

FACTSHEET KIGALI



Demonstration City

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Kigali - Rwanda

As the country's commercial and administrative hub, Kigali is rapidly urbanizing as a result of a growing population and increasing economic activities (World Population Review, 2019). Consequently, the city's major economic sectors are challenged with issues ranging from congestion, pollution, deteriorating infrastructure, among others. The transport and energy sectors, especially, have become stressed over the years, thus, prompting major reforms. It is estimated that Rwanda's electricity mix is about 52% hydro and 48% percent thermal, with thermal power generated using imported diesel fuel.

E-mobility for last-mile connectivity

The demonstration action in SOLUTIONSplus focuses on e-mobility for last-mile connectivity in Kigali. It will have a systemic approach integrating the Public Bus System with electrified feeder-services provided by 30 e-moto taxis (20 new and 10 remodelled) and 100 e-bikes that support first/last mile connectivity. With support from city authorities, transport operators and bus manufacturing companies, a suitable business model for e-Buses for the city's current bus transport administration will be explored. Expectedly, the project will create a good precursor to public transport electrification in Kigali. The business model for e-moto taxi will also be developed in the demonstration project. Together with riders, transport associations and other relevant institutions, 10 existing motorcycles will also be remodelled into e-motorcycles – with the possibility to easily swap and charge batteries (Lithium-ion) and considering local-EU prototypes with Valeo 48V. The demonstration project will also test the establishment of an e-Bike sharing scheme along the most widely used bus corridors with charging points fitted with solar power energy to provide seamless charging service to riders and patrons. For the wider use of E-Moto taxis and E-Bikes, smart services applications will be explored that support eco-routing.

The demonstration project will involve existing transport operators, service providers and associations including motorcycle taxi associations, bike rider groups and other relevant transport associations in Kigali. In partnership with local investors such as those outlined above, the demonstration project will introduce e-moto taxis in the city and support the installation of fast charging infrastructure at public places and vantage points. Other stakeholders of relevance to the project will include international vehicle manufacturers and local vehicle manufacturers and suppliers.



Test category: Test under real operational conditions

Vehicles involved: 20 e-motorcycles

Lines involved: Most widely used corridors

Time span: From June to December 2021



Test category: Test under real operational conditions

Vehicles involved: 100 e-bikes

Lines involved: Most widely used corridors

Time span: From June to December 2021