



CARIBBEAN CENTRE FOR RENEWABLE ENERGY & ENERGY EFFICIENCY

AN INSTITUTION OF



TERMS OF REFERENCE- Telematics Solution for Electric Vehicle Pilot (NDC-TEC: WP.IV.1, Saint Lucia)

Duty Station: Remote, with travel to Saint Lucia as required

Reports to: Caribbean Centre for Renewable Energy and Energy Efficiency

A. Background and Context

The Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE), through the NDC Transport, Energy and Climate (NDC TEC) initiative, is leading the implementation of Work Package IV.1 (WP.IV.1) in Saint Lucia. This pilot involves the replacement of government-owned internal combustion vehicles with a fleet of twenty-two new electric vehicles (EVs) across multiple ministries and agencies.

The transition represents a flagship action under Saint Lucia's NDC implementation, contributing directly to national emissions reduction commitments, reducing fuel import dependency, and building institutional capacity for e-mobility adoption. Supporting this transition, the GIZ is responsible for the procurement of the replacement electric vehicles, while the CCREEE leads the data collection and analysis through the procurement and deployment of a comprehensive telematics solution.

The selected contractor will supply and operate the telematics hardware and platform to capture the required performance and operational data. The CCREEE, in collaboration with national stakeholders, will lead the subsequent analysis and interpretation of this data to inform policy, NDC reporting, and regional replication.

To ensure the effective management and evaluation of this new EV fleet, CCREEE seeks to procure a comprehensive telematics solution that will enable:

- Real-time monitoring of vehicle performance,
- Collection of operational and climate impact data,
- Improved decision-making on fleet utilization, charging, and maintenance.

The telematics system is central to demonstrating the viability of EV integration in government operations and will provide critical data for regional replication under the broader NDC-TEC programme.

B. Objectives

The objective of this consultancy is to supply, install, and operationalize telematic devices for all 22 electric vehicles to be procured by the GIZ for Saint Lucia's government vehicle fleet and to provide data monitoring and reporting services throughout the contract period. Specifically, the Contractor will:

- Supply and install telematics hardware in all EVs procured under the project.
- Develop and configure a fleet management platform to designated government stakeholders.
- Ensure accurate data capture, visualization, and reporting on vehicle performance, energy use, and emissions reductions.
- Deliver training for government operators and fleet managers on effective platform use.
- Provide technical support and ensure system functionality throughout the contract period.
- Ensure that all intellectual property (IP) and datasets generated under this consultancy remain the property of CCREEE/GoSL. The contractor shall retain ownership of any proprietary software or tools but must provide CCREEE/GoSL with full access to the platform and data throughout the contract and at final handover.

C. Scope of Work

The Contractor will work closely with CCREEE, the Government of Saint Lucia (GoSL), and programme partners to execute the following tasks:

I. Telematics Hardware Supply and Installation

- Supply devices compatible with the following vehicle models:

Vehicle Type	Model/Make	Units
Cargo/Panel Vans	Farizon L1H1 Super Van	7
Pickups (Single Motor)	Riddarra RD6 Air	3
Pickups (Dual Motor)	Riddarra RD6 Econ	4
Minibuses	Farizon Supervan Passenger	3
SUV	BYD Yuan Pro GS	1
Police Pickup (Dual Motor)	Riddarra RD6 Econ	1
Police SUVs	BYD Yuan Pro GS	3
Total Vehicles		22

- Telematic devices must:
 - Connect to vehicle ECU via the standard on-board diagnostic port, OBD-II port, to poll and collect vehicle performance data.
 - Be capable of CAN bus integration, in addition to OBD-II, to capture complete EV performance metrics where OBD-II data alone is insufficient.

- Securely fastened to prevent accidental disconnection under driving conditions.
- Install splitter cables where necessary to ensure the OBD-II port remains available for maintenance purposes.
- Report data to a platform over-the-air without requiring manual data uploading.

II. Deployment of Fleet Management Platform

- Provide a cloud-based platform accessible via both web interface and mobile application.
- Configure role-based access of the fleet management platform for the various users of the system. At minimum, fleet managers shall have full visibility of the vehicles within their assigned fleet, operators shall have access limited to their individual vehicles, and the CCREEE team shall have full access to all pilot data.
- Integrate dashboards and tools for real-time vehicle tracking, performance monitoring, and automated reporting.
- Ensure the platform provides actionable insights into vehicle utilization, including but not limited to:
 - Driving patterns and driving styles
 - Charging habits and practices
- Ensure the platform incorporates cybersecurity and data privacy protections, including encryption and alignment with internationally recognized data protection standards
- Ensure the platform allows for export of datasets in standard formats (CSV, JSON, API).

III. Data Collection and Reporting

- Configure system to capture, at minimum, the following performance indicators:
 - Live location of vehicle and trip history
 - Temperature
 - Odometer readings
 - Distance traveled
 - Driving behavior (speed, stops, idling)
 - Charging frequency, location, duration, and energy used

- State of Charge (SOC)
 - Energy consumption (kWh)
 - EV energy economy (km/kWh)
 - Estimated GHG emissions avoided
 - Cost metrics (energy cost, cost per km where feasible)
 - Battery health monitoring (where feasible)
 - Charging time (where feasible to capture grid impact metrics)
- Provide structured summary data outputs and system-generated dashboards covering the key performance indicators listed, issued on a monthly basis during the 6-month telematics data collection period. Reports should be accessible within the platform for download and/or sent to designated subscribers periodically.
 - Ensure the monitoring portal/platform is globally accessible via mobile application and/or web interface. Access must be strictly role-based and limited to authorized users, with data visibility configured in line with responsibilities (e.g., vehicle operators, fleet managers, CCREEE and beneficiaries).

IV. Training and Capacity Building

- Deliver user training for vehicle operators, fleet managers, and administrators.
- Provide training manuals, quick reference guides, and troubleshooting documentation.
- Ensure users are equipped to interpret data outputs and utilize platform features effectively.

V. Technical Support and Maintenance

- Provide reliable technical support during the 9-month contract period.
- Cover telecommunication and data transmission costs associated with device operation.
- Maintain device functionality and promptly address performance issues through troubleshooting.
- The Contractor is expected to ensure high system availability (target of at least 95% uptime) and provide responses to troubleshooting requests within 48 hours.
- At the conclusion of the contract, safely disconnect telematic devices and provide the CCREEE with a complete archive of the collected dataset.

D. Deliverables

The Contractor shall deliver the following outputs, each tied to the scope of work:

- I. *Installation and Commissioning Report*: confirming successful deployment of telematics devices across all 22 EVs and initial system activation.
- II. *Configured Fleet Management Platform*: with role-based access established for fleet managers, CCREEE, and designated beneficiaries.
- III. *Training Completion Report*: documenting training sessions for operators, fleet managers, and administrators.
- IV. *Periodic Performance Reports*: (monthly) provide structured data outputs and system-generated dashboards covering the key performance indicators listed, issued on a monthly basis during the **6-month data collection period**. These outputs shall enable CCREEE and national stakeholders to undertake the analysis and interpretation of results.
- V. *Final Data Handover Package*: containing the complete dataset collected during the contract period and close-out report.

E. Duration and Timeline

- Duration: **9 months** from the date of contract signature

Key milestones and indicative dates:

Milestone		Criteria for acceptance	Delivery weeks from date of contract award
0.	Contract Award		
1.	Installation of Telematics Devices in the vehicles	Installation report capturing proof of devices installed and reporting data to platform.	6 Weeks
2.	Configured Fleet Management Platform	Provision of access to monitoring platform for each required user group	6 Weeks
3.	Delivery of fleet monitoring platform training	Training completion report confirming successful delivery of operator training	8 weeks
4.	Periodic Performance Reports	Monthly performance data reports	From Week 10 (Ongoing)
5.	Final Data Handover Package	Complete performance dataset from 6-month data collection and close out report	34 Weeks

Proposed Payment Schedule

Phase	Deliverable	Payment %
P1.	Telematics Installation Report	25%
P2.	Configured Fleet Management Platform	25%
P3.	Delivery of fleet monitoring platform training	10%
P4.	Periodic Performance Reports	15%
P5.	Final Data Handover Package	25%

F. Contractor Qualifications

Bidders must demonstrate the capacity to deliver both the supply and service components of this contract. At a minimum, contractors shall provide evidence of the following:

- *Relevant Experience:*
 - A minimum of three (3) years of proven experience in supplying and installing telematics or fleet management systems, preferably involving electric vehicles or comparable transport fleets.
 - At least three (3) successfully completed projects providing telematics or fleet management services, including project description, client organization, and year of completion. Contact details for verification may be requested at a later stage.
 - Experience in Small Island Developing States (SIDS) or contexts with limited grid capacity and tropical conditions is desirable.
- *Technical Capacity:* Availability of qualified staff with expertise in telematics installation, system configuration, and ongoing technical support. Bidders should provide a company overview highlighting staff competencies and prior project experience.
- *EV-specific expertise:* Contractors must demonstrate experience with EV-specific telematics solutions. Where such experience is limited, bidders must clearly describe how their proposed solution will address these requirements beyond generic fleet management functions.
- *Support Arrangements:* Demonstrated ability to provide remote technical support and maintenance services for the duration of the contract period.

G. Technical and Financial Proposal Requirements

Bidders are required to submit both a Technical Proposal and a Financial Proposal.

Technical Proposal

The technical proposal must provide sufficient detail for evaluation and should include:

- Company profile and overview of relevant experience.

- Detailed description of the proposed telematics solution, including hardware specifications, platform features, and compliance with the TOR requirements. Supporting documentation such as technical datasheets, photos, and dashboard screenshots should be provided as available.
- Implementation approach, including a work plan and timeline (e.g., Gantt chart), methodology for installation and training, and projected lead-time for delivery of services and equipment.
- Risk identification and proposed mitigation measures relevant to the installation and operation of the telematics solution.
- Data security and hosting arrangements, including how role-based access will be configured.
- Training and technical support plan, outlining the scope and duration of support offered.
- References from at least three comparable assignments, including contact details for verification.

Financial Proposal

The financial proposal must provide a clear cost structure and should include:

- Itemized cost breakdown covering:
 - Supply of telematics hardware
 - Installation and commissioning
 - Access to the fleet management platform (including any licensing or subscription fees)
 - Training delivery
 - Ongoing monitoring, technical support, and data transmission costs
- A lump-sum price inclusive of all costs, taxes, and duties, which shall be treated as the maximum contract amount.
- Confirmation of warranty terms and conditions for devices and platform access.
- A proposed payment schedule aligned with deliverables.

H. Instructions for Responding

I. Point of Contact

For all stages of this procurement process, queries and final submissions should be made to **procurement@ccreee.org**. Attempts at unofficial queries through officials or staff members of CCREEE for the purpose of influencing the outcome of this procurement will be cause for disqualification from further consideration.

II. Submission Delivery Requirement

All submissions must be completed in electronic form and submitted via e-mail. Submissions must:

- Be sent in PDF format only.

- Be duly signed and dated.
- Be submitted no later than 17:00 (UTC-4) on Wednesday, 15 October 2025.
- Use the following subject line in the submission email: “TOR-SLU Telematics-[Company Name]”

Only complete submissions which include all required information and are received by the deadline will be considered.

III. Timelines

- Issue Date of this TOR – Wednesday, September 17th, 2025
- Deadline for Queries – Friday, October 3rd, 2025, by 17:00 (UTC-4)
- Responses to Queries / Addenda Issued – Friday, October 10th, 2025
- Deadline for Submission of Proposals – Wednesday, October 15th, 2025, by 17:00 (UTC-4)