

Environmental Leadership Programme on Sustainable and Resilient Infrastructure
Digitalisation of Sustainable Transportation Infrastructure, 06.12.21

The logo for 'solution+plus' is displayed within a semi-transparent teal circle. The word 'solution' is in a black, lowercase, sans-serif font, and 'plus' is in a teal, lowercase, sans-serif font, with a small teal plus sign between them.

Electric mobility
transition in
Rwanda





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 875041



Four year programme, 2020-2023
Funded under EU, Horizon 2020
Total budget: €20,233,098.75



State of e-mobility in African cities



Opportunities:

- Reduction of carbon emissions
- Reduction of air pollutants
- Reduction of fuel imports
- Cost-efficient solutions
- Reduced operational costs

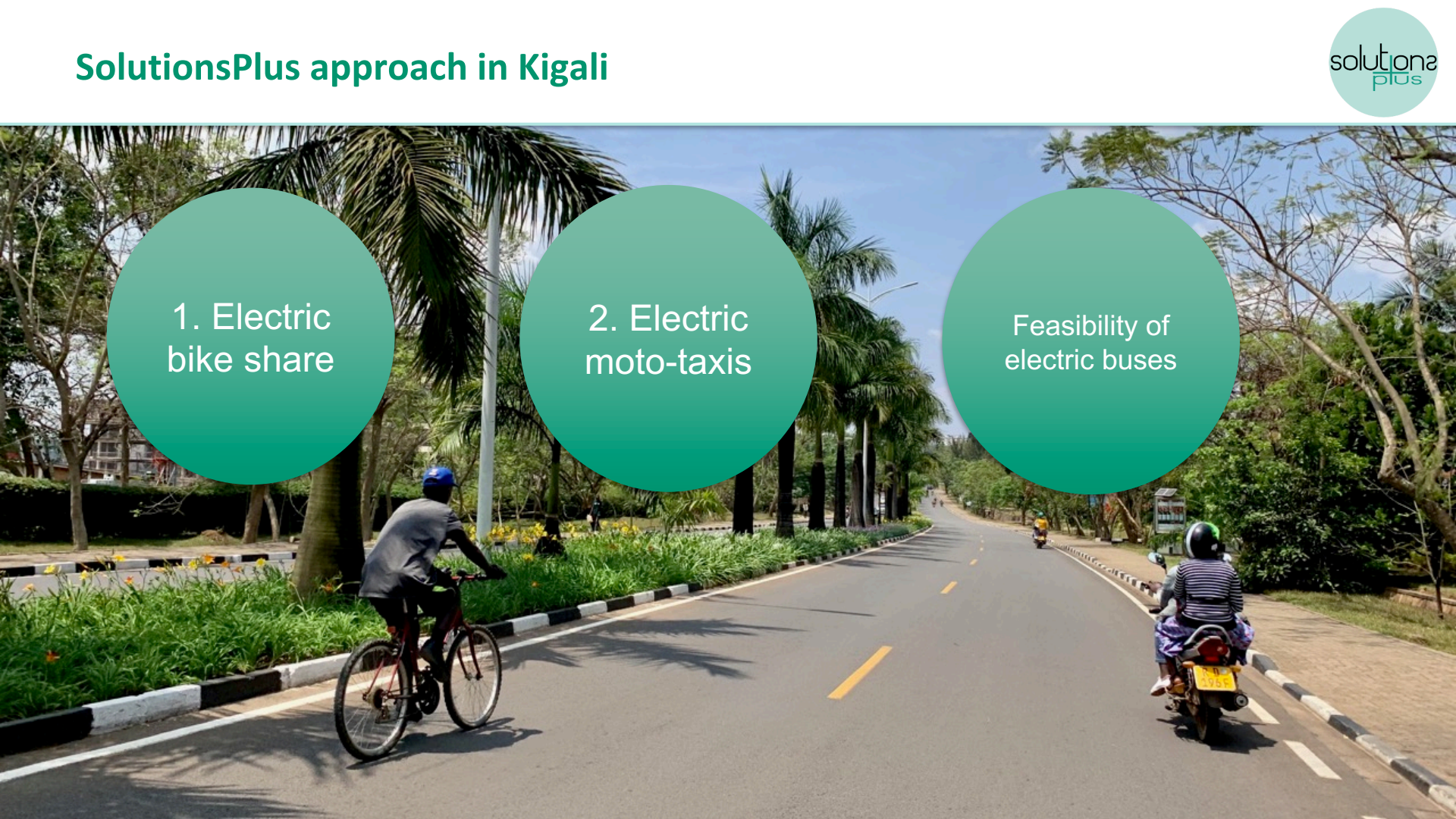
Strengths:

- Strong policy environment
- Ambitious incentives for e-mobility
- Numerous pilots
- Numerous organisations involved

Challenges:

- Lack of knowledge, e.g. on procurement models or where to locate charging points
- Investment costs and business models
- Standards and interoperability
- Lack of technical skills
- Limited interest of investors (being solved)

SolutionsPlus approach in Kigali

The background image shows a wide, paved road in Kigali, Rwanda, lined with lush greenery and tall palm trees. A person is riding a bicycle on the left side of the road, and a person is riding a motorcycle on the right side. The road has yellow dashed lines in the center and white solid lines on the edges. The sky is clear and blue.

1. Electric
bike share

2. Electric
moto-taxis

Feasibility of
electric buses

SolutionsPlus work in Kigali

Barrier: lack of data

SOL+: Data collection



Barrier: lack of knowledge

SOL+: Capacity building



Barrier: lack of funding, technical barriers

SOL+: Support to start-ups



Barrier: lack of local integration

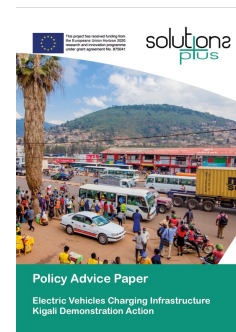
SOL+: Mobility as a Service app, urban planning



MERCADO SAN ROQUE
PROPOSED SCENARIO (MOBILITY ISLANDS)
© SOLUTIONA PLUS / DTU / UNO HABITAT

Barrier: lack of knowledge, policies, coordination

SOL+: Policy & coordination, scale-up & funding



Policy Advice Paper

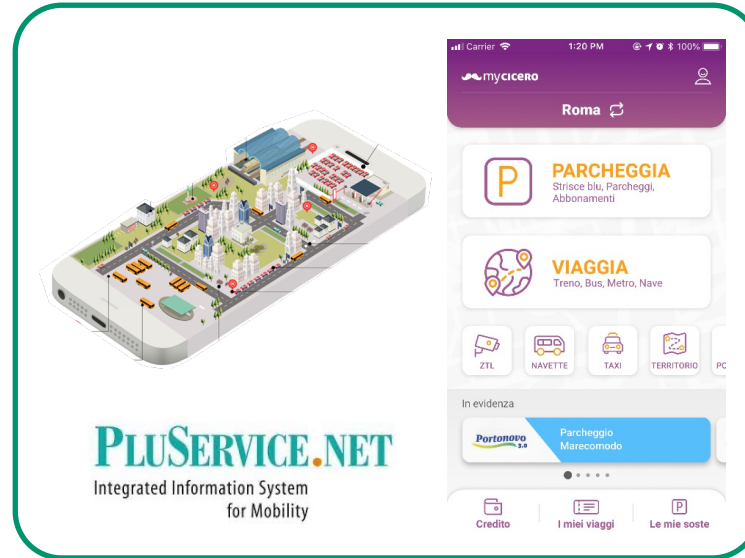
Electric Vehicles Charging Infrastructure
Kigali Demonstration Action

Mobility as a Service in Kigali

Mobility services: from multiple
information channels and payment
options to...



A single app integrating
information and payment
for all modes, including
electric ones



Rwanda Utilities
Regulatory Authority

City of Kigali

New mobility
services

Ride-hail

Bus companies

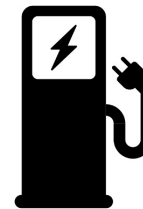
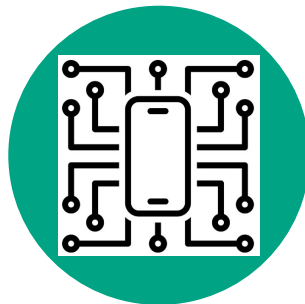
IT companies

Digitalisation: key to the success of electric mobility

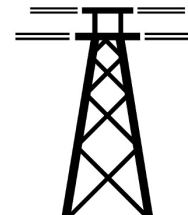
Fleet
management
& route
optimisation



Battery
management



User
Access to
charging



Smart
charging
& vehicle-
to-grid

Technical
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