



AWARENESS,
COMMUNICATION
AND SENSITISATION

FINANCING

Harnessing CO₂ Emission Reduction Monitoring to Accelerate EV Adoption

SUMMARY

Country	Uganda
Implementer	Perspectives Climate Research gGmbH
Co-implementer	Bodawerk International
Target groups	Electric vehicle distributors
Duration	12/2021 – 06/2023
Type of energy use	Other

CHALLENGE

Uganda's transport sector is dominated by motorcycles, accounting for 70% of all vehicles. These motorcycles are used for the transport of goods and people alike. While a motorcycle produces less CO₂ per person compared to a car, the sheer number of them driving on Ugandan roads make this difference negligible. Besides, Ugandan motorcyclists spend up to 75% of their income on operating costs for their vehicles, usually consisting of fuel, rent, oil, maintenance and repairs. Furthermore, potential projects offering products for the voluntary carbon market suffer from limited understanding of market access options.

IMPACT LOGIC

The project's objective is to create a robust, data-driven study, outlining a method for producing CO₂ certificates. The necessary data for this is generated through a physical pilot study. Five electric motorcycles (e-bikes) are distributed to and operated by selected beneficiaries, producing the necessary real-world data for determining the potential for CO₂ savings. The CO₂ emission reduction monitoring system uses data that is continuously produced and remotely collected by the smart batteries that power the e-bikes. Capacity building measures build up knowledge of the processes required for the generation of CO₂ certificates. This is done in accordance with international certification standards by pioneering the application of existing approved monitoring methodologies to the results from Uganda.

INNOVATIVE PROJECT ELEMENTS

The combination of this pilot with the preparation of a written guideline for the methodology for using and calculating CO₂ emission reduction in e-mobility and smart battery application represents an ambitious innovative approach. This guideline includes a baseline assessment of the setting for a potential replication by other CO₂ certification programmes for e-mobility in Uganda and potentially in other countries in East Africa. Furthermore, the guideline also includes information on the reparation of documents in line with Gold Standard's and Voluntary Carbon Standard's requirements that can be used for seeking registration under these standards. Finally, the revenues from the CO₂ certificates' sale can be used to reduce obstacles hindering a widespread use and expansion of innovative e-mobility solutions, such as the e-bikes' high acquisition costs.

FURTHER INFORMATION

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