This project aims to replace polluting taxi motorcycles with solar-powered electric models with PayGo charging stations. Zembo designs and sells innovative electric motorcycles and operates solar re-charging stations using a battery swap business model. The motorcycles with lithium-ion batteries are low cost to run and operate, and are sold as rent-to-own, thus increasing the drivers’ revenue. But the battery swap model and solar re-charging stations are innovations that need support to reach market scale. With EEP Africa financing, Zembo will launch 200 electric moto prototypes and construct 10 solar charging/battery swap stations in Kampala to pilot and validate the technology and payment solutions.

Outcome and Impact

The project provides an alternative to the large fossil fuel-based “boda-boda” market, which is a major contributor to pollution in African cities. During the pilot phase, the switch from fuel to battery power will reduce 350 tonnes of CO2e emissions and decrease fine particle emissions and noise pollution. The battery swap model will maximise the use of each battery and ensure they are properly recycled at the end of their life. The project will bring significant cost savings and revenue creation to taxi drivers. It will also create new jobs, especially for youth, as the motorcycles are assembled in Uganda.