

Expression of Interest (EOI) **For Supply of electric 3-Wheelers and Chargers in Freetown, Sierra Leone**

Government of Sierra Leone (GoSL) is seeking Expression of Interest (EOI) from qualified and experienced national/international EV providers for the supply of electric 3-Wheelers (locally referred as e-Kekes) and associated chargers in the capital city of Freetown at Sierra Leone.

This EOI request application from interested providers with strong capability and interest to supply any one or both types of systems **1) Swap Battery e-3Ws 2) Fixed Battery e-3Ws** and associated charging system for full project deployment.

Introduction:

GoSL has secured funding from the Global Environment Facility (GEF) for pilot demonstration of e-Kekes in Freetown, Sierra Leone. This project aims to introduce sustainable transportation to reduce GHG emissions, enhance road safety by promoting quality e-Kekes over ICE Kekes and motorcycle taxis and optimize energy use.

Pilot Project Details:

For the demonstration project, a fleet of 15 e-3Ws will be deployed in the western corridor in Freetown. These e-Kekes shall have a seating capacity of 3 passengers each and equipped with lithium-ion batteries to support daily running distances from 80-120 kms. The batteries can be swap **OR** fixed configurations, operating at 48/60V and powered by BLDC motors (with regeneration).

The supported charging system required is 3 units of battery charging & swapping stations (with 81 swap batteries) **OR** 5 units of fixed charging systems.

The charger locations are pre-identified with land support from the City Council, and electricity connection support from the local distribution utility company EDSA. The provider will support installation, commissioning, warranty and maintenance support and services and appropriate training and manuals (through right local partners).

Key Technical Specifications:

e-3W and Batteries:

- Quantity: 15 e-Kekes
- Vehicle Category: L5M
- Seating Capacity: Driver + 3
- Battery Type: Lithium ion
- Battery Pack system:
 - Swap batteries (3 x 1.5 kWh = 4.5 kWh); 0.5 - 1.0C charging;
 - **OR** Fixed battery pack 7.5 kWh; 0.125 - 0.25C charging;
- Energy Consumption (in real-world cycle):

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- Swap battery system - less than 90 Watt-hour/km
- Fixed battery system - less than 100 Watt-hour/km

Chargers:

	Battery Charging & Swap Station	Fixed Charger
Quantity	3 units 15 battery charge-swap modules per unit (each to charge 1.5 kWh swap battery)	5 units
Power Rating	1.5 or 2 kW AC (per swap battery charging module) Total 28 kW AC input	1.5/ 3.3 kW AC
Charging Management System (CMS) and end-user Mobile App	Integrated CMS with mobile App for e-Keke users for identification of available charge point, payment gateway and managing user accounts	

Scope of Work:

The provider shall be responsible for supply, installation, and commissioning of the e-3Ws and associated chargers. The provider shall also be responsible for operational handover, including Warranties (e-3W – 3 years; Batteries – 5 years; Chargers – 5 years), Annual Maintenance Contract (AMC) for minimum 3 years with support from appropriate local partner(s). A working manual should be provided on the system and operations along with training(s).

Submission Requirements:

Interested providers are requested to submit an Expression of Interest (EOI) in response to this notice. The EOI should include the following information:

- Name and contact details of the company(s). Consortium is allowed.
- Description of the company(s) – background and expertise (products, design, IPs, assembly/manufacturing, dealerships, fleet management), credentials, experience in executing similar projects (in HQ country and/or outside countries), experience in Africa regions, partnerships, etc.
- Items that the company/ Consortium can supply and support for deployment in Sierra Leone (select from this list):

Items	Sub-Items	From Lead company	From Partner(s)
e-Keke (e-3Wheeler)	<input type="checkbox"/> With Swap Batteries	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> With Fixed Battery	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> Charging and Swapping unit	<input type="checkbox"/>	<input type="checkbox"/>

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Battery Swapping Station	<input type="checkbox"/> Swap Batteries (81 in nos. each 1.5 kWh)	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> CMS and integrated mobile App for drivers	<input type="checkbox"/>	<input type="checkbox"/>
Fixed Chargers	<input type="checkbox"/> 1.5/ 3.3 kW AC Chargers	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> CMS and integrated mobile App for drivers	<input type="checkbox"/>	<input type="checkbox"/>

- Detailed Technical specifications of products (and variants), deviations from stated specifications, type-test reports, real-life test performance and benchmarking data, etc.
- Case studies of 3+ successful deployments of similar or higher fleet size (swap and/or fixed battery systems)
- Total number of deployments by products, years, countries (across Consortium partners)
- Indicative budget for each supply
- Last 3 years Financial turnover and Net worth (of Lead provider)

All documents are to be mailed to Mr. Sheikh Ahmed Tunis at sheikh.tunis@epa.gov.sl. EOI submission deadline is **14th March, 2024 (23:59 GMT)**.

Note: *This EOI is not a formal solicitation or tender document. It is intended solely for the purpose of identifying qualified providers/ suppliers interested in participating in the supply of e-3Ws and their associated charging systems in Sierra Leone. The information provided will be used for evaluation and shortlisting of potential suppliers for sharing of detailed RfP. If any variations in technical specifications then highlight it clearly in submission.*

GoSL look forward to receiving your Expression of Interest and the opportunity to collaborate on this project. For any clarifications or inquiries, please contact Mr. Sheikh Ahmed Tunis at sheikh.tunis@epa.gov.sl.