

Driving Change

Scaling Kenya's EV Industry Through Capacity Building and Ecosystem Development



The global landscape of electric vehicles (EVs) is rapidly evolving. The International Energy Agency projects that the market could reach 230 million vehicles sold globally by 2030, representing over 60% of total vehicle sales. This growth underscores the critical role EVs play in reducing greenhouse gas emissions while improving air quality and enhancing public health.

Kenya has emerged as a promising market for EVs, housing Africa's largest electric mobility start-up ecosystem. The country is steadily adopting EVs as part of its strategy to promote sustainable transport, cut emissions and enhance energy efficiency. While the current market share for EVs in Kenya stands at about 1%, adoption is on the rise — especially in urban areas, with EV sales rising from 65 units in 2018 to 4,047 units in 2023, making up 2.4% of new vehicle sales. This jump is driven by supportive government policies, technological advancements and increased consumer awareness.

Kenya's journey toward a greener and more sustainable future began in the early 2000s, but a more formal approach began in 2016 with the launch of Kenya's Green Economy Strategy and Implementation Plan. This comprehensive framework laid the foundation for integrating sustainable practices into economic development, emphasizing low-carbon pathways, resource efficiency and social inclusivity. Recognizing the growing global focus on climate change and clean energy solutions, Kenya's leadership aimed to position the country as a trailblazer, prioritizing the transport sector, which accounted for a significant share of the country's greenhouse gas emissions (as it does globally). Electrification of mobility soon emerged as a critical area of focus.

Kenya's policymakers have put in place a number of measures to promote private sector investments in EVs, including tax incentives for EV imports, policies promoting EV-specific electricity tariffs and renewable energy generation, and the development of infrastructure for charging networks. Local entrepreneurs and innovators are driving the EV market forward by launching small businesses that capitalize on market growth and government incentives. However, challenges remain, including high upfront costs, the lack of expanded charging infrastructure, misaligned policy frameworks, a constricted fiscal space, and the lack of charging

demand integration into existing power systems. To sustain this momentum, stakeholders must cultivate a supportive ecosystem that increases diverse EV solutions to meet various consumer needs.

The initiative Partnering for Green Growth and the Global Goals 2030 (P4G) assists early-stage green businesses, like Kenyan EV startups, in navigating the challenging early stages of growth, often called the "valley of death." P4G provides grants to help startups validate their business models and overcome market challenges. It also offers technical assistance to strengthen their investment readiness and creates knowledge resources to tackle industry barriers. A key part of the P4G model is its startup partnership which teams startups with nonprofits and industry experts to drive important market transformations. P4G also provides specialized support in areas like verifying environmental and social benefits, conducting regulatory analysis, and helping with community outreach and product-market fit.

P4G's National Platforms¹ (NPs) support startups by helping them navigate market challenges and overcome policy, legal and regulatory barriers in their countries. Startups present their business models, key challenges and knowledge products to the NPs, which then assist by organizing workshops and connecting the startups with experts and key stakeholders from government and the private sector. Through sector roundtables, these collaborations have helped shape discussions on inclusive e-mobility policies and laid the groundwork for future policy action.

Kenya's NP comprises the National Treasury and Planning, the Ministry of Environment, Climate Change and Forestry and the Kenya Private Sector Alliance, alongside representatives from World Resources Institute, and the embassies of Denmark, the Netherlands and the Republic of Korea, who work together to facilitate policy and regulatory improvements that can strengthen climate entrepreneur ecosystems.

P4G has directly supported 10 Kenyan startups across six e-mobility startup partnerships since 2018 and has been one of the key actors transforming this marketplace over the past decade. This case study highlights four of these EV startup

¹ National Platforms are high-level public-private country networks that strengthen the enabling environment for climate entrepreneurs to enter the marketplace and scale their startups.

Round 1

- M-KOPA Mobility Shell Foundation (PayGo)
- FIKA Mobility, ARC Ride & Energy4Impact (ChargeUp!)
- Bodawerk, Opibus, Asobo, Anywhere. Berlin & Siemens Foundation (Accelerating E-Mobility Solutions for Social Change)

Round 2

- BasiGo Practical Action
- Sun Run Sustainable Transport Africa
- Ebee Sustainable Transport Africa

partnerships and examines the legal, regulatory and policy advancements they have driven through collaboration with Kenyan NP.

The featured EV partnerships are BasiGo and Practical Action, Sun Run and Sustainable Transport Africa, M-KOPA Mobility and the Shell Foundation, and ChargeUp!, which includes Fika Mobility, ARC Ride and the NGO Energy4Impact. Each partnership tackles a different challenge in the e-mobility sector, such as flexible financing, battery swap models, charging infrastructure and expanding EV access to rural areas.

These partnerships have played a crucial role in identifying and addressing policy challenges faced by green businesses in Kenya. Their collective efforts have led to significant contributions in shaping the country's legal, policy, regulatory and institutional frameworks, including:

- A 22% reduction in the e-mobility tariff offered by Kenya Power for EV charging at night, outlined in the Kenya E-Mobility Tariff Review.
- A 15% reduction of the excise duties for importing EV knock-down kits, now in the Tax Procedures (Unassembled Motorcycles) Regulations.
- The creation of the MOBESSA Project, an Environmental, Social and Governance (ESG) methodology and monitoring tool that is now available for use by any EV company.

- A comprehensive set of recommendations addressing both fiscal and non-fiscal issues to advance e-mobility in Kenya, including necessary regulatory changes, improvements in the national EV charging infrastructure, and enhancements to operations and maintenance support systems.
- The formation of the National Task Force on E-Mobility, which was established to develop and maintain a comprehensive National Electric Mobility Policy.
- The Mitigation Action Facility which committed 25 million euros (\$27 million) to accelerate the market development of e-mobility in Kenya.

This case study also examines the mechanisms and tools P4G's Kenya EV startups have leveraged to overcome key marketplace barriers and prove their business case and investment worthiness. These strategies include:

- Financial innovations, such as leasing models like Pay-as-you-Go, Pay-as-you-Drive and Batteryas-a-Service, are driving systemic change in the e-mobility market.
- Data-driven knowledge products and dialogues aimed at creating a more favorable regulatory environment for e-mobility.
- Public-private partnerships and coalition-building efforts, with Kenya's NP playing a key role in enabling data-driven policy interventions, bringing together diverse stakeholders and securing political support to accelerate EV adoption.

This case study provides valuable insights and tools for stakeholders to improve enabling market environments, drastically scale climate innovation, broaden business opportunities within this market and achieve sustainable mobility goals in Kenya.

STARTUP VIGNETTE 1: BASIGO – CAPACITY BUILDING IN A NASCENT MARKET

- **Innovation:** Pay-as-you-Drive financing for electric buses.
- Enabling Environment Contribution:
 - A memorandum to Kenya's National Task Force on E-Mobility based on BasiGo's insights from 11 months of e-bus operations, which influenced Kenya's national e-mobility policy proposal.
 - MOBESSA Project, a guideline for ESG and Environmental and Social Management Systems (ESMS) for the e-mobility sector in Sub-Saharan Africa.
- Investment Raised: \$42 million.

During the early months of the COVID-19 pandemic, BasiGo co-founders Jit Bhattacharya and Jonathan Green found themselves under lockdown in Nairobi, Kenya. With public transport paused, pollution levels dropped dramatically allowing for clear views of Mount Kenya and Mount Kilimanjaro. Inspired by the cleaner air, they saw the opportunity to make a significant environmental impact through electric buses (e-buses). Their journey began by acquiring a few e-buses from China to test the feasibility of their business model. They translated their deep experience and knowledge in the solar industry into a compelling e-bus value proposition: BasiGo.

BasiGo is a climate startup focused on introducing e-buses to transform Kenya's public transport system. BasiGo developed a multipronged solution to overcome the barriers of e-bus adoption in Sub-Saharan Africa by integrating e-bus sourcing, charging and service infrastructure, and expertise with an innovative Pay-as-you-Drive financing model. This model enables public bus operators to make regular and affordable payments to BasiGo by paying a security deposit and leasing on a daily, mileagebased fee. Operators pay a deposit of \$8,000 and a daily Pay-as-you-Drive fee of 52 cents per kilometer. The lease fee, which covers all charging and maintenance, is lower than the combined costs of financing, fuel and maintenance for diesel buses. As a result, this model significantly reduces the initial capital requirements and allows operators to realize more operational savings compared to diesel buses.

When BasiGo first launched in 2021, the e-mobility market was still in early bloom. Initial policy gaps were a challenge; for example, board members of the National Transport and Safety Authorities struggled to categorize e-buses under existing frameworks. Despite these hurdles, BasiGo has achieved several significant milestones, including:

Customer acquisition: It has partnered with multiple public transport companies, including Kenya Bus, one of the country's oldest bus service operators, to transition its fleet to electric buses. As Edwins Mukabanah, Kenya Bus Service's managing director, noted: "That's where the world is heading."

Building a maintenance value chain: Kenya Bus educates new EV bus drivers and provides EV repair services through internally hired service staff and partnerships with the existing bus maintenance ecosystem, building essential skills for Kenya's future EV workforce.

Attracting commercial finance: In October 2024, BasiGo announced that it successfully closed \$42 million in new capital. This is one of the largest investments in e-mobility in Africa and will support BasiGo's goal of deploying more e-buses, enhancing its Pay-as-you-Drive model for new vehicle types, and improving technology platforms like Jani — a mobile booking app — to make e-buses more accessible and convenient for passengers. BasiGo has also partnered with Kenya Vehicle Manufacturers to launch the first dedicated assembly line for e-buses in Kenya. BasiGo aims to deliver 1,000 e-buses between 2024 and 2027 and will leverage this new capital to expand its manufacturing capacity.

Contributing to policy and regulatory dialogues:

- During the P4G funding period, BasiGo submitted a memorandum to Kenya's National Task Force on E-Mobility based on insights from 11 months of e-bus operations which influenced Kenya's national e-mobility policy proposal. The memorandum outlined a comprehensive framework to transition the country's transport sector toward sustainable electric mobility. Key highlights of the document included:
 - Forecasting that 5% of all registered vehicles in Kenya be electric powered by 2025.

- Needs for expansion of charging networks and the integration of renewable energy sources, capitalizing on Kenya's electricity grid, which generates nearly 90% of its energy from clean sources.
- Strategies for stakeholder engagement, regulatory adjustments and incentives to encourage the adoption of EVs, including tax benefits and support for local manufacturing and assembly.
- BasiGo joined the Kenya E-Mobility Battery Initiative and participated in workshops organized by the Africa E-Mobility Alliance to address end-oflife EV battery management.

• The company also proactively engaged policymakers, hosting officials from the Ministry of Investment, Trade and Industry at its local assembly plant, underlining its commitment to fostering an enabling environment for e-mobility.

Startups like BasiGo forged ahead without a comprehensive policy framework all-the-while building the infrastructure needed to showcase why Kenya's EV market must have strong support from policymakers. The noted activities showcase the challenging work required to build a startup in a new sector of the economy. It is essential that these types of engagements continue to cultivate an ecosystem where policy and financing align to support scaling EV solutions.

BasiGo Develops ESG Measurement and Monitoring Tool That All **Kenya EV Companies Can Access**

BasiGo has made significant strides in advancing sustainability in Kenya's e-mobility sector through the MOBESSA (Mobility and ESMS Solutions for Sub-Sahara Africa) Project, a collaborative initiative funded by P4G and implemented by BasiGo and Practical Action which aims to develop and share implementable guidelines on ESG and ESMS for the e-mobility sector in Sub-Saharan Africa. Ensuring the ESG benefits and the methodology for quantifying and verifying them were key conditions for the startup's investors.

During P4G's National Platform stakeholder engagement event, which brought together key players, including the E-Mobility Association of Kenya (EMAK) and the National Electric Mobility Task Force, BasiGo presented early versions of their tools, which highlighted how companies could responsibly navigate current issues within the e-mobility ecosystem while fostering sustainable growth in the sector, including better management of environmental risks and impacts; securing fair labor practices and community engagement; implementing strong governance structures for sustainable operations; and attracting investment by demonstrating commitment to responsible business practices.

EMAK embraced the framework and acknowledged its value, recognizing that individual EV companies would have found it challenging to develop such a comprehensive tool independently. As a result, EMAK saw an opportunity to offer these toolkits as a service to its members and is working closely with the MOBESSA Project as a key partner in the project implementation, seeking to enhance integration of ESG tools that further strengthen the industry's capabilities.

Additionally, international partners like the Deutsche Gesellschaft für Internationale Zusammenarbeit expressed interest in collaborating with the P4G partnership to incorporate the toolkit into national regulations and policies. The organization noted the potential to integrate the framework at the national level, indicating strong support for the initiative.

STARTUP VIGNETTE 2: M-KOPA – RESILIENT INNOVATION BEYOND SILICON VALLEY

- Innovation: Battery-as-a-Service solutions for urban electric two-wheelers.
- Enabling Environment Contribution:
 - Advocating for an inclusive e-mobility tariff which led to favorable new tariffs by Kenya Power offering up to 22% in cost savings.
 - Conducting a gender inclusivity survey which provided key recommendations to increase women's participation in the e-mobility marketplace.
- Investment Raised: \$10 million.

M-KOPA Mobility is an offshoot of M-KOPA, a leading connected asset financier in East Africa focused primarily on mobile phone solutions. Since entering the marketplace in 2022, M-KOPA Mobility has become a major player in Kenya's EV market. "The work that M-KOPA has done is significant especially given the market's nascency at the start of this project," said Emma Stephenson, head of Transporters Portfolio at Shell Foundation, a partner of M-KOPA during the P4G funding period. "No player is finding it easy, especially given the policy changes."

M-KOPA Mobility was awarded \$792,500 in grant funding, together with \$500,000 from Shell Foundation. P4G's financial support helped M-KOPA Mobility scale its technology and capacity to distribute and finance EVs, enabling it to address affordability barriers to e-motorbike adoption by offering Pay-as-you-Go options that allowed drivers to pay daily rates, which were cheaper than financing, fuel and maintenance costs for gas-powered bikes. By December 2024, over 2,000 e-bikes had been deployed.

M-KOPA Mobility also conducted a gender inclusivity survey to identify barriers for women and ways to overcome them, including delivery services, targeted messaging and women's savings groups. The company introduced a gender-intentional strategy, realizing that including women in the business model was not only inclusive but also profitable.

M-KOPA's journey to deploy e-motorbikes had faced numerous supply and logistical challenges, requiring patience, resilience and adaptability. "There is a significant need for patient and risk capital to support companies like M-KOPA Mobility, which differ from Silicon Valley investments in terms of return timelines," said David Damberger, managing director

M-KOPA Lends A Hand in an Inclusive E-mobility Tariff to Drive Affordable EV Adoption

The startup also conducted multiple studies, one of which resulted in a significant change to the enabling environment. This learning revealed that battery swap models suited high-density business markets, while battery charge models are better for low-income, fragmented markets. M-KOPA Mobility presented these insights to key stakeholders through e-mobility roundtables hosted by the Kenyan National Platform. The NP used these findings and gathered other P4G e-mobility startups to advocate for the aforementioned Kenya E-Mobility Tariff Review. The beauty of these tariffs is that Nairobi has an over-supply of renewable energy, with solar and wind facilities often taken offline when the grid's demand doesn't match their production. This results in wasted energy that could be stored if utility-scale energy storage, such as batteries, were more cost-effective.

Since solar power is typically generated midday and wind power is produced at night when demand is low, the lack of storage capacity causes these resources to go unused. However, when EV batteries are charged during off-peak hours — such as at night for wind power or during peak solar hours — they can act as collective storage. Thus, this pricing scheme incentivizes the use of EVs by reducing unit rates for EV charging at those specific times of the day.

of M-KOPA Mobility. "Early support from providers, including grants from P4G and the Shell Foundation, has enabled innovation and testing in areas like electric mobility. This type of funding is essential to drive social impact and build sustainable business models that require time and patience to develop."

The uptake of EVs in Kenya is already gaining momentum, bolstered by a budding startup ecosystem, local manufacturing initiatives and growing consumer awareness. However, challenges related to infrastructure, costs and technology must be addressed to ensure widespread adoption. Ongoing investment and robust policy support are critical in unlocking the full potential of the EV market.



STARTUP VIGNETTE 3: SUN RUN – ENSURING INCLUSIVE ACCESS IN THE ENERGY TRANSITION

- **Innovation:** Rural solar-powered EV charging and cold storage as a service solution.
- Enabling Environment Contribution: Reducing the excise duty for importing EV knock down kits by 15%.
- Investment Raised: \$43,000.

When Carol Ofafa, CEO of E-Safiri, was studying electrical engineering at the University of Glasgow, she wondered how e-mobility, which was gaining in popularity, would impact Africa. Having grown up in rural Kenya, she knew there would be major concerns and barriers to EV adoption in rural areas, so she set out to ensure that these communities were included in the clean energy transition.

Around the same time, Chris Maara, founder of Kiri EV, started noticing how the transition from fossil fuel to e-bikes was allowing new players to enter the transportation market. He saw this as an opportunity to create jobs and bridge the gap between urban and rural regions in the EV transition.

Early in their respective journeys the two startups joined together to create Sun Run, to more effectively provide e-mobility services to peri-urban and rural areas.

With underdeveloped road infrastructure, bringing e-mobility to rural Kenya would be no small feat, and Sun Run sought to develop a solution that would address the local communities' unique needs. Kiri EV used multiple rounds of testing and rider feedback to adapt its e-bikes to meet these needs. Key modifications included replacing plastic components with sturdier metal, reducing reliance on imported parts, lengthening the seat for carrying additional passengers and strengthening the shocks to withstand the rough, unpaved roads. These adjustments made the bikes more durable, practical and appealing for local communities.

To address the key affordability barriers to rural e-mobility adoption, Sun Run incorporated a Pay-as-you-Go leasing model that matched the upfront cost of gas-powered vehicles and services tailored toward rural consumers. Importantly, the initiative included building local capacity for vehicle maintenance, establishing reliable and affordable solar-powered

Sun Run's Marketplace Contribution: Improving the Tax Treatment of Kenya's EV manufacturers

Sun Run met with business and policy leaders to discuss legislation that would help increase e-bike supply. When Kiri EV began operations, it imported complete EV knock-down kits, which would be assembled and sold in the market. However, this business model proved uncompetitive as these knock-down kits were subject to a 25% excise duty tax while internal combustion engine (ICE) powered motorcycles were exempt.

Since there were no regulatory frameworks addressing alternative power sources, e-bikes did not qualify for excise duty exemptions that already applied to ICE bikes. This omission meant there was no standardized classification for electric motors, leaving companies like E-Safiri and Kiri struggling to register e-bikes and clear them through customs.

With support from P4G, Sun Run, alongside other startups and interested parties, presented a compelling case to legislators on how the existing government policies hindered the development of the e-bike industry. The Kenya Association of Manufacturers, a member of the Kenya Private Sector Alliance, also contributed by submitting a detailed policy paper on the matter. This collective effort ultimately resulted in the updated Tax Procedures (Unassembled Motorcycles) Regulations under which companies benefit from a 15% excise duty reduction when importing knock-down EV kits, with the new tax level set at 10%. The policy proved transformative, leading to substantial growth in the electric boda boda industry — now numbering more than 2,000 — as more affordable motorcycles became available in the market. Additionally, the 2023 Finance Act included an e-mobility tax exemption, creating greater opportunities for startups to import and sell e-bikes.

charging stations, and enabling the dual use of charging infrastructure for productive purposes like ice block makers for fishermen and cold storage.

While the venture remains small, it is working hard to deliver sustainable and affordable transportation solutions while fostering economic empowerment in rural communities. Sun Run currently supports 45 riders, with women making up half — with interest growing daily. Two of these women use Sun Run's EV and cold storage solutions to transport their vegetables to the marketplace more efficiently. This allows them to reduce their post-harvest loss, increasing profits to meet their families' financial needs.

As part of its continued work to expand its customer set, Sun Run has signed a memorandum of understanding with the Kiumba Beach Management Unit and the Awuoth Widows and Orphans Community Based Organization to offer EV and cold storage solutions to fish vendors, facilitating efficient transport and storage, and providing more opportunities for local women to be business owners.

Sun Run is also fostering community trust and confidence, by offering safety trainings and a dedicated roadside rescue service for female riders, which helps ensure the safety of its female customers and employees, while boosting their confidence on the road.

While consumer interest and clear solutions exist, bridging the funding gap will be critical for Sun Run as it approaches customers who tend to have limited financial resources and do not gravitate toward unfamiliar products and services. Early support and funding from P4G have been critical for Sun Run, helping the startup explore rural markets, rather than staying confined to urban centers like Nairobi. "P4G believed in us very early ... they saw the vision early on ... they saw what we needed to bring that market to us," Maara noted. With P4G funding, Sun Run hosted training workshops for women's groups, fishermen and vendors, helping build community trust and equip them with the skills to operate EVs and leverage energy solutions.

Additionally, due diligence assistance — an audit of financial records to examine and mitigate risk from a business decision — was instrumental, helping Sun Run prepare to engage with investors. At P4G's Colombia Summit in 2023, P4G introduced Sun Run to investors to pitch and develop its business proposition and to policymakers to advocate for policies impacting the EV startup ecosystem.

Through P4G's National Platform, Sun Run attended the Electric Mobility for Youth Employment Roundtable Discussion in Nairobi to discuss how green technology startups and e-mobility innovations can boost youth employment in the e-mobility sector and participated in national discussions about e-mobility policy. It continues to collaborate with the Kisumu County government to foster county-level awareness of e-mobility benefits, including discussions with the Homa Bay County Executive Committee Member for Trade, Tourism, Industry and Marketing.

Sun Run showcases how accelerating the EV transition will require tailored solutions that address unique needs across disparate yet intersecting demographics. It highlights how, with appropriate outreach and consumer engagement, marginalized communities can be included in the clean energy transition.



STARTUP VIGNETTE 4: FIKA MOBILITY - SCALING EV ADOPTION WITH A DECENTRALIZED APPROACH

- Innovation: Battery-as-a-Service solutions for urban electric two-wheelers.
- Enabling Environment Contribution:
 - Advocating for an inclusive e-mobility tariff, which led to favorable new tariffs in Kenya.
 - Advocating for uniform standards for charging equipment.
- Investment Raised: 348,590 euros (\$377,066).

Having been an entrepreneur for most of his life, Rishi Kohli, CEO and co-founder of Fika Mobility, has always believed collaboration is necessary to propel a business forward. Fika focuses on interoperable charging infrastructure by decentralizing charging for two- and three-wheel electric vehicles. Operating in peri-urban and rural areas on the outskirts of Nairobi. Fika's business model supports charging "anywhere," empowering the company to extend their services to the most remote locations.

Fika, a partner in the Charge Up! Partnership alongside ARC Ride, a leading Battery-as-a-Service infrastructure provider for electric two- and threewheelers, and the NGO Energy4Impact, was awarded \$295,041 in grant funding by P4G to establish a network of charging stations in Kenya with a flat battery swap fee for two- and three-wheel EVs.

While the initial ChargeUp! Partnership hit roadblocks scaling its solution. Fika was able to make progress in refining its own business model. Initially focused on the business-to-business market, Fika enabled delivery companies and fleet owners to operate their own swap stations. The company then expanded to offer proprietary swap stations tailored to e-motorcycle customers. The innovative Battery-as-a-Service model separates battery ownership from the vehicle, reducing upfront costs for consumers.

Within the business-to-consumer market, Fika offers e-motorbikes with chargers and battery rentals, enabling delivery businesses to create their own swap stations, and boda boda riders to charge at home or on the go. "Mom-and-pop style shops have Fika batteries there and they receive revenue shares from them," said Kohli. "A peri-urban shop where

boda boda riders congregate and they have a swap point there ... it is quicker for Fika to do it this way ... it allows them flexibility to move batteries around."

Fika also launched an all-female two-wheeler e-motorbike group in collaboration with Little Cab, a ride-hailing service and delivery platform, and Carrefour, the largest supermarket chain in Kenya, empowering more women to become entrepreneurial riders. This effort, along with sales of second-hand EVs to other startups like Sun Run, underscored Fika's role in building the ecosystem from the ground up.

Fika did incur setbacks that could not be resolved through collaboration. The Charge Up! Partnership aimed to develop a computer-based model to optimize the location of battery swap stations for electric vehicles. However, the initiative faced significant hurdles. A key challenge was obtaining the necessary operational data from private operators. Many operators were reluctant to share their commercial data, fearing that competitors might use the insights to gain an advantage without making similar investments in rider portfolios.

Efforts to anonymize the data did not resolve the issue, as commercial partners remained hesitant to release critical information, and complications arose around platform hosting and monetization. These market dynamics and operational challenges ultimately hampered the partnership's ability to achieve its goals, highlighting the complexities of operationalizing such initiatives in competitive environments.

However, decentralizing charging infrastructure in rural and peri-urban areas is critical to accelerating EV adoption in Kenya. By extending reliable and affordable battery swap stations within and beyond urban centers, more communities can access the benefits of e-mobility. This approach addresses key barriers such as range anxiety and charging accessibility while fostering economic opportunities in underserved areas.

Furthermore, decentralized infrastructure empowers rural and peri-urban residents to embrace sustainable transport solutions, driving broader adoption and positioning Kenya as a leader in Africa's transition to electric mobility.

M-KOPA advocates for charging infrastructure to power e-mobility growth

With support from the P4G National Platform, Fika facilitated joint reports that informed government policy, supporting regulatory efforts to encourage EV use. The comprehensive plan to advance e-mobility in Kenya addresses policy, fiscal and infrastructure barriers to EV charging infrastructure. The report demonstrates the business case for:

- Implementing tax and import duty
 waivers for EVs and related equipment
 to make electric mobility more financially
 accessible. Such incentives are crucial
 for reducing the cost barriers associated
 with EV adoption.
- Establishing uniform standards for charging equipment and ensuring compatibility across different service providers to facilitate seamless user experience and interoperability within the EV ecosystem.

During subsequent NP workshops, Fika engaged policymakers, including the Ministry of Transport and National Treasury, to drive e-mobility adoption. Fika also advocated for an inclusive e-mobility tariff, alongside M-KOPA, the NP and other e-mobility startups. Fika's efforts aimed to expand e-mobility, reduce air pollution and deliver long-term health benefits for residents in the peri-urban and rural areas on the outskirts of Nairobi.

SCALING THE SOLUTIONS – TOOLS FOR ACCELERATING THE TRANSITION TO ELECTRIC MOBILITY

P4G's approach is premised on the idea that by enabling and documenting the market testing of the earliest movers in the EV sector, we can enable pathways for future startups to follow. These startup vignettes document and illuminate the various pathways explored by private sector pioneers in Kenya and the key challenges they were able to overcome. Addressing critical barriers — such as excise tax duties, electricity pricing, policy frameworks and operations and maintenance infrastructure — demand ongoing investment, policy support and stakeholder collaboration. The journeys of these four startups serve as blueprints for policymakers and entrepreneurs interested in engaging in and scaling EV adoption.

Across these startups, influencing policy and regulatory interventions required the following:

Data-led market interventions

One of the greatest challenges in pioneering new technology in a nascent marketplace is that the pathways are neither well defined nor well known. For decades, businesses have grappled with the known knowns, the known unknowns and the unknown unknowns, and these startups face all three. Having a knowledge base on what is required to enact marketplace change is crucial for informed decision-making. However, that knowledge base is absent when a marketplace, service or product is new.

By helping startups collect and analyze data, including regulatory and policy barriers, P4G has empowered these startups to have an effective dialogue with policymakers. This has led to more productive and targeted interventions tailored to Kenya's unique transportation needs. This includes identifying gaps in charging infrastructure, supply chains and financing models that are necessary to support EV uptake in both urban and rural contexts.

P4G's Kenya National Platform, co-chaired by Kenya's National Treasury and the Kenya Private Sector Alliance, has played a pivotal role in sharing guidance, insights and data to provide a holistic view of the progress and gaps. The NP leveraged real world insights and data from the startup partnerships to draft and submit country-specific reports and recommendations, such as the Charge Up! Kenya Charging Forward Policy Assessment, whose recommendations contributed to the preferential e-mobility tariff by Kenya Power with up to 22% in cost savings as outlined in the Kenya E-Mobility Tariff Review.

Data-informed interventions are key to accelerating Kenya's strategic goals for EV adoption. As the market grows, knowledge sharing is instrumental as it provides clarity to policymakers and investors about the industry's priorities, paving the way for coordinated action.

The National Platform is catalytic in nature. P4G seeks to make strategic interventions at critical moments, organizing key stakeholders to discuss current industry challenges and inspire systemic changes that would propel the sector forward.

-Augustine Kenduiwo, deputy director of the Climate Change Directorate for Kenya's Ministry of Environment, Climate Change, and Forestry.

Convening stakeholders and fostering buy-in for stronger e-mobility policies

The buy-in of key public and private stakeholders is another indispensable component of a successful climate startup. Policy and regulatory frameworks heavily influence the pace of e-mobility market growth. Securing support from policymakers ensures that critical incentives — such as tax regulations and operations and maintenance infrastructure development — are implemented effectively.

To ensure that policy is responsive to current market challenges, it is essential to bring together stakeholders from the public sector, including regulatory, bureaucratic and institutional bodies, as well as the leading private sector stakeholders within that sector. P4G has worked as a convener to foster meaningful dialogue and collaboration among these groups. In February 2023, the National Platform hosted a series of e-mobility roundtables, held by the Danish Embassy in Kenya, a P4G funder. During these events, P4G's partnerships showcased innovations and facilitated discussions on the sector's progress.

M-KOPA presented a policy analysis highlighting e-mobility regulations and practices from other countries and introduced its gender inclusivity paper. Representatives from the African Guarantee Fund and the Ministry of Transport alongside other stakeholders fostered a rich exchange of ideas and perspectives, discussing significant market barriers and emphasizing the need for reforms to accelerate innovation and adoption. Following these discussions, Kenya established its National Task Force on E-Mobility, marking a major step forward. P4G contributed to its formation and is represented through the Ministry of Environment, Climate Change and Forestry and the National Treasury and Planning.

Additionally, WRI, which hosts P4G, convened a group of experts including the Kenyan government and other stakeholders to design, write and submit a mitigation action facility (MAF) proposal. The MAF committed 25 million euros (\$27 million) to accelerate the market development of e-mobility in Kenya. The proposal included the real-world experiences and recommendations of P4G's startups to illustrate the vital technical support, policy interventions and financing required for climate change mitigation projects.

These sector roundtables were invaluable for fostering collaboration and showcasing real-life cases, demonstrating the potential impact of EVs in different contexts. Advancing this approach will help build momentum and confidence in the transition to EVs, while also identifying areas for further innovation and investment.

Coalition Building

Identifying and enabling champions is a proven strategy for driving systemic change. Champions — whether they are government officials, business leaders or community members — can act as advocates for and drivers of EV adoption, demonstrating its feasibility and benefits. These individuals and organizations can provide tangible proof points that inspire others to join the e-mobility transition. They can also serve as catalysts for other startups entering the market.

For example, Sun Run leveraged word-of-mouth marketing, hired female agents for awareness campaigns and showcased its products at local trade shows, such as the Lake Region Motor Show Kisumu, to increase interest. This, coupled with the increase in national media and marketing coverage of EVs, led to awareness and interest growing significantly, with public engagement. As a result, Sun Run products increased from 18% to 39% between 2022 and 2024 in the local areas Sun Run services. Moreover, Fika sold second-hand EVs to other startups like Sun Run, building the ecosystem from the ground up and allowing other businesses to jumpstart their own journey into the clean energy transition.

Finally, the National Platform served as a reputable champion in mobilizing government stakeholders and associations because it had direct access to real-world insights from P4G's e-mobility startups, enabling it to advocate for policies and partnerships grounded in practical, on-the-ground experiences. Fostering an environment for trusted individuals and institutions to act as EV champions is a strategic avenue that can enable localized solutions that resonate with communities.

Financing

Developing innovative financing models, such as leasing arrangements, Pay-as-you-Drive, Pay-as-you-Go, Battery-as-a-Service, solar charging and cold storage as a service, can alleviate financial burdens and make EVs more accessible. All of P4G's e-mobility startup partnerships have implemented some version of these leasing programs, and they have found success in reducing the financial barrier to entry.

In 2023, Roam, a Swedish EV and solar energy company, selected M-KOPA to be one of its major financing partners for customers who wish to buy e-motorbikes, highlighting not only the model's effectiveness but also the growing interest of foreign investors to engage in this nascent market.

By leveraging these tools effectively, Kenya can create a robust ecosystem that accelerates EV adoption and supports its broader goals of sustainable development and climate resilience.

CONCLUSION: DRIVING THE EV TRANSITION IN KENYA

The growing adoption of EVs in Kenya demonstrates the potential of sustainable transportation to address pressing environmental, economic and social challenges. The transition is both a challenge and an opportunity. Efforts to raise consumer awareness, implement supportive policies and develop infrastructure are already bearing fruit. However, sustained progress requires concerted action. Each effort must seamlessly integrate into Kenya's existing EV ecosystem, enhancing collaboration and creating synergies that allow for scalable solutions and an enabling environment to rapidly accelerate the adoption and growth of electric vehicles across the country.

Strong government policies, such as tax incentives and supportive legislation; innovative platforms and financing mechanisms like P4G, MAF and others that provide grants and technical assistance; and public-private partnerships are paving the way for an equitable and inclusive EV transition.

Kenya's experience serves as a model for other emerging economies looking to adopt clean transportation solutions while fostering sustainable development. By staying committed to innovation and inclusivity, Kenya can solidify its position as a leader in Africa's green mobility revolution.





P4G helps early-stage climate startups in emerging markets and developing economies become investment ready. We provide startups with grants and technical assistance, and partner them with national level public-private platforms to help navigate the marketplace. Through this approach, P4G strengthens market systems for climate entrepreneurs and accelerates just and resilient country economic transitions. Hosted by World Resources Institute and funded by Denmark, the Netherlands and the Republic of Korea, P4G accelerates food, water and energy partnerships in Colombia, Ethiopia, Indonesia, Kenya, South Africa and Vietnam.

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