#### **FSD Africa Impact**



# **Easing Kenya's Transport Burden: Transforming Mobility with Innovative Electric Motorcycles**



### **EcoBodaa**

A VISIONARY TECH STARTUP DESIGNING AND MANUFACTURING ELECTRIC **MOTORCYCLES SUITED TO** THE CHALLENGING ROAD **CONDITIONS IN AFRICA.** 







With financial and technical support from Persistent, **Ecobodaa offers robust** motorcycles with an overall maintenance cost that are up to:

lower than petrol-powered motorcycles.



#### Including women in the motorcycle industry

Kenya's motorcycle sector has traditionally been maledominated, and Ecobodaa's attempts to encourage women to ride boda bodas have not been successful. However, the company has broken gender barriers by appointing five women to lead different operations, marking a significant shift in the historically male-centric sector.

"Including women in our operations has not only broken gender barriers but also enriched our company's perspective and performance."

> Kim Chepkoit Co-founder of Ecobodaa

"We're on a mission to revolutionise transportation in Kenya. Electric motorcycles are not only environmentally friendly but also economically sensible. The support we've received, especially from Persistent, has been instrumental in achieving our goals.

Over three years, we've identified key challenges, and we're now 90% ready for scaling up. And so far, we've managed to sell 37 of them." Kim Chepkoit

Co-founder of Ecobod

Ecobodaa is leading the shift towards sustainable transportation in Kenya with its locally assembled electric motorcycles.

With the support of FSD Africa Investments (FSDAi) investee Persistent Energy Capital, Kenyan startup EcoBodaa is preparing to enter the billion-shilling boda boda (motorcycle) and delivery bike industry with made-for-Africa electric motorcycles.

While motorcycles play a crucial role for many people, they also contribute significantly to environmental harm. According to the UN Environment Programme (UNEP), there are currently:

Motorcycles worldwide

Motorcycles in Kenya



A global transition to electric motorcycles holds the potential to avert 11 billion tonnes of carbon dioxide emissions, (UNEP).

In pursuit of eco-friendly and efficient transportation, Kim Chepkoit and Stephen Juma, launched Ecobodaa, a visionary tech startup in Kenya. Ecobodaa's journey began with experimentation with imported electric motorcycles. Even with modifications, these bikes proved inadequate in replacing their petrol-powered counterparts, especially under the rigorous demands of Kenyan roads. That is where Persistent Energy and other strategic partners stepped in, providing vital financial and technical support.

## **PERSISTENT**

Persistent is a climate venture builder providing early-stage, green innovators with the hands-on human capital support and patient equity capital they need to go from early-stage to growth-stage companies.

Support to Ecobodaa has included helping build internal capacity in financial modelling, reporting and in trials leading the reporting of its commercial bike model.

In May 2021, Ecobodaa imported ten electric motorcycles, with five each designated for boda boda and Uber delivery riders. By December 2021, the boda boda motorcycles struggled with heavy loads and rough terrain, while those used by Uber delivery riders, without excessive cargo, continued to operate smoothly.

With Persistent's support, Ecobodaa began designing motorcycles tailored to the Kenyan market. These bikes feature advanced sensors for data collection, enabling Ecobodaa to enhance its services and products continuously. Notably, they've successfully integrated GPS systems and localised battery configurations. Introducing an installment payment model has significantly increased the financial accessibility of Ecobodaa's electric motorcycles to a wider audience. Furthermore, Ecobodaa offers customized battery services to meet local demands, allowing riders to conveniently swap depleted batteries for fully charged ones at a minimal cost. As a result, the overall maintenance costs are up to 80% lower than those of petrolpowered motorcycles.

Furthermore, policy changes in Kenya have facilitated a cost-effective importation of electric bikes and related components. Imported parts no longer face delays at the port, considering that local assembly and job creation are part of the equation.

Ecobodaa's rent-to-own model faces default challenges despite a Kshs 150,000 (USD 1,026) deposit requirement. To tackle this and foster rider loyalty, training and medical insurance are now included in the strategy. This commitment involves contributing Kshs 500 (USD 3.45) monthly to the National Health Insurance Fund (NHIF) for each rider. As an additional incentive, the company has introduced an energy micropayment system, allowing riders to purchase energy affordably and effectively manage their cash flow.

Ecobodaa is leading the shift towards sustainable transportation in Kenya with its locally assembled electric motorcycles. These bikes

will enhance Kenya's transport fleet and reduce pollution while generating jobs and income. With interest from e-mobility players in countries like Cameroon and Zimbabwe, Ecobodaa shows promise

for expansion beyond Kenya's borders.