**GOVERNMENT OF SIERRA LEONE**

**MINISTRY OF ENERGY**

**Date of issue: 4th May 2026**

# REQUEST FOR EXPRESSIONS OF INTEREST (REOI) FOR CONSULTING SERVICES FOR THE DESIGN AND PREPARATION OF TENDER DOCUMENTATION FOR HYBRID ENERGY SYSTEMS FOR FEED SALONE AGRICULTURAL PRODUCTION HUBS

**PROCUREMENT NUMBER: MOE/FEEDSL/QCBS/2026/001**

## TERMS OF REFERENCE (ToR)

**Client:** Government of Sierra Leone
**Lead Agency:** Ministry of Energy, Ministry of Planning and Economic Development, Ministry of Agriculture and Food Security (MAFS)
**Supporting Institutions:** National Investment Board (NIB), Ministry of Energy, Ministry of Finance

**Project Locations:**
- Mambolo Agricultural Hub – Kambia District
- Kitchum Agricultural Hub – Karene District
- Tormabun Agricultural Hub – Bonthe District
- Gbondapi Agricultural Hub – Pujehun District

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## 1. BACKGROUND

The Government of Sierra Leone, through the **Feed Salone Agenda**, is implementing a comprehensive national strategy to transform the agricultural sector, strengthen food security, and promote inclusive agro-industrial development across the country. The initiative seeks to modernise agricultural production systems, increase domestic food production, reduce dependence on food imports, and stimulate rural economic growth by strengthening value chains from farm to market.

A central pillar of the Feed Salone programme is the establishment of **Agricultural Production and Processing Hubs**, strategically located across key agricultural zones. These hubs are envisioned as integrated agricultural clusters designed to enhance productivity, facilitate value addition, and support commercial agribusiness development. Each hub will function as a coordinated ecosystem that brings together production, processing, storage, and distribution infrastructure in a single operational platform.

The hubs are expected to support a wide range of agricultural and agro-industrial activities, including but not limited to:

- Mechanised farming and farm service centres to support modern agricultural practices
- Agro-processing facilities for key value chains such as rice, cassava, oil palm, and other crops
- Cold storage and post-harvest handling infrastructure to reduce losses and improve product quality

• Irrigation systems to enable year-round agricultural production and climate resilience
• Agricultural input distribution and service centres providing seeds, fertilisers, equipment, and extension services
• Aggregation, packaging, and logistics infrastructure to support efficient market access

Reliable, affordable electricity is a critical enabler of the effective operation of these agricultural hubs. Power is required to support irrigation pumping systems, mechanised processing equipment, cold storage facilities, warehouse operations, packaging lines, administrative services, and digital agricultural technologies.

However, many of the targeted agricultural regions currently face limited grid connectivity, unstable power supplies, or insufficient electricity capacity, which significantly constrain agro-industrial development and private-sector investment in rural areas.

To address this infrastructure gap, the Government intends to deploy **hybrid energy systems** designed to provide a reliable, cost-effective, and sustainable electricity supply to the agricultural hubs. These systems will combine multiple complementary energy technologies to ensure resilience and operational continuity. The proposed hybrid energy configuration will typically include:

• **Solar photovoltaic (PV) generation**, serving as the primary renewable energy source
• **Battery energy storage systems (BESS)** to store excess energy and ensure supply stability during non-solar hours
• **Thermal backup generation**, using diesel or biomass where technically and economically feasible, to guarantee uninterrupted power during peak demand or extended periods of low solar generation

This hybrid approach is intended to optimise renewable energy utilisation while maintaining the reliability required for industrial-scale agricultural operations.

In order to advance the development of these energy systems, the Government of Sierra Leone intends to engage a qualified consulting firm to undertake the **technical design of the hybrid energy infrastructure and prepare comprehensive procurement-ready tender documentation** for the energy facilities required at each agricultural hub.

The outputs of this consultancy will provide the Government with the necessary **engineering designs, system sizing, technical specifications, and procurement documentation** required to competitively procure contractors or private investors for the development and implementation of the energy systems supporting the Feed Salone Agricultural Production and Processing Hubs.

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## 2. PURPOSE OF THE ASSIGNMENT

The purpose of this consultancy is to support the Government of Sierra Leone in developing technically robust and procurement-ready solutions to provide reliable electricity to the Feed Salone Agricultural Production and Processing Hubs. The assignment will focus on the design of hybrid energy systems and the preparation of comprehensive tender documentation to enable the Government to competitively procure qualified contractors or private energy investors to develop the required energy infrastructure.

Specifically, the consultancy seeks to ensure that each agricultural hub is supported by efficient, resilient, and cost-effective energy systems capable of meeting the operational requirements of modern agricultural production, agro-processing, cold storage, irrigation, and logistics infrastructure. The proposed systems will prioritise renewable energy solutions while incorporating appropriate storage and backup technologies to ensure a reliable and continuous power supply.

The key objectives of the consultancy are as follows:

1. Design Hybrid Energy Systems
   To design technically sound hybrid energy systems capable of providing a reliable, continuous, and scalable electricity supply to each agricultural hub. The systems will integrate renewable energy technologies—primarily

solar photovoltaic generation—with battery energy storage and appropriate backup generation to ensure a stable power supply under varying operating conditions.

2. Determine Optimal Generation Capacity and Energy Configuration
   To assess the projected energy demand of each hub and determine the optimal generation capacity, storage requirements, and system configuration. This will include analysis of peak demand, load profiles, operational requirements for agro-processing facilities, irrigation systems, storage infrastructure, and other hub services to establish appropriate megawatt (MW) sizing and system architecture for each location.

3. Prepare Detailed Engineering Designs and Technical Specifications
   To develop comprehensive engineering designs for the proposed energy systems, including system layouts, electrical configurations, generation and storage integration, and internal power distribution networks within the hubs. The consultant will prepare detailed technical specifications, engineering drawings, and system performance requirements in accordance with international engineering and safety standards.

4. Prepare Procurement-Ready Tender Documentation
   To prepare complete and procurement-ready tender documentation to facilitate the competitive procurement of Engineering, Procurement and Construction (EPC) contractors or Independent Power Producers (IPPs). The tender documentation will include technical specifications, bidding instructions, qualification requirements, evaluation criteria, draft contractual provisions, and performance standards necessary for transparent and efficient procurement.

5. Develop Preliminary Investment Estimates and PPP Structuring Options
   To prepare preliminary capital cost estimates for the proposed hybrid energy systems, including indicative investment requirements for each agricultural hub. The consultant will also identify and outline potential public–private partnership (PPP) or private sector participation models, including Independent Power Producer (IPP) or Energy Service Company (ESCO) arrangements, that could support the financing, development, and long-term operation of the energy infrastructure.

It is important to note that the scope of this assignment is limited to technical design, system planning, and procurement documentation preparation. The consultancy will not include construction supervision, project implementation, or operational management of the energy facilities. The outputs of this assignment will provide the Government with the technical and procurement framework required to proceed with the subsequent development and implementation phases.

## 3. SPECIFIC OBJECTIVES OF THE ASSIGNMENT

The specific objectives of this consultancy are to provide the Government of Sierra Leone with the technical, financial, and procurement framework required to develop reliable hybrid energy systems for the Feed Salone Agricultural Production and Processing Hubs. The consultant will generate the necessary design outputs and tender documentation to enable the Government to competitively procure qualified contractors or attract private-sector participation for the development of the required energy infrastructure.

In particular, the consultancy shall pursue the following objectives:

**• Assess Electricity Demand Requirements for Each Agricultural Hub**
Undertake a comprehensive assessment of the current and projected electricity demand of each agricultural hub, taking into account the operational requirements of mechanised farming operations, irrigation systems, agro-processing facilities, cold storage infrastructure, warehouses, administrative facilities, and other supporting services. The consultant shall develop detailed load profiles, peak demand estimates, and future expansion scenarios to ensure that the energy systems are appropriately sized and scalable.

**• Design Hybrid Renewable Energy Systems**
Develop technically robust hybrid energy solutions capable of delivering a reliable and efficient electricity supply. The

proposed systems should combine **solar photovoltaic (PV) generation as the primary renewable energy source, battery energy storage systems (BESS) to ensure supply stability and energy storage, and thermal backup generation (diesel or biomass, where feasible) to guarantee operational continuity during peak demand periods or low-solar-generation** conditions. The design should prioritise energy efficiency, resilience, and cost optimisation.

**• Establish Optimal Generation Capacity (MW Sizing) for Each Hub**
Determine the optimal installed generation capacity for each hub based on the demand assessment, operational requirements, and future expansion potential. The consultant shall recommend appropriate **megawatt (MW) capacity for solar generation, battery storage capacity (MWh), and backup generation systems**, ensuring that the proposed configuration can reliably meet operational requirements while maintaining cost-effectiveness.

**• Develop Preliminary Capital Cost Estimates**
Prepare preliminary capital investment estimates for the proposed energy systems, including solar generation infrastructure, battery storage systems, backup generation facilities, distribution networks, and control systems. The consultant shall provide indicative **cost benchmarks, bill of quantities (BoQ), and estimated capital expenditure (CAPEX) for each hub**, based on international market standards and comparable projects.

**• Prepare Detailed Engineering Designs and Technical Specifications**
Develop comprehensive engineering documentation required for implementing the hybrid energy systems. This will include system architecture diagrams, electrical single-line diagrams, solar plant layouts, battery storage integration designs, internal distribution network layouts, and other necessary engineering drawings. The consultant shall also prepare detailed technical specifications and performance standards for all major equipment and system components.

**• Prepare Procurement-Ready Tender Documentation**
Develop complete tender documentation to support the competitive procurement of **Engineering, Procurement and Construction (EPC) contractors or Independent Power Producers (IPPs)**. The documentation shall include technical specifications, instructions to bidders, qualification requirements, bid submission procedures, evaluation criteria, and draft contractual provisions required for transparent and efficient procurement.

**• Provide Preliminary PPP Structuring Options for Private Sector Participation**
Identify and outline potential **public–private partnership (PPP) structures or private-sector participation models that could support the financing, development, and operation of** energy systems. This may include Independent Power Producer (IPP) arrangements, Energy Service Company (ESCO) models, or hybrid public–private investment frameworks. The consultant shall provide a preliminary analysis of investment attractiveness, potential revenue mechanisms, and indicative risk allocation to support future engagement with private investors.

## 4. SCOPE OF WORK

The Consultant shall undertake all technical and analytical tasks necessary to design reliable hybrid energy systems for the Feed Salone Agricultural Production and Processing Hubs and to prepare complete procurement-ready tender documentation for the development of the required energy infrastructure.

The assignment will include demand analysis, technical system design, preliminary financial assessment, and preparation of engineering and procurement documentation. The Consultant shall perform, but not be limited to, the following tasks:

### 4.1 Energy Demand Assessment

The Consultant shall conduct a comprehensive assessment of the electricity requirements for each agricultural hub to determine the scale and configuration of the proposed energy systems.

This task shall include the following activities:

• Assess the projected electricity demand associated with the full range of agricultural production, processing, storage, and administrative activities at each hub.
• Identify current and anticipated electricity consumption patterns associated with mechanised agricultural operations and agro-industrial facilities.
• Develop detailed energy consumption projections based on the operational characteristics of each hub.

Electricity demand assessments shall include, but not be limited to, the following infrastructure components:

• Irrigation pumping systems and water management infrastructure
• Agro-processing plants (e.g., rice milling, cassava processing, oil palm processing, grain drying)
• Cold storage and refrigerated logistics facilities
• Warehousing and commodity aggregation infrastructure
• Agricultural machinery maintenance and service centres
• Administrative buildings, laboratories, and training facilities
• ICT infrastructure and security systems

The Consultant shall develop **daily, seasonal, and peak load demand profiles** for each agricultural hub and identify potential future expansion scenarios to ensure that the proposed energy systems are scalable and adaptable to increasing demand.

**4.2 Site Assessment and Resource Analysis**

The Consultant shall undertake technical assessments of the proposed hub locations to determine the feasibility and optimal configuration of renewable and hybrid energy systems.

This task shall include the following assessments:

• Solar resource and irradiation analysis to determine the viability and productivity of solar photovoltaic systems.
• Assessment of land availability and suitability for the installation of solar photovoltaic arrays.
• Evaluation of existing or potential grid connectivity, including distance to transmission or distribution networks and potential for grid interconnection.
• Analysis of environmental and climatic conditions that may influence system performance, such as rainfall patterns, temperature variations, and flooding risks.
• Assessment of local biomass availability (such as agricultural residues) that could support biomass-based thermal generation where feasible.
• Identification of potential environmental and social considerations related to the proposed energy installations.

The findings of this assessment will inform the technical design and system configuration for each hub.

**4.3 Hybrid Energy System Design**

Based on the demand assessment and site analysis, the Consultant shall design technically robust hybrid energy systems capable of delivering a reliable electricity supply to each agricultural hub.

The proposed energy systems shall integrate multiple energy sources to ensure resilience, operational continuity, and cost efficiency.

**Solar Photovoltaic Generation**

Solar photovoltaic (PV) generation shall serve as the **primary source of renewable electricity** for each hub. The Consultant shall design ground-mounted solar PV systems optimised for energy yield, reliability, and ease of maintenance.

**Battery Energy Storage Systems**

Battery energy storage systems (BESS) shall be incorporated to stabilise the energy supply, store excess solar generation during daylight hours, and ensure a reliable power supply at night or during periods of low solar generation.

**Thermal Backup Systems**

Thermal backup generation shall be incorporated to ensure an uninterrupted electricity supply during periods of extended low solar output or peak demand. Backup generation may be based on diesel or biomass systems, depending on local resource availability and economic feasibility.

The hybrid system design shall include:

- Overall generation system configuration and capacity allocation
- Integration of solar generation, battery storage, and backup generation systems
- Internal power distribution network within the agricultural hubs
- Electrical substations and transformer infrastructure where required
- Energy management system (EMS) architecture
- Control, monitoring, and remote management systems

The system design shall prioritise reliability, operational efficiency, and maximise renewable energy utilisation.

### 4.4 Preliminary MW Capacity Sizing

The Consultant shall determine the optimal installed generation capacity required to meet each hub's operational energy requirements.

Based on preliminary estimates, the following indicative capacity ranges are anticipated:

| AGRICULTURAL HUB | INDICATIVE HYBRID ENERGY CAPACITY |
|---|---|
| **MAMBOLO HUB** | 3 – 4 MW Hybrid Solar System |
| **KITCHUM HUB** | 2 – 3 MW Hybrid Solar System |
| **TORMABUN HUB** | 2 – 3 MW Hybrid Solar System |
| **GBONDAPI HUB** | 3 – 4 MW Hybrid Solar System |
| **GRAND TOTAL** | **10.5 MW** |

These estimates are indicative and shall be refined based on the detailed energy demand assessment and system modelling conducted by the Consultant.

The Consultant shall determine appropriate:

- Solar generation capacity (MW)
- Battery storage capacity (MWh)
- Backup generation capacity (MW)

The recommended configuration shall ensure system reliability while maintaining cost efficiency and scalability.

### 4.5 Preliminary Cost Estimates

The Consultant shall prepare preliminary capital cost estimates for the proposed hybrid energy systems based on international benchmarks and comparable project experiences.

Indicative cost benchmarks for hybrid systems may include:

| COMPONENT | ESTIMATED COST |
|---|---|
| **SOLAR PV GENERATION** | USD 900,000 – USD 1,200,000 per MW |
| **BATTERY ENERGY STORAGE SYSTEMS** | USD 400,000 – USD 700,000 per MWh |
| **THERMAL BACKUP GENERATION** | USD 300,000 – USD 600,000 per MW |
| **POWER DISTRIBUTION INFRASTRUCTURE** | USD 200,000 – USD 400,000 per MW |

Based on these benchmarks, the estimated total capital expenditure (CAPEX) per hub may range between:

**USD 6 million – USD 15 million**, depending on final generation capacity, storage requirements, and distribution infrastructure.

The Consultant shall prepare:

• Detailed capital cost estimates for each hub
• Preliminary **Bill of Quantities (BoQ)**
• Cost breakdown by infrastructure component
• Consolidated investment estimate for the overall programme

**4.6 Preparation of Engineering Designs**

The Consultant shall prepare comprehensive engineering documentation required to support the procurement and implementation of the hybrid energy systems.

Engineering documentation shall include, but not be limited to:

• System architecture diagrams
• Electrical single-line diagrams
• Solar photovoltaic plant layouts
• Battery storage system integration designs
• Internal distribution network layouts
• Substation and transformer designs
• Control and monitoring system design

All engineering designs shall comply with **international engineering standards, electrical safety regulations, and applicable national regulatory requirements**.

**4.7 Preparation of Tender Documentation**

The Consultant shall prepare complete and procurement-ready tender documentation to support the competitive procurement of contractors or private energy investors.

The tender documentation shall include the following components:

**Technical Specifications**

• Detailed engineering specifications
• Equipment standards and performance requirements
• Installation and commissioning requirements
• Operation and maintenance requirements

**Procurement Documentation**

• Instructions to bidders
• Bid submission procedures
• Qualification and eligibility criteria
• Bid evaluation methodology and scoring framework

**Draft EPC Contract**

The Consultant shall prepare a draft Engineering, Procurement and Construction (EPC) contract covering:

• Design and construction responsibilities
• Technical performance guarantees
• Construction timelines and milestones
• Testing and commissioning requirements
• Defects liability provisions and warranty conditions

**4.8 PPP Structuring Options**

The Consultant shall provide preliminary recommendations on potential **public–private partnership (PPP) or private-sector participation models to** support the development, financing, and operation of the proposed energy systems.

Potential structuring options may include:

**Independent Power Producer (IPP) Model**

Under this model, private investors would finance, develop, and operate the energy systems and supply electricity to the agricultural hubs under long-term **Power Purchase Agreements (PPAs)**.

**Energy Service Company (ESCO) Model**

Under an ESCO model, private operators would install and manage the energy infrastructure while agricultural hub operators pay service-based tariffs linked to energy consumption.

**Hybrid Public–Private Model**

Under a hybrid structure, the Government may finance core infrastructure components while private investors develop and operate generation assets.

The Consultant shall provide a preliminary analysis of:

• Potential tariff structures
• Risk allocation frameworks
• Investment attractiveness and bankability considerations
• Opportunities for private sector participation and financing.

**5. DELIVERABLES**

The Consultant shall submit the following deliverables:

| Deliverable | Description |
|---|---|
| Inception Report | Methodology, work plan, and data requirements |
| Energy Demand Assessment Report | Load forecasts for each hub |
| Hybrid Energy System Design Report | Technical configuration and system sizing |
| Preliminary Cost Estimate Report | CAPEX estimates and BoQ |

| | |
|---|---|
| Draft Engineering Designs | Detailed infrastructure designs |
| Draft Tender Documentation | Procurement and EPC documents |
| Final Tender Package | Complete procurement-ready documentation |

## 6. IMPLEMENTATION TIMELINE

PHASE 1 : The assignment is expected to be completed within **16 weeks**.

| Phase | Duration |
|---|---|
| Inception Phase | 2 weeks |
| Energy Demand and Site Assessment | 4 weeks |
| Engineering Design | 6 weeks |
| Cost Estimates and PPP Structuring | 2 weeks |
| Tender Documentation Preparation | 2 weeks |

PHASE 2: Supervision and Construction

## 7. CONSULTANT QUALIFICATIONS AND EXPERIENCE

The assignment requires engaging a qualified consulting firm with demonstrated expertise in renewable energy system design, hybrid power infrastructure, and the preparation of procurement-ready engineering and tender documentation. The Consultant must possess the technical capacity, multidisciplinary expertise, and institutional experience necessary to design reliable hybrid energy solutions and develop bankable procurement frameworks suitable for government infrastructure programmes and for potential private-sector participation.

### 7.1 Firm Qualifications and Institutional Experience

The consulting firm shall demonstrate the following minimum qualifications:

• **Extensive experience in renewable energy infrastructure design**, with at least **ten (10) years of proven experience** in the planning, engineering design, and technical assessment of renewable energy systems.

• **Demonstrated experience in hybrid energy systems**, particularly projects integrating **solar photovoltaic generation, battery energy storage systems, and thermal backup generation**, including hybrid mini-grid or distributed energy solutions.

• **Proven track record in solar photovoltaic system design**, including utility-scale solar installations, distributed solar systems, or solar-powered industrial and agricultural infrastructure.

• **Experience in preparing Engineering, Procurement and Construction (EPC) tender documentation**, including technical specifications, engineering drawings, bill of quantities (BoQ), procurement frameworks, and draft EPC contracts.

• **Experience in the preparation of energy infrastructure projects for government or development partner programmes**, including feasibility assessments, technical design, and procurement preparation.

• **Demonstrated experience in Public–Private Partnership (PPP) or private sector participation in energy infrastructure**, including advisory work related to Independent Power Producer (IPP) projects, energy service models, or hybrid public–private investment structures.

• Experience working in **developing countries or emerging markets**, preferably in **Sub-Saharan Africa**, particularly in the design of energy infrastructure supporting agricultural, rural development, or agro-industrial projects.

• Familiarity with **international engineering standards, renewable energy best practices, and environmental and safety requirements** applicable to hybrid energy systems.

The consulting firm must demonstrate the capacity to assemble a multidisciplinary team capable of delivering all aspects of the assignment within the required timeframe.

### 7.2 Key Experts

The consulting firm shall propose a team of qualified experts with relevant professional experience in renewable energy systems, engineering design, infrastructure procurement, and PPP structuring. At a minimum, the proposed team should include the following key experts:

**Renewable Energy Engineer / Team Leader**
The Renewable Energy Engineer will serve as the Team Leader and will be responsible for overall Coordination and delivery of the assignment. The expert should possess at least **10 years of experience in renewable energy project design**, with substantial experience in solar photovoltaic systems and hybrid energy solutions. The Team Leader will oversee the system design, coordinate technical inputs, and ensure the quality and consistency of project outputs.

**Electrical Power Systems Engineer**
The Electrical Engineer will be responsible for designing electrical systems, including generation integration, distribution networks, substations, and electrical protection systems. The expert should have demonstrated experience in designing electrical infrastructure for renewable energy plants, mini-grids, or hybrid power systems.

**Energy Storage Specialist**
The Energy Storage Specialist will be responsible for designing battery energy storage systems (BESS) and integrating storage solutions within the hybrid energy configuration. The expert should have experience in battery technologies, energy storage modelling, and system optimisation for renewable energy systems.

**PPP / Infrastructure Finance Specialist**
The PPP Specialist will provide expertise in structuring private-sector participation options and assessing the financial viability of proposed energy systems. The expert should have experience in energy-sector PPP transactions, Independent Power Producer (IPP) projects, or infrastructure financing frameworks, including tariff structures and risk-allocation mechanisms.

**Procurement Specialist**
The Procurement Specialist will be responsible for preparing procurement-ready tender documentation, including instructions to bidders, qualification requirements, evaluation frameworks, and draft EPC contractual provisions. The expert should have experience in public sector procurement and infrastructure tender preparation, particularly for energy or engineering projects.

### 7.3 Additional Expertise (Optional but Desirable)

The consulting firm may also include additional experts where necessary to strengthen the assignment, such as:

• **Solar PV Design Engineer** with expertise in solar plant layout and performance optimisation
• **Environmental and Social Specialist** with experience in environmental safeguards and sustainable infrastructure design
• **Cost Engineer / Quantity Surveyor** responsible for preparing cost estimates and bill of quantities

### 7.4 Team Composition and Coordination

The consulting firm shall ensure that the proposed team has adequate technical capacity and complementary expertise to deliver all components of the assignment efficiently. The Team Leader will be responsible for coordinating the multidisciplinary team and ensuring that all deliverables meet the technical and quality standards required by the Government of Sierra Leone.

The Consultant must also demonstrate the ability to collaborate effectively with Government agencies, technical stakeholders, and potential investors throughout the assignment.

## 8. EVALUATION CRITERIA

Consultants will be evaluated through a transparent and competitive selection process based on the Quality and Cost-Based Selection (QCBS) methodology or an equivalent public procurement evaluation framework adopted by the Government of Sierra Leone. The evaluation will assess the technical competence, experience, and methodological soundness of the submitted proposals, as well as the consulting firm's financial competitiveness.

The evaluation process will consist of two main stages: technical and financial. Only proposals that achieve the minimum technical qualification score will proceed to the financial evaluation stage.

The criteria and corresponding weights for the evaluation are outlined below.

| **Evaluation Criteria** | **Weight (%)** |
|---|---|
| Firm Experience | 20% |
| Quality of Technical Approach and Methodology | 30% |
| Qualifications and Experience of Key Experts | 20% |
| Work Plan and Implementation Schedule | 10% |
| Financial Proposal | 20% |
| **Total** | **100%** |

### 8.1 Firm Experience (20%)

This criterion will assess the consulting firm’s institutional capacity and track record in delivering similar assignments. The evaluation will consider:

• Demonstrated experience in the design and engineering of renewable or hybrid energy systems, particularly solar photovoltaic and battery storage solutions.
• Previous assignments involving hybrid power systems, mini-grids, or distributed energy infrastructure supporting agricultural, industrial, or rural development projects.
• Experience in preparing engineering designs and EPC tender documentation for energy infrastructure projects.
• Experience providing advisory services for PPP or private sector participation in energy projects, including IPP or ESCO models.
• Experience working with governments, development partners, or public institutions, particularly in developing countries or emerging markets.

Additional consideration may be given to firms with relevant experience in Sub-Saharan Africa or similar operating environments.

### 8.2 Quality of Technical Approach and Methodology (30%)

This criterion will evaluate the quality, clarity, and practicality of the technical proposal submitted by the consulting firm. The assessment will consider:

• The consultant's understanding of the objectives and scope of the assignment.
• The proposed methodology for conducting the energy demand assessment, system design, and engineering analysis.
• The proposed approach for designing hybrid energy systems integrating solar PV, battery storage, and thermal backup generation.
• The proposed approach for developing engineering designs, cost estimates, and procurement-ready tender documentation.
• The consultant's strategy for identifying PPP structuring options and private sector participation models.
• The overall coherence, feasibility, and innovation of the proposed methodology.

Proposals that demonstrate a clear, technically sound approach to achieving reliable, efficient, and scalable hybrid energy systems will receive higher scores.

### 8.3 Qualifications and Experience of Key Experts (20%)

This criterion will assess the qualifications, professional experience, and technical expertise of the proposed project team. The evaluation will consider:

• Academic qualifications and professional certifications of key experts.
• Relevant experience in renewable energy system design, electrical engineering, energy storage technologies, infrastructure finance, and procurement documentation.
• Previous involvement in similar assignments involving solar hybrid power systems, EPC tender preparation, or energy infrastructure planning.
• Demonstrated experience working on large-scale energy or infrastructure projects, particularly in developing country contexts.

Particular emphasis will be placed on the expertise of the Team Leader/Renewable Energy Engineer, the Electrical Power Systems Engineer, the Energy Storage Specialist, the PPP Specialist, and the Procurement Specialist.

### 8.4 Work Plan and Implementation Schedule (10%)

This criterion will evaluate the practicality and organisation of the proposed work plan for delivering the assignment within the required timeframe.

The evaluation will consider:

• The clarity and sequencing of activities across the assignment phases.
• The adequacy of the proposed timeline and milestones for delivering key outputs.
• Allocation of responsibilities among team members.
• The feasibility of completing the assignment within the proposed schedule.

Consultants are expected to present a **realistic, well-structured implementation plan** that demonstrates effective project management.

### 8.5 Financial Proposal (20%)

The financial proposal will be evaluated based on the competitiveness, clarity, and reasonableness of the proposed budget. The evaluation will consider:

• The overall cost of the consultancy services.
• The cost breakdown across major activities and expert inputs.
• Consistency between the financial proposal and the technical approach.

The financial evaluation will be conducted in accordance with the applicable procurement rules and will ensure value for money while maintaining the required technical quality.

The combined technical and financial evaluation will determine the final ranking of proposals, and the consulting firm achieving the highest overall score will be recommended for contract award, subject to successful negotiations with the Government of Sierra Leone.

## 9. REPORTING ARRANGEMENTS

The Consultant will report to:

The Ministry of Energy
Feed Salone Programme Implementation Unit

Technical oversight will include:

- Ministry of Agriculture and Food Security
- Ministry of Planning and Economic Development
- Ministry of Finance

**Bidders must submit the following valid documents in their Expressions of Interest (EOIs)**: -

- Firm's profile
- Relevant Experience as indicated in the Terms of Reference.
- Valid Certificate of Business Registration or Certificate of Incorporation from the Corporate Affairs Commission.
- National Revenue Authority (NRA) Tax Clearance Certificate
- National Social Security and Insurance Trust (NASSIT) Clearance Certificate, and
- Registration Certificate from the National Public Procurement Authority (NPPA)

**Date and deadline for the submission of Expressions of Interest is Monday 18th May 2026 at 12:00 noon.**

**All Expressions of Interests (EOIs) must be addressed to: -**

**The Assistant Director of Procurement**

**Ministry of Energy**

**Procurement Unit**

**6th Floor, Electricity House**

**36A Siaka Stevens Street**

**Freetown**