Foreword

I'm delighted to share P4G's inaugural startup portfolio. What you have before you is a pipeline of investable climate businesses rooted in community and designed for growth.

By 2035, developing countries will need $1.3 trillion in finance annually to build resilience and shift toward net-zero economies. Climate startups are an underutilized opportunity that can bring in climate finance and power economic progress.

Since our launch in 2018, we have invested over $42 million in 119 climate startups that have subsequently mobilized more than $526 million in investment and created more than 14,000 jobs. Critical to this success is the network of support created by our nine member country National Platforms.

All around us climate startups are implementing breakthrough technologies, shaping our future, and the future of the communities they serve. This portfolio takes you into the business models, achievements and impact projections of P4G-supported startups advancing the transformation of our food, land and energy systems.

In the next two years, these featured startups plan to raise $181 million in capital, create more than 9,700 local jobs, and reduce or avoid more than 1.5 million metric tons in carbon emissions. They will have increased incomes, improved water resilience, and contributed to cleaner air in their communities and cities. Many of them will have expanded to different countries and regions and diversified their product portfolios.

These locally-led climate startups from Africa, Asia and Latin America have grown from a spark of an idea into replicable and scalable businesses.

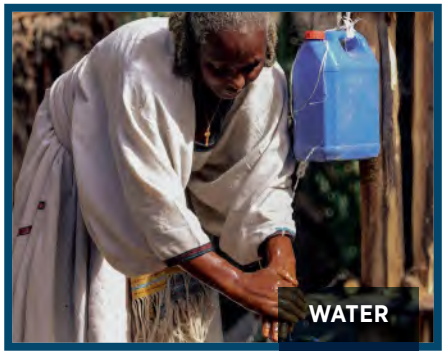
The journey to investment readiness is not a smooth one. It's filled with twists and turns as evidenced by the case study of African Bamboo, a deep tech Ethiopian-Dutch startup pioneering fiber-based construction materials. Also included here, a look at how P4G's electric-mobility startups collaborated with our National Platform in Kenya to influence policy and accelerate the electric vehicle revolution in the country.

You'll find their stories and more here.

I encourage you to be inspired by them, collaborate with them and grow them.

Robyn McGuckin
Executive Director, P4G

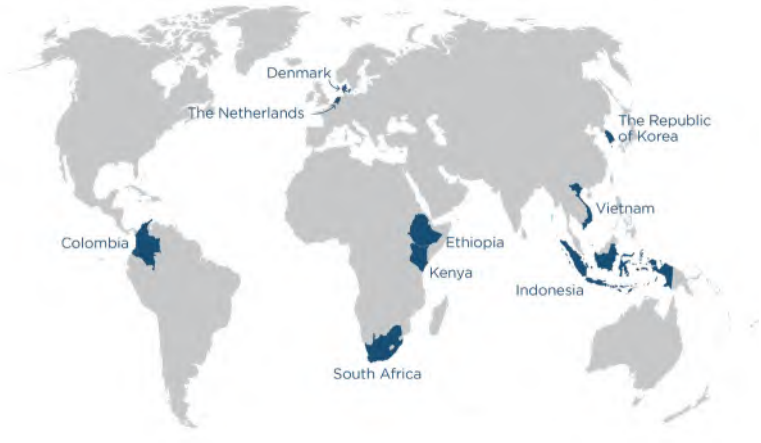
P4G: A Platform Strengthening Climate Entrepreneurship and Accelerating Country Climate Transitions



About P4G

P4G helps early-stage climate startups in emerging markets and developing economies (EMDEs) become investment ready and partners 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.

P4G's members are committed to advancing breakthrough solutions to achieve the Sustainable Development Goals and Paris Agreement commitments and are focused on poverty reduction and gender equity goals in climate-smart agriculture, clean energy and water resilience sectors.



Hosted by World Resources Institute and funded by Denmark, the Netherlands and the Republic of Korea, P4G accelerates partnerships in Colombia, Ethiopia, Indonesia, Kenya, South Africa and Vietnam.

P4G Impact

OVER $42 MILLION
directly mobilized to **119 climate startup partnerships**

MORE THAN $526 MILLION
in total sectoral investments **realized by P4G startups**

11.6 MILLION METRIC TONS
CO_2e emissions **avoided or mitigated**

OVER 3 MILLION
individuals positively affected and **over 14,000 jobs created** across member countries

87% OF PARTNERSHIPS
complying with **Gender 2X** criteria

The P4G Approach

Partnering to enable investment readiness: P4G's climate startups are EMDE-domiciled micro-small-medium enterprises (MSMEs) who are nearing commercial readiness and conducting their market proofs. They must be partnered with at least one nonprofit and can include additional technical specialists to help with Environmental-Social-Governance proofs, customer understanding and outreach, and analyzing legal and regulatory challenges or other barriers. Together, they apply for P4G grant funding, technical assistance and network support to help the business become investment ready. The P4G team provides technical assistance that includes due diligence and gap analysis of the business model, stakeholder events, business matchmaking sessions and communications.

Enabling market systems through country led improvements: P4G's multistakeholder National Platforms work alongside our startup partnerships to better understand the marketplace based on real-world insights, and provide connections with relevant authorities who can support the enabling policy or regulatory improvement. Established in all P4G country partners, National Platforms comprise public sector leaders and the leading trade and industrial associations.

Mobilizing knowledge to accelerate just transitions: Analysis and insights into our climate startup market proofs provide essential learnings to inform both domestic and global public policy makers who are seeking to incentivize investment in that sector across their economy. Through communications, knowledge products, publications, in-country events and biennial P4G Summits, we reach key stakeholders in the public and private sector who can help accelerate our partnerships. We share our learning so others can replicate the success of our early-stage businesses.

The P4G Summit

The P4G Summit is a global moment to showcase P4G startup partnerships and National Platforms, facilitate a learning exchange on solutions for in-country transitions, and engage high-level stakeholders who can use P4G's approach to enable green growth. The 2018 Copenhagen Summit and 2021 Seoul Summit united world leaders and heads of international organizations to progress bold climate action to meet global commitments. The 2023 P4G Bogota Summit accelerated the deployment of climate finance in EMDE countries to advance a just transition to a net zero future. The 2025 Vietnam Summit shared insights and advanced strategies to support climate entrepreneurship.

Contact us

P4Gpartnerships.org

@P4Gpartnerships

Examples of P4G Partnerships

African Bamboo

A deep tech Ethiopian-Dutch startup pioneering fiber-based construction materials.

WasteX

A climate-tech startup offering an end-to-end integrated biochar solution to agricultural producers and farms in Indonesia and other Asian countries.

Residua Biocircular

A Colombian startup using Black Soldier Fly Larvae to convert organic waste into high-protein animal feed and biofertilizer.

Alternō

A Vietnamese startup using sand-based thermal battery technology to store thermal energy at 300–600°C for agricultural and industrial applications.

BasiGo

An e-mobility startup focused on transforming Kenya's public transport system through increased e-bus use and production.

P4G National Platforms: Strengthening the Marketplace for Climate Innovation and Entrepreneurship

National Platforms (NPs) are a distinguishing factor of P4G. They help climate startups navigate marketplace barriers that constrain their investment readiness and strengthen the enabling environment to make it more conducive for climate entrepreneurs. NPs work with climate startup partnerships across a full range of issues such as policy, regulatory, trade, permitting, planning, incentives, carbon credits and value chains.

NPs, established in each P4G member country, comprise a core government ministry and the leading national industry association.Key functions include:

- **Identifying and Supporting Partnerships:** NPs help identify high-impact partnerships that align with national development and climate goals and P4G's priority areas – climate smart agriculture, food loss and waste, water resilience, zero emissions mobility and renewable energy.
- **Improving the Enabling Policy and Regulatory Framework:** NPs receive real-world insights from P4G startups, which helps them facilitate informed policies, incentives and regulatory interventions to improve the overall enabling market environment in those priority sectors for economic growth.
- **Building Capacity and Sharing Knowledge:** NPs provide technical support, convene relevant stakeholders and share best practices through their vast networks to strengthen the climate entrepreneur ecosystem in their countries.

Country	National Platform Members			
Denmark	Ministry of Foreign Affairs	State of Green		
Netherlands	Ministry of Foreign Affairs	Netherlands Enterprise Agency (RVO)		
Republic of Korea	Ministry of Foreign Affairs	Korea Chamber of Commerce & Industry		
Colombia	National Planning Department	National Business Association (ANDI)	iNNpulsa	
Ethiopia	Ministry of Planning and Development	Chamber of Commerce and Sectoral Associations		
Indonesia	Ministry of National Development Planning	The Indonesia Business Council for Sustainable Development	IBEKA	
Kenya	National Treasury and Planning	Ministry of Environment, Climate Change and Forestry	Kenya Private Sector Alliance	
South Africa	Presidential Climate Commission	Department of Environment, Forestry and Fisheries	National Business Initiative	Just Energy Transition Project Management Unit
Vietnam	Ministry of Finance	Vietnam Chamber of Commerce and Industry		

Sub-Sector Focus

Climate Smart Agriculture

KardiaNuts

Established
2018

Location
Colombia

Sector
Climate smart agriculture

Employees
40

Capital Raised
US $4.2 million

Leadership Team
Juan Pablo Muriel: CEO & Founder
International experience as a business consultant in Hong Kong and Berlin. He has been working in the agroindustry since 2011.

Diego Solano: Agricultural Director
19+ years of experience in agroforestry management, in which he has produced over 25 million trees and planted 5 million.

Website
www.kardianuts.com

kardianuts

Contact
Juan Pablo Muriel: CEO and Founder
jpmuriel@kardianuts.com

About
KardiaNuts is pioneering a sustainable cashew value chain using regenerative practices in a region of Colombia once considered barren.

The Challenge
Agricultural value chains are the first step for socioeconomic development. Without them, there is no income generation, food security, nutrition or economic growth. Small farmers and large corporations in the Vichada region of Colombia have struggled to grow and access markets competitively. KardiaNuts is driving social, environmental and economic prosperity by establishing a value chain in an area traditionally believed to be barren.

The Solution
KardiaNuts is implementing a solution that involves the production and processing of cashews in Puerto Carreño, Vichada using agroforestry solutions that improves soil health and farmer incomes. The startup supports local farmers by providing them with access to processing facilities, technical assistance, financing and fair market opportunities.

Traction
Market size: The South American cashew nut industry, led by Brazil, is steadily growing, with the market projected to reach approximately US $750 million by 2029 due to rising global demand for healthy, organic and sustainable products. Colombia is emerging as a niche competitor by emphasizing organic and sustainable practices. KardiaNuts serviceable obtainable market amounts to about US $12 million by 2030.

Revenue: Since its inception, the company has generated approximately US $750,000 in revenue to date. However, due to the nature of the business—focused on late-yielding crops—revenues in the initial years are typically lower, while capital requirements remain high.

Milestones: KardiaNuts has achieved the following milestones:

- KardiaNuts is the first facility in the region with national food safety and organic certifications for the EU, USA and Switzerland.
- The startup has planted 1,200 hectares of cashew and constructed a 450 ton processing facility in Vichada.

Investment Opportunity
KardiaNuts is seeking US $1 million in equity to cover operational expenses related to its expansion projects in Vichada, as well to implement Measurement, Reporting and Verification processes and carbon certifications. It will also use to the investment to maintain its competitive advantage, innovative product offerings and optimize its pricing strategy.

Ancestral Organics

Established
2020

Location
Colombia

Sector
Climate smart agriculture

Employees
4 full time
4 part time

Capital Raised
US $375,000 in grant funding

Leadership Team
Mateo Ospina: CEO & Co-founder
13+ years of experience in international market development, inclusive business model construction, and commercial and marketing roles in the CPG (Consumer Packaged Goods) industry. He holds a bachelor's degree in business administration.

Manuela Jaramillo: COO & Co-founder
14+ years of experience in project formulation across various national government entities and private companies. Professional in government and international relations with a Master's degree in entrepreneurship and innovation.

Website
www.ancestralfoods.co

Ancestral Organics

Contact
Mateo Ospina: CEO
mateo@ancestralfoods.co

About
Ancestral Organics is a Colombian startup dedicated to the development of organic and healthy superfoods produced through regenerative agriculture in Quindío, and other departments of Colombia.

The Challenge
Agriculture is responsible for approximately 30% of global greenhouse gas emissions. The sector also contributes to soil degradation that reduces productivity and biodiversity. The limited adoption of regenerative practices and lack of farmer knowledge further exacerbate these issues in Colombia. Existing market solutions often fail to provide comprehensive approaches that integrate sustainable farming, address food loss and empower farmers. Additionally, these solutions come with high costs hindering adoption among small-scale farmers.

The Solution
Ancestral Organics offers high-nutrition plant-based foods in Colombia through local markets, supermarkets and online platforms. In the U.S., U.K. and Aruba, distribution is via wholesalers and online channels like Amazon and Faire. The startup's holistic approach integrates regenerative practices, direct market access, farmer empowerment and sustainability to drive economic and social impact.

Traction
Market size: The total addressable market for organic, high-nutritional products is estimated at US $150 billion, with a serviceable available market of US $500 million and a serviceable obtainable market of US $20 million.

Revenue: The company has successfully become operational in the U.S. Since its foundation, it has generated US $430,500 in revenues (2021: $18K, 2022: $86.5K, 2023: $120K, 2024: $206K).

Milestones: Ancestral Organics has achieved the following milestones:
- Obtained organic certifications and is currently implementing monitoring, reporting and verification processes to measure its climate and social impact.
- Establishing operations in the U.S. enhancing control, profitability and cash flow management, providing stability and a clear growth path.
- Begun operations in the UK, and meets the legal certification requirements for Europe, Dubai and Mexico.

Investment Opportunity
Ancestral Organics is seeking US $500,000 to scale operations in the U.S., Colombia and new markets. The funds will be used to expand stock capacity, optimize cash flow, cover entry costs for major retailers, and support working capital for its sales force. The preferred financing vehicle is revenue-based financing.

SaBio

Established
2021

Location
Colombia

Sector
Climate smart agriculture

Employees
5

Capital Raised
US $68,000

Leadership Team
Nicolas Montoya: Co-Founder & CEO
Biologist with 8+ years of experience in soil health and innovation

Andre Echavarria: Co-Founder & CCO
Commercial leader with 7+ years of experience in startups and multinational companies

Daniel Moreno: Co-Founder & COO
Mechanical engineer with experience in mechatronics and robotics design, now applying his expertise to agriculture by integrating microbiology and advanced technology

Website
www.sabio.com.co

Sabio

Contact
Nicolas Montoya Rojas
nicolas.montoya@sabio.com.co

About
SaBio is a Colombian biotech platform transforming agriculture by integrating biotechnology and data-driven solutions to restore soil health and strengthen agroecosystem resilience. The startup empowers farmers to increase productivity, reduce costs and agrochemical use, and make smarter decisions. The goal is to drive innovation toward a more efficient, profitable and regenerative agricultural sector.

The Challenge
Soil degradation and agrochemical overuse threaten the future of farming. In Colombia, 58% of soils are unsuitable due to erosion, desertification, and compaction—mirroring a global crisis affecting over 40% of soils worldwide. Poor soil health leads to biodiversity loss, greenhouse gas emissions, water contamination, and declining productivity, directly impacting food security, human health and agribusiness profitability.

The Solution
SaBio uses microbiome science, customized bio inputs, and AI-powered analytics to improve soil health and crop yields. The startup works directly with producers and partners with corporate buyers to support the transition to regenerative supply chains. SaBio's model includes a one-time soil diagnostic with tailored recommendations, followed by a subscription service offering training, field support and actionable insights. This empowers farmers to boost yields, cut input costs and restore soil biology, while helping companies build traceable, climate-resilient sourcing systems.

Traction
Market size: SaBio operates in the US $271 billion global agrochemical market, offering a scalable, sustainable alternative as demand for nature-based solutions rises. The agrochemical market in Latin America is valued at US $12 billion, and in Colombia it exceeds $ US 1.3 million. SaBio targets US $2 million in short-term revenue, US $13 million in the mid-term, with a clear roadmap to reach US $130 million across the region.

Revenue: Since launch, SaBio has generated US $237,000 in revenue with 130%–270% year-on-year growth and positive EBITDA. Clients have cut agrochemical use by 50–70% and increased yields by up to 27%. In 2025, it aims to build two centralized bio-factories, secure national certifications, and reach US $287,000 in revenue.

Investment Opportunity
SaBio is raising a US $2 million round at a $12 million post-money valuation to scale from 2X to 3X annual growth. This capital will fund high-impact projects with large producers, expand into new bioregions, and tie revenue to measurable outcomes. SaBio will strengthen its commercial, tech, and admin teams, and fast-track proprietary tech development—especially AI- and IoT-powered microbial monitoring. These advancements will accelerate market entry and unlock growth across Latin America and beyond. Sabio is seeking mission-aligned investors who bring capital, global reach and deep expertise.

Urban Farmers Pro

Established
2021

Location
Colombia

Sector
Climate smart agriculture

Employees
7

Capital Raised
US $440,000

Leadership Team
Klaus Hergett: Co-founder and CEO
20 years of experience in design, product development, manufacturing, and training, specializing in low-cost water and agricultural technologies

Daniel Ramirez: Co-founder and COO
10+ years of experience in communications and business negotiations, driving strategic growth and partnerships

Jorge Camacho: Managing Partner
8+ years of experience in sales, marketing, and business development in insurance, agriculture, and Software-as-a-Service

Website
www.urbanfarmerspro.com

Urban-farmers-pro

Contact
Daniel Ramirez
daniel@urbanfarmerspro.com

About
Urban Farmers Pro is revolutionizing urban agriculture in with smart, sustainable solutions. By integrating technology and eco-friendly practices, it empowers communities to grow fresh, nutritious food efficiently in urban spaces, reducing dependency on traditional supply chains.

The Challenge
Urban areas face limited space, resource inefficiency and food insecurity. Conventional farming struggles to meet growing urban demand, while environmental challenges like water scarcity and soil degradation threaten sustainability.

The Solution
Urban Farmers Pro addresses limited arable land and food security with fully automated vertical farms in repurposed shipping containers. Using proprietary algorithms and nutrient formulas, it ensures high-efficiency, pesticide-free production. The startup has consistently improved its technology, launching VIOS ONE with automated climate control in 2022, followed by a 45% more efficient VIOS FARM in 2023. In 2024, Urban Farmers Pro introduced Latin America's first large-scale modular vertical farm, yielding over 10 tons of produce annually in just 12 square meters. The business model includes direct B2B sales and an operational leasing model.

Traction
Market size: The global fresh vegetables market is valued at US $650 billion, with expected growth to US $895 billion by 2032. Urban Farmers Pro targets a US $160 billion market across key regions, with an initial focus on Colombia's US $7 billion market. By Year 5, it aims to capture US $750 million, aligning with a projected revenue of US $6.3 million through production expansion and strategic partnerships.

Revenue: Urban Farmers Pro has gained strong traction in the B2B sector, supplying top-tier restaurants, hotels, and supermarkets like Colsubsidio and Jumbo Cencosud. Since launching VIOS FARM in February 2023, it has achieved a 40.38% compound monthly growth rate, reaching full product sellout by November 2024. The startup's annual recurring revenue now stands at US $25,000, with year-to-date revenue of US $35,658. As pioneers in Latin America's indoor farming sector, Urban Farmers Pro combines production and sales of leafy greens with an innovative "agriculture as a service" model, offering on-site vertical farms with full operational management.

Investment Opportunity
Urban Farmers Pro is launching a US $1.5 million seed round through a SAFE, offering 10% equity. This investment will support scaling production capacity, enhancing proprietary technology, and driving nationwide expansion across Colombia. With strong market traction and a unique agriculture-as-a-service model, the company is positioned for rapid growth in the sustainable food sector.

African Bamboo

Established
2012

Location
Ethiopia
The Netherlands

Sector
Sustainable construction

Employees
219

Capital Raised
US $20 million committed in cash and assets from DFCD and KFW plus a founder investment of $14m in cash and assets.

Leadership Team
Khalid Duri: Founder and CEO
20+ years of experience intimber, fintech and IT industries inEurope, North America and Africa

Rania Duri: Founder and COO
20+ years of experience instrategic development, human andasset management, and financial monitoring and planning

Sam Rosmarin: Chief Investment & Corporate Development Officer
15+ years of experience inbusiness and investment strategy,public policy, and greenfieldprojects in Ethiopia and the UnitedStates

Website
www.african-bamboo.com

African-Bamboo

Contact
Sam Rosmarin
Samuel.Rosmarin@African-Bamboo.com

About
A deep tech Ethiopian-Dutch startup pioneering fiber based construction materials

The Challenge
The buildings and construction sector contributes to 37% of global emissions. Traditional materials like concrete and steel are a major source of carbon emissions. Wood in construction also contributes to an increase in emissions.

The Solution
African Bamboo's core business is its technology services to others in the building industry. The startup's revenue and growth will come from multiple business lines:

- Licensing the technology to other companies to develop their own bamboo-based product lines
- Scaling the production and sale of the bamboo materials through its factory in Ethiopia
- Generating revenue through the sale of VCUs from AB's Verra-listed ARR project in Ethiopia

African Bamboo's solution is rooted into community-led forestry operations. The startup provides technical and business training to smallholder farmers in Ethiopia across the bamboo value chain. This allows farmers to increase their incomes while implementing sustainable forestry practices to restore degraded land. AB plans to expand forestry and manufacturing operations across multiple African countries.

Traction
Market size: The expected market growth for bamboo is projected at 4.5% until 2030. The African continent houses more than 12.3% of global bamboo resources. Ethiopia alone is home to almost 70% of bamboo resources in Africa and could generate up to $5 billion in annual revenue.

Revenue: In 2024, African Bamboo's revenues are $1.6 million, and the company expects a 300% growth in annual revenue to $8.1 Million by 2026.

Milestones: African Bamboo has achieved the following milestones:

- Owns the patents to its processes and has a model that is fit to scale across sub-Saharan Africa.
- Refined its product to meet international FSC and Verra standards and has built a Verra-listed carbon offset product.
- Secured a five-year guaranteed offtake agreement worth $94 million from SECA, a leading wood industry company.

Investment Opportunity
African Bamboo is seeking US $2 million in equity to close its US $22 million fundraising round. The funds will be used to scale its factory in Ethiopia to fulfill the US $94 million signed offtake agreement. The investment will cultivate up to 20,000 ha of bamboo in natural forests and smallholder farms.

Solar Village

Established
2019

Location
Ethiopia

Sector
Climate smart agriculture

Employees
12 full-time
40 part-time

Capital Raised
US $85,000

Leadership Team
Mr Lebeza Alemu: Founder and Managing director. Has 40+ years of experience in finance. An international Finance & Audit Professional, with a BA in Accounting.

Tiglu Tesfaye: Head of Agriculture and Irrigation Department
15+ years of experience in agriculture value chains, both in private and civil society. Has an MSc in horticulture.

Melaku Tesema: Head of Irrigation Department
8+ years of experience as an irrigation engineer in the design and installation of solar-based irrigation systems and drip and sprinkler irrigation. MSc. in hydraulic engineering.

Website
www.solarvillageethiopia.com

solar-village-ethiopia

Contact
Tiglu Tesfaye: Head of Agriculture and Irrigation Department
tigletesf@gmail.com

About
Solar Village Ethiopia is a solar equipment importer, distributer and extension service provider company. The startup supplies smallholder farmers with affordable and reliable solar-powered water pumps to improve their climate resilience.

The Challenge
Despite its potential to enhance smallholder farmers' resilience to climate change and strengthen food systems, Ethiopia has not experienced an uptake in the adoption of climate smart agriculture practices and technologies. The key reasons for the low adoption rate are financial and technical barriers such as high upfront costs, lack of credit facilities and limited availability of products customized for local land or weather conditions.

The Solution
Solar Village serves smallholder farmers by delivering reliable solar-powered water pump technology, vermicompost and organic seedlings for improved climate-smart and nutrition-sensitive agriculture practices.

Traction
Market size: The serviceable available market for solar powered pumps and agritech products including seedlings and vermicompost in Ethiopia is around US $156 million and Solar Village's serviceable obtainable market is US $46.5 million.

Revenue: Solar Village's revenue has grown from US $179,700 in 2021 to US $523,150 in 2024. The company projects an average growth rate of 25% per year for the next 5 years.

Milestones: Solar Village has reached and supported 5,000 small holder farmers to date.

Investment Opportunity
Solar Village Ethiopia is seeking US $1 million in investment for:
- Importing and distributing solar powered water pumps with accessories
- Providing capacity building trainings for aftersales service experts and beneficiaries
- Supplying improved agricultural inputs
- Creating market linkages and ensuring quality production

Estifanos, Betelhem and Friends Partnership

Established
2022

Location
Ethiopia

Sector
Water resilience

Employees
10 full-time
40 part-time

Capital Raised
US $13,000

Leadership Team

Estifanos Zeleke: Co-founder and CEO

Responsible for the overall management of Estifanos Betelhem and Friends. Has a B.S. in civil engineering and certificate in electromechanical engineering.

Betelhem Gedu: Co-founder and Deputy Manager

Responsible forthe company's data management and providing both technical and administrative support to thecompany's manager , ensuring efficient operations and effective decision-making. Holds a BSc in architecture and urban planning.

Website
www.ethioplasticrecycle.com

Contact
Estifanos Zeleke
estifanoszelleke@gmail.com

About

Estifanos, Betelhem and Friends Partnership specializes in transforming plastic waste into high-quality recycled materials, promoting a circular economy and reducing environmental pollution. By collecting, processing and repurposing plastic into products that support water retention and irrigation, the company promotes water resilience while supporting local communities through job creation and waste reduction initiatives.

The Challenge

Plastic waste pollution continues to grow, with limited recycling infrastructure and inefficient waste management systems exacerbating the problem. Large amounts of plastic end up in landfills and the environment, contributing to environmental degradation. There is an urgent need for scalable recycling solutions to reduce waste, conserve resources and promote a circular economy.

The Solution

The startup collaborates with local businesses and municipalities to manage the efficient collection of plastic waste. It uses advanced recycling technologies to convert waste into recycled plastic products, including geomembranes and polyethylene tubes. Geomembranes serve as impermeable liners for landfills, reservoirs and wastewater treatment, preventing water leakage and supporting irrigation. Polyethylene tubes aid in tree seedling growth, supporting afforestation efforts, though their non-biodegradable nature requires proper recycling. The startup sells these products to agricultural investors, smallholder farmers and forest seedling producers.

Traction

Market Size: The serviceable addressable market, calculated with a focus on Bahir Dar City Administration and four provinces, is US $3 million for geomembrane and US $2 million for biodegradable seedling bags. The company is targeting a 30% share of this market equivalent to US $1.5 million as its serviceable obtainable market.

Revenue: Since 2023, the company has collected and recycled up to 370 tons of plastic, realizing revenues of US $44,400. The startup projects revenues of US $807,668 in 2025, their first year of full commercial operation, with a 15% year-on–year average growth to reach US $1,449,682 in revenues by 2029 and cumulative revenues of $5.6million.

Milestones: The company produced 30 tons of recycled products in its first year and expanded its operations to produce 90 tons of recycled products in 2023. The startup has reached a production capacity of 250 tons of geomembranes and four tons of polyethylene tubes per year.

Investment Opportunity

Within the next 24 months, the Estifanos, Betelhem and Friends Partnership plans to scale up its operations, targeting an annual collection of 800 tons of waste and converting 667 tons into geomembranes and 78 tons into seedling bags. This will require up to US $60,000 in equity and debt for machinery and equipment as well as production and skills development.

agriBORA

Established
2019

Location
Kenya

Sector
Climate Smart Agriculture

Employees
28

Capital Raised
US $3.1 million

Leadership Team

Kizito Odhiambo: Founder & CEO
11+ years of experience in the agriculture sector as a two-time founder. His extensive background in fundraising, business development, and investor relations has driven agriBORA's growth, securing over US $1.6 million in grants and equity funding. His background is in Electrical Engineering and Information Technology

Nicolas Caspari: CTO
9+ years of experience in software development and environmental geography

Gladys Agumba: Finance Manager
A CPA with 11+ years of experience working as a finance controller with finance and administration background.

Website
www.agribora.com

agribora

Contact
Kizito Odhiambo
kizito.odhiambo@agribora.com

About
agriBORA empowers African smallholder farmers with climate-smart solutions and increased access to essential agricultural resources and financial services. Through a network of agriHUBs, it provides farmers with climate-resilient seeds, bio-fertilizers, and sustainable advisory services. The agriHUBS function as reliable one-stop marketplaces that connect farmers with quality inputs and fair market access.

The Challenge
Over 70% of smallholder farmers in Kenya face challenges selling produce at fair prices due to seasonal supply fluctuations, limited market access and fragmented trading networks. Poor storage practices lead to up to 40% in post-harvest losses. This exacerbates the cycle of climate vulnerability, economic instability and resource-driven conflicts.

The Solution
agriBORA is piloting a Warehouse Receipt System (WRS), to scale and integrate into agriHUBs. The WRS will provide secure storage and help farmers retain crop value, allowing them to access favorable market prices, strengthen income stability and reduce post-harvest losses. The WRS will be complemented by agriHUBs, which serve as micro-warehouses for aggregation as well as providing last-mile access to quality inputs such as drought-resistant seeds, organic fertilizers and mechanization services.

Traction
Market size: agriBORA sees high growth potential in the Kenyan market with a serviceable available market of $34 billion. agriBORA's serviceable obtainable market is $210 million and the startup has plans to establish 7,400 agriHUBs in the next five years.

Revenue: To date, the business has generated total revenue of US $2.51 million.

Milestones: agriBORA has achieved the following milestones:
- Built a network of over 544 digitally enabled agriHUBs between 2021 to date, spanning across 12 Kenyan counties, serving a minimum of 200 farmers per hub. This network is vital for providing farmers with access to information, quality inputs, fair market prices, and essential services.
- Launched agriGHALA in 2024, a pioneering service and the first of its kind in Kenya that integrates commodity storage, financing and trading through the Warehouse Receipt System (WRS).
- Stored over 3,000 bags of commodities and issued two commodity-backed loans to farmers. Farmers have experienced an average of 8% profit increase when selling.

Investment Opportunity
US $3.5 Million to be deployed for technology enhancements, marketing, operation and working capital to ensure consistent supplies to agriHUBS (inputs) and offtakers (output), resulting in increased revenues leading to profitability.

Shamba Pride

Established
2016

Location
Kenya

Sector
Climate smart agriculture

Employees
50

Capital Raised
US $1.42 million

Leadership Team

Samuel Munguti: CEO
15+ years of experience in marketing, strategic management, and last-mile distribution across FMCG, energy, and agriculture. Held various roles at Coca-Cola, L'Oréal, and Colgate-Palmolive.

Nancy Mutuku: Co-founder & Head of Admin and Logistics
10+ years of experience in last-mile agri-distribution. Held multiple roles at Osho Agrochemicals Limited and Loreal Company.

Patrick Sampao: Chief Product Officer
Seasoned product manager with expertise in product development, partnerships, and stakeholder engagement. 10+ years of experience at ACRE Africa and Mdundo.com.

Website
www.shambapride.com

Contact
Samuel Munguti
samuel.munguti@shambapride.com

About
Shamba Pride is transforming the rural agricultural trade ecosystem in Africa by equipping agricultural input distributors, known as agro-dealers, with digital tools and technology that strengthens their capacity to provide quality products, services and information to smallholder farmers. This approach ensures farmers have access to essential resources, fostering sustainable improvements in farm productivity.

The Challenge
Smallholder farmers in Kenya face major challenges, such as limited access to quality agricultural inputs, services, and reliable market information. These barriers reduce their productivity and income. The agricultural sector also suffers from inefficiencies caused by multiple intermediaries, which drive up costs and lower farmers' profits. Solving these issues is essential for improving food security and boosting the livelihoods of rural communities.

The Solution
Shamba Pride facilitates the last-mile delivery of agricultural inputs directly from suppliers to agro-dealers. The startup also enables market linkages that bring registered farmers' harvested produce to digi-shops, where Shamba Pride facilitates delivery to buyers. Finally, it offers credit to agro-dealers based on inventory, with repayment due in 30 days. Shamba Pride is currently operating in Kenya, as well as planning future expansion into Uganda, Zambia and Tanzania.

Traction
Market size: In Kenya, the total addressable market is estimated at US $305 million, based on the average order values traded by agro-dealers combined with the average produce of farmers. Shamba Pride is targeting 10,000 agro-dealers, representing the serviceable available market of US $105 million.

Revenue: To date Shamba Pride has reached 60,000 farmers and 2,900 agro-dealers. The business has earned a total cumulative revenue of US $10 million since inception, with an average customer monthly order value of US $1,500. The business has seen a month-over-month revenue growth of over 10%, driven by input sales, market linkages and "Buy Now, Pay Later" transactions. The cost of acquiring each digi-shop is $1,300, with a payback period of 6 to 8 months.

Investment Opportunity
Shamba Pride seeks to raise US $5 million in equity and debt. The funds will be used for:

- Agro-dealer and digi-shop network expansion
- Strategic product development
- Technology platform optimization
- Team advancement

Forestwise

Established
2018

Location
The Netherlands
Indonesia

Sector
Climate smart agriculture

Employees
53

Capital Raised
US $700,000

Leadership Team
Dirk-Jan Oudshoorn: Co-Founder & CEO
16+ years of experience in environmental conservation with a specialization in sustainable products

Alexander van Oord: CCO
15+ years of experience leading businesses in emerging markets

Marcha Adiwara Prawita: Project Manager
10+ years of experience managing complex projects rooted in environmental sustainability and social impact

Website
www.forestwise.earth

forestwise

Contact
Dirk-Jan Oudshoorn
dirkjan.oudshoorn@forestwise.earth

Alexander van Oord
alexander.vanoord@forestwise.earth

Marcha Adiwara Prawita
marcha.adiwara@forestwise.earth

About
Forestwise sells sustainable rainforest products, such as illipe butter, a cocoa butter equivalent, creating economic incentives to help preserve forests in Borneo and improve the income of community residents. The startup is the world's leading supplier of traceable wild-harvested rainforest products.

The Challenge
Borneo has lost 56% of its original rainforest with the province of West Kalimantan in Indonesia losing 77% tree cover loss from 2013 to 2021 which affected the biodiversity and local communities' livelihood. Areas of the province have poverty rates that are higher than the national average. On the other hand, demand for cocoa butter equivalent products is rising because of deforestation and the volatility of cocoa supply and prices.

The Solution
Forestwise helps preserve the rainforests of Borneo by producing wild-harvested rainforest ingredients such as illipe butter that make it more profitable to preserve rainforests and improve local livelihoods. Illipe butter is a cocoa butter equivalent that can be used for a range of cosmetic and confectionery products.

Forestwise generates revenue by selling rainforest products such as illipe butter and kukui nut oil for the cosmetics and food industries, along with illipe waste repurposed for farm feed and fertilizer. Forestwise is also exploring natural rubber and arenga sugar to provide farmers with a steady year-round income between Illipe nut harvests.

Traction
Market size: The service available market is around US $4.2 billion and Forestwise's obtainable market is 0.16% which amounts to US $0.68 billion.

Revenue: By Q4 2024, Forestwise generated US $1.4 million in revenue. The business has seen more than a 300% increase in revenue with 907% year-over-year growth.

Milestones: Forestwise has achieved the following milestones
- Partnered with confectionery manufacturers in Europe, the USA and Australia to incorporate Illipe butter into their products. This expansion is expected to benefit 1,800 farmers.
- Expanded the collection area from 36,000 ha to 44,300 ha and established hubs in five districts to improve logistics. The farmer network grew from 1,000 to 1,836 across 70 villages their annual income increased by 16% from illipe nuts alone.
- Established traceability tools and a sustainability strategy.

Investment Opportunity
Forestwise is seeking US $3 million in grants, equity and convertible loans to help strengthen its sustainable supply chain, operations, and infrastructure to meet the increased demand for illipe butter and kukui nut oil and to develop new product lines. The capital will be used to procure raw materials, improve operational capacity, strengthen transportation and infrastructure, integrate renewable energy into production, human resources, product diversification and waste management.

AgriLogiq

Established
2020

Location
South Africa

Sector
Water resilience

Employees
15

Capital Raised
US $550,000

Leadership Team
Joel van der Schyff: Co-Founder and CEO
Qualified mechanical and electrical engineer (millwright) and MBA graduate with 15+ years of business ownership and management experience. Joel has extensive experience in capital equipment and automation within food and fruit packing.

Johnny Fonsesca: Co-Founder
Process improvement professional with 20+ years of expertise in business and operations leadership, employee coaching, and problem-solving in industrial manufacturing.

Website
www.agrilogiq.com

agrilogiq

Contact
Joel van der Schyff
joel@agrilogiq.com

About
The AgriLogiq advances an integrated and automated greenhouse farming system that helps farmers in South Africa maximize yields while minimizing energy, water and chemical consumption.

The Challenge
African agriculture struggles with shrinking arable land, limited access to modern tools, and costly precision technologies. Most farmers lack real-time monitoring for crops, water, and climate impact. Inefficient irrigation also leads to significant water waste, demanding scalable solutions for sustainable growth.

The Solution
AgriLogiq empowers farmers by providing them with tools to "listen" to their farms' needs, optimizing resource use and increasing yields. The integrated solution is built around asset-light, proprietary software and hardware designed to assist farmers from seed to harvest.

AgriLogiq provides cost-effective, modular solutions suited for smaller, resource-limited farms, making advanced automation more accessible in developing regions. AgriLogiq's greenhouse system automates farming activities such as climate control, irrigation and fertigation, and enables modern farming practices such as vertical, hydroponic and aeroponic farming systems. The startup operates a dual revenue model based on hardware sales and a scalable SaaS (Software-as-a-Service) offering.

Traction
Market Size: The global agri-tech market is expected to grow significantly, reaching approximately US $22 billion by 2025. Within South Africa alone, medium-to-high-tech undercover farming systems are valued at over US $54 million. Estimated at US $4.4 billion, AgriLogiq's serviceable available market aligns with farmers looking for advanced, scalable farming technologies. AgriLogiq targets mid-sized farms and resellers in South Africa, Kenya, and Morocco. Coupled with an IP-deployable strategy to outlying time zone areas its serviceable obtainable market is estimated at US $1.4 billion

Revenue: The startup has generated US $300,000 in revenue which represents 3X growth in 2024. AgriLogiq has also raised seed funding of US $500,000 in 2025.

Milestones: Agriloqiq has deployed over 50 systems into various farms across South Africa and neighboring countries and is the preferred technology provider for Haygrove, a UK-based global greenhouse solution firm supplying to countries in Africa and the rest of the world.

Investment Opportunity
This round is capped at US $650 000 with US $400 000 already secured. The investment will be split across continued feature development, commercialization and expansion as well as marketing and working capital.

AVALVE

Established
2019

Location
Republic of Korea
Vietnam

Sector
Agriculture

Employees
20

Capital Raised
US $1,038,300 in equity

Leadership Team
Park Kyu Tae: CEO
A Forbes 30 under 30 entrepreneur specializing in AI-based smart farming

Bong Jin Sun: COO
An entrepreneur with experience launching start-ups and AI technology

Hee Soo Park: CTO
Former CEO of Valuebridge with 24 years of experience in leading R&D

Park Kyung Chan: AI Team Leader
PhD in Artificial Intelligence

Website
www.avalve.co.kr

Contact
Park Kyu Tae, CEO
kpark0809@avalve.co.kr

About
AVALVE is a Korean smart farm technology company specializing in artificial intelligence solutions for sustainable agriculture. The startup is expanding its smart farm technology to smallholder farmers in Northern Vietnam.

The Challenge
Around 44% of Vietnam's population works in the agriculture sector and 89% of farmers in the country are smallholders. There is high water and fertilizer use in crop cultivation in Vietnam that has high environmental and health costs.

The Solution
AVALVE has a hydroponic smart farm solution that uses AI to monitor crops and introduces efficient water and energy management in crop production. The system reduces water usage by 90% and increases crop productivity by 300%. AVALVE sells and trains smallholders on this smart farm technology with specific attention to producing high-value crops like Korean strawberries.

Traction

Market size: The global smart farm market is valued at US $21.6 billion, with AVALVE's addressable smart farm solution market alone reaching US $9.1 billion, presenting a significant growth opportunity.

Revenue: AVALVE has generated approximately US $5,936,000 in revenue until 2024 with a 2022-2023 year-over-year growth of 84%.

Milestones: AVALVE has achieved significant technological and smart farm installation milestones including:
- Collecting standardized crop growth data through various sensor modules to build a big data system
- Using deep learning technology to create optimal crop cultivation guidelines based on crop type and smart farm hardware.
- Using camera and AI technology for real-time crop monitoring, with AI automatically creating optimal conditions for maximizing production.
- Providing smart farm construction services and supporting crop cultivation and distribution.

Investment Opportunity
AVALVE is seeking $10 million in equity investment to support the next phase of growth. The investment will be primarily used for:
- Scaling Operations: Expanding the AI-based smart farm solutions globally, with a focus on Southeast Asia, including Vietnam, Thailand and Cambodia.
- R&D and Product Development: Enhancing the AI technology for increased efficiency and resource optimization.
- Market Penetration: Strengthening marketing and distribution channels to secure more partnerships and increase sales of high-value crops like strawberries, wasabi, and mushroom etc.

enfarm

Established
2022

Location
Vietnam

Sector
Climate Smart Agriculture

Employees
24

Capital Raised
US $500,000

Leadership Team

Dzung Nguyen: CEO & Co-founder
Experienced urban planner, specializing in regional urban planning and design. With expertise in technology-driven solutions.

Dr. Ho Long Phi: Co-founder and CTO
Expertise in climate resilience and sustainable agriculture. Former member of the National Advisory Council on Climate Change.

Vuong Phan Lien: Co-Founder & BOD
Urban management expert with over 10 years of experience in strategic planning, large-scale development, and multidisciplinary projects.

Website
www.enfarm.com

enfarm-agritech

Contact
Nguyen Do Dzung
dzung.nguyen@enfarm.co

About
enfarm is transforming precision agriculture in Southeast Asia and beyond with cutting-edge soil sensing technology. The startup's AI-powered device provides real-time, lab-precision soil nutrient analysis and actionable recommendations, enabling farmers to optimize yields, cut input costs, and enhance sustainability.

The Challenge
Excessive fertilizer use wastes $120 billion annually, depletes soil health and contributes 5% of global greenhouse gas emissions. In Vietnam, farmers use 2.5 times the global average, losing two months' income annually to inefficiency. With food demand projected to rise 70% by 2050 and net-zero targets looming, optimizing fertilizer use is imperative.

The Solution
Enfarm's smart soil sensor and AI-driven platform provides lab-precision insights at 10-15% of traditional costs, helps farmers cut fertilizer use by 30%, increase yields, and boost income by up to 200%. The solution includes:

- Proprietary real-time soil sensing technology for precision agriculture.
- AI-powered recommendations for optimized farm management.
- Exclusive soil and crop data to drive innovation in fertilizers and agribusiness.
- Early global expansion, starting with the Philippines within a year of launch.
- Industry recognition through prestigious awards and rapid market adoption.

Traction
Market size: enfarm's scalable technology addresses a US $19 billion market in device leasing and sales, with future expansion into the US $200 billion fertilizer market through developing new highly effective fertilisers leveraging on crop and soil insights.

Revenue: enfarm has generated US $500,000 in revenue.

Milestones: enfarm has achieved the following milestones:

- Deployed 500 sensors in Vietnam.
- Secured a contract to provide technology and technical assistance for 30,000 hectares of coffee farms in the Philippines.
- Received global acclaim, winning the 2024 Market Readiness Award at the Agrifood Tech World Championship and ranking among the Top 5 AI Products in Vietnam. Additionally, enfarm has been selected to showcase its model at the 2025 AI Action Summit in Paris as a Top 50 AI Project, cementing its leadership in agricultural technology.

Investment Opportunity
enfarm seeks US $1 - $2 million in equity funding to drive product innovation and international expansion. Funds will support R&D, sales growth and strategic partnerships to accelerate global adoption.

Sub-Sector Focus

Food Loss and Waste Reduction

Residua Biocircular

Established
2019

Location
Colombia

Sector
Food loss and waste

Employees
23

Capital Raised
US $650,000

Leadership Team
Carlos Fernández: CEO and Co-founder
20+ years of experience in private equity. Currently an operating partner at EWA Capital and founder of Blum, a venture studio focused on gender-oriented in Spain and LatAm. MBA from IE Business School and a Master's in Corporate Finance.

Andrés Camargo: CTO and Co-founder
10+ years of experience studying the Black Soldier Fly and has managed advised outputs projects with a capacity of +5030 tons waste per month

Román Parra: CPO and Co-founder.
6+ years of experience in the edible insect industry and 4+ years of experience in industrial biowaste facilities. Founder of the Latam Edible Industry Association.

Website
www.residua.bio

residua-biocircular

Contact
Diego Villamil
diego@residua.bio

About
Residua Biocircular is a startup creating value from organic waste through circular economy models and Black Soldier Fly Larvae (BSFL) bioconversion technology. To date it has treated over 600 tons of waste in Colombia and plans to expand in Colombia, Mexico and Central America.

The Challenge
The world faces a significant waste management crisis, generating more than 2 billion tons of municipal solid waste annually, with organic waste making up 44%. By 2030, this is projected to increase to 2.58 billion tons, yet only 13.5% is recycled and 5.5% is composted. In Latin America, about 215.3 million tons of waste are generated each year, with organic waste at 52%, but 39% is poorly disposed of, mostly in open dumps or incineration. Recovery rates remain below 4%, posing public health risks, especially for vulnerable populations.

The Solution
Residua Biocircular offers a fully scalable and sustainable solution that leverages industrial organic waste to create value-added products using insects. This circular approach produces a diverse range of products, including protein flour and protein oil for pet food, poultry feed and aquaculture, as well as biofertilizers for high-value agricultural crops.

Traction
Market size: The global animal protein feed market is projected to increase from US $301 billion in 2024 to US $372 billion by 2028, with a CAGR of 5.1%. Colombia and Mexico are seeing growth rates of 3.8% and 6.2%, respectively, driven by rising demand for meat and animal products. The serviceable obtainable market for Residua Biocircular is about US $50 million by 2030.

Revenue: In revenue terms, FY 2023 was dedicated to plant construction and product development. Company sales began in 2024 and totaled US $45,000 from January to December 2024, with an annualized run rate of US $120,000 by EOY.

Milestones: Residua Biocircular has achieved the following milestones:
- Processing capacity of 60 tons of waste per month
- Generating revenue through sales to regional pet food producers
- Signing agreements with major agrifood producers in Colombia, securing the waste supply at no cost for its actual and upcoming plants
- Successfully launching a decentralized bioconversion pilot for rural communities
- Collaborating with CIAT (CGIAR) to develop insect farming technology in LATAM

Investment Opportunity
Residua Biocircular is seeking US $2 million in a seed round either as equity or convertible debt (already has investment commitments totaling US $700k from impact funds and other funding organizations). The investment is for its expansion in Colombia and Mexico and achieving a combined processing capacity of 400 tons of waste per month.

Yarashoo Agro Industry

Established
2020

Location
Ethiopia

Sector
Food security

Employees
13

Capital Raised
US $28,730

Leadership Team

Roman Worku: Co-founder & CEO
Financial sector expert with 13+ years of experience in the Ethiopian banking industry. Extensive expertise in investment, risk assessment and portfolio management.

Melat Tekaligne: Chief Strategic Officer
Management consultant and policy advisor with 13+ years of experience. Specialization in manufacturing, agro-processing and hospitality industry. Seasoned in strategic planning, capital raising, policy advisory, performance evaluation and client management.

Nareem Adem: Partnerships & Markets Advisor
Private sector development expert with 13+ years of experience in transaction advisory services, fundraising and business development.

Aifa-foods

Contact
Roman Worku: Co-founder and CEO
Romanworku19@gmail.com

About
Yarashoo Agro Industry was established to address market linkage challenges in agricultural trade and add value to fresh produce. In July 2022, it introduced Aifa Foods, a brand of dried fruit products that have a shelf life of up to 12 months.

The Challenge
Farmers in Ethiopia face significant post-harvest losses due to poor handling practices, limited use of technology and a lack of value addition. They also struggle with limited market access, making it difficult to sell their products, and experience challenges from the mismatch between supply and demand that is compounded by seasonal fluctuations. The under development of value addition in agricultural products further exacerbates the problem, resulting in low returns for value chain players, limited access to processing and preservation technologies and inadequate technical expertise.

The Solution
Yarashoo Agro Industry, through its Aifa Foods brand, reduces post-harvest losses by introducing advanced preservation and storage techniques, while adding value to fresh produce with healthy, nutritious snacks for local and export markets. In addition, Aifa supports farmers by building their capacity in handling, processing, and storage, enhancing their technical skills and access to modern technologies.

Traction
Market Size: The current global market for dried fruits is about US $147 million. In Ethiopia, the total serviceable available market is about US $38 million with the serviceable obtainable market being US $3.4 million.

Revenue: The startup has generated US $9000 in revenue to date and expects to grow by US $110,062 by the end of 2025 and US $23 million by year 10.

Milestones: Yarashoo has achieved the following milestones:
- Yarashoo products are currently displayed in 20 outlets, including supermarkets and restaurants. They anticipate expanding their subscription services to prominent clients like Ethiopian Airlines and the African Union. They are exploring the export reach to Kenya, Uganda, Europe, USA and the U.A.E.
- Yarashoo, through its farmers outreach program, engages over 250 farmers, ensuring a steady supply of fresh produce while offering training on production, harvesting, post-harvest handling (such as drying), and farm-level packaging

Investment Opportunity
Yarashoo is seeking US $850,000 in equity, debt and grant to upgrade its processing technology and facilities, enhance quality control; and invest in farmer training programs.

WasteX

Established
2022

Location
Indonesia

Sectors
Food loss and waste
Climate smart agriculture
Renewable energy

Employees
~25

Capital Raised
US $1.5m in equity

Leadership Team
Pawel Kuznicki: Founder and CEO
Tech entrepreneur with experience in healthcare, fintech, and e-commerce. He has led teams of 50+ people and managed businesses generating revenues exceeding US $20 million, successfully raising US $6 million in equity and facilitating over US $100 million in debt financing.

Mohammad Shofie: Director of Operations
An energy expert with 8+ years of experience in the biogas industry, holding both commercial and technical roles in several multinational companies.

Website
www.wastex.io

wastexio

Contact
Pawel Kuznicki: Founder and CEO
pawel@wastex.io

About
WasteX is a climate-tech startup offering an end-to-end integrated biochar solution to agricultural producers and farms.

The Challenge
WasteX is addressing the issue of 3.5 billion tons of agricultural processing waste globally that is either dumped, burned or sold cheaply. This waste contributes to climate change, as biomass burning and decomposition are significant sources of emissions. Additionally, farmers face multiple pressures, including rising fertilizer costs and soil degradation, which threaten their livelihoods.

The Solution
WasteX offers an integrated biochar solution that transforms agricultural residues into biochar, a carbon-rich product that can improve soil health, enhance crop yields and reduce fertilizer usage. This solution not only provides farmers with additional income and operational improvements but also helps mitigate climate change by capturing and storing carbon. The company's approach includes proprietary biochar equipment, enabling services and a guarantee of carbon credits.

Traction
Market size: Globally, the biochar market is projected to reach US $6.3 billion by 2031, while in Indonesia, it is expected to grow from US $46.2 million in 2023 to over $1.7 billion by 2033. This expansion is driven by strong government support for sustainable agriculture and carbon sequestration initiatives, resulting in a serviceable obtainable market of US $800 million for WasteX. Additionally, the recent launch of the Indonesia Carbon Exchange provides a robust platform for carbon credit trading, further enhancing WasteX's potential. The startup is aiming to sell over biochar at US $200 per ton and generate carbon credits at a minimum of US $100 per ton of carbon emissions, with an annual recurring revenue of $50,000 per facility and gross margin of 30-40%.

Revenue: In 2024 WasteX generated US $180,000 in revenue. The startup anticipates breaking even in 2025, projecting annual revenues of US $1.4 million with a gross margin of 40% and 120 units sold.

Milestones: WasteX has achieved the following milestones:
- WasteX's proprietary equipment has proven to increase agricultural yields by up to 95% while reducing fertilizer use by 50%.
- The company has sold ~25 units and established 3 operational facilities that have produced >50 tons of biochar and removed >60 tons of carbon emissions.

Investment Opportunity
The company is currently fundraising for US $1.5 million equity (1st closing was completed in February 2025) to establish a more substantial financial buffer, scale up operations in Indonesia and India, support product development and working capital.

BIKI

Established
2019

Location
Indonesia

Sector
Food loss and waste
Food rescue

Employees
20

Capital Raised
US $373,600

Leadership Team
Muhammad Hafid Rosidin: Founder and CEO
A climate entrepreneur with a background in agroindustrial technology and experience with startup strategy and management

Mutia Khonza: Co-founder and COO
A food scientist with experience in creating innovative solutions to address food loss and waste issues

Website
www.halobiki.com

BIKI

Contact
Muhammad Hafid Rosidin: Founder and CEO
hafid@halobiki.com

About
BIKI offers an integrated solution to reduce food loss at the processing stage while improving food security through unsold produce distribution to those in need. The startup has developed main innovation Chitasil, an edible natural coating made from shrimp shells that doubles the shelf life of fruits and vegetables that integrated with traceability system.

The Challenge
More than 60% of fruits and vegetables are lost or wasted in Indonesia annually, costing the country more than US $320 million. More than 30% of the loss occurs at the post-harvest and processing stages, which in turn reduces farmer incomes.

The Solution
BIKI offers an end-to-end solution that prevents food loss and waste at the production until consumption stage through agritech products, predicts the shelf life of fruits and vegetables through an app, connects farmers to modern market and exporters, and sets up food rescue points (BIKI points) to process and distribute unsold produce to those in need.

The business generates revenue from:
- Agritech products including Kito-B Nano bio booster and Chitasil edible coating
- Trade collaboration for selling fruit and vegetable local and export
- Profit sharing from access to financing to farmers packing house
- Subscription service for BIKI Trace apps

Traction
Market size: The service available market for its edible coating and agritech products in Indonesia is around US $218.75 million and BIKI's serviceable obtainable market is US $6.08 million.

Revenue: In 2023, the startup generated US $17,160 in revenue and increased its revenue by 1336% to US $229,300 in 2024.

Milestones: BIKI has established 12 BIKI food rescue points at markets in 2024. By 2025, it will have scaled to establish 30 BIKI food rescue points and have prevented the loss of 5,000 tons of fruits and vegetables. The startup will have empowered 500 farmers and 100 women to improve the agrifood ecosystem

Investment Opportunity
BIKI is fundraising is US $500,000 in equity and debt. This will be used to:
- Replicate 30 BIKI Points and Initiation BIKI Trade for Export
- Expand agritech products use cases across multiple commodities
- Enhance traceability systems to improve food loss & waste management
- Invest in R&D and advanced processing equipment
- Scale digital marketing, sales promotions, and activations

RE:harvest

Established
2019

Location
South Korea

Sector
Food loss and waste

Employees
24

Capital Raised
US $8.3 million

Leadership Team
Alex Min: CEO
A CEO with experience setting up restaurant franchices in Korea, Min is a former consultant with PwC specializing in factory efficiency and go-to-market strategies.

Website
https://en.reharvest.net

Contact
Alex Min
alex@reharvest.net

About
RE:harvest is a food upcycling company that processes Brewer's Spent Grain (BSG) waste to produce food products. These by-products from food manufacturing are transformed into flour that is calorie-free, sugar-free, and rich in protein and fiber, providing consumers with a healthy alternative to traditional flour.

The Challenge
BSG, which is primarily composed of barley, is a byproduct produced during the beer brewing process. BSG is rich in protein and fiber, making it a promising nutritional alternative to low-fiber foods. Unfortunately, it is often considered "used" and categorized as food waste that must be disposed.

The Solution
RE: harvest transforms BSG and associated grain-based by-products into nutritious products, including alternative flour and energy powders suitable for consumer food items like granola bars and baked goods. Upcycling BSG helps divert tons of food waste from landfills, positively impacting the environment. According to an internal analysis, the production of 1 kg of flour saves 11 kg of carbon emissions, 3.7 tons of water and diverts 3 kg of food waste.

Traction
Market size: The total addressable market is US $34 billion and RE:harvest's serviceable obtainable market is US 3.5 million.

Revenue**:** In 2024, the startup has generated US $1,842,662 in revenue.

Milestones: RE:harvest has achieved the following milestones:
- Korea's First Food Upcycling Company
- World's largest single upcycled raw material production capacity and expertise (End-to-End)

Investment Opportunity
RE:harvest is currently raising US $3 – 5 million in equity (Marketing 55%, Product R&D 35%, Operation 10%). This will be used to launch a B2C product, expand overseas (USA and Indonesia), conduct proactive R&D for market entry, and offset the operational costs of workforce expansion

Surplus Indonesia

Established
2020

Location
Indonesia

Sector
Food rescue

Employees
20

Capital Raised
US $1 million

Leadership Team
Agung Saputra: Founder and CEO
A climate entrepreneur who was awarded the Forbes 30 under 30 Asia in 2024 for Consumer Technology. He was also awarded the Youth Category Winner of the 2024 Asia-Pacific Economic Cooperation (APEC) Bio-Circular-Green (BCG) Award.

Arvian Prabawa: Co-founder and VP of Business Development. He has 9+ years experiences in Ops, Sales & Business Development. He has raised seed capital with previous company

Debby Lufiasita: Co-founder and VP of Marketing & Branding. She has 11+ years' experience in branding, consulting, media & public relation

Website
www.surplus.id

Surplus-Indonesia

Contact
Agung Saputra, Founder and CEO
agungsaputramuhammad@gmail.com

About
Surplus Indonesia is a Food Rescue and Clearance Marketplace 4.0, helping businesses sell surplus, overstocked and imperfect food for discounts of up to 80% discount or more. Surplus connects food retailers with consumers looking for affordable and sustainable food options.

The Challenge
Indonesia ranks as the second-largest producer of food waste globally, with 115–184 kg of food wasted per person annually, leading to US $39 billion in economic losses. Meanwhile, over 22 million Indonesians face food insecurity. This paradox of excess and scarcity highlights the urgent need for systematic food rescue and clearance marketplace solutions.

The Solution
Surplus Indonesia has evolved into a comprehensive clearance marketplace, offering the Surplus app where businesses sell surplus or imperfect food directly to consumers; a juice bar that repurposes imperfect fruits; EV mobile carts and vending machines delivering upcycled juices and smoothies; a supermarket selling overstock food products; and an AI-powered inventory management system to help businesses "Predict, Price & Distribute" surplus inventory efficiently, ensuring waste reduction and revenue maximization.

Traction
Market size: The serviceable available market for food service in Indonesia is US $49 billion and the serviceable obtainable market for Surplus is an estimated US $7.5 billion.

Revenue: Surplus Indonesia achieved profitability in October 2024 with an average 20% month-to-month revenue growth that year. Gross profit margins were around 84% month-over-month in 2024. Surplus has had an average 5X year-on-year growth since 2020. The business generates revenue from transaction fees, consumer payments, delivery fees, and retail & offline sales.

Surplus has 1,000,000 customers and has rescued more than 500 tons of food. The startup has helped more than 6,000 businesses prevent an estimated $610,000 in losses, and has avoided 1 million tons of carbon emissions.

Milestones: Surplus received B Corp certification in 2022. In 2023, the startup received a Google Play award for the "Best App for Good" (honorable mention) among 25,000 apps in the world. Surplus was the Gold Winner of Asean Digital Awards 2025 in Thailand.

Investment Opportunity
Surplus has opened its seed round to raise US $3 million in equity to:
- Scale its B2C Ecosystem and acquire 5 million customers + 10,000 F&B merchants
- Scale its O2O Ecosystem and establish 10 experience stores, 50 Vending machines & 200 EV mobile carts fleet
- Launch an AI-Powered Surplus Food Inventory, Tracking & Forecasting platform

MYCL

Established
2019

Location
Indonesia

Sector
Food Loss And Waste

Employees
22

Capital Raised
US $250,000

Leadership Team

Adi R. Nugroho: Co-Founder and CEO
Leading the development of sustainable biomaterials for fashion and construction. Experienced entrepreneur with a background in architecture, recognized globally for innovation in circular economy solutions.

Ronaldiaz Hartantyo: Chief Business Development
10+ years of experience in production and R&D with focus on conservation.

Robbi Zidni: Chief of Production Officer & Co-Founder
10+ years of experience in environmental operational with Architecture background

Website
www.MYCL.bio

MYCL-Mycotech

Contact
Adi R. Nugroho
adi@mycl.bio

About
MYCL develops eco-friendly biomaterials using mycelium technology to create sustainable alternatives for fashion, packaging and construction. By harnessing fungal networks, MYCL aims to reduce environmental impact and promote a circular economy.

The Challenge
The leather industry faces high carbon emissions, while mycelium leather struggles to meet demand with a 13,900% supply gap. Meanwhile, Indonesia's agri-crop waste, a major food loss contributor, emits 40 million tons of carbon emissions annually. Inefficient disposal worsens environmental damage, highlighting the need for sustainable solutions.

The Solution
MYCL converts agricultural waste into a range of products that can be used for bags, shoes, sustainable and decorative building materials. The solution reduces carbon emissions by 52% compared to traditional leather. A few of its products include:

Mylea – Leather-like material made from Mushroom Mycelium
Biobo – Multifunctional Mycelium composite board
MYCL Composite – Solid-composite material

Traction
Market size: The serviceable available alternative leather market is about US 150 billion. Within this market, the demand for mycelium leather is about $ US 28 billion. In meter terms, the demand for mycelium leather is about 280 million square feet a year while the supply is only 2 million square feet a year, giving MYCL significant room for growth.

Revenue: MYCL has generated almost US $60,000 in revenue over the last twelve months with a 202% year-over-year growth. The startup has had a gross margin of 43%.

Milestones: MYCL has achieved the following milestones:

- Finalist in The Earthshot Prize 2024, MIT SOLVER 2019 and KEHATI social enterprise award 2023
- Notable Customer: Doublet; Japanese award winner in LVMH Prize Winning Designer, featured in Paris Fashion Week

2 Patents for Leather Substitute and Composite Material

- Expanded a processing facility to Japan and has a customer base of foreign companies (e.g., USA, Australia, Europe)

Investment Opportunity
MYCL is currently fundraising for an equity and debt investment of between US $1 - $3.5 million. Funds will be dedicated to process optimization, cost efficiency measures, advancing quality improvements, increasing the processing facility, and enhancing research and development efforts.

ADAGIN TECHNOLOGIES

Established
2018

Location
South Africa

Sector
Climate smart agriculture

Employees
8

Capital Raised
US $674,000

Leadership Team

Fredrik Gideon Adriaanse: Founder & CEO
Master's degree in logistics and has developed a bin-carrying harness system that enabled him to establish strong relationships within the farming industry

JD Naude: COO
Mechanical Engineer with significant expertise in product development and engineering consulting

Justin Vellacott: CTO
Honors degree in Information Systems with 12+ years of experience in IT and software products

Website
www.adagintech.com

adagin-technologies

Contact
Fredrik Gideon Adriaanse: Founder and CEO
fg.adriaanse@adagintech.com

About
Adagin helps farmers optimize their profitability, yield and quality by providing real-time data and insights through innovative hardware and software solutions. Adagin's competitive edge lies in their specialization between the "Plant and the Pallet," i.e. the first leg of the food supply chain.

The Challenge
Farmers are facing increasing challenges related to profitability and sustainability. The recent surge in costs has significantly reduced farmers' margins and they are unable to easily locate their pain points due to archaic methods of doing business and a lack of real-time data. The current methods being used include paper-based systems and unpractical and bulky hardware, which leads to poor packing systems, lack of accurate labor costing, as well as no traceability or performance insights

The Solution
The Adagin platform enables farmers to precisely manage their costs, specifically relating to harvesting, packing and labor, while also optimizing key factors affecting their yield and profitability. The startup digitizes farmers' systems, providing real-time data and insights via a cloud-based platform.

Traction
Market Size: The global horticulture market was valued at US $32.3 billion in 2021, and is projected to reach US $65 billion by 2030. South Africa's agricultural sector, with more than 40,000 farms has shown consistent expansion over the past two years. The sector employs a substantial workforce of more than 757,600 employees. The expected serviceable available market would be 4,643 horticultural farms with the serviceable obtainable market being 1000 horticultural farms.

Revenue: Adagin has generated US $2.1 million in revenue since inception. The company generated US $411,263 in 2024.

Milestones: Adagin has achieved the following milestones:
- Grown from processing the pay of 120 employees to 3,300 employees processed monthly, with a total wage expense of roughly US $452,000 – US $1.69 million.
- Grown from one farmer customer with 250 workers to 19 farmers employing a total of 8,000 people in peak season from January 2020.
- Expanded into 4 countries including Ecuador, Egypt, Australia and Namibia.
- Developed a new product called "Precision Bin & Team Tracking" that generates 4x-5x the normal product's revenue and has a larger target market due to multiple crop and seasonal alignment.

Investment Opportunity
Adagin is seeking to raise US $5.2 million for international expansion with the following split in investment:
- Growth & Expansion - 50%
- Innovation & Development - 35%
- Marketing & Sales – 15%

Maltento

Established
2018

Location
South Africa

Sector
Climate smart agriculture

Employees
64

Capital Raised
US $5.5 million

Leadership Team
Dean Smorenburg: Founder &CEO
Dean's background spans management consulting (Bain, Monitor Deloitte) and finance,with expertise in private equity, organizational design,and C-Suite strategy. At Maltento, he guides innovationand strategy to promote sustainability in the food chain.

Jaysen Golding: COO
A seasoned CharteredAccountant, Jaysen has workedacross diverse industries locallyand abroad. He focuses on delivering solutions, navigatingcomplex transactions, anddriving performance. At Maltento, he oversees operations and finance,ensuring efficiency and financial stability.

Website
www.maltento.com

maltento

Contact
Jaysen Golding
Jaysen.golding@maltento.com

About
Maltento is a biotechnology company focused on sustainable feed solutions by using Black Soldier Fly Larvae (BSFL). By upcycling food waste into nutrient-rich feed additives, Maltento supports environmental stewardship and encourages circular agriculture.

The Challenge
Traditional feed sources not only contribute nearly half of agriculture's greenhouse gas emissions but also involve high costs and supply chain risks—particularly in regions where farmers cannot afford expensive feeds. These concerns highlight the need for alternatives that lower ecological impact while maintaining or improving animal performance.

The Solution
Maltento uses BSFL to convert food waste into an easily digestible, eco-friendly feed additive known as Digest. In addition to reducing emissions and upcycling waste, Digest improves animal survivability and feed performance, making it an attractive option for aquaculture, pet food and early weaning livestock.

Traction
Market Size: Global demand for insect-based products is expected to surpass 500,000 tons by 2030. Maltento focuses on higher-value markets—like aquaculture, pet food, and specialized livestock feed—where functional additives may yield both higher returns and measurable performance improvements.

Revenue: Maltento has recorded 117% and 105% revenue growth from 2022 to 2023 and 2023 to 2024 respectively, realizing revenues of US $3.05 million in 2024.

Milestones: Since 2018, Maltento has scaled monthly production to more than 120 tons of larvae and supplied over 300 tons of Digest in South Africa, preparing to enter the U.S. and European markets. Trials in aquaculture demonstrated up to a 15% improvement in feed conversion and stronger recovery from stress. In pet food trials, dogs showed better skin and coat quality, while livestock tests indicated healthier weight gain. These results reflect the broad potential of Digest for different animal species and feed applications.

Investment Opportunity
Maltento's next phase involves broadening market acceptance, expanding distribution, increasing production capacity and further refining regulatory compliance. Partnerships, including P4G with WWF, will help support additional validation trials and reinforce Maltento's role in sustainable feed solutions.

Maltento is seeking US $3 million in equity funding to increase production capacity and strengthen its sales reach into the US and European markets.

AirX Carbon

Established
2022

Location
Vietnam

Sector
Waste management

Employees
16

Capital Raised
US $200,000 in equity
US $500,000 in grants

Leadership Team
Thanh Le: Founder and CEO
A climate entrepreneur with 15+ years of experience in product development and business growth.

Anh Duong: Co-founder
15+ years of experience in venture capital and climate tech. Angel investor in Southeast Asia.

Website
www.netzeropallet.com

NetZeroPallet

Contact
Thanh Le, CEO
ceo@airxcarbon.com

About
AirX Carbon is a biomaterial company pioneering carbon negative materials through its flagship product - NetZero Pallet - crafted from polymerized agricultural wastes.

The Challenge
Traditional pallets are typically made of wood or plastic, which contribute to deforestation and higher carbon emissions during the manufacturing process respectively. Concurrently, Vietnam generates almost 100 million tons of agricultural waste annually. Only about 50% of these crop by-products are collected, with an even smaller amount processed for productive use.

The Solution
AirX Carbon repurposes coconut, rice, coffee, bamboo waste, etc. in Vietnam to make the NetZero Pallet. The sturdy, sanitary and stackable pallets can be used by a range of companies from food, pharmaceutical to manufacturing. The pallets have a negative carbon footprint and are 20% - 50% cheaper than traditional wood and plastic pallets.

The startup's target customer market includes:
Exporters dealing with one-way shipping.
Environmentally conscious exporters sending products to Japan, Singapore, Australia, Europe and the United States.
Global companies.

Traction
Market size: The global serviceable addressable market is around US $73 billion and AirX Carbon's serviceable obtainable market is $3 billion.

Revenue: In 2023, AirX Carbon generated US $181,000 in revenue and expected to close 2024 with US $1 million in revenue. It expects a year-over-year growth rate of 500% from 2023 to 2024. By 2035, AirX aims to generate US $400 million in annual revenue and create at least 2,000 direct jobs.

Milestones: AirX has negotiated long-term commitments with 10 local suppliers for a steady supply of raw materials. Additional milestones include:
- Partnerships with industry leaders like Coca-Cola, Hyosung and Far Eastern
- Awards and endorsements worth US $500,000 from Temasek Foundation, SK, US Dept. of State, European governments and Australian governments
- FDA and USDA approval for food safety and biodegradability

Investment Opportunity
AirX Carbon is seeking to raise US $2 million in seed funding either through equity or SAFE agreements to:
Scale to an annual production capacity of 4 million pallets with 2 factories
Invest in R&D to advance biomaterial innovations from agricultural waste
Expand human capital and business development

BUYO

Established
2022

Location
Vietnam

Sector
Food Loss And Waste

Employees
12

Capital Raised
US $2.5 million

Leadership Team

Hanh Do: Co-Founder and CEO
20 years of experience in design, product development, manufacturing, and training, specializing in low-cost water and agricultural technologies.

Thu Vuong: Co-Founder & CTO
Experienced in communication and business negotiations, driving strategic growth and partnerships.

Hoang Nguyen: COO
10 years experience in Production Management in Textile and Leather Industry. Bachelor's and master's degree in chemical engineering from Ho Chi Minh University of Technology. Participates in factory set-up and production, and supply chain management.

Website
www.buyoplastic.com

Buyo-bioplastics

Contact
Hanh Do
hanh.do@buyoplastic.com

About
Buyoplastic is dedicated to transforming plastic waste into sustainable solutions that benefit both business and the environment. By leveraging innovative recycling technologies, BUYO creates high-quality, eco-friendly materials that support a circular economy.

The Challenge
Plastic waste remains a global environmental crisis, with excessive production and improper disposal leading to severe pollution. Many industries still rely on virgin plastic, contributing to resource depletion and carbon emissions. Additionally, inefficient recycling systems and limited market adoption of recycled materials hinder progress toward a more sustainable future.

The Solution
Unlike typical bioplastics made from corn or potatoes, BUYO's solution utilizes discarded food waste from industries, such as brewery grains, converting it into a biomaterial with up to 50% biomass content. This approach cuts greenhouse gas emissions, prevents organic waste from entering landfills, and promotes circular economy principles. For every ton of finished product, BUYO can upcycle 0.5 tons of biowaste, reducing energy use and carbon emissions by 70% compared to conventional plastics.

Traction
Market size: By 2026 the global market size for bioplastics will be US $11.6 billion. BUYO's primary target markets are North America and Europe which give the startup a serviceable obtainable market of US $128 million by 2026.

A B2B business, BUYO targets corporate clients in high-quality and safety-critical industries like food packaging, medical and cosmetics. Primary clients include multinational corporations and SMEs that prioritize eco-friendly solutions.

Revenue: The company has generated US $110,000 USD from its inception to date. Revenue totaled US $70,000 in 2024 and is expected to grow to US $500,000 in 2025.

Milestones: BUYO has achieved the following milestones:
- First company from Southeast Asia selected into the Global 100+ Accelerator program co-hosted by AB InBev, Coca Cola, Unilever, Colgate Palmolive and Danone
- Recipient of multiple international awards for its pioneering technology in revolutionizing plastic alternatives.
- Current supplier of a bio-based compostable keg cap for AB InBev, the first ever keg cap made from bio-waste in the world's beer industry

Investment
The company has just completed its seed round fund raising and has raised a total of US $2.5 million equity investment to date. BUYO will use these funds for R&D and innovation, and to scale up the business.

Sub-Sector Focus

Zero Emissions Mobility

MubOn

Established
2024

Location
Colombia

Sector
Zero emissions mobility

Employees
2

Capital Raised
US $150,000 in SAFE
US $350,000 in Impact Fund

Leadership Team
Nelson Padilla: Founder and CEO
10+ years of experience in mobile, web application development and IoT projects. 4+ years in sales.

Nick Velasquez: Co-founder and CTO
10+ years of experience in IoT products with a focus on rapid learning and iteration. Strong background in hardware design, embedded systems and rapid prototyping.

Website
www.mubon.co

MubOn

Contact
Nelson Padilla – CEO
nelson@mubon.co

About
MubOn is a startup dedicated to solving electrical infrastructure challenges for electric vehicle (EV) users.

The Challenge
The EV market in Colombia is experiencing significant growth, however, several challenges are hindering its full potential, particularly among urban users. Issues include a lack of charging infrastructure and insufficient manufacturing capacity from local producers. In major cities, many landlords prohibit tenants from installing chargers or impose higher fees due to difficulties in monitoring the energy consumed by residents' vehicles, further limiting access to EVs.

The Solution
MubOn aims to close the infrastructure and service gap for urban users in Colombia's EV market by:

- **Developing a SaaS Platform**: A subscription service to streamline the monitoring, management, and fee collection for charging stations.
- **Product-as-a-Service**: MubOn provides electric charging infrastructure while eliminating upfront costs for common areas and businesses.
- **Implementing a usage-based platform**: Electric charging for residential units through shared stations paired with integrated payment software.

Traction
Market size: The global charging market is projected to reach US $1.567 billion by 2025, expanding at 38.5% CAGR. In the Americas, the total addressable market is an estimated US $25 billion, with a serviceable available market of US $8 million in Latin America and a serviceable obtainable market of US $97 million.

Revenue: Originally a spin-off from DeepSea Developments, which began in 2022, MubOn has operated independently since June 2024. As of October 2024, MubOn has generated over US $120,000 in revenues and expects to close its first year of operations with a total of US $160,000.

Milestones: MubOn has achieved the following milestones:

- IP owner and developer of their charger, and software platform.
- In six months, the company has attracted over 1,200 users across 30 charging points in major cities like Cali, Medellín, and Bogotá, facilitated over 1000 paid charging sessions, and delivered more than 20,000kWh of power.

Investment Opportunity
The company is looking for a pre-seed round of US $500,000 in 2025 and plans to raise US $1.5 million in 2026 in equity or SAFE agreements. The investment will be split as follows: 40% for marketing and sales, 35% for product development, 10% for processes and operations, and 15% for assets and equipment.

BasiGo

Established
2021

Location
Kenya

Sector
Zero emissions mobility

Employees
114

Capital Raised
US $50 million

Leadership Team
Jit Bhattacharya: CEO and Co-founder
12+ years of technical experience in EV technology, specializing in Li-ion batteries

Jonathan Green: CFO
15+ years of experience in leading operations and financing of technology solutions in Sub-Saharan Africa

Website
www.basi-go.com

basigo

Contact
Jonathan Green
jg@basi-go.com

About
BasiGo, an e-mobility start-up headquartered in Nairobi, is revolutionizing the public transportation sector by providing bus operators with a cost-effective, electric alternative to diesel buses. The startup is bringing together experts in electric vehicles, public transport, the power sector, asset finance, software and data science to systematically electrify public transport in Africa.

The Challenge
By 2025, Africa will have 10 mega-cities with over 10 million residents each. In Africa's growing cities, diesel buses account for 40% of all passenger trips. Dependence on diesel-powered public transport worsens air pollution, impacts growth through reliance on fuel imports, and accelerates global climate change. To address the growing demand for urban mobility, African cities urgently require a shift towards affordable, clean and low-carbon public transport solutions.

The Solution
Kenya already generates over 90% of its electricity from renewable energy. BasiGo leverages this clean energy to power modern, electric buses. BasiGo's key innovation is the Pay-as-you-Drive financing model for electric buses, a mileage-based lease that eliminates high CapEx costs as a barrier to adoption. Pay-as-you-Drive also includes the costs of e-bus charging and regular service.

Traction
Market Size: The serviceable addressable market is US $1 billion and BasiGo's serviceable obtainable market is US $650 million between Kenya and Rwanda.

Revenue: BasiGo generated US $872,000 in revenue in 2024 and expects to generate US $4.5 million in 2025.

Milestones: BasiGo has achieved the following milestones:

- BasiGo currently has a fleet of 55 electric buses in operation in Sub-Saharan Africa – 6 in Kigali and 49 in Nairobi – and over 800 reservations from bus operators in Kenya and Rwanda.
- These buses have covered over 3.8 million km, carried over 5.9 million passengers, and mitigated 1,700 metric tonnes of CO_2 emissions.

BasiGo intends to deploy over 5,000 e-buses with its Pay-as-you-Drive financing across sub-Saharan Africa by 2030.

Investment Opportunity
BasiGo requires US $330 million in equity, debt and grants over the next 5 years to:

- Deploy 3,000 Pay-as-you-Drive E-Buses in East Africa by 2030.
- Develop extensive e-bus charging infrastructure.
- Build complementary public transport and bus asset management technology to catalyze the adoption of e-buses in Africa.

eBee Kenya

Established
2021

Location
Kenya

Sector
Zero emissions mobility

Employees
36

Capital Raised
US $653,000

Leadership Team

Maarten Fonteijn: Country Manager
Maarten has a strong background in venture building, renewable energy, and circular economy solutions, he has spearheaded impact-driven businesses in Africa, Europe, and India.

Chris Pleijsier: Commercial Director
Chris brings extensive leadership experience in marketing and sales in mobility and emerging markets.

Alice Ejiofor: Head of Finance
Alice has a strong foundation in finance and leadership, having started her career at two “Big Four” audit firms before transitioning into the startup ecosystem.

Website
ebee.africa/ke/

ebee-kenya

Contact
Maarten Fonteijn
maarten@ebee.africa

About
eBee is a pan-African e-mobility company founded in late 2021 in Kenya. The company currently sells and rents e-bikes and manages a fleet of last-mile delivery riders. Through this model, eBee is creating green jobs, particularly for women and youth.

The Challenge
Urban transportation in Kenya is at a critical turning point, as congestion and pollution worsen due to the heavy reliance on diesel-powered vehicles. In Nairobi alone, 2.27 million trips per day are made on foot, while 55,000 are by bicycle. Many people walk or cycle due to limited income and a lack of alternative transport options. However, pedestrians and cyclists face numerous challenges, including traffic accidents, pollution, congestion and a shortage of green spaces.

The Solution
eBee is transforming urban mobility by electrifying bicycles and leveraging innovative branding and community engagement strategies. By reshaping perceptions around cycling, eBee is making e-bikes more desirable and accessible to a broader audience. Additionally, eBee is accelerating the adoption of electric bicycles in Nairobi and Mombasa by offering consumer financing through its newly developed loan product and leveraging available credit guarantee schemes.

Traction
Market size: With an average selling price of US $850 per e-bike, eBee's potential market size is approximately US $94.4 million. The total addressable market in Kenya is approximately 740,000 potential e-bike users. The serviceable available market is about 370,000 riders, and the serviceable obtainable market is an estimated 111,000 riders.

Revenue: In 2024, eBee realized total revenue of US $1,201,925. This was an 83% growth from US $629,352 in 2023. With the current growth trajectory, revenue is projected to reach US $1,500,000 in 2026.

Milestones: To date, eBee has distributed 1,124 e-bikes that have covered 2,947,480 kilometers, created 381 jobs, and mitigated 412,000 kilograms of CO_2.

Investment Opportunity
The startup seeks to raise US $5 million in Series A funding to enable
- Rural delivery in country expansion – US $1.2 million
- Research into affordable and rural adaptable products – US $1.5 million
- Expansion into Tanzania and Ethiopia – US $2.3 million

Gempacs

Established
2021

Location
Indonesia

Sector
Zero emissions mobility

Employees
6 full-time
3 part-time

Capital Raised
US $108,000

Leadership Team

Corrado Accardi: Co-founder and CEO
28+ years of executive and entrepreneurial experience in renewables, property development, construction project and cost management

Enrico Carlin: Co-founder and CTO
45 years of global experience, including 20 years as a technologist at Hewlett-Packard, and in renewables, power generation, electric mobility and telecoms, and electronics and IT.

Website
www.gempacs.com

Gempacs

Contact
Corrado Accardi
ca@gempacs.com

About
Gempacs is transforming Indonesia's maritime industry by electrifying boats through an integrated solution that reduces emissions and boosts incomes.

The Challenge
More than 1 million Indonesian fishing boats run on fossil fuels and contribute to environmental degradation. High fuel costs trap operators at or below the poverty threshold. Existing solutions often focus on technology alone, overlooking the regulatory, societal and economic factors affecting the sector, with high costs and limited range or autonomy at sea.

The Solution
Gempacs offers an integrated solution that includes retrofitting and/or building new fully electric boats with photovoltaic roofs and geo-localization systems for enhanced safety and emissions tracking. It also installs charging stations and facilitates access to financing options for boat owners, helping them to make the transition more seamless and affordable.

Traction
Market size: Globally the total addressable market for electric boats will be US $100 billion by 2035. Focusing on Indonesia alone, Gempacs serviceable obtainable market will be US $10 million in 2025 and US $1 billion by 2035.

Revenue: Gempacs is in its early stage and the revenue for boats sold was generated in partnership with an associated company, raising an overall revenue of US $90,000, of which $30,000 (large part of the gross margin) was invoiced by Gempacs.

Milestones: Gempacs has achieved the following milestones:
- Proven technology on fishing, water taxi and tourist boats making the technology risk very limited.
- Achieved institutional support in Indonesia, including the Ministry of Energy and Mineral Resources, the Ministry of Maritime Affairs and Fisheries, and Bappenas' Directorate for Maritime Affairs and Fishing.
- Declared a national strategic project by Perusahaan Listrik Negara, Indonesia's state-owned electric utility company.
- Collaborated with the National Research Centre (BRIN) and universities such as Politeknik Batam and ITS Surabaya, which also serve as a source for technology, services and engineering graduates.
- Signed agreements with a fishermen's cooperative with 1,000 boats and a fishermen's association with 6,000 boats.
- Current member of the BISA (UNDP, Jakarta) Blue Economy accelerator.

Investment Opportunity
Gempacs aims to raise US $3 million over the next 12 months in SAFE, equity or convertible notes, with an initial tranche of at least US $500,000. The investment will be used to set up a new Singapore holding, shore up its assembly line, charging infrastructure and spare parts, retrofit kits and batteries, recruitment and payroll and contingency cash flow.

Zimi Charge

Established
2022

Location
South Africa

Sector
Zero emissions mobility

Employees
7

Capital Raised
US $330,000

Leadership Team

Michael Maas: Founder and CEO
8 years of experience in product and project management for IOT projects, managing large design and engineering teams, and launching products in new markets. Bachelor's degree in mechatronic engineering, master's degree in electronic engineering, and a PMP certificate.

Stefan Nel: Director Finance & Operations
8 years of experience focused on automation, business strategy and overseeing large-scale tech projects, including roll out of large-scale industrial automation projects. Bachelor's degree in mechatronic engineering, MBA, and PMP certificate.

Website
www.zimicharge.com

Zimicharge

Contact
Michael Maas
michael@zimicharge.com

About
Zimi provides simple, turn-key, electric charging systems and services to fleets. Their service includes electric charging infrastructure (i.e. chargers) and value-added energy, carbon and payments management software.

The Challenge
Fleet operators, particularly those involved in delivery, last-mile logistics and technical services, face high operational costs due to their reliance on internal combustion engine vehicles. Their challenges are further complicated by future sustainability pressures, including carbon taxes and missed opportunities for carbon credits. While some attempt to address these issues with inefficient fuel solutions or limited electric fleet experiments, they struggle with selecting electric vehicles, managing charging infrastructure and optimizing energy usage.

The Solution
Zimi Charge offers a comprehensive solution for fleet electrification bundled with other services, including charging systems, installation, smart energy management, carbon tracking and payment solutions. The pricing model offers flexibility, including purchase, lease options, and Charging-as-a-Service (CaaS) plans.

Traction
Market Size: Zimi Charge's potential market in South Africa consists of 270,000 vehicles across delivery, last-mile logistics, and technical services fleets, requiring approximately 104,050 chargers, with a projected upfront revenue of US $21.76 million and an annual recurring revenue of US $7 million from CaaS.

Revenue: Zimi Charge currently operates on a 46.7% gross margin with a break-even target for 2027. Since inception, it has generated US $27,635 in revenue. Zimi Charge is targeting a revenue generation of US $6.7 million by 2029 with CaaS and charger sales each contributing 39.3%. The startup is expecting a 49.3% return on equity and a 27.3% return on assets.

Milestones: Zimi Charge has achieved several milestones:
- Contracted and onboarded its initial commercial customers who will be able to scale with the company in the long term.
- Developed and launched its proprietary charging stations and management software system.

Investment Opportunity
Zimi Charge is raising US $700,000 in equity funding for operational expansion and product development.

STROOM

Established
2016

Location
South Africa

Sector
Zero emissions mobility

Employees
10

Capital Raised
US $0.67 million

Leadership Team

Bouwer van Niekerk: CEO and co-founder
12+ years of experience in bicycle and e-bike design. He holds an Honors and master's degree in industrial engineering.

Carlien van Niekerk: CFO and co-founder
Experience in business strategy and financial administration. She holds a diploma in accounting, a degree and Honors degree in sports science.

Karen von Weilligh: Business Development Consultant
Extensive experience in last-mile logistics. She worked for the largest online retailers Take-A-Lot and Checkers Sixty60. She holds an MBA.

Marthinus Harmse: Technical Manager
He is a qualified automotive body repairer and welder. He has 20 years of extensive automotive experience.

Website
www.stroom.co.za

stroom-cargo-bikes

Contact Us
Bouwer van Niekerk, CEO
info@stroom.co.za

About
STROOM is Africa's leading designer and manufacturer of cargo e-bikes. Recognized for its advanced manufacturing, STROOM received support from the South African government's Aerospace Industry Support Initiative (AISI). The company also signed an MoU with Jatco from Japan, a Nissan subsidiary, to co-develop and test cargo e-bike technology using automotive expertise.

The Challenge
Informal settlements in South Africa and the rest of Africa are underserved with logistical services. It lacks efficient, affordable and green delivery services.

Africa's population is projected to reach 25% of the global total by 2050, with Africa's emissions doubling by then. Cargo e-bikes present a sustainable, job-creating solution—particularly empowering youth and women. With youth unemployment exceeding 50% in South Africa and many other African nations, the need for innovative employment models is urgent. Early workforce entry boosts long-term career prospects and is vital to the strength of democratic societies.

The Solution
Cargo e-bikes offer a green, affordable solution for delivery in South Africa's and the rest of Africa's underserved informal settlements. No license is needed, making it easy to train and employ youth and women.

STROOM is a cost-effective manufacturer with more than 80% of vehicle value manufactured in-house. STROOM owns all intellectual property. STROOM's cargo e-bike school train riders who in turn rent cargo e-bikes and use STROOM's ecosystem to help generate delivery business.

Traction
Market size: Cargo e-bikes are increasing in popularity and STROOM's local serviceable obtainable market by 2029 is 16,200 cargo e-bikes.

Revenue: STROOM generated US $100,000 in revenue by October 2024 and expects to grow significantly as it starts to roll out its logistical hubs. By the end of 2026, STROOM aims to roll out 50 cargo e-bike logistical hubs with 1,000 vehicles, employing more than 2000 youth and women through a shift rental system and achieving revenues in year 3 of more than $3 million annually through its rental model.

Milestones: STROOM has achieved the following milestones:
- 80 operational e-bikes with different classes of cargo e-bike models available to consumers
- Long term testing completed with more than 100,000kms of delivery testing
- 3.8 tons of carbon emissions offset

Investment Opportunity
STROOM seeks US $1.1 million in funding through grants, loans, convertible loans or equity to roll out logistical hubs of cargo e-bikes.

Mobius Energy

Established
2020

Location
South Africa

Sector
Zero emissions mobility

Employees
7

Capital Raised
US $1.42 million

Leadership Team
Hugo van Veen: Founder and CEO
Hugo van Veen has founded and led four successful and profitable startups that introduced groundbreaking products in their respective markets. Hugo has over 30 years of experience in finance, project management, private equity, and engineering.

Ivaan de Jager: CTO
Ivaan de Jager is an energy expert with over 20 years of experience in electrical engineering, specializing in power quality, solar PV, and technical product design

Website
www.mobius-energy.com

Mobius-energy-technologies

Contact
Hugo van Veen
hugo@mobius-energy.com

About
Mobius Energy is a provider of efficient, high-performance energy storage systems for electric vehicles and renewable energy applications. By focusing on sustainability, innovation, and reliability, the company empowers industries to reduce carbon emissions and push towards a sustainable future.

The Challenge
The cold storage transportation industry heavily relies on fossil fuels, contributing to 15% of global CO_2 emissions. With 95% of the sector using diesel-powered refrigeration units, the industry faces challenges in decarbonization. Diesel refrigeration emits 15–40 tons of CO_2 per year per vehicle and consumes up to 15,000 liters of diesel annually, making it both environmentally harmful and costly. Additionally, increasing regulations on urban emissions and noise pollution, along with pressure from food retailers, are driving the demand for greener transportation solutions.

The Solution
Mobius Energy has developed a proprietary electric refrigeration inverter system that utilizes battery and solar technology. The startup conducted over 5 years of research and development (R&D) in partnership with Thermo King, a global leader in vehicle refrigeration to develop custom-designed equipment with global IP that is ready for patent.

Traction
Market size: South Africa has a total addressable market of 15,000 trucks, a serviceable available market of 9,000, and a serviceable obtainable market of 4,500. The industry benefits from a steady replacement cycle of 5–7 years and 2–3% annual growth, making it resilient to economic fluctuations, as it is driven by the essential food transport sector. Additionally, Mobius has strong connections in East Africa, particularly in Kenya, and sees Ethiopia as a strategic growth market due to its ban on fossil fuel-based generation.

Revenue: Mobius Energy has generated a total revenue of US $1.05 million to date. The client payback period is 2 to 3 years with measured savings of total vehicle fuel consumption of 35% to 55%.

Milestones: Mobius Energy has achieved the following milestones:
- Deployed 25 units to five large logistics companies operating in South Africa
- More than 100,000 hours logged run time
- Total of 360,000 liters of diesel has been saved

Investment Opportunity
Mobius Energy seeks to raise US $2.5 million in equity and debt. The funds will be used for marketing, expansion into markets across Africa and Europe, and to develop a secondary product and R&D.

EBOOST

Established
2020

Location
Vietnam

Sector
Zero emissions mobility

Employees
25

Capital Raised
US $2 million

Leadership Team

Stefan Kaufman: CEO and founder
18+ years of experience leading companies with a focus on technology innovation, marketing, sales and development

Thu Le: COO
7+ years of experience in operations, facilities and property management across prominent firms

Nguyen Tran Huu Nguyen: CTO
10+ years of experience in research and technology innovations development. PhD in computer science and engineering.

Website
www.eboost.vn

eboostpower

Contact
Stefan Kaufmann, CEO
stefan.kaufmann@eboost.vn

About
EBOOST is a Vietnamese startup developing a nation-wide open network of electric two- and four-wheeler charging stations that are integrated with mobile technology for easy tracking and payments.

The Challenge
Lack of brand-agnostic charging infrastructure to accelerate the adoption of e-mobility, improve the bad air quality and bring down the transportation sector's carbon footprint.

The Solution
EBOOST builds and maintains a smart and brand-agnostic EV charging network with prime locations in multi-unit buildings, hotels, factories and large shared parking areas. The startup generates revenue through its Charging-as-a-Service model and multi-year exclusive contracts with these locations. Furthermore, EBOOST offers franchise models where locations or businesses can buy chargers and EBOOST operates with a recurring subscription over its own management platform. Lastly, EBOOST runs a marketplace approach for linked services such as ads for commercial brands or its clientele on its app.

Traction
Market size: The EV market in Vietnam is poised to rapid grow as the combined number of electric bikes and cars is estimated to reach about 18.4 million by 2030. A significant jump from the current number of around 3-4 million electric vehicles. EBOOST expects to have a target accessible market of around 13 million vehicles.

Revenue: As of the end of 2024, EBOOST has approximately US $57,000 in annual recurring revenue.

Milestones: EBOOST has reached several milestones that are positioning it to be a market leader in Vietnam:
- Strategic partnerships with BYD, GRAB, HSBC, and others.
- Expansion to 228 locations with more than 1,800 charging points.
- Reached over 1,000 frequent active users and over 8,000 having an account registered.

Investment Opportunity
EBOOST seeks US $3-4 million with the following split:
- US $2 million in equity and/or convertible loans for operating expenses.
- US $1-2 million in debt financing for capital expenditure such as expansion and investments for its e-charging network.

Sub-Sector Focus

Renewable Energy

ZhanaSolutions

Established
2019

Location
Colombia

Sector
Renewable energy

Employees
11

Capital Raised
US $1.2 million in SAFE and debt

Leadership Team
Francisco Vivas: CEO
15+ years of experience. A finance expert with experience in business plan formulation, management and strategic growth.

Javier Andres De Castro: CTO
17+ years of experience and two patents to his name. An expert in developing innovative water decontamination solutions.

Andres Galindo: CBDO
15+ years of experience in C-level roles with strong track record in managing investment and grant projects. Serial technology entrepreneur and impact investor, and a member of the Global Top Tier impact investment network.

Website
www.zhanasolutions.com

zhana-solutions

Contact
Francisco Vivas
francisco.vivas@zhanasolutions.com

About
ZhanaSolutions Technology enhances water resilience by recovering oils and fats for advanced biofuel production. This process decontaminates discharge from the food industry, reduces water pollution and dependence on fossil fuels.

The Challenge
There is an inputs deficit for biodiesel production, particularly due to the limited supply of used cooking oil (UCO) and brown grease. As demand for alternative energies rises, the recovery of UCO and brown grease becomes increasingly valuable, providing a new input for biodiesel production. Additionally, accumulation in sewer networks leads to obstructions, flooding and water pollution, highlighting the need for effective waste management.

The Solution
ZhanaSolutions provides a circular economy service, in which it uses cutting-edge equipment to recover fatty waste from the food preparation and production industry. The quality of the collected waste is appropriate for biodiesel conversion. The company offers a comprehensive discharge decontamination service, which includes equipment rental and maintenance, and the logistics necessary to manage and delivery the waste for biofuel production. The system also measures sustainability indicators in terms of reduced carbon emissions and saved water.

Traction
Market size: The solution has a total addressable market of 167,000 industrial kitchens and ZhanaSolutions' serviceable obtainable market is reaching at least 3,000 kitchens in the next two years. The Fats, Oils, and Grease (FOG) market, particularly for brown grease, is poised for significant growth, linked to biofuel production projected to reach US $225.9 billion by 2028. In Colombia, this expansion is supported by stricter environmental regulations and government initiatives promoting sustainability.

Revenue: To date, ZhanaSolutions has achieved US $365,000 in revenue, with over US $140,000 achieved by Q2 2024, and a churn rate close to zero with positive earnings before interest, taxes, depreciation, and amortization (EBITDA).

Milestones: ZhanaSolutions has achieved the following milestones:
- Collaborations with major restaurant and hotel brands in Colombia, including Frisby, Juan Valdez and Crepes & Waffles.
- Commercial agreements with brands such McDonald's and Burger King, which holds the potential for international expansion.

Investment Opportunity
Zhana Solutions is looking for US $1 million to consolidate its growth strategy and expand the business in Colombia and abroad.

BATx

Established
2020

Location
Colombia

Sector
Renewable energy

Employees
10

Capital Raised
US $450,000

Leadership Team
Alejandro Camargo: Co-founder and CEO
Physics engineer specializing in lithium-ion battery design and treatment and expertise in diagnostic machine development and process innovation

Pablo Castellanos Ramelli: Co-founder and COO
Lawyer and political scientist with expertise in marketing, regulation, and sustainable development project implementation

Nessim Assad: BDM
Mechanical engineer with a master's degree in renewable energies and a vast knowledge of the energy sector, as well as energy-based markets

Website
www.batx.co

batxco

Contact
Pablo Castellanos Ramelli
pcastellanos@batx.co

About
BATx is redefining energy storage by repurposing prematurely discarded lithium-ion batteries that would otherwise undergo final disposal. With cutting-edge technology and a commitment to sustainability, BATx extends battery life, reduces waste, and minimizes environmental impact, enabling a circular economy for battery production.

The Challenge
The rapid rise of electric vehicles and renewable energy has led to a surge in battery waste, posing significant environmental and supply chain risks. Traditional disposal methods contribute to pollution, while the extraction of new raw materials is costly and unsustainable. Additionally, the industry faces inefficiencies in battery recycling infrastructure and regulatory hurdles that slow progress.

The Solution
BATx focuses on large-scale grid applications and cost-effective energy storage, providing refurbished batteries for the EV sector for small-to-medium-scale applications, as well as large-scale grid applications with Battery Energy Storage Systems (BESS). BATx offers a cost-effective solution that strengthens its competitive edge with second-life batteries priced 30-40% lower than new alternatives. By addressing a key gap in battery diagnostics and second-life production, it helps lower costs and expand access to renewable energy solutions.

Traction
Market size: BATx operates in the rapidly growing global energy storage market, valued at US $50 billion annually and projected to expand at a 25% compound monthly growth rate over the next two decades. In Latin America, BATx's serviceable available market is an estimated US $500 million annually, with Colombia accounting for US $55 million. Targeting a 20% to 40% share of Colombia's market within five years, BATx aims for to generate US $10 million in annual sales.

Revenue: BATx generated US $415,000 (€381,000) in revenue as of Q4 2024.

Milestones: BATx has achieved the following milestones:
- First company in the region to manufacture and repurpose lithium-ion batteries.
- Built partnerships with industry leaders such as Auteco, Volvo, BMW, Celsia, Ecopetrol and ISA.
- Developed and patented its own battery diagnosis process and deployed over 1MWh of second-life batteries in the market, further solidifying its position as an industry leader.

Investment Opportunity
BATx is raising US $491,000 (€450,000) to expand production, automate processes, and secure product certifications. This investment will scale operations, enhance efficiency, and strengthen its market positioning to drive increased adoption of cost-effective, second-life battery solutions.

Anega Energies Manufacturing

Established
2022

Location
Ethiopia

Sector
Renewable energy

Employees
30

Capital Raised
US $440,000

Leadership Team

Professor Tsegaye Nega: Founder and CEO
With over 25 years in academia, research, and conservation, Prof. Nega has been a pioneer in clean energy innovation in Ethiopia

Eman Omer Okash: General Manager
Eman holds an MBA from Addis Ababa Medical and Business College. He has extensive experience in strategic planning and operational management, and a strong commitment to environmental stewardship and women's empowerment.

Pascal Franken: Chief Product Designer
Pascal holds a master's in integrated product design from TU Delft. His design leadership ensures AEM's products are both user-friendly and high performing, significantly reducing emissions and improving cookstove efficiency.

Website
anegaenergiesmanufacturing.org

Contact
Tsegaye Nega
tsegaye.nega@healthyfire.cc

About
Anega Energies Manufacturing (AEM) designs and produces modern energy-efficient cooking solutions powered by fuel pellets made from readily available waste biomass, including spent coffee grounds, sawdust, and coffee husks. The United Nations Development Programme (UNDP) has recognized AEM as one of the world's top six grassroots energy companies, highlighting its innovation and impact.

The Challenge
Ethiopia's heavy reliance on solid fuels like wood, charcoal and crop residues for cooking and heating creates severe environmental and health issues. Traditional methods contribute to deforestation, indoor air pollution and over 60,000 preventable deaths annually, disproportionately affecting women and children. With 90% of the population affected, an estimated 25 million households urgently need cleaner cooking solutions.

The Solution
AEM's model integrates a locally made, battery-powered cookstove, clean-burning fuel pellets from recycled biomass, and a biochar buyback system that enhances soil and captures carbon. By distributing through local networks and cooperatives, AEM ensures its clean cooking solution remains affordable and accessible to communities.

Traction
Market size: The total addressable market consists of 25 million households. Within this, the serviceable available market (SAM) includes 7.5 million households. AEM's goal is to reach 750,000 households (10% of SAM) within five years.

Revenue: Available upon request.

Milestones: AEM has achieved the following milestones:
- Facility capable of producing 200 cookstoves/day
- Pellet line producing 1 ton/hour of high-quality fuel
- Over 5,000 clean cookstoves have already been deployed
- Partnerships with SNV, GIZ, and community organizations in Ethiopia

Investment Opportunity
AEM seeks US $2 million investment in the form of equity, loan, or a blended structure to:
- Scale manufacturing capacity
- Expand national distribution and after-sales support
- Develop PAYGO and SACCO-based financing systems
- Enhance monitoring and evaluation systems
- Strengthen brand visibility and rural market penetration

Crustea

Established
2022

Location
Indonesia

Sector
Renewable energy

Employees
7

Capital Raised
Bootstrapping but already generatung revenue

Leadership Team

Roikhanatun Nafi'ah: Founder and CEO
Over 5 years of experience in management and innovation

Riza Alaudin Syah: Co-founder and VP of technology
Over 20 years of experience in AI, IoT and Software fields

Dian Martha: Deputy GM and Carbon Project Manager
Over 5 years of experience in asset management credit and digital business lecturer

Website
www.crustea.id

Crustea-Indonesia

Contact
Dian Martha
dianmarthaa@gmail.com

About
Crustea is a dynamic startup pioneering advancements in aquaculture technology by deploying its proprietary solar-powered Eco-Aerators and IoT monitoring systems that significantly reduce operational costs and greenhouse gas (GHG) emissions while boosting farm productivity. With a strong focus on innovation, the company develops sustainable solutions that enhance resource efficiency and drive eco-friendly practices within the aquaculture industry.

The Challenge
The aquaculture industry faces critical challenges that limit productivity, including shrimp mortality caused by poor water quality management leading to uncontrolled dissolved oxygen levels, and high operational costs that financially constrain shrimp farmers.

The Solution
The Eco-Aerator uses advanced, eco-friendly technology with AI and IoT capabilities to optimize aquaculture. The EBII Monitoring & Controlling System allows farmers to track and manage pond conditions remotely with smart sensors. Meanwhile, the Smart Energy System measures efficiency and energy savings, helping farmers maximize sustainability with Crustea's technology.

Traction
Market size: The Southeast Asian aquaculture market is an estimated US $41 billion. The serviceable obtainable market (SOM) is US $10 billion in Indonesia. Crustea aims to capture this segment through its Eco-Aerator technology. This targeted approach addresses environmental challenges while laying the groundwork for expansion across Southeast Asia.

Revenue: Generated US $120,000 in revenue in 2023.

Milestones: Crustea has achieved the following milestones:
- Launched Eco Aerator and IoT systems
- Boosted shrimp productivity by 200%
- Reduced operational costs by up to 80%
- Reduced GHG by 23,044 CO_2

Investment Opportunity
Currently raising US $1 million in equity funding to scale production, enhance R&D for AI and IoT solutions, and expand market reach.

Takazuri

Established
2023
2019

Location
Kenya
UK

Sectors
Renewable energy

Employees
5

Capital Raised
US $350,000 in grants
US $100,000 founder's equity

Leadership Team
Maria Schlesinger: CEO and co-founder
BDes in product design, MA in industrial design. Recycling and product development expert in the USA, EU and Africa.

Adel Kassem: Design director and co-founder
BDes in product design. Industrial Designer with 20+ years in product design in the EU and Latin America.

Christopher Hornor: Business development and co-founder
BSc in medical anthropology. Renewable energy entrepreneur with 20+ years of experience in the USA, EU and Africa.

Zehra Ali: COO
MIT engineer, MBA with 10+ years of experience in construction and plastics in the EU and Asia

Website
www.takazuri.com

takazuri-ltd

Contact
Maria Schlesinger
maria@takazuri.com
info@takazuri.com

About
Takazuri is a design and innovation company focused on creating smart building products that enhance climate resilience.

The Challenge
Climate change demands a global shift in the way we build. By 2050, an estimated 400 million people in East Africa will require sustainable housing to fulfill a significant housing deficit. Current construction materials fall short in resilience, energy efficiency and environmental sustainability.

The Solution
Climatile™ is a patent pending, multifunctional roofing and cladding system made from recycled polymers. It provides enhanced insulation, safe rainwater harvesting, and integrates solar energy. It is easy to install and ideal for permanent and temporary buildings. Through an asset-light model, Takazuri leverages strong partnerships in its value chain to scale rapidly across regions using a licensing model.

Traction
Market size: The global construction market was US $5,412 billion in 2021 and by 2031, projected to US $11,211 billion. The serviceable available market in Kenya grows at compound annual growth rate of 7.1%. The serviceable obtainable market is US $4.3 million in revenues for 2025.

Revenue: Takazuri has generated US $50,000 in revenue in the current financial year. Between 2025 – 2027, the startup envisions over 2 million Climatile™ across key markets, leveraging strategic partnerships and licensing. Its projected revenue is over US $35 million by 2026 through product sales and licensing agreements.

Milestones: Takazuri has achieved the following milestones:
- Commercialization and closing of 700+ sqm in sales of ClimatileTM and 90 KW integrated solar to date.
- Collaborations with Kwale Recycling Centre and Mr. Green Africa for recycled materials.
- Product development and testing with partners BASF in Germany, Gabriel Chemie in Austria, SGS in China and Europe, and Istituto Giordano in Italy.
- Toll manufacturing set up with leading injection molding company in East Africa with 4000 sq. m in monthly production.

Investment Opportunity
Takazuri is seeking up to US $1.5million in grants, debt and equity in 2025:
- US $450,000 to scale in East Africa and accelerate market entry in additional mature markets.
- US $150,000 for additional product development and certifications.
- US $200,000 for direct marketing and channel development.
- US $100,000 in capex investments for cost optimization.
- US $450,000 to hire a core team in the US and EU, and team development in East Africa.
- $150,000 for legal and licensing fees.

Kulu Eco-services

Established
2021

Location
South Africa

Sectors
Renewable energy

Employees
40

Capital Raised
US $566,000

Leadership Team
Dr. Pieter van Heyningen: CEO
16+ year of experience in sustainability. PhD in innovation and sustainability.

Hannes Jonker: Lead Technician and Hub operations manager
Qualified electrician and automation specialist

Theresa Le Roux: Financial Manager
24 years of experience in finance

Website
https://kuluecoservices.co.za

Kulu Eco-services

Contact
Pieter van Heyningen, CEO
pieter@sustnet.com
+27(0)792944390

About
Kulu Eco-services is set to revolutionize waste management in South Africa. Starting with converting organic and liquid waste into feedstocks for biofuels and bioenergy, the company seeks to disrupt traditional models of waste management through a smart digital platform that diverts waste to its processing hubs and converts it into energy. It also offers carbon credits through its green credit incentives program.

The Challenge
South Africa generates 122 million tons of waste annually and only 10% is recycled. Waste systems remain linear, and landfills are overflowing. The South African Department of Environmental Affairs plans to ban all organic material from landfills by 2027. A transition from unsustainable linear waste systems to more circular economy solutions is needed, but successful technologies and projects are scarce in South Africa.

The Solution
Kulu is transforming waste management by tackling complex, previously untreatable waste streams. Its innovative facilities and advanced separation techniques convert waste into biofuel and biogas feedstocks. With seed funding secured and first-phase operations launched, Kulu is proving global demand for its clean energy solutions. A digital platform is in development to help waste generators find better alternatives to landfill.

Traction
Market Size: South Africa's total addressable market for organic waste is approximately 30 million tons annually. Although precise data on the serviceable available market is limited, Kulu estimates that by securing a 60% share in Gauteng and the Western Cape, its serviceable obtainable market (SOM) could reach around 8.8 million tons of organic waste per year. Currently, Kulu accesses less than 1% of this SOM, underscoring significant growth potential.

Revenue: US $2.85 million to date; projected to grow 81% year on year and reach US $8 million within the next two years.

Milestones: Kulu has successfully achieved the following milestones:
- Raised seed capital to build the first prototype commercial plant.
- Completed and operated a first-phase commercial plant, which transforms waste into renewable energy feedstocks.
- Diverted over 25,000 tons of waste from landfill to date.
- Exported over 120 tons of feedstocks for biofuels per month.

Investment Opportunity
Kulu is currently seeking an additional US $1.65 million in its next round of funding to scale and ramp up operations nationally, and thereafter US $5.5 million to scale the business tenfold.

Alternō

Established
2023

Location
Vietnam

Sector
Renewable energy

Employees
12

Capital Raised
US $1 million in pre-seed round
US $1 million A1 round

Leadership Team
Hai Ho: CEO
A serial entrepreneur with extensive experience in building tech startups, with a focus on renewable energy and sustainability

Nam Nguyễn: CTO
10+ years of experience in robotics and automation, Nam has been instrumental in leading Alternō's technological innovations

Website
alterno.net

Alternō

Contact
Hai Ho, CEO
hai@alterno.net

About
Alternō is a pioneering climate tech startup headquartered in Singapore with R&D and manufacturing in Vietnam. It developed the world's first sand-based thermal battery for agricultural and industrial applications, delivering high-temperature heat (300–600°C) at the lowest cost in the market. Its solution cuts fossil fuel use by up to 50% and has been validated through successful pilot installations with global leaders like PepsiCo and Mondelez.

The Challenge
34% of global greenhouse gas (GHG) emissions come from industrial heat and power. The International Energy Agency reports that heat accounts for 50% of global energy use and 40% of CO_2 emission. Additionally, the Center for Climate and Energy Solutions states that 74% of industrial energy is derived from heat, with 75% of it still reliant on fossil fuels.

The Solution
Alternō develops sand-based thermal energy storage solutions that store renewable energy as heat, reducing dependency on fossil fuels. Its proprietary Alternō Standard and Alternō Pro systems provide cost-effective, long-duration storage for industries needing consistent high-temperature heat.

Traction
Market Size: The total addressable market for long-duration energy storage systems globally is valued at US $3.6 trillion. By 2028, the serviceable available market for solid fuel replacement is expected to generate US $401 billion in annual recurring revenue. Emerging trends indicate a growing demand for sustainable industrial heating, automation, and thermal storage.

Revenue: Alternō generated US $318,000 in revenues in 2024 and is projected to generate US $2.5-3 million in 2025.

Milestones: Alternō has achieved the following milestones:
- Achieved significant year-over-year revenue growth of 600%, reflecting strong market demand and rapid commercialization.
- Winner at Pepsi Greenhouse Accelerator and Top 2 at Startup World Cup 2024.
- Secured contracts with PepsiCo, Mondelez, and My Viet Coffee; engaged with Marubeni & Schneider Electric for pilot projects.
- Deployed Alternō Sand Battery at PepsiCo Hung Yen; expanding with Alternō Hybrid (biomass) and Alternō E (heat-to-electricity); scaled R&D and manufacturing.

Investment Opportunity
Alternō is raising US $1 million in Series A2 round at a US $10 million pre-money valuation to scale manufacturing, advance R&D, and expand partnerships. Revenue is projected at US $2.5-3 million in 2025, doubling to US $8-10 million in 2026, with over US $20 million expected by 2028. A Series B round in 2027–2028 will drive further growth with partners like Honda and Marubeni. Exit strategy: Strategic M&A or IPO by 2030.

Stride

Established
2021

Location
Vietnam

Sector
Renewable energy

Employees
19

Capital Raised
US $5.5 million equity (Seed+ Series A)
US $8 million debt

Leadership Team

Andrew Fairthorne: CEO
18+ years of experience in financial services and analytics with leading international and domestic banks. Strong track record of growing businesses and leading teams.

Leo Polojac: COO
20+ years of experience in financial services and telecommunications. 12 years of experience in risk management in Vietnam.

Tra Le: CTO
14+ years of experience developing and managing IT infrastructure across banking, telecommunications and engineering.

Website
www.stride.vn

stridecoltd

Contact
Andrew Fairthorne, CEO
af@stride.vn

About
Stride is a cleantech startup in Vietnam offering customers solar products and affordable payment plan options for their solar installations.

The Challenge
Vietnam's energy demands are increasing by more than 8% annually. As part of its energy transition plan, the Vietnamese government has set a goal of having 50% of buildings and residences have rooftop solar by 2030. However, high upfront costs remain a barrier to the adoption of solar energy.

The Solution
Stride's primary consumer segment is households and small-medium sized businesses. The startup's competitive advantage is a quick pre-approval process and a low upfront deposit of 20%. Stride pays the remaining 80% and collects it back in monthly installments. Another distinguishing factor is complimentary project insurance and independent quality assurance check, which increases consumer confidence in the product.

Stride offers consumers two points of sale:
- Direct through Stride's online channel.
- Stride's solar installer network which offers discounts that can be passed on to consumers.

Traction
Market size: The serviceable addressable market in Vietnam is around US $4.5 billion and Stride has the potential to reach about 5% of this market in the next five years, about US $225 million.

Revenue: Stride quadrupled its revenue in 2024 and plans to double its revenue in 2025. Specific numbers can be provided on request.

Milestones: Stride has grown rapidly with its 20MW solar power plant having signed projects by end of 2024 and aims to double its capacity in 2025.

Investment Opportunity
Stride is looking for US $8-10 million in convertible note and non-dilutive debt financing to support the financing of new solar rooftop projects in Vietnam. This will continue to position the startup as a leader in payment plans in Vietnam and help it meet its projected capital requirements.

ReFeed

Established
2022

Location
Vietnam
Korea

Sector
Renewable energy

Capital Raised
US $1,800,000 equity
US $588,498 grants

Leadership Team
Lee Chungho: Founder and CEO
15+ years of experience in engineering and ESG at Hanhwa and Samsung

Joen Junbong: Co-founder
10+ years of experience in process engineering, and feedstock purchasing and planning at Hanwha and Samsung.

You JeongHwan: Co-founder
12+ years of experience in planning media platform at Chosunilbo and Asan Nanum Foundation.

Website
https://www.refeed.eco

refeedeco

Contact
Lee Chungho, CEO
ch.lee@refeed.eco

About
ReFeed revolutionizes used cooking oil collection (UCO), creating a sustainable supply chain for sustainable aviation fuel (SAF) while empowering communities and protecting the environment through innovative technology.

The Challenge
ReFeed's challenge is establishing a reliable UCO supply chain for the booming SAF market amidst complex logistical and market dynamics. This includes competing with the illicit "black oil" market for UCO, overcoming information asymmetry that hinders efficient collection, and ensuring proper disposal to mitigate environmental and health risks.

The Solution
ReFeed's solution tackles UCO waste and SAF demand with a tech-driven collection network. Smart vending machines and two apps incentivize collection, ensure traceability and financially empower communities. This creates a sustainable UCO supply chain, reducing environmental impact and providing crucial feedstock for SAF, while also educating the public and fostering a circular economy. ReFeed's target customers are twofold:
- UCO Generators: Restaurants, food processing facilities, schools, hotels and households—any entity that produces used cooking oil.
- SAF Producers/Airlines: Businesses that will ultimately use the collected UCO to create sustainable aviation fuel.

Traction
Market size: The national vegetable oil consumption is valued at US $2.4 billion and continues to grow. Each year, approximately 300,000 tons of UCO is generated. So far, ReFeed has covered 800 tons in the market and is on track to reach 1,000 tons soon.

Revenue: In 2023, ReFeed generated US $330,000 in revenue and closed 2024 with US $500,000 in revenue, a year-over-year growth rate of 151%. By 2028, ReFeed aims to generate over US $1,000,000 in annual revenue, have a team of over 100 full time workers, and recruit and train over 1,000 collaborators.

Milestones: ReFeed has achieved the following milestones:
- Secured MOUs and long-term contracts with partners and customers like Mitsubishi Corp, VinGroup, Marriott, and Melia.
- Awards totaling US $588,498 from multiple distinguished institutions, with an ongoing grant of US $40,000 from UNDP Indonesia.

Investment Opportunity
ReFeed is seeking to raise US $3 million in series A round through equity or SAFE agreements to:
- Expand collection network
- Enhance technology platform
- Build strategic partnerships with SAF producers and airlines

Sub-Sector Focus

Water Resilience

Waterlife

Established
2017

Location
Ethiopia

Sector
Water resilience

Employees
12

Capital Raised
US $468,000

Leadership Team

Fasika Afeworik: Co-Founder and CEO
20 years of experience in design, product development, manufacturing and training, specializing in low-cost water and agricultural technologies

Rahel Ayele: General Manager & Co-Founder
Experienced in communications and business negotiations, driving strategic growth and partnerships

Dejene Hailu: Deputy GM and Carbon Project Manager
Experienced in leading project implementation and carbon credit initiatives, with expertise in engineering and marketing management

Website
www.waterlifecon.com

Waterlife-plc

Contact
Rahel Ayele
fasika.a@waterlifecon.com

About
WaterLife Construction PLC provides affordable and reliable water-well drilling services in Ethiopia. With expertise in both manual and machine-operated borehole drilling, the company helps communities access clean water. Services include manufacturing agricultural equipment and engineering solutions.

The Challenge
Ethiopia faces a high rate of non-functional rural water systems, leaving 87% of the population relying on unsafely managed drinking water services. With an average non-functionality rate of 19%**,** sustainable and market-based solutions are needed to ensure long-term access to clean and safe water.

The Solution
Waterlife constructs new water points and rehabilitate broken works, providing clean and safe drinking water to rural residents. The startup is running three SMART Water Kiosks as a pilot project, offering purified water at a low cost. These kiosks operate under a franchise model, empowering women and youth groups within the community and creating local employment opportunities. Waterlife aims to generate profits while delivering exceptional value to customers, engaging individuals and businesses that utilize their water services.

Traction
Market size: Approximately 35 million people in Ethiopia lack access to clean and safe drinking water. The total addressable market is around 3.7 million people (740,000 households). 1.5 million are in the serviceable available market. Since both government and NGOs provide clean and safe drinking water to communities, Waterlife aims to capture a market of around 250,000 people (50,000 households) in five years.

Revenue: Waterlife recorded a 21% growth in revenues 2022-2023 to reach US $70,477 in 2023 and a further 50% growth to reach US $105,716 in 2024. With a planned expansion and business model enhancement, revenues for 2025 are projected to rise to US $222,100

Milestones: Waterlife has achieved the following milestones:
- Constructed 73 new water points and 57 rehabilitation works in Sidama, Oromia, and Amhara Regional States
- Provided a total of 10,000 households consisting of 50,000 people with access to safe and clean water through the rehabilitated water schemes

Investment Opportunity
Waterlife aims to raise US $1,000,000 in equity to be channeled towards:
- Infrastructure Rehabilitation: Upgrading and transitioning non-functional systems to solar-powered solutions
- Smart Technology Deployment: Implementing IoT-enabled water management for operational efficiency
- Water Kiosks Expansion: Establishing franchise-based models to drive sustainable water access
- Carbon Credit Integration: Strengthening financial sustainability through carbon trading mechanisms

Grekkon Limited

Established
2013

Location
Kenya

Sector
Water resilience
Climate smart agriculture

Employees
22

Capital Raised
US $279,000 as equity

Leadership Team

Wamae Mwangi: Administration and Commercial Director
18+ years of experience working with small holder farmers across 13 African countries during his tenure at Farmchem Limited, Monsanto (now Bayer), and OCP Africa where he was the country director.

Erastus Matete: Founder and Director in Charge of Technical and Innovation
15+ years of experience working with small holder farmers in east Africa during his tenure at Monsanto (now Bayer), and Yara fertilizers where he was the territorial lead.

Website
www.grekkon.co.ke

grekkon-limited-irrigation-hub

Contact
Wamae Mwangi: Administration Director
wamae@grekkon.co.ke

About
Grekkon Limited was built to offer climate smart solutions such as borehole drilling and irrigation to small-holder farmers in Africa who are most affected by the ravages of climate change. The startup was registered in 2013 but formally began its operations in January 2017.

The Challenge
Sub-Saharan Africa has a host of water-related challenges such as:
- Increased need for boreholes and irrigation for crop and livestock production
- High incidences of 'dry' wells due to low quality water scanning technology
- Inability to determine if the water quality in a borehole is suitable for irrigation before drilling

The Solution
Grekkon uses advanced Danish technology TEMS for groundwater geo scanning, which guarantees 100% identification of irrigation water aquifers. This in turn ensures that every borehole drilled is high yielding, and that the water quality is suitable for irrigation. The startup offers five solutions:
- Water sourcing and borehole drilling
- Water harvesting and storage through dam liners
- Water pumping including solar-driven surface pumps and submersible water pumps
- Irrigation solutions including drip and overhead systems
- Post-harvest crop losses management incl. solar driven drying solutions

Traction
Market size: The serviceable available irrigation market in Kenya is estimated at US $425 million with Grekkon's obtainable market being 0.10% which amounts to US $42.5 Million.

Revenue: In 2024, Grekkon generated US $1.168 million in revenue and expects to reach US $1.66 million by the end of 2025. Grekkon expects to retain a 60% YoY revenue growth and grow its annual revenue to US $10.9 million by 2028.

Milestones**:** Grekkon has achieved the following milestones:
- First to introduce double emitter drip lines in the Kenyan market to address the challenge of drip emitter clogging
- Projecting to reach up to 20,000 farmers with the company's product offering by December 2024

Investment Opportunity
The company seeks to raise US $2 million split evenly across equity and debt. This will support expansion into Africa, working capital and manufacturing.

Irri-Hub Ke

Established
2017

Location
Kenya

Sectors
Climate smart agriculture
Water resilience

Employees
17

Capital Raised
US $450,000

Leadership Team
Eric Onchonga: Co-founder & CEO
12+ years of experience in venture building. A top innovator recognized by the World Economic Forum and the winner of the African Youth Development Challenge in 2021. MBA at the University of Nairobi and a certificate in Entrepreneurship in emerging economies from Harvard University.

Sheila Monyenche: Co-founder & CFO
6+ years of expertise in analysis and monitoring controls. A Certified Public Accountant & Audit Professional whose main area of experience is in financial reporting, financial management, and auditing.

Website
www.irri-hub.com

Irri-Hub Ke

Contact
Sheila Monyenche: Co-founder & CFO
sheila@irri-hub.com

About
Irri-Hub Ke is an agriculture company that provides rainwater harvesting with solar-enabled drip irrigation systems. These systems are IoT-enabled and bundled with ongoing customer support to smallholder farmers in Kenya, helping them maximize productivity as they build resilience against climate change

The Challenge
98% of Africa's smallholder farmers rely on rain-fed agriculture for sustenance. They have limited access to modern irrigation systems and knowledge regarding optimal farming practices crucial for transitioning to sustainable, climate-resilient agriculture. This transition is crucial for maximizing productivity and building resilience against the impacts of climate change.

The Solution
Irri-Hub Ke designs and implements low-cost water management solutions that help small farmers increase yield and predictability of production. The end-to-end model offers everything from product sales to seedlings distribution, installation and service.

Traction
Market size: The serviceable available market for smallholder farmers in Africa is 5 million and Irri-Hub Ke's serviceable obtainable market is 3 million smallholder farmers. The startup aims to reach 50,000 farmers by the end of 2030.

Revenue: Irri-Hub Ke has generated US $1 million in revenue since its inception. The company is currently piloting its IoT model. In 2024, Irri-Hub Ke generated revenue of US $574,468 and expects a 30% year-on-year growth.

Milestones: The startup has achieved the following milestones:
- Worked with 3,000 farmers to date
- Increased smallholder revenue by 33%
- Increased yields by 40%
- Saved more than 200 million cubic liters of water

Investment Opportunity
Irri-Hub Ke seeking US $1,200,000 in grant and debt financing. This will be used for capacity building, research and development, inventory - IOT hardware and agro-dealer onboarding.

Loowatt ZA Pty (KALOOLA)

Established
2023

Location
UK
South Africa

Sector
Water & Sanitation

Employees
5

Capital Raised
US $10.5 million

Leadership Team

Alvin Anderson: Executive Director
Bold leader with 7+ years of experience in management and enterprise development of water and sanitation solutions for South Africa's informal settlements in Durban and beyond.

Steven Gooding: General Manager
Seasoned leader with 20+ years of experience as a branch manager for Sanitech in Gauteng for services to construction sites, events and informal settlements

Website
https://www.kaloola.co.za

kaloola-sa

Contact
Alvin Anderson
alvin@kaloola.co.za

About

Kaloola is the first paid sanitation service in South Africa, targeting low-income communities who lack access to water and sanitation. The overall objective of the social enterprise is to expand the service to reach 16,500 customers by 2029, with a core strategy of diversifying into the commercial toilet hire sector to strengthen profitability while growing social and environmental impact.

The Challenge

2 million homes in South Africa's informal settlements rely on shared chemical toilets, community ablution blocks, buckets and latrines. This presents a risk of damaging health, livelihoods, gender equality and social justice.

The Solution

Kaloola's solution consists of waterless flush toilets that seal waste into hermetic containers. Kaloola's services process waste at treatment sites with the human waste delivered as optimal feedstock for anaerobic digestion.

Traction

Market Size: In South Africa, B2C home service is a frontier market worth at least US $100M annually. The serviceable addressable market is at least US $100 million and government-contracted toilet services to housing developments are led by municipal service providers who desperately need more solutions to deliver essential services to their constituents.

Revenue: Kaloola generated US $47,000 in revenue in 2024 in business to customer services with less than 2% monthly churn. Kaloola targets a revenue generation of US $7.67 million by year 6 with an EBITDA of US $2.2 million. This requires circa 16,500 toilets to be installed by year 6 with more than 1 million users.

Milestones: Kaloola successfully launched South Africa's first paid home toilet service and now serves over 1,000 home residents (150 contracts, 60% women) with less than 2% average monthly churn. The startup launched a commercial trailer offering at Durban in July 2024 to rave reviews of the product and service.

Investment Opportunity

Kaloola is raising US $2 million in total equity in 2025, with a first close of US $1 million by Q1-2025. The funds will be used to:

- Expand home and commercial services in Durban and beyond
- Establish local contract and license production of toilets and system consumables
- Develop circular economy partnerships

Photo by: African Bamboo

African Bamboo

An Ethiopian Startup Transforming Sustainable Construction, Creating Jobs and Regenerating Forests

November 2024

P4G
Pioneering Green Partnerships, Investing in Impact

AB

> *We are creating diversified skilled employment and entrepreneurial opportunities throughout the bamboo agroforestry value chain: from seedling production and sustainable forest management, to value addition manufacturing, to forest and soil carbon development. These solutions are not independent, isolated fixes; rather, they are part of a holistic ecosystem that addresses the social, economic and environmental challenges faced by different populations in Ethiopia.*
>
> **–Khalid Duri, Founder and CEO, African Bamboo**

By 2030, about 3 billion people globally will need new housing and basic infrastructure. This demand has immense health, wellbeing and climate implications.

The buildings and construction sector contributes to 37% of global emissions. As we think about new construction, we must consider replacing carbon-intensive materials with sustainable and climate resilient ones.

This is where bamboo, the fastest-growing plant on earth, comes in. Technically a grass, one hectare of bamboo can sequester about 17 tons of carbon a year. More crucially, it can continue to store carbon even when used in construction.

But can the mighty bamboo prove to be a match for the old construction stalwarts of concrete and cement? According to Ethiopia-based African Bamboo, and other breakthrough bamboo-based initiatives working in the sector, the answer is yes.

African Bamboo is a company that has developed a strong and resilient bamboo-based material that is a sustainable and lower-carbon alternative to traditional construction materials such as steel, plastic, aluminum or tropical hardwood.

African Bamboo's journey from inception to investability has been adaptive and systematic, yielding valuable lessons for other nature-based start-ups. This case study captures African Bamboo's path to building a sustainable and scalable business and the valuable lessons learned along the way.

The road to developing a strong prototype and an equitable supply chain to manufacture bamboo-based building materials was long, but none were more suited to the journey than entrepreneurial brother-and-sister duo Khalid and Rania Duri.

Originally in the furniture business, the Duri siblings had a deep knowledge of the timber value chain. While their primary customer base was the local market, they noticed supply chain challenges - timber was increasingly scarce, and they faced competition from cheaper imported products. Seeking more sustainable forestry sources, they recognized the need to pivot their business model. As they spent time studying Ethiopia's nascent forestry sector, the Duris' search for a supply of high-performance, locally available material led them from timber to bamboo.

The Duri siblings dedicated time to studying Ethiopia's native bamboo species - its availability, usability and potential for broader adoption. Khalid spent months immersed in bamboo-growing regions to deeply understand the market dynamics, existing technology and the overall value chain.

TECHNICAL APPROACH

The first commercial product African Bamboo developed was high-end bamboo decking and cladding with a certified 20-year lifespan. Replacing tropical hardwood and modified wood products, it is sourced from Forest Stewardship Council (FSC) certified forests and tested in accordance with European standards[1]. African Bamboo manages bamboo forests in a socially-, environmentally-, and economically-sustainable manner, supplying FSC-compliant bamboo from a 10,000 hectare catchment area and 4,500 hectares of community-owned bamboo patches.

The Duri siblings' journey to this point spanned 7 years, encompassing product development, testing and building a strong network of international technology partners. This included collaborating with

state-of-the-art applied research institutions such as Fraunhofer Institute WKI Germany, TU Dresden, TU Delft and TU Munich. In addition, African Bamboo collaborated with the Netherlands Organization for Applied Scientific Research (TNO) to co-innovate and refine the processing technology and advanced bamboo materials.

The early capital to build the pillars of the business was drawn from the Netherlands Enterprise Agency (RVO), the German development agency (GIZ), and USAID, together with the Duris who invested more than US $5.5 million of their own capital.

To innovate and streamline manufacturing processes, African Bamboo collaborated with German mechanical engineering firm Dieffenbacher, international plywood leader Raute and a host of other companies. Several NGOs have also supported the development and growth of the business, including SNV Ethiopia, the International Bamboo and Rattan Organization (INBAR), iDE Global and more.

With its pilot facility in Addis Ababa, African Bamboo has leveraged Europe's advanced applied research infrastructure to support both the development of an innovative product line and conduct further research. It has developed a technology cluster to support its growth, patent inventions and proprietary processes. While it raises capital for its manufacturing facility in Ethiopia, it also provides technology services to established materials manufacturers, which generates an additional source of revenue for the startup.

The bamboo species used in African Bamboo's products is Yushania alpina, or highland bamboo. This variety features longer fibers than Asian bamboos, a beneficial property for industrial applications. Additionally, highland bamboo is non-invasive and grows in loose clumps, with a productivity rate of 40-60 tons per hectare. This fast-growing bamboo also sequesters a significant amount of CO_2, capturing 30-50 tons per hectare annually.

African Bamboo has pioneered innovative processing technologies that have significantly enhanced the sustainability and efficiency of its products compared to conventional alternatives. The company has patented a novel production method that doubles throughput volumes relative to industry standards. This proprietary technology represents a 50% reduction in energy consumption compared to the pressing techniques commonly used for bamboo, plywood and similar materials. Additionally, it has also patented resin technology allowing for a 33%


Photo by: African Bamboo

reduction in resin consumption and enhanced application precision for mass production. This versatile technology works for different bamboo species as well as a range of other natural fibers.

Finally, it has devised a process for bamboo fiber enhancement. By altering its biomass contents, specifically reducing hemicellulose and increasing its lignin content, the company has been able to achieve up to 90% fiber enhancement and has resulted in 37% energy savings compared to conventional wet processes.

THE PRODUCT

African Bamboo's flagship product is bamboo decking, a high-quality material suitable for outdoor use and available in lengths up to 10 meters. This decking is as strong as the commonly used tropical hardwood Bangkirai, with even higher stiffness. The product – which conforms to EU standards – is fire-, water-, and termite-resistant, and comes with a 20-year manufacturer's warranty.

Through its approach, African Bamboo has developed a versatile high-performance bamboo board suited for modern construction applications that can be transformed into a variety of products. The company's alternative construction products are made from natural fibers that are extremely strong and durable, with 28,000 MPa bending strength –

the most important parameter for estimating the strength of a product in the industry. It has the strongest engineered structural material, 2 times stronger than wood and the highest engineered wood class (LVL80S), and is both environmentally friendly and price competitive.

POLICY SUPPORT

African Bamboo enjoys strong national-level support in Ethiopia and has been able to gain more support through the National Platform of the initiative Partnering for Green Growth and the Global Goals 2030 (P4G). P4G National Platforms (NP) are multi-stakeholder platforms co-chaired by senior government and private sector leaders. In the case of Ethiopia, this includes leaders from the Ministry of Planning and Development and the Chamber of Commerce. The NP has played a pivotal role in enabling African Bamboo's success in several ways: facilitating strategic partnerships and connections with national and local institutions, providing technical assistance, securing political buy-in, offering policy and regulatory support, and facilitating project implementation.

As with any nascent market, Ethiopia's current policies and regulations don't always keep up with the pace of change. African Bamboo aspires to see bamboo and trees categorized as an asset class in Ethiopia, so that utilizing these resources can be financed in new ways. Currently, asset classes in Ethiopia tend to be properties, movable assets like cars or, more recently, livestock.

One consequence of bamboo lacking this designation is that farmers are not able to borrow against their bamboo holdings. As a result, farmers cannot access revenue until they sell to African Bamboo – and they don't have available cash reserves to wait until the bamboo is mature to sell. Highland bamboo takes four years to mature before it can be harvested. The distinction of this bamboo is that it is harvested piecemeal, which means the plant remains healthy and standing after harvesting and continues to produce new shoots for future harvests. This nature of bamboo makes it more appealing for it to be considered a long-term investment asset.

By introducing carbon credits as a way of assigning value to the non-revenue-generating period of the tree, banks can design loans that use young bamboo or prospective bamboo farms as collateral. Pegging

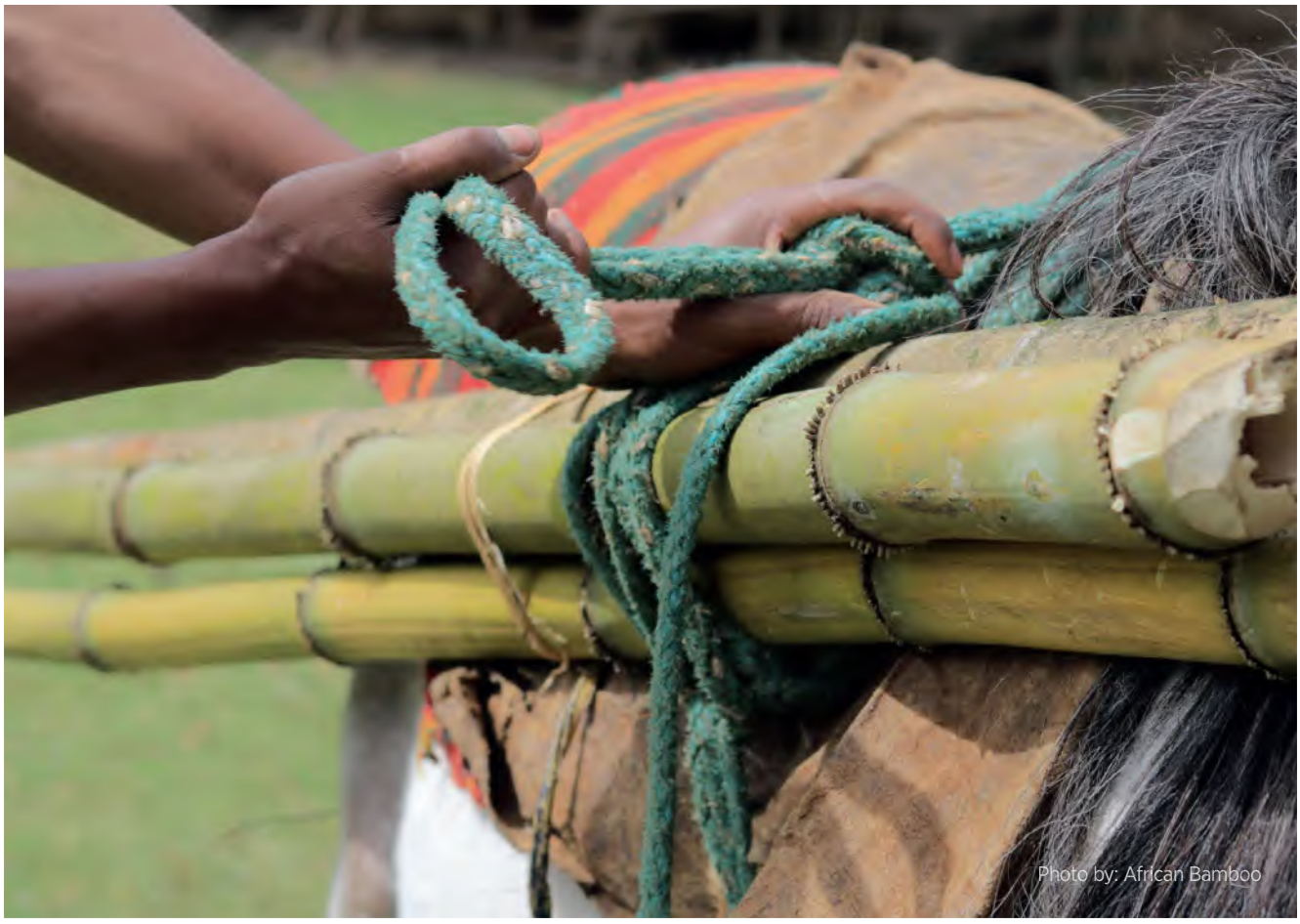


Photo by: African Bamboo

this to carbon credits also allows banks to give loans in local currency while selling the credits in dollars, thus circumnavigating the foreign exchange barrier that is an ongoing challenge in Ethiopia.

In addition, with the European Union's new Deforestation Regulation (EUDR) to curb the EU market's impact on global deforestation and forest degradation, there is an opportunity to restore lands and bring more traceability to the EU supply chain in Ethiopia. Under the new EU regulation, companies trading in commodities such as coffee, cocoa and wood (among others) are required to inspect their value chain to ensure the products do not contribute to deforestation or degradation.

This new regulation gives African Bamboo a significant advantage in the international market because of its heavy emphasis on sustainable production and land restoration. The business follows international sustainability standards with ongoing monitoring to comply with its FSC certification and Verra's Verified Carbon Standard. Practices include maintaining over 75% of canopy cover, involving and training local communities in bamboo growing and harvesting, and restoring degraded lands through seedling distribution to maintain native species and biodiversity. African Bamboo also works with local technical and vocational training institutes and governments to support smallholders.

Moreover, African Bamboo offers product traceability right to the source by using the Kanop software system to monitor and verify project activities. The system can trace bamboo and other species within the project ecosystem to the stock in a specific farmer's plot or a block in a natural forest asset.

INVESTMENT READINESS

Bamboo companies in low- and middle-income countries often face challenges in securing investment through equity or debt. This is primarily due to development finance institutions categorizing them as either forestry or agricultural ventures, which are perceived as high-risk – despite bamboo not strictly fitting into either category. The lack of clarity regarding classification is further compounded by the absence of financial models with suitable structures or expected returns.

What is clear, however, is that there is an incredible market opportunity for sustainable building materials – with expected market growth for bamboo projected at 4.5% until 2030[2]. This can be attributed to several factors, from countries and companies trying to meet their emissions targets and manage their climate risks to a growing consumer preference for sustainability and traceability.

African Bamboo's offering is well-positioned to meet this project market demand. The company's growth strategy is aligned with the Ethiopian government's ambition[3] of becoming the leading bamboo supplier in Africa by 2030. A distinct advantage African Bamboo has over other Ethiopian startups is its focus on exports. This allows it to generate foreign currency that covers its import needs. While Ethiopia's current economic policy incentivizes exporters, recent fiscal reforms have increased the investment case for the country, one that could attract more interest in African Bamboo and more broadly in the country's agroforestry sector.

Since its establishment in 2012, African Bamboo has dedicated itself to build a strong foundation for business at scale. During this time, it has:

- Developed and refined its technology and products to meet international standards
- Built an agro-forestry ecosystem through community engagement of nearly 6,000 farmers over 10,000 hectares
- Established the right to operate: Securing of more than 20,000 hectares of natural forest rights through a 25-year Supply Purchase Agreement with the regional government
- Obtained a production shed in the Hawassa Industrial Park and obtained the licenses for forestry, agriculture, trade, manufacturing and import/export needed to run the business at scale
- Developed a Verra-listed carbon offset product
- Signed a guaranteed offtake agreement with SECA, a leading wood industry company
- Began operating as a technology-first company providing research and development support on using

The company envisions its growth coming from multiple business lines:

1. Licensing its patented technology for processing natural fibers so that others can start their own product lines using the same species
2. Scaling the production and sale of the bamboo materials through its factory in Hawassa to meet its secured offtake agreement

3. Generating revenue through the sale of Verified Carbon Units from AB's Verra-listed ARR project in Ethiopia

The startup's core business is its technology services to others in the building industry. The licensing of its intellectual property to businesses across Africa is also part of its vision for expansion. In addition, African Bamboo envisions the sale of materials from its own manufacturing facility in Ethiopia and future partner facilities in other countries to generate additional revenue.

African Bamboo owns the patents to its processes, as well as a licensing model that will allow it to scale across Sub-Saharan Africa – which currently houses more than 4.5 million hectares of bamboo resources[4]. In Ethiopia alone, the bamboo industry could generate up to US $5 billion in annual revenue and provide over 1.3 million jobs[5].

The company expects its annual revenue to grow 300% from a projected US $2.7 million in 2025 to US $8.1 million in 2026. By 2030, it expects to generate an annual revenue of almost US $26.6 million. This growth rate is dependent on African Bamboo's ability to maintain its current positive trajectory and sustained growth across all its business offerings.

The company's business case has attracted strong interest from Germany's KFW and the Dutch development bank FMO for a financing round amounting to more than US $16 million to scale up African Bamboo's operations starting in 2025. It expects to close KFW financing by the end of 2024 and FMO financing in March 2025. The funding will enable the company to establish its manufacturing factory in Hawassa, Ethiopia. The startup is targeting June 2025 for placing plant and machinery orders for the factory with trial production starting in Q3 2026 and commercial production in Q4 2026. At capacity, the factory will be able to produce 900,000 m2 of outdoor bamboo decking per year. The factory will enable African Bamboo to generate US $94 million within the first 5 years through its secured offtake agreement.

The company is listed on Verra and will implement reforestation activities and trade in Verified Carbon Units, adhering to Verra's latest reforestation methodology (VM0047). The first carbon project is expected to store over 6 million tons of carbon over a 40-year period.

FUNDER ACTIVITIES

A key factor contributing to African Bamboo's investment readiness is the grant and technical assistance it received from Partnering for Green Growth and the Global Goals 2030 (P4G).

P4G is an initiative hosted by the World Resources Institute. It aims to mobilize climate finance to support early-stage businesses working in food, water and energy to enable country climate transitions. In 2022, P4G first provided African Bamboo with about US $585,000 in grant funding to enhance its investment readiness. It 2024, it provided a second round of grant funding amounting to US $500,000.

These funds have helped the company pursue activities and develop tools to expand its forest-to-business model – from building a modular financial model, to developing a risk measurement, management and sensitivity tool, to conducting environmental and social safeguard assessments.

The grants have also helped African Bamboo pursue a decarbonization plan that will include the production and sale of biochar and carbon credits, providing the company with the agility of an additional revenue stream. With the aid of P4G's funding, African Bamboo solidified its market presence by cementing a supply purchase agreement, showcasing its advanced technology, and entering the voluntary carbon market. These efforts ensured a strong value proposition for potential investors and partners while also reducing the business's risk perception.

P4G has also featured African Bamboo at high-profile events such as its 2023 global summit in Bogota, Colombia, where it spotlighted the company in accelerator and investor pitch sessions and brought it to the attention of different investors.

The African Bamboo team continued to meet with investors between 2021 – 2024 including institutions like the Dutch Fund for Climate and Development and the German state-owned investment and development bank KfW. In addition, it is working to secure additional revenue from carbon buyers by 2025.


Photo by: African Bamboo

BAMBOO CULTIVATION AND COMMUNITY IMPACT

African Bamboo was founded with a strong emphasis on community-led forestry operations. Drawing from their prior experience, the Duri siblings brought a deep understanding of how to build a sustainable value chain from the ground up. They recognized the key elements required to develop a resilient and financially viable project that delivered social, environmental and economic returns.

The community-centric approach is central to African Bamboo. Therefore, it works directly with smallholders to understand their needs. The business has established 30 farmer cooperatives across five districts in the Sidama Region in southern Ethiopia, bringing together 4,800 smallholder farmers covering 4,400 hectares (with an average land holding size of 1 hectare) to develop bamboo agroforests. This enables the procurement of bamboo as well as restoring degraded land – a particular issue plaguing the Sidama Region[6].

African Bamboo provides cooperative members with capacity-building technical and business training. On the technical side, this includes training on planting, harvesting, monitoring and reporting of carbon removal units. Business training includes business and financial plan development, bookkeeping, basic cooperative management, access to finance and market linkages. In addition, it has provided the community with upskilling opportunities on using digital tools that give farmers traceability. Since many of the farmers African Bamboo works with are also involved in coffee-growing operations, these skills are critical and transferrable to their work on coffee farms.

African Bamboo has also worked to address gender inequalities, encouraging women's participation in bamboo farms by prioritizing bamboo plots and parcels for reforestation located near homesteads. The startup has also held tailored training and conducted capacity-building initiatives in locations where women typically meet and congregate, so that they do not have to take more time out of their day to attend.

Bamboo grows at higher altitudes than coffee farms and men are typically more involved in coffee-growing. This has given African Bamboo a unique opportunity to prioritize women's engagement and financial inclusion.

At its full capacity of producing 900,000 m2 of bamboo decking per year, African Bamboo's bamboo agroforestry undertaking has the potential to unlock an array of employment opportunities[7] and pathways in Ethiopia. The business could generate more than 300,000 jobs across the bamboo value chain, including jobs in planting, irrigation, harvesting, transportation, processing, biochar manufacturing and monitoring. African Bamboo has determined its jobs modeling through expert and community consultations and on-the-ground implementation experience.

For Meseret Tona, a 23-year-old female farmer who attended a training conducted by African Bamboo on the potential of bamboo-growing, a local bamboo nursery backed by a kebele (a small administrative unit in Ethiopia) would be a "game-changer."

Growing bamboo, Tona says, "has the potential to bring about positive change in our community and empower local farmers."

African Bamboo has assisted farmers in several ways:

- Providing them with seed capital to build the capacity of their satellite and community nurseries
- Providing bridge loans to cover operational costs
- Supplying micro, small and medium enterprises (MSMEs) with bamboo-processing equipment (including supplying them with basic bamboo furniture and coffee-drying mats)

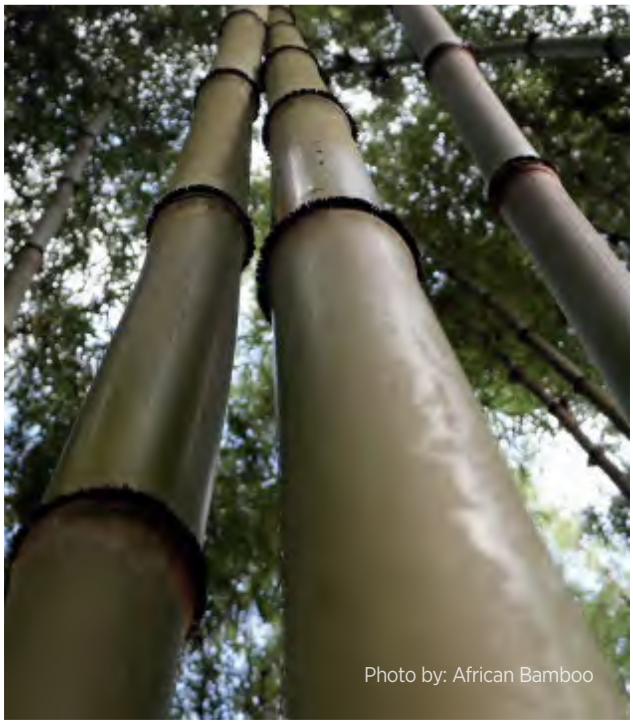


Photo by: African Bamboo

In total, the company has provided 12 cooperatives and 19 MSMEs with access to finance – totally more than 1,000 beneficiaries.

Genet Tumicha is a cooperative farmer working on her 2-hectare homestead. She sells bamboo and coffee at the local markets. One of the most challenging aspects of her work is her daily 15 kilometer (9.3 mile) trek to fetch water from the river to use in her home. She plans on using the seed capital that African Bamboo has provided her with to invest in a cart and water jerrycans. This will enable her to transport more produce to the market and reduce her water collection trips to just twice a week. More produce sold means more earnings for her – and she can use her free time to further invest in her homestead, such as building a fence to protect her crops from animal damage.

KEY LESSONS LEARNED

1. **An experienced team with deep technical and fundraising expertise is a key ingredient for success:** An experienced and tenacious team was paramount to African Bamboo's success. Khalid and Rania's deep familiarity with building resilient value chains in forestry helped the company build a robust business model that was both commercially viable and impact-driven. Embedding team members with an in-depth understanding of the start-up capital landscape boosted the company's fundraising efforts. In addition, adding employees with strong smallholder networks in the region helped African Bamboo reach and train more farmers to build an inclusive, strong and wide-ranging supply chain.
2. **Flexible finance is critical:** Raising greenfield finance in East Africa is challenging as most financiers require a fully operational model. African Bamboo's manufacturing model is not well-suited to this requirement. In order to build a resilient and sustainable business, the company had to build a forestry sector from the ground up. This differs vastly from regions such as the US or Europe, which have established forestry sectors. A lesson learned from African Bamboo's success story is that the market in countries like Ethiopia requires financing mechanisms beyond blended finance. The importance of grant funding, in particular, cannot be undervalued in terms of its contribution to de-risking early-stage businesses. African Bamboo credits P4G as one of the initiatives that helped it turn the corner to commercial viability by providing it with grant

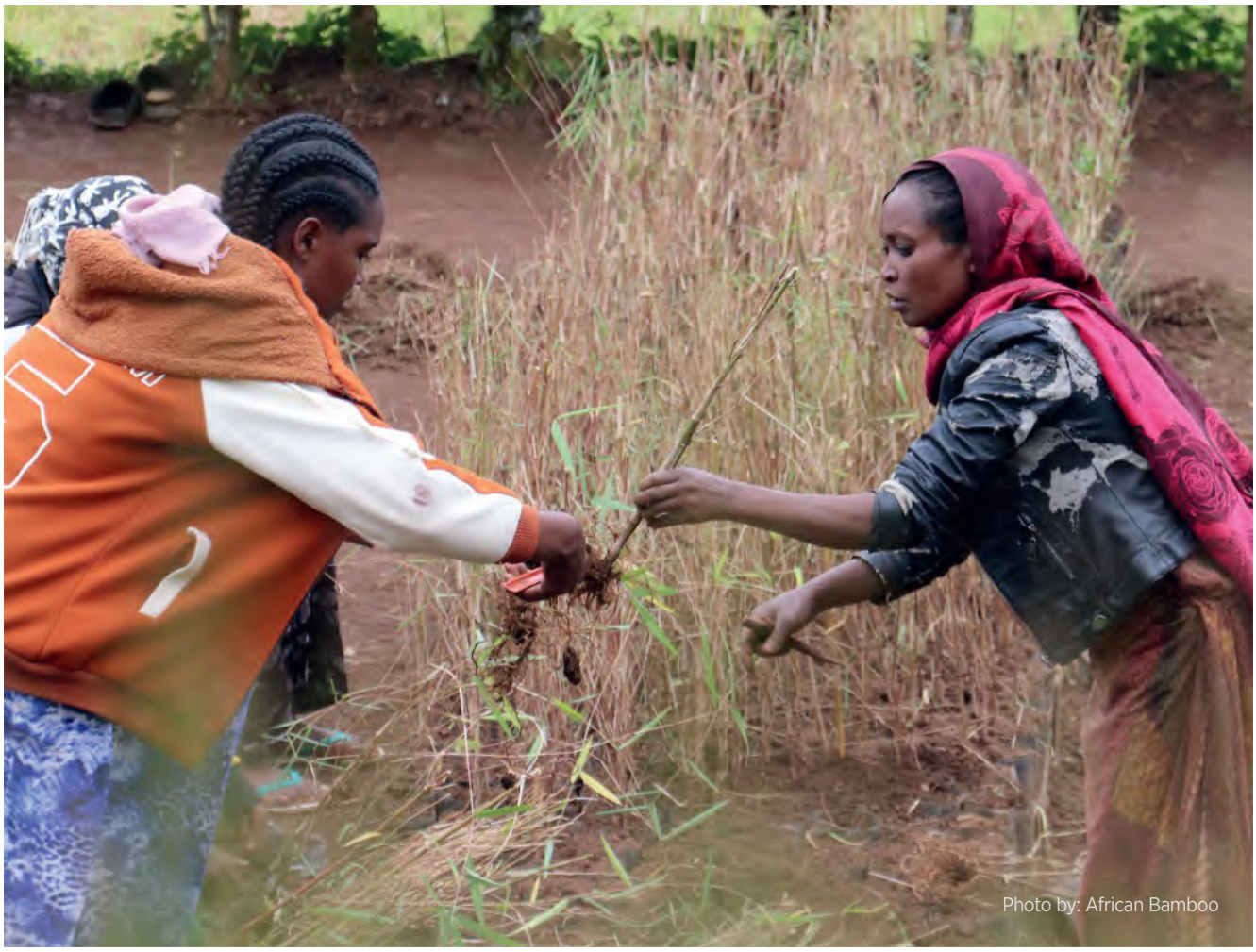


Photo by: African Bamboo

funding and technical assistance to lower its risk and become bankable. This was instrumental for a business working in a very challenging and fragile environment.

3. **Incorporating technology into the investable model has been a big value-add:** African Bamboo realized that positioning itself as a technology company with roots in manufacturing allowed for quicker commercialization. Through technology services, it offered a stronger investable proposition that could be scaled and replicated at speed in other African countries.
4. **A strong understanding of the start-up capital landscape is crucial:** Having a team with a better understanding of the start-up capital landscape would have allowed the company to structure itself to be more responsive to those markets. This would have also allowed for better engagement with the capital market. Once the team realized the benefits of accessing this market, it quickly hired employees with startup know-how and spent time analyzing the key players investing in the forestry sector so they could foster deeper engagement with them.
5. **Strategic partnerships and a supportive multi-stakeholder network are critical:** African Bamboo's strategic partnerships have been crucial to its success, enabling the company to access technical expertise and support, enhance its credibility and visibility, build a strong reputation for social and environmental responsibility, and scale its operations efficiently. The company is leveraging these partnerships to access resources, expertise and markets that it would not otherwise have access to, ultimately allowing it to increase its impact and reach in Ethiopia. The table below gives an overview of the key stakeholders African Bamboo has engaged with and their role in supporting the business on its journey.

STAKEHOLDER	ROLE
Government of Ethiopia	The Ethiopian Ministry of Planning and Development played a critical role in endorsing the growth of the bamboo sector. The ministry recognized African Bamboo's alignment with national priorities relating to sustainable economic growth and supported the business by facilitating key connections. The ministry also took on board policy recommendations shared by African Bamboo to open the sector and attract new investors.
Regional and woreda (district) government	Regional and woreda (district) government support – which included facilitation, community engagement and smooth project implementation – was also essential to African Bamboo's success.
Private sector	Five-year guaranteed offtake agreements with leading wood industry companies like SECA helped African Bamboo boost investor confidence in its product and model.
International organizations	Partnering with reputable organizations such as the International Bamboo and Rattan Organization (INBAR) and TU Delft helped African Bamboo gain credibility and visibility. This, in turn, helped strengthen its reputation and brand as a company committed to social and environmental responsibility. Other partnerships include TNO, Fraunhofer WKI, TU Dresden, TUM international, IHD, iDE, Farm Africa, Solidaridad and Fair Climate Fund. It is also working to partner with national and international organizations like Digital Green, Bamboo for Africa, BFA global and others to demonstrate its commitment to sustainable development and dignified job creation.
Farmer cooperatives	By entering into contracts with farmer cooperatives, African Bamboo was able to reach a larger network of smallholder farmers interested in becoming part of the supply chain. The cooperatives were also instrumental in helping build the capacity of smallholders to grow bamboo and operate nurseries.
University incubators	Having a research and development base at the applied research Technical University of the Netherlands (TNO Delft) allowed African Bamboo to access the technical expertise, research and lab facilities, and international validation required to build a strong product and business foundation.
International trade agencies within government ministries	Working with agencies like the Netherlands Enterprise Agency (RVO), housed within the Dutch Ministry of Economic Affairs, connected African Bamboo with key ecosystem players in Europe and enabled it to expand its reach and network.
Funders – including grant funders, development finance institutions and private sector investors	Grant funding from organizations like P4G and the Challenge Fund for Youth Employment enabled African Bamboo to get the support it needed to set up critical de-risking elements such as dMRV tools, risk tools and financial models.

Key Forecasted Achievements

$25 million
Capital committed in cash and assets

2,500
Female Smallholders with Increased Incomes

6,200
Jobs Created

$94 million
Guaranteed Offtake Agreement

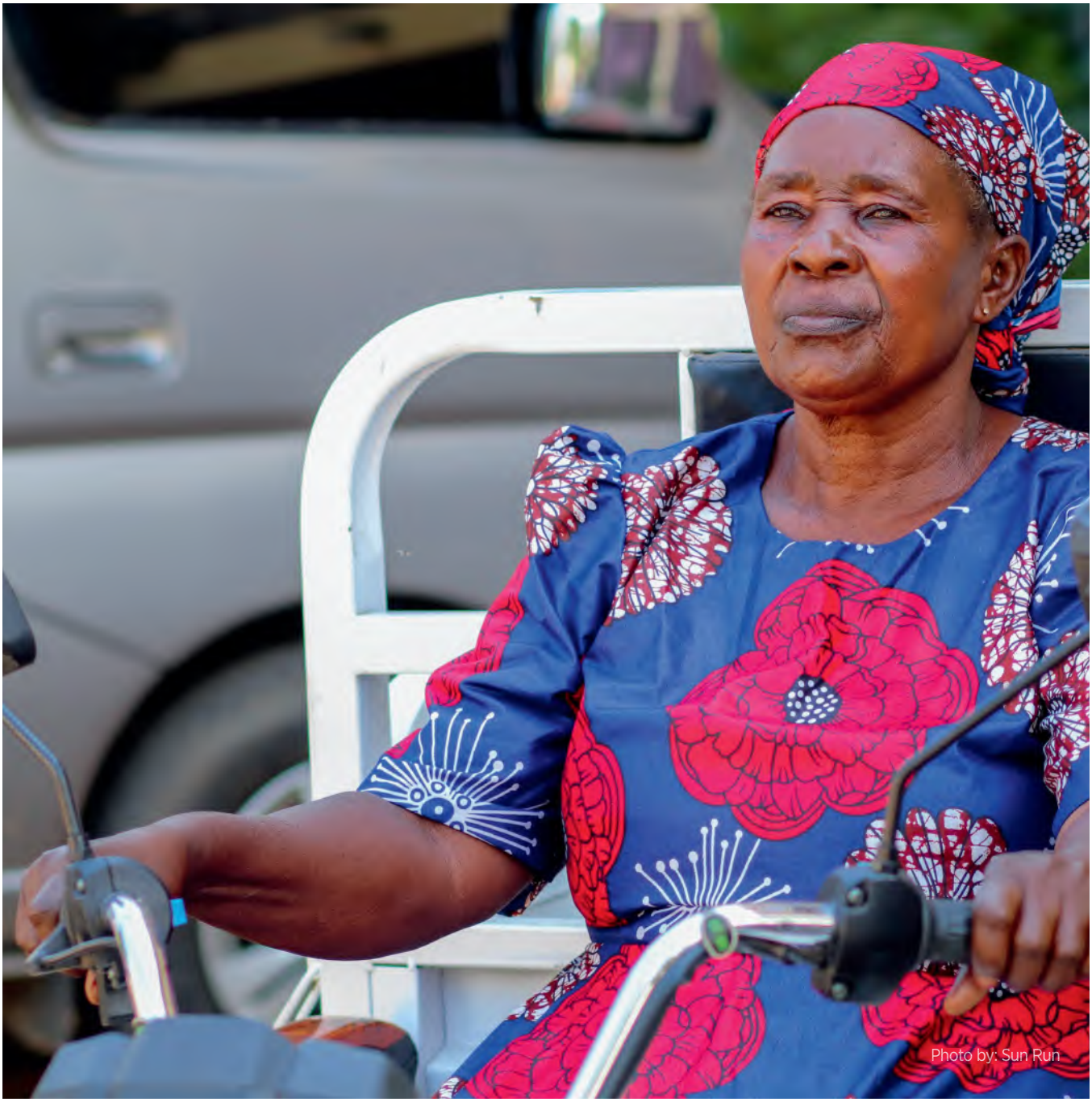
112,700
People Positively Affected

12,700 direct beneficiaries and over **100,000** indirect beneficiaries (i.e. assuming eight dependents per family) over 10-year period

$25 million
Carbon Investment Catalyzed (Projection)

ENDNOTES

1. European Standard EN 15534–4, specifying the characteristics of decking profiles made from cellulose-based materials.
2. https://www.grandviewresearch.com/industry-analysis/bamboos-market#:~:text=What%20is%20the%20bamboos%20market,USD%2088.43%20billion%20by%202030.
3. https://www.epa.gov.et/images/PDF/Bambbo/Ethiopia_Bamboo_Development_Strategy__Action_Plan.pdf
4. https://onlinelibrary.wiley.com/doi/10.1155/2021/8835673#:~:text=The%20review%20process%20found%20out,of%20the%20total%20bamboo%20species.
5. https://www.un-redd.org/news/bamboo-ethiopia-can-it-help-stimulate-its-economy-while-same-time-help-achieve-redd
6. https://www.epa.gov.et/images/PDF/Environment/Sidama%20Natural%20Resource%20degradation%20&prevention.pdf
7. African Bamboo has determined its jobs modeling through expert and community consultations and on-the-ground implementation experience.



Driving Change

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

April 2025

P4G
Pioneering Green Partnerships, Investing in Impact

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 Platforms[1] (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 Battery-as-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, mileage-based 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-of-life 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.

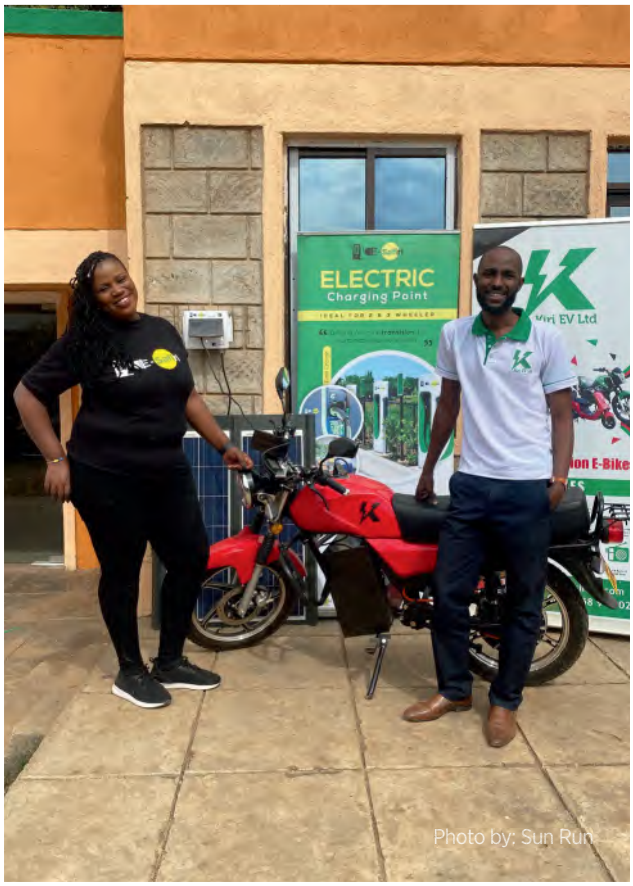


Photo by: Sun Run

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 three-wheelers, 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.

Photo by: ChargeUp! Partnership