

SCALING-UP RENEWABLE ENERGY PROGRAM IN LIBERIA (SREP-LIBERIA)

TERMS OF REFERENCE FOR THE JOINT MISSION

August 5-9, 2013



EXECUTIVE SUMMARY

Objective and the Scope of the Joint Mission:

1. The main objective of the Joint Mission (“the Mission”) is to support the Government of Liberia (GoL) in designing the SREP Investment Plan for Renewable Energies (IPRE). In consultation with stakeholders, the Mission will: (i) validate the suggested investment priorities, (ii) collect all the necessary elements to ensure the finalization of the IPRE; and (iii) develop investment concept briefs of the projects that will enable the implementation of the IPRE under Phase 2.

Dates of the Mission: The proposed dates for the Joint Mission are August 5-9, 2013.

The Mission Composition: The Mission Team will comprise representatives from Multilateral Development Banks (MDBs), namely the World Bank (WB), the African Development Bank (AfDB), and the International Finance Corporation (IFC).

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Activities to be undertaken during the Joint Mission

2. The main activities of the Joint Mission will be to: (i) conduct stakeholder consultations through workshops and meetings to discuss the strategic role of the investment priorities proposed by the GoL, and to identify potential co-financiers; (ii) assisting the GoL in finalizing and validating the identified investment priorities; (iii) supporting the design of the various program/projects’ concept notes that will lead to the implementation of the SREP IPRE under Phase 2; and (v) initiating the

work related to the IPRE environmental and social issues, as well as the development of the Monitoring and Evaluation (M&E) framework for the program. Activities in the Mission will be conducted in a participatory and consultative manner, so that all stakeholders have an opportunity to indicate how SREP resources can be utilized to assist the GoL in the scaling-up of renewable energy investments in the country.

Expected Results and Outcomes:

3. The main deliverables for the Mission are: (i) the investment priorities are discussed and agreed on with national stakeholders;(ii) based on the discussion with government authorities and stakeholders including NGOs and private sector, investment concept brief for the implementation of the IPRE prepared; and (iii) an Aide Memoire describing key findings and recommendations coming out of the Mission, as well as agreed next steps for SREP in Liberia.

CONTEXT OF THE JOINT MISSION

4. The SREP Sub-Committee approved Liberia as the eight SREP pilot country in January 2013, indicating a tentative allocation of up to USD50 million to support the implementation of renewable energy investments in the country. Prior to that, Liberia formed part of a group of reserve countries whose SREP funding for the implementation of the Investment Plan was subject to the availability of funding. SREP operates under the Strategic Climate Fund (SCF) that supports programs with potential for scaled-up, transformational action aimed at a specific climate change challenge or sectorial response. SCF is part of the Climate Investment Funds (CIF), which promote international cooperation on climate change and support developing countries as they move towards a low-carbon economy and adapt to climate change. CIF resources are available through Multilateral Development Banks (MDBs), and in case of the SREP program for Liberia, the AfDB and the WBG, including the International Finance Corporation (IFC), will jointly manage the SREP program, with the World Bank (WB) as the lead institution.
5. The SREP aims to demonstrate the social, economic, and environmental viability of low carbon development pathways in the energy sector. It seeks to create new economic opportunities and increase energy access through the production and use of renewable energy. The SREP program will enable Liberia to initiate the process to achieve a transformational change that will lead the country towards a low GHG emission development.
6. The private sector, as the basis for economic growth, has an important role to play in promoting renewable energy development and increase electricity access. By opting for an Investment Plan that combines public sector and private sector interventions, the SREP will work to remove economic barriers (among others) and increase private investments in support of achieving the objectives of the SREP. Improved market and financial conditions, as well as strengthening of investors' confidence, could facilitate to low carbon energy pathway by stimulating public and private investments in renewable energy projects.
7. Financing from SREP is guided by a number of design principles. The financing will:
 - be country-led;
 - take a programmatic and outcome-focused approach;

- target proven renewable energy technologies;
 - leverage significant additional financing from MDBs, bilateral agencies/banks, and from other public and private sources;
 - encourage private sector investments;
 - target the entire value chain by working with private sector and civil society groups;
 - seek wider economic, social and environmental co-benefits;
 - be designed and implemented in a participatory manner; and
 - seek to build on synergies with other programs by development partners.
8. The SREP program will support several types of activities under a SREP Investment Plan prepared for each pilot country, based on the specific requirements of the country. An Investment Plan can include capacity building and advisory services to support delivery and results, and investment leading to deployment of different renewable energy technologies. The Investment Plan will seek to:
- demonstrate transformative impact;
 - strengthen enabling environment for scaling-up renewable energy;
 - build implementation capacity;
 - catalyze increased investments in renewable energy;
 - improve the long-term economic viability of the renewable energy sector; and
 - increase energy access.

PREPARATORY ACTIVITIES

9. Since Liberia was elected as a potential pilot country under the SREP, the GoL with support from MDBs, has undertaken a number of preparatory including: (i) participation in the SREP Sub-Committee Meetings and the SREP Pilot Country Meetings in Kenya (March 2011), Istanbul Turkey (November 2012), and Maldives (May 2013); (ii) participation of representative of the Ministry of Land Mines and Energy as a speakers at the Partnership Forum in Istanbul, Turkey in November 2012, (iii) the MDB Scoping Mission in Liberia in September 2012 during which the responsible agency for SREP programming was identified, and consultations with national stakeholders were initiated; and (iv) the Technical Mission in February 2013 where the preparation of the IPRE was initiated .
10. In March 2011, and November 2012, two representatives from the energy sector in Liberia attended the SREP Sub-Committee and Pilot Country Meetings in Nairobi (Kenya) and Istanbul (Turkey), respectively. In these meetings, the representatives had opportunities to gain a greater understanding of the SREP financing modalities, operational guidelines, types of investments supported under the program, as well as the required procedures for the IPRE preparation and implementation.
11. From September 11 to 14, 2012, a Scoping Mission with representatives from WB, AfDB, and IFC visited Liberia. The objective of the Scoping Mission was to assist the GoL in planning and preparing for the development of the IPRE and the first Joint Mission, including: (i) identify relevant government counterparts, discussing the programming and financing modalities, identify how the SREP can support the implementation of the national energy strategy and the planning process; (ii) Identify key development partners and other stakeholders, collecting information on on-going and planned renewable energy initiatives; (iii) Agree on a timeline and resources required for the preparation of the IPRE; (vi) Agree on the Terms of Reference for the Joint Mission; and (vii) Agree

on the scope and outline of the IPRE and clarifying the institutional arrangements for the IPRE preparation.

12. During the Scoping Mission, the Mission Team had extensive discussions with the GoL, including representatives from the Ministry of Lands, Mines and Energy (MLME), Ministry of Finance (MoF), Rural Renewable Energy Agency (RREA), Liberia Electricity Corporation (LEC), and Environment Protection Agency (EPA). The Mission also benefited from the consultations it had with private sector organizations and civil society organizations, including the Chamber of Commerce, National Investment Commission (NIC), Liberia Business Association (LIBA), Winrock International, Center for Sustainable Energy Technology. The Mission also engaged with development partners involved in the energy sector, including the Government of Norway, European Union, the Japan International Cooperation Agency (JICA), the United Nations Development Programme (UNDP), and the US Agency for International Development (USAID) who provided valuable inputs. In addition, the Mission met with the Norwegian Delegation and Energy+ representatives to discuss about possible areas of collaboration and the need for coordination with the SREP program in Liberia to avoid duplication of efforts.
13. The Mission Team agreed with the GoL, among others, (i) the institutional arrangements for preparing the IPRE, and (ii) an indicative schedule and key actions that need to be taken. The responsible lead agency for SREP engagement is RREA, whereas MLME will ensure that all initiatives related to the energy sector and climate change are aligned with the GoL's access agenda. Additionally, it was agreed that the MLME will review and validate the IPRE for Liberia before it is submitted for endorsement by the SREP Sub-Committee.
14. From February 4-9, 2013, a Technical Mission visited Liberia. Government of Liberia (GoL) has an ambitious strategy to reach electricity coverage of 70 per cent of the population in Monrovia, and 35 per cent nationwide by 2030. Government strategy's implementation requires massive investments along the service provision chain (generation, transmission, distribution, retail supply, fuel supply and rural electrification). To ensure consistency around all the energy initiatives in the sector and to maximize their impact, the Government of Liberia is currently preparing a Least Cost Power Development Plan (LCPDP) lead by the Ministry of Land Mines and Energy (MLME). The European Union is supporting the Government of Liberia in elaborating a rural electrification master plan. Both plans will provide a road map for the expansion of the sector over the next two decades, in full consistency with the Government's objectives and strategy. In this regard, the Government indicated to support that SREP should be consistent with the overall framework of LCPDP and support its Agenda for Transformation. As indicated by the Ministry of Energy and Ministry of Finance, SREP should: (i) support the efforts of increasing lower cost supply options; and (ii) increase electricity supply to rural areas as part of the Government efforts to implement its Agenda for Transformation on peace stability. The IPRE will serve as an implementation instrument with the proposed investments in RE being consistent with the ongoing planning exercise and government's objectives.

JOINT MISSION ACTIVITIES

Objective of the Joint Mission

15. The **main objectives of the Joint Mission** are: (i) completion of the consultation process engaging key stakeholders in the design of the SREP IPRE for Liberia; (ii) validate the suggested investment priorities; (iii) collect all the necessary elements to ensure the preparation of the SREP IPRE for Liberia; (iv) help GoL develop investment concept briefs of the projects that will be implemented under Phase 2; and (v) identification of other donors or investment partners who have expressed

interest and willingness to co-finance, and levels of financing such partners would be willing to commit and timing of availability of such funds.

Scope of the Joint Mission

16. **Validation of the Investment Priorities.** The Mission will collectively validate the strategic investment priorities for the scaling-up of renewable energy in Liberia. This work will be done through the following steps:
- Before the Mission, the GoL will prepare the draft IPRE, including investment concept briefs for discussion. The IPRE will focus on the expansion of electricity services based on the best use of renewable energy sources available in Liberia, including the necessary investment in transmission and distribution to ensure access for the end users, and will be consistent with the overall Least Cost Development Plan and the rural electrification master plan for the power sector. The preparation will consist of two phases: (i) assessment of the renewable energy potential and costs and demand and supply assessment; (ii) preparation of IPRE and projects briefs.
 - During the Mission, a series of participatory and consultative meetings will be held to discuss with stakeholders the proposed investment priorities and pre-identify projects for implementation under Phase 2 of the IPRE.
17. **Preparation of an advanced draft of the IPRE for Liberia.** The GoL will take the lead to produce and advance draft the IPRE with support from MDBs. For this purpose, a small group composed of key members from the GoL and MDBs staff will work together to draft the document, in parallel with other mission activities. The drafting of the document will be continued during the weeks following the Mission by the same group with assistance from additional MDB specialists or consultants as needed. In accordance with the “SREP Programming Modalities and Operational Guidelines,” a suggested structure of the IPRE is as per Annex 1.
18. **Development of Investment Concept Briefs.** The IPRE will need to include investment concept briefs on individual projects to be proposed for SREP funding under Phase 2. The investment proposals should address the criteria in Annex 2 as appropriate. A suggested outline for an investment concept brief is attached in Annex 3.

Roles and Responsibilities of the Government and the MDBs

19. The Joint Mission will be led and hosted by the GoL under the leadership of RREA. The GoL has decided to share the tasks among the members of the SREP Task Force as in the Table 1 below.

Table 1: Role and Responsibilities

Task 1: Preparation of the Joint Mission	MDBs
Task 2: First draft of the IPRE ready at least two weeks in advance to the Joint Mission	RREA
Task.3: Mobilization of the Private Sector	World Bank
Task 4: Reporting for the workshop	World Bank/AfDB
Task 5: Assessment of social and environmental work	World Bank
Task 6: Definition of the M&E work	AfDB

Task 7: Produce advance draft of IPRE, including investment concept briefs	RREA and MDBs
Task 8: Write Up of the Mission Aide Memoire	WB/AfDB

20. Representatives from MDBs will participate in the Joint Mission. The WB is responsible for the Mission, with support from the AfDB. Following discussions between the two organizations, it was agreed that the responsibilities would be shared as mentioned in Annex 5. The needs (country readiness) and availabilities of experts will be reassessed prior to the Mission to ensure adequate technical assistance.

Consultations with Stakeholders

21. During the Mission, consultations with key stakeholders in the country will be held, including national institutions/authorities, development partners, CSOs, local communities and the private sector.
22. Consultations with stakeholders, already initiated during the scoping mission and technical mission, should help strengthen national ownership, mobilize co-financing for SREP investments, harmonize support to public policies and promote complementarily with ongoing or planned activities.
23. The Mission will consult the following stakeholders, either through meetings (group or bilateral), or as part of the planned technical workshop:

National Institutions:

- *Ministry of Finance* Ministry of Lands, Mines and Energy (MLME), Rural Renewable Energy Agency (RREA), Liberia Electricity Corporation (LEC), Environmental Protection Agency (EPA)

Private Sector Organizations:

Liberian Chamber of Commerce (LCC), National Investment Commission (NIC), Liberia Business Association (LIBA), rubber and oil palm plantations, domestic banks or local bank branches

Civil Society Organisations:

- Winrock International, Center for Sustainable Technology, Medical Relief International (MERLIN), The National Charcoal Union of Liberia (NACUL)

Development Partners:

- European Union, Government of Germany, Government of Japan, Government of Norway, NVE, Government of Sweden, the United Nations Development Programme (UNDP), United Nations Office for Project Services (UNOPS) and the US Agency for International Development (USAID), JICA

COMPOSITION OF THE MISSION

24. The mission will consist of experts from the WB and the AfDB supported by a few consultants supporting the Phase 1 activities. The areas of expertise include:

- Renewable Energy Expert
- Power Engineer
- Regulatory Economist
- Energy Economist
- Country Economist
- CIF/SREP coordinator
- Climate Change specialist
- Forestry specialist local
- Environmental specialist
- Social/gender Specialist
- Financial specialist
- Knowledge Management Specialist

The detailed roles of the Mission participants, including the GoL, are available in Annex 4.

25. In addition to MDBs experts and GoL staff, the mission will be based on the broad participation of national stakeholders. This broad participation is designed to ensure ownership of the program and support its implementation by the GoL, national stakeholders and development partners.

MISSION SCHEDULE

26. A preliminary schedule is proposed in Table 2 below for the mission activities. This calendar will be further refined in the coming weeks and specific agendas will be developed for the workshop, working groups, various meetings.

Table 2: Preliminary Schedule of the Joint Mission

	Day 1	Day 2	Day 3	Day 4	Day 5	Weekend	Weekend
<i>AM</i>	<p>Meeting of the mission MDB Core Team (AfBD and WB)</p> <p>Meeting RREA (focal point) with MDBs</p>	<p>Consultations with key stakeholders:</p> <ul style="list-style-type: none"> •Opening •General introduction of SREP within the overall energy strategy •Presentation of the draft SREP •Presentation of Yandahou (pilot that can be scaled up) •Remarks from development partners 	Working session with development partners	Working session with private sector	Finalization of the mission with the MoF and MLME with RREA and development partners		
<i>PM</i>	Kick-off meeting with MoF and MLME organized by RREA and participation of development partners	<p>Consultations with key stakeholders:</p> <ul style="list-style-type: none"> • Civil Society • Private Sector • Development partners 	Working session with social and environmental aspects with civil society	Drafting of the mission Aide Memoire	Working session to include findings and agreements on the SREP IPRE including the outlines of investment concept briefs		
7:00	<i>Meeting of the Mission Core Team</i>	<i>Meeting of the Mission Core Team</i>	<i>Meeting of the Mission Core Team/ Write Up</i>	<i>Meeting of the Mission Core Team /Write Up</i>	<i>Meeting of the Mission Core Team /Write Up</i>		

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PROPOSED TIME TABLE FOR IPRE DEVELOPMENT

Milestone	From
Technical mission or VC to agree on scope of technologies/options with MoE	Mid-June
Joint Mission to validate IP with key stakeholders	August 5-9
Submit IP for Public consultation & Independent technical review	August 19
MDB internal quality review of IP	September 16
Submit IP for endorsement by SREP Sub-Committee	September 30

Annex 1: Suggested Structure for the Investment Plan

I. Proposal Summary (2 pages)

- Objectives
- Expected outcomes
- Program criteria, priorities and budget

II. Country Context (3-4 pages)

- Energy sector description (market structure, demand supply, and dispatch composition, electricity cost and pricing) incl. renewable energy status
- Gap/barrier analysis; needs assessment

III. Renewable Energy Sector Context (3-4 pages)

- Analysis of RE options (technology, cost, mitigation potential, barriers)
- Government plans or strategy for the sector (willingness to move towards renewable energy investments, existing or envisioned policy, regulation, plans, and resource allocation)
- Institutional structure and capacity (technical, operational, financial, equipment supply, information)
- Role of private sector and leverage of resources
- Ongoing/planned investment by other development partners

IV. Contribution to National Energy Roadmap (2 pages)

- Likely development impacts and co-benefits of SREP investment
- How SREP investment will initiate a process leading towards transformational low carbon growth

V. Program Description (6-8 pages)

- Capacity building and advisory services
- Investment preparation activities
- Technology deployment investments
- Parallel activities to be funded by other development partners
- Environmental, social and gender co-benefits

VI. Financing Plan and Instruments (3-4 pages)

- Budget envelop for investments
- Costs and sources of funding
- SREP assistance (grant, concessional debt, etc.)
- Recipients of funding

VII. Additional Development Activities (2-3 pages)

- Leverage complementary co-financing with other development partners such as bilaterals, private sector, and financial institutions

VIII. Implementation Potential with Risk Assessment (2 pages)

- Country/regional risks - institutional, technology, environmental, social, financial
- Absorptive capacity for SREP and leveraged resources

IX. Monitoring and Evaluation (1/2 page)

- Results framework table
- Process for information sharing and lessons learnt (new requirement from SREP donors)

Annexes

Information should be included in annexes on the following areas:

- assessment of country's absorptive capacity
- stakeholder consultations
- co benefits
- existing activities in the field of renewable energy, particularly activities of other development partners

Annex 2: Criteria for the Sub-Committee to Assess the Investment Plan

- a) **Increased installed capacity from renewable energy sources:** A high priority for most low income countries is expanding their generation capacity in order to ramp up modern energy use and energy access. Therefore, SREP-funded investments should result in increased MW from renewable energy, as well as increased energy (GWh) per capita in the country.
- b) **Increased access to energy through renewable energy sources:** SREP may support grid extensions and decentralized energy systems with a view to expanding the percentage of the population with access to non-fossil-fueled electricity. Investment proposals should demonstrate how the investments are part of the Government's long term commitment to increasing energy access.
- c) **Low Emission Development:** SREP may support the use of renewable energy technologies for electricity generation and services to replace fossil fuel technologies that would be deployed in a business-as-usual scenario aimed at substantially increasing commercial energy use in low income countries. In particular, benefits from SREP investments will often arise from “leap-frogging” technologies, in which low income countries will be assisted to mainstream renewable energy technologies into the overall energy system.
- d) **Affordability and competitiveness of renewable sources:** Affordability is essential for increasing access and for ensuring the long term renewable energy market development. SREP funding should address clearly-defined cost barriers to adoption of renewable energy technologies, such as connection costs for rural consumers, higher capital costs of new technologies, transmission costs related to grid-connected renewables, and risk adjusted rates of return sought by investors.
- e) **Productive use of energy:** SREP programs should promote the generation and productive use of energy.
- f) **Economic, social and environmental development impact:** Investment proposals for SREP financing should demonstrate the generation of economic, social and environmental benefits.
- g) **Economic and financial viability:** Investment proposals should demonstrate the economic viability of investments and the financial viability with the inclusion of time bound SREP resources.
- h) **Leveraging of additional resources:** Activities should maximize the leverage of funds from other partners.
- i) **Gender:** SREP investments should seek to strengthen the capacity of women to be active participants in the economic sector and avoid negative impacts on women.
- j) **Co-benefits of renewable energy scale-up:** SREP investments should include decreased air pollutants from energy production and consumption as well as the potential to reduce stress on forest resources. Investments and activities should elaborate on the potential positive effects on air quality and natural resource management through the adoption of renewable energy technologies.

Annex 3: Suggested Outline for an Investment Concept Brief

For each project to be implemented under the Investment Plan, an investment concept brief (maximum two pages) will be prepared as part of the Annex to the Investment Plan.

A suggested outline of an Investment Concept Brief includes:

- Problem statement (1-2 paragraphs)
- Proposed contribution to initiating transformation (1-2 paragraphs)
- Implementation readiness (1-2 paragraphs)
- Rationale for SREP financing (1-2 paragraphs)
- Results indicators
- Financing plan
- Project preparation timetable
- Requests, if any, for investment preparation funding

Annex 4: SREP Government core team and Joint-Mission MDB Team Composition

Note: Not all MDB experts will attend the mission at the same time – and some will contribute from HQ through video-conference; areas of expertise will be used at best to complement each other. It is understood that the Government is leading the mission and that the MDBs and other development partners will provide support.

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Annex 5: Roles and Responsibilities of MDBs for the Joint Mission

WB	AfDB
<ul style="list-style-type: none">- Prepare the Mission overall – the workshop, plus the series of meetings and reporting;- Ensure linkages with ongoing or planned energy projects in Liberia- Lead the write-up of the IPRE- Lead the coordination of SREP Activities in Liberia with donors	<ul style="list-style-type: none">- Support the preparation of the Mission- Lead the write-up of the Aide Memoire for the Mission- Lead the development of the M&E framework- Contribute to the write up of the IPRE