominated in electric truck import proportions in 2026. In the first half of the year, Rwanda had the largest share at 15% followed by Seychelles at 11% and Ethiopia at 10%. Compared to global leaders like Norway, Denmark, and China, some African countries have been catching up despite having a much lower EV share in 2023 (Figure 4A).

(A) Time series of imported vehicles



(B) Spatial distribution of imported vehicles

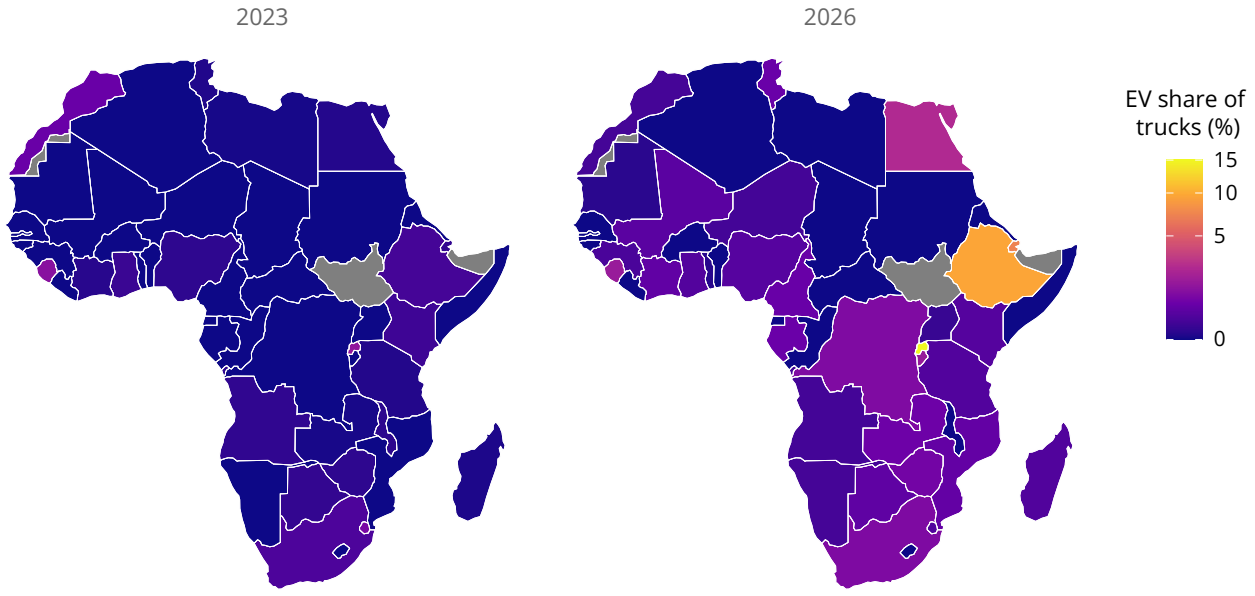


Figure 4. Temporal (A) and spatial (B) distribution of electric truck imports from 2023 to mid-year 2026 (January to June). In panel (A), the top five importers in Africa are shown by colored solid lines, while the other African countries are shown by grey dashed lines. Trajectories of EV sales shares of selected countries in the world are displayed for comparison.

5. Implications for Africa's e-mobility transition

This analysis holds important implications for Africa's e-mobility transition, policymaking, and infrastructure, as presented in this section.

Africa's EV import patterns signal an impending and substantial e-mobility transition. Current import trajectories reveal widespread EV importation (and thus adoption) spanning both lower- and middle-income African countries, signaling emergent EV cost parity with ICEVs, and the early stages of a substantive transition to e-mobility in the region. This supports recent analyses which estimate that battery electric passenger cars will be cost competitive before 2040,[13] several years ahead of earlier mid-century estimates.[32]

China's EV export dominance could accelerate EV penetration and adoption in Africa. China's dominance in EV exportation to Africa and other emerging economies is reshaping the global e-mobility sector, which in turn is introducing competitive dynamics such as trade wars and retaliatory pricing strategies between major EV producers.[33–35] While these frictions may generate externalities that limit access to the EV market for low-income countries, it may also potentially lower global EV prices and accelerate EV adoption in Africa and other developing regions. In addition, preliminary observations note that unsustainable EV-price discounting is prompting some manufacturers and suppliers to set up facilities overseas.[2] This will create opportunities for strategic international partnerships that can facilitate technology transfer and the localisation of EV manufacturing and assembly across Africa.

Dependence on a few EV suppliers could leave the region vulnerable to supply chain disruptions. On the other hand, the export patterns uncover Africa's increasing dependence on a few EV suppliers which could expose the region to supply chain disruptions, price volatility, and geopolitical leverage. It could also impede local content development such as domestic assembly and manufacturing, skills and workforce, and supply chains. Africa holds substantial critical mineral reserves, and the e-mobility transition represents an opportunity to engage in EV manufacturing.[36,37] Recognising this, some African countries such as Ghana, Nigeria, Uganda, and Kenya are incentivising domestic manufacturing and assembly, often in partnership with Chinese and South Korean automakers.[38–41] Other countries such as South Africa and Morocco are embedding EV manufacturing in their existing automotive industries.[38,41] Such efforts would enable Africa to capture some of the global EV export market, meet most domestic EV demand, and insulate the region from global supply chain shocks.

EV importation may disrupt the existing supply chains of secondhand ICEVs. More broadly, increasing EV importation could disrupt the secondhand ICEV car supply chains and imports which currently constitute most of the automotive imports into Africa. Although accurate data on the used-car market in Africa are scarce, it is worth considering whether and to what extent the EV import market will follow similar trends. Used EV imports may displace used ICEV imports, effectively accelerating EV penetration across the region.

Decentralised energy and innovative charging mechanisms will be required to overcome infrastructural constraints. The rapid growth in EV imports also raises critical concerns about energy and infrastructural capacity in the region, specifically regarding electricity-demand growth, charging infrastructure expansion, and energy planning. This is especially pertinent in energy-constrained countries such as Ethiopia, Kenya, Nigeria, and Rwanda, where universal and reliable electricity access remains unattained[42] despite significant and growing EV importation. Mitigating these energy

and infrastructure gaps in the near-term may necessitate integrating decentralised renewables and battery storage, and deploying novel charging modalities including battery swapping.[43,44]

Incentives and supportive policies can accelerate EV importation. Although this study did not conduct an exhaustive policy analysis, a macro-level examination of the leading EV importers (such as Ethiopia and Rwanda) indicates that supportive policy and regulatory frameworks, particularly import incentives and tax exemptions, can accelerate EV importation across diverse national contexts. This offers critical insights and benchmarks for the laggard countries in the region, and for adjacent aspects of the e-mobility transition including domestic EV manufacturing and assembly, infrastructure buildout, and others.

6. Conclusion: Looking ahead

This analysis uses country-level vehicle import data from 2023 to mid-2026 to illuminate the latest patterns of EV diffusion in Africa. The trends identified demonstrate that combined imports of electric passenger cars, electric two-wheelers, and electric trucks more than tripled, increasing from 2% of total vehicle imports in 2023 to over 6% by 2025. This rapid growth suggests widening e-mobility adoption and potentially marks the initial stages of a substantial transition to e-mobility.

Electric passenger car importation is concentrated in a few countries while electric two-wheeler importation is more spatially distributed across the continent and exhibits the strongest growth, which aligns with the region's dominant transport modes. Electric truck imports have remained modest, and they also remain concentrated in a few countries. Further, in some countries, EVs make up a significant proportion of vehicle imports though they import modest volumes.

Africa sources most of its EVs from China, Germany, Japan, and the USA, with China holding a dominant market share across multiple vehicle segments. The affordability of Chinese EV models makes them appealing to African mass market consumers, which may consequently accelerate EV penetration and uptake in the near-term. On the other hand, this dependence on a few supplier countries may expose the region to supply chain vulnerabilities and disruptions, however, strategic partnerships for domestic manufacturing and assembly can alleviate this risk. Overall, accelerated EV importation will rely on ambitious incentives and policies, and decentralised energy and innovative charging mechanisms will be required to overcome infrastructural constraints and subsequently widen domestic adoption.

Looking ahead, future research could conduct sub-regional analyses to examine the contextual and structural disparities shaping EV importation and adoption patterns across the region, while also identifying potential manufacturing and assembly prospects. Sustained EV adoption across Africa will be contingent on national infrastructural readiness, specifically energy and charging networks, therefore further analyses could evaluate the synergies between the e-mobility transition and broader energy sector transformations. Such evaluations would identify optimal pathways that ensure that EV adoption yields net environmental and socio-economic benefits. Furthermore, detailed assessments of the prevailing policy landscape can offer insight into the core adoption drivers and provide germane benchmarks to accelerate adoption in lagging countries.

Finally, limited accurate data remains a significant impediment to in-depth analyses of the EV adoption in Africa; therefore, collaborations between EV suppliers, manufacturers and assemblers, start-ups, researchers, and policymakers are essential to bridge this data and information gap and foster cross-stakeholder synergy.

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Appendix

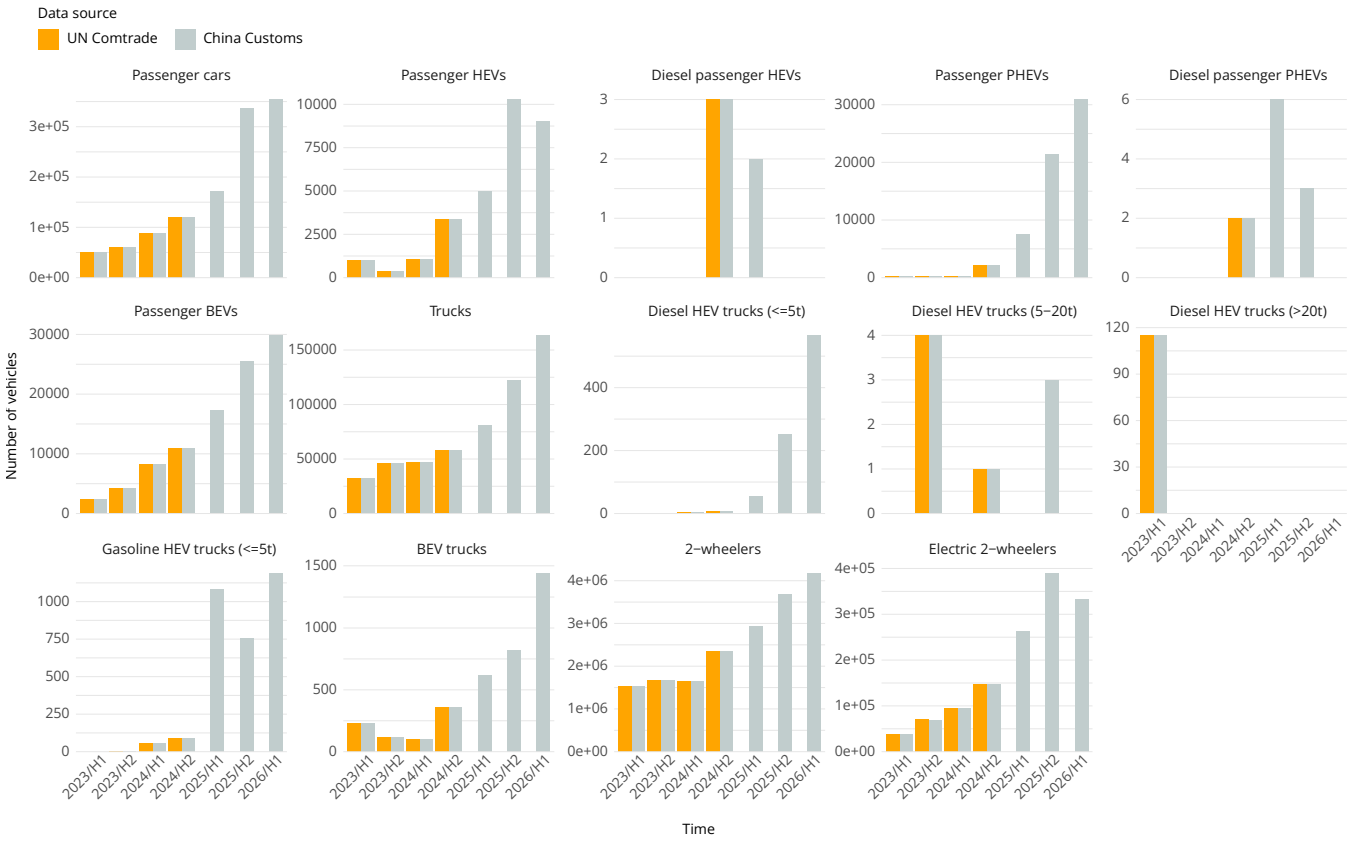


Figure A1. Comparison of the UN Comtrade and China Customs data on Africa's vehicle import from China from 2023 to mid-year 2026 (January to June).

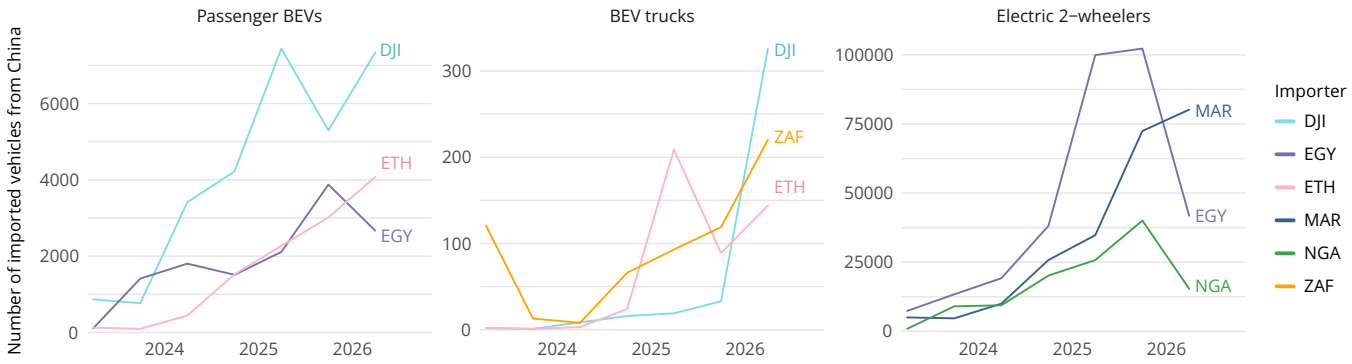


Figure A2. Top importers of BEVs from China by vehicle type from 2023 to mid-year 2026 (January to June).

Table A1. Top EV importers in 2025 by volume, showing each country's EV imports as a proportion of the country's total vehicle imports and as a proportion of Africa's total EV imports.

2-wheelers			Trucks			Passenger cars		
Country	EVs in country's vehicle imports, 2025	EVs in Africa's EV imports, 2025	Country	EVs in country's vehicle imports, 2025	EVs in Africa's EV imports, 2025	Country	EVs in country's vehicle imports, 2025	EVs in Africa's EV imports, 2025
Egypt	32%	31%	Ethiopia	10%	18%	Djibouti	82%	25%
Morocco	26%	16%	South Africa	0.4%	15%	Egypt	4%	14%
Nigeria	6%	10%	Morocco	0.4%	8%	Ethiopia	67%	11%
Kenya	12%	6%	Nigeria	0.2%	8%	Nigeria	2%	10%
Algeria	53%	5%	Mauritius	3%	5%	Morocco	1%	6%
Rwanda	29%	5%	Zimbabwe	0.2%	5%	South Africa	2%	6%
Uganda	18%	4%	Tanzania	0.4%	5%	Kenya	3%	5%
South Africa	38%	4%	Rwanda	5%	5%	Mauritius	11%	5%
Tunisia	10%	2%	Madagascar	1.5%	3%	Tunisia	3%	4%
Cote d'Ivoire	5%	2%	Zambia	0.4%	3%	Ghana	1%	3%
Ghana	2%	2%	Seychelles	11%	2%	Rwanda	32%	2%
Tanzania	2%	1%						
Togo	1%	1%						
Ethiopia	34%	1%						
Libya	48%	1%						