FACTSHEET KIGALI

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Demonstration City | 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 focuses on e-mobility for last-mile connectivity. It will have a systemic approach integrating the planned BRT, with the introduction of e-buses in combination with electrified feeder-services provided by 30 e-moto taxi (20 new and 10 remodelled) and 100 e-bikes (shared with Bosch components) 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.

E-mobility for last-mile connectivity

The approach/ innovative aspect

- Business model exploration for integrating e-buses into the current bus transport administration
- E-moto (new and remodeled) with swap and charge batteries (Lithium-ion)
- Support last mile connectivity
- E-bike sharing with solar power energy to provide seamless charging service
- Provision of support for the installation of faster charger infrastructure

Activities

- Involve local investors such as Ampersand for e-moto taxi
- Ex-post evaluation: EV feasibility, charging, infrastructure utilisation, emission reduction
- Smart services - eco-routing

	Demonstration actions		
	E-bike sharing system to support first/last mile connectivity 100 local EU bikes	Charging stations Sharing models	Smart services (apps, smart card) SOL+ MaaS App
	30 e-moto-taxis 20 new and 10 remodelled local EU prototypes	E-moto taxis business models	Physical and fare Integration of E-moto taxis at 5 BRT stations SOL+ MaaS App