

Rural and Renewable Energy Agency

Securing modern energy access for all Liberians



Liberia Electricity Sector Strengthening and Access Project (LESSAP II) Project ID: P180498

REQUEST FOR EXPRESSIONS OF INTEREST (CONSULTING SERVICES – INDIVIDUAL SELECTION)

Issue date: May 26, 2025 Closing date: June 9, 2025

Consultancy Services for Result Based Financing (RBF) Mini grid Specialist Contract Reference No: LR-RREA-488765-CS-INDV

1. Background

The Rural and Renewable Energy Agency (RREA) is an autonomous agency of the Government of Liberia, established in 2010 and legislated in 2015. Its mandate is to facilitate and accelerate the economic transformation of rural Liberia by promoting the development and supply of modern energy products and services, with a focus on locally available renewable resources.

Liberia's National Electrification Strategy (NES) aims to achieve universal electricity access by 2030, with a target of 75% access by 2030. The strategy outlines a combination of grid expansion, mini-grids, and stand-alone solar systems to achieve these goals.

Under the World Bank-financed LESSAP II, RREA is implementing initiatives to electrify public health and education facilities, deploy solar home systems for households and off-grid productive uses, and pilot private sector-led mini-grids. These efforts are aligned with Liberia's medium-term development plan and contribute to the government's target of reaching universal access to electricity by 2030.

With the financing from the World Bank, toward the cost of Liberia Electricity Sector and Strengthening Access Project (LESSAP), RREA intends to apply part of the proceeds for consulting services for Project Coordinator.

2. Objective of the Assignment

The Rural and Renewable Energy Agency is seeking a Mini-grid RBF Specialist to support the off-grid sub-component of the Liberia Energy Sector Strengthening & Access Project Phase 2. The strategy for electrification of households through mini-grids will pilot a results-based financing mechanism targeting an estimated 5,300 connections (estimated 23,320 people including 50 MSME with electricity access) to be implemented by private developers based on a public-private partnership model, with the private developers to mobilize co-financing in equity or debts of up to \$1.5million. The Mini-grid RBF Specialist

will support selected mini-grid developer(s) through the Fund Manager/IVA as relevant on project preparation and facilitation including investment readiness to identify a pipeline of technically and financially viable projects, tendering & implementation, enabling environment to meet regulatory/legal requirements and design of innovative financing & delivery(business) models including:

- Review and validation of technical(engineering), environmental, socio-economic and financial pre-feasibility & feasibility studies for viability and bankability of projects including financial modelling,
- Technical assistance including business development and investment readiness for investment mobilization and addressing capacity constraints,
- Design of RBF & competitive process and support for evaluation, due diligence and grants award decision making,
- Contracting, claims & disbursement processing,
- Implementation monitoring & verification oversight during and after construction and customer connections including design, construction, operational performance, etc
- Technical assistance, enabling policy/regulatory market facilitation support,
- Facilitating access to finance & stimulating productive use of energy,
- Environmental, social safeguards and other regulatory/legal compliance support.

3. Scope of the Assignment

- The Mini-grid RBF Specialist will support selected mini-grid developers through the Fund Manager/IVA on relevant activities for tendering, implementation and monitoring of the mini-grids sub-component of LESSAP Phase 2, including but not limited to the following:
- Support the development of an Operations Manual for the mini-grids RBF to cover competitive process, evaluation, due diligence, contracting, processing of claims, claims verification, disbursement, monitoring & evaluation;
- In collaboration with the mini-grid consultants and Fund Manager/IVA, participate in the design of the Call for Proposals and financial models for competitive processes for mini-grid developers,
- Review and validate technical(engineering), environmental, socio-economic and financial pre-feasibility and feasibility site-specific studies including financial models and business plans proposed by private developers under the mini-grids RBF,
- Conduct technical and financial capacity needs assessment and design a technical assistance plan for mini-grid developers,
- Provide business development and investment readiness support to mini-grid developers to access debt and equity funding,
- Design and implement strategies to mitigate challenges for implementation of minigrids such as reduction of commercial losses, addressing consumers affordability, stimulation of productive use of energy, demand-side management, etc,



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- Support facilitation with local commercial financial institutions and impact investors to facilitate access to finance for mini-grid developers,
- Support facilitation on legal and regulatory requirements to mini-grid developers such as obtention of environmental permit, mini-grid construction permit, license/permit for operations & maintenance, duty exemption on quality-verified solar PV components under Executive Order, land acquisition,
- Oversee claims verification processes and conduct four-eye checks on claims verification reports submitted by Independent Verification Agent including test inspection for mini-grid infrastructure constructed,
- Participate in procurement of mini-grid RBF process management tool including development of bidding documents, participation in clarification meeting to bidders, users acceptance test and serving as contract manager,

4. Qualifications, Experience, and Competencies

An appropriate undergraduate degree in Energy Engineering or Policy, Economics or other relevance field along with a solid experience of 5 years in energy access through of off-grid, especially mini-grids;

- Private sector development through public-private-partnerships based on results-based financing or performance-based grants,
- Experience in design and implementation of private-sector driven off-grid electrification initiatives particularly mini-grids,
- Experience in design and implementation of enabling environment including facilitating access to finance for the private sector,
- A good understanding of the policy, legal, institutional and regulatory framework of the energy sector specifically on mini-grids infrastructure in Sub-Saharan Africa, especially Liberia,
- Proven written and oral communication skills; strong research, teamwork and interpersonal skills;

5. Required Qualities

- Ability to work under pressure and meet critical deadlines
- Communication and other interpersonal skills;
- High levels of personal initiative, motivation, honesty, integrity
- Proficiency in computer applications (Internet and MS Office suite) and report writing skills;

6. Location and Reporting Line

The LESSAP2 RBF Mini-grid Specialist will be based at the office of RREA in Monrovia, Liberia, but is expected to travel periodically to the project sites

and other locations in rural Liberia. The Consultant will report to the Project Coordinator of the Rural and Renewable Energy Agency (RREA) or his or her designate.

7. Duration

This is a time-based contract for a period of two years with the possibility of extension based on performance.

The attention of interested individual Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" dated July 2016, revised November 2017, and August 2018, November 2020 and September 2023 and revised in February 2025, setting forth the World Bank's policy on conflict of interest. Please refer to paragraph 3.17 of the Procurement Regulations on conflict of interest related to this assignment which is available on the Bank's website at http://projectsbeta.worldbank.org/en/projects-operations/products-and-services/brief/

Interested individual will be selected in accordance with the Individual Consultant Selection (ICS) method set out in the Procurement Regulations.

Further information and the detailed Terms of Reference (TOR) for the assignment can be obtained electronically at the following email addresses and Website, from Mondays to Fridays, from 0900 to 1600 hours GMT:

Email: info@rrealiberia.org Website: www.rrealiberia.org

Expression of Interest; clearly marked Consultant for RBF Mini-grid Specialist, must be delivered through an email to the address below on or before 4:00 p.m. Local Time, on June 9, 2025.

Only shortlisted candidates will be contacted.

Attn: Executive Director

Rural and Renewable Energy Agency LEC Sub-station, Newport Street 1000 Monrovia 10, Liberia Email: samueln@rrealiberia.org

Electronic submission should also be copied to the following addresses:

<u>info@rrealiberia.org</u>; <u>stephenp@rrealiberia.org</u>; <u>augustinem@rrealiberia.org</u>, tenniej@rrealiberia.org; dehkonteew@rrealiberia.org



Liberia Electricity Sector Strengthening and Access Project (LESSAP) – Off-grid Component

Terms of Reference

8. Background

The Rural and Renewable Energy Agency (RREA) was established by an Executive Order in 2010 and by an Act of the National Legislature in 2015, as an Autonomous Agency of the Government of Liberia (GoL), with the mandate to facilitate and accelerate the economic transformation of rural Liberia, by promoting the development and supply of modern energy products and services to rural areas with an emphasis on locally available renewable energy resources.

The GoL has now adopted a National Electrification Strategy (NES) embracing the target of universal access to electricity by 2030 and 54% access by 2025 through both grid and off-grid options. The NES provides a roadmap for electricity access through the expansion and densification of the grid, expansion of the distribution network along the CLSG corridor, expansion of cross-border systems, development of large and single-community mini-grids, and a significant scale-up of stand-alone solar solutions. Geospatial analyses of the NES reveal that grid expansion and densification will be the least-cost options for reaching 70% of households by 2030. The remaining 30% of households could be served by three large-capacity mini-grids (5% of the households), smaller-size community mini-grids each serving between 99 and 337 households with an average of 140 consumers (6% of the households), and stand-alone solar systems (for the remaining 19% of households). On this basis, the World Bank is rolling out a multi-phase program (3 phases) with an overall Bank financing envelope of US\$ 180 million that will help achieve GoL's ambitious agenda of universal electricity access by 2030. The overall program is expected to end December 31, 2030. Phase 1 of the program, dubbed Liberia Electricity Sector

Strengthening and Access Project (LESSAP) is currently being administered by the World Bank in partnership with the GoL and is expected to close on June 30, 2026.

LESSAP I – the first phase of the MPA (ongoing) has fully met the PDO indicator of "Optimal organization structure developed and implemented" and achieved 47 percent of the PDO indicator of "People provided with new or improved electricity service" (162,852 against the target of 345,000) and 35 percent of PDO indicator of "Connections regularized in the project areas" (13, 924 against the target of 40,000) as of April 2024. Regarding the off-grid component, the contracts for electrifying 88 health facilities with solar systems are ongoing – with all targeted health facilities to be electrified by December 2025. Moreover, the call for proposals for Result-based financing (RBF) for solar home systems was launched in December 2023. Grants have been awarded to five off-grid companies to ensure at least 22,013 household connections (projected), electrifying more than 110,065 people nationwide. The original target of electrifying 15,600 households will be surpassed by June 2026, reaching up to 34,000 households.

LESSAP II is the second phase of the MPA financed by the World Bank to build the necessary foundations in the grid and off-grid spaces to embark on a faster access trajectory in the next phase1 . LESSAP II incorporates lessons learned from the first phase (LESSAP I) as well as analytical results of the World Bank Programmatic Advisory Services and Analytics (PASA) for Liberia Energy Sector (P176686), with a focus on the identification and implementation of off-grid electrification modalities for households, small productive use customers and public institutions to providing urgent access support, among others. Under LESSAP II, the off-grid component would support the Electrification of health and education facilities, and households in off-grid rural areas is been undertaken by Rural and Renewable Energy Agency (RREA)/ The project supports Liberia's medium-term development plan and will contribute to the GoL's target of reaching universal access to electricity by 2030 from the current rate of 32.7 percent. The project finances the following under Component 2: Off-grid Electrification of Households, Public Facilities, and Stimulation of Productive Uses in Rural Areas:

- 2.a. Electrification of public health and education facilities in rural areas
- 2.b. Deployment of solar home systems for households and off-grid productive uses
- 2.c. Piloting private sector-led mini-grids

9. Objectives of the assignment



The Mini-grid RBF Specialist to support the off-grid sub-component of the Liberia Energy Sector Strengthening & Access Project Phase 2. The strategy for electrification of households through mini-grids will pilot a results-based financing mechanism targeting an estimated 5,300 connections (estimated 23,320 people including 50 MSME with electricity access) to be implemented by private developers based on a public-private partnership model, with the private developers to mobilize co-financing in equity or debts of up to \$1.5 million

Main Activity: Lead on project preparation to demonstrate technical/engineering, environmental, socio-economic and financial viability and support the mini-grid RBF tendering & implementation processes (development of operations manual; evaluation; due diligence & grants award; processing of claims, verification including oversight/inspections pre and post construction; disbursement; operational performance monitoring; technical assistance; enabling environment including facilitation in meeting regulatory/legal requirements and design of innovative financing & delivery(business) models to selected developers through Fund Manager, etc) of mini-grids RBF based on a public-private partnership model.

3. Scope of the assignment:

The Mini-grid RBF Specialist will support selected mini-grid developer(s) through the Fund Manager/IVA as relevant on project preparation and facilitation including investment readiness to identify a pipeline of technically and financially viable projects, tendering & implementation, enabling environment to meet regulatory/legal requirements and design of innovative financing & delivery(business) models including: The Mini-grid RBF Specialist will support selected mini-grid developers through the Fund Manager/IVA on relevant activities for tendering, implementation and monitoring of the mini-grids subcomponent of LESSAP Phase 2, including but not limited to the following:

- Review and validation of technical(engineering), environmental, socio-economic and financial pre-feasibility & feasibility studies for viability and bankability of projects including financial modelling,
- Technical assistance including business development and investment readiness for investment mobilization and addressing capacity constraints,
- Design of RBF & competitive process and support for evaluation, due diligence and grants award decision making,
- Contracting, claims & disbursement processing,
- Implementation monitoring & verification oversight during and after construction and customer connections including design, construction, operational performance, etc

- Technical assistance, enabling policy/regulatory market facilitation support,
- Facilitating access to finance & stimulating productive use of energy,
- Environmental, social safeguards and other regulatory/legal compliance support.
- Support the development of an Operations Manual for the mini-grids RBF to cover competitive process, evaluation, due diligence, contracting, processing of claims, claims verification, disbursement, monitoring & evaluation;
- In collaboration with the mini-grid consultants and Fund Manager/IVA, participate in the design of the Call for Proposals and financial models for competitive processes for mini-grid developers,
- Review and validate technical(engineering), environmental, socio-economic and financial pre-feasibility and feasibility site-specific studies including financial models and business plans proposed by private developers under the mini-grids RBF,
- Conduct technical and financial capacity needs assessment and design a technical assistance plan for mini-grid developers,
- Provide business development and investment readiness support to mini-grid developers to access debt and equity funding,
- Design and implement strategies to mitigate challenges for implementation of minigrids such as reduction of commercial losses, addressing consumers affordability, stimulation of productive use of energy, demand-side management, etc,
- Support facilitation with local commercial financial institutions and impact investors to facilitate access to finance for mini-grid developers,
- Support facilitation on legal and regulatory requirements to mini-grid developers such as obtention of environmental permit, mini-grid construction permit, license/permit for operations & maintenance, duty exemption on quality-verified solar PV components under Executive Order, land acquisition,
- Oversee claims verification processes and conduct four-eye checks on claims verification reports submitted by Independent Verification Agent including test inspection for mini-grid infrastructure constructed,



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- Participate in procurement of mini-grid RBF process management tool including development of bidding documents, participation in clarification meeting to bidders, users acceptance test and serving as contract manager,
- Participate in procurement of Independent Verification Agent for mini-grid RBF including development of bidding documents, clarification meeting to bidders, evaluation, due diligence and serving as contract manager,
- Support the evaluation, due diligence, clarification meeting, grant portfolio allocation of all proposals submitted by mini-grid developers,
- Support design of enabling environment to stimulate productive use of energy by
 partnering with local commercial financial institutions, micro-finance institutions
 and suppliers of PUE appliances to facilitate access to consumer financing for PUE
 appliances; providing awareness on socio-economic benefits of PUE, providing
 business development and entrepreneurship trainings for end-users; conducting
 assessments for PUE potentials such as agricultural and small industrial anchor
 loads,
- Any other relevant function as required to achieve the Government of Liberia's targets and ambitions of off-grid electrification through mini-grids.

4. Minimum Skills, Educational Qualifications and Experience:

- An appropriate undergraduate degree in Energy Engineering or Policy, Economics or other relevance field along with a solid experience of 5 years in energy access through of off-grid, especially mini-grids;
- Private sector development through public-private-partnerships based on results-based financing or performance-based grants,
- Experience in design and implementation of private-sector driven off-grid electrification initiatives particularly mini-grids,
- Experience in design and implementation of enabling environment including facilitating access to finance for the private sector,
- A good understanding of the policy, legal, institutional and regulatory framework of the energy sector specifically on mini-grids infrastructure in Sub-Saharan Africa, especially Liberia,

- Proven written and oral communication skills; strong research, teamwork and interpersonal skills;
- Full proficiency in English required,
- High proficiency in Microsoft Office suite (e.g., Excel, Project, PowerPoint, Word);
- Demonstrated ability to collaborate with others, driving results across multiple work streams; and
- Strong individual initiative, including the ability to take ownership of work and work product, motivate others to produce strong work product and solve problems.

5. Key Performance Indicators (KPIs)

- Number of mini-grid developer applications received and efficiently processed(evaluation, due diligence and grants funding award),
- Number of technically and financially viable/bankable mini-grid projects and connections identified and supported through review and validation of prefeasibility/detailed feasibility reports, business plans and financial models,
- Number of technically and financially viable/bankable mini-grid projects and connections supported through investment readiness and financial deals closure reached,
- Number of mini-grid projects (sites) and connections successfully designed, installed and operated considering regulatory/legal requirements including efficient claiming, verification and grants disbursement processes,
- Amount of private capital mobilization supported for investment into mini-grids.

6. **Duration**

This is a time-based contract for a period of two(2) year with possibility of extension based on performance. A performance review will be conducted annually, influencing continuation or renewal of the contract.

7. Facilities to be Provided by RREA

RREA will provide the following facilities to the Consultant based on relevance:



- Access to all information and material to facilitate the execution of the assignment;
- Office space;
- Writing Desk and Chair;
- Filing Cabinet;
- Desk Tray;
- Laptop Computer;
- Access to Internet, and network resources;
- Printing Services;
- Access to Vehicle during working hours

8. Payment Terms

The consultant will be paid on a monthly basis, subject to submission of satisfactory deliverables and a timesheet approved by the designated supervisor. Payment will be made in United States Dollars and subject to withholding tax based on legal and contractual framework.