

Introduction of E-Motorcycles in the Greater Kampala Metropolitan Area

Project needs

- Dominance of road transport in Uganda's transport system with outdated vehicle technology
- Transport sector in Kampala is responsible for air pollution and pollution in Kampala exceeds the set WHO limits- sometimes 5-6 times more.
- Growing use of motorcycles projected to increase to 3 million by 2050
- Increasing use of motorcycles as taxis with PM emissions and other emissions e.g. nitrogen oxides (NOx), carbon monoxide (CO) and hydrocarbon (HC) emissions, larger than those from a car
- National Transport Master Plan (2008-2023) highlights the need for low-capacity transit options that reduce traffic and air pollution.
- Lack of legal framework and infrastructure to facilitate introduction and use of electric mobility.
- Lack of infrastructure to facilitate the introduction, use and scale-up of clean and electric mobility

Mitigation impact

Estimated mitigation impact over lifespan	1 M tonnes CO2eq
Estimated project lifespan	10 years
Project duration	3 years



Project overview

- Through the 'Introduction of E-Motorcycles in the GKMA' project, Government aims to **reduce greenhouse gas emissions from transport** by shifting away from emissions-intensive growth in motorcycle taxis towards an electric motorcycle fleet.
- Through;
 - a) facilitating market growth and acquisition of electric motorcycles of at least 180,000 motorcycles per year by 2033;
 - b) establishing e-mobility infrastructure- charging stations, battery swap facilities, among others;
 - c) reducing direct lifetime emissions of 1 MtCO₂e with indirect reductions of over 3 MtCO₂e;
 - d) strengthening enabling framework and implementation of the e mobility concept in greater Kampala.
- The project will be executed by Ministry of Energy and Mineral Development the responsible institution for formulation of policies and regulations for the energy sector.

National context

- The project responds Sustainable Development Goal 7 including the sector strategic objective of developing adequate, reliable and efficient multimodal transport network. The project is aligned with the UN Sustainable Mobility Resolution which calls on all countries to switch to sustainable mobility, including electric mobility.
- The project also responds to National Energy Policy (2023) strategy to **develop legal framework and infrastructure to facilitate the introduction and use of electric mobility**.
- The project is in alignment with the National Climate Action Plan, also referred to as the Updated Nationally Determined Contribution (NDC) commitment to reduce transport emissions by 29% below the BAU level in 2030 (**absolute reduction of 2.78 MtCO₂e** in 2030).
- The project also responds to Third National Development Plan (2020/21 – 2024/25) call for the development of a seamless, safe, inclusive and sustainable multi-modal transport system and reduction of average travel time from the baseline 4.1 min per road km to 3.5 min per km by 2025 within the GKMA.

Justification of funding request

- Over 90 per cent of Uganda's electricity is derived from renewable energy sources thus electrification of transport possible.
- Modification of the existing motorcycle fleet from gasoline to electric motorcycles achievable
- Prototypes and technical know-how available through start-ups- Bodawerk, Zembo and Mojo energies and the International University of East Africa (IUEA)
- Existence of a State Enterprise— Kiira Motors Corporation (KMC) which is promoting the use of electric transport solutions
- The current cost of finance is envisaged to be high and no funding partner identified yet.
- Government incentive: **10% reduction** on customs duties on electric vehicle charging equipment and **7% reduction** on value-added tax (VAT)

Finance required

Total Project cost USD	354.47 million
Requested funding amount	USD 11.79 million
Financial instrument	X% Debt; Y% Equity
Duration of project	3

Sustainability and replicability of the project (exit strategy)

- Nearly half of the Internal Combustion Engine (ICE) motorcycles in Kampala are acquired on credit.

