

# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

**Report No.:** ISDSC12579

**Date ISDS Prepared/Updated:** 30-Jun-2015

**Date ISDS Approved/Disclosed:** 17-Aug-2015

## I. BASIC INFORMATION

### A. Basic Project Data

<b>Country:</b>	Liberia	<b>Project ID:</b>	P149683
<b>Project Name:</b>	Liberia Renewable Energy Access Project (P149683)		
<b>Task Team Leader(s):</b>	Clemencia Torres De Mastle, David Vilar Ferrenbach		
<b>Estimated Appraisal Date:</b>	08-Oct-2015	<b>Estimated Board Date:</b>	22-Jan-2016
<b>Managing Unit:</b>	GEE07	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	Hydropower (40%), Other Renewable Energy (40%), Transmission and Distribution of Electricity (20%)		
<b>Theme(s):</b>	Infrastructure services for private sector development (50%), Rural services and infrastructure (50%)		
<b>Financing (In USD Million)</b>			
<b>Total Project Cost:</b>	25.00	<b>Total Bank Financing:</b>	0.00
<b>Financing Gap:</b>	0.00		
<b>Financing Source</b>		<b>Amount</b>	
Borrower		0.00	
Strategic Climate Fund Grant		25.00	
Total		25.00	
<b>Environmental Category:</b>	B - Partial Assessment		
<b>Is this a Repeater project?</b>	No		

### B. Project Objectives

16. The Project Development Objective (PDO) is to increase access to electricity and to foster the use of renewable energy sources.

### C. Project Description

1. The proposed Project would support the implementation of the Liberia Investment Plan for

Renewable Energy (IPRE) prepared by the Government in October 2013. The financing plan of IPRE amounts to US\$178.5 million. Other financing sources for the IPRE will include AfDB, Government of Norway, USAID, the EU, and the Government of Liberia. The Project would also support the scale-up of the Government's initiative to foster the creation of a market in Liberia for modern solar lanterns that will provide sustainable lighting solutions to improve living conditions of the population. Other financing sources to foster the market of modern solar lanterns include the EU and the Government of Liberia.

2. The proposed Project would finance three main activities. First, the Project would finance the implementation of decentralized electrification through mini-grids in Lofa County, in the North-West of Liberia. Second, the project would finance the elaboration of regulations for decentralized electricity services. Third, it would support the market for scaling-up of stand-alone solar systems.

The proposed Project components are the following:

3. Component 1. Decentralized electrification in Lofa County (estimated cost US\$23 million). This component would finance investments in renewable generation with diesel back-up, and in mini-grids to distribute this electricity to the local population. Financing would be provided for installation of facilities, implementation of safeguards measures, and operation and maintenance (O&M) services. This component will be targeted at the North of Lofa County, a rural economic and agricultural hub on the border with Guinea and Sierra Leone. The capital of this county is Voinjama. This county is more than 200 km from the national grid; there are no prospects in the medium term to provide service to this area from the national grid that serves Greater Monrovia. Currently, households and businesses in this area do not have any electricity services or have limited, unreliable and expensive electricity supply from informal diesel generators.

4. Subcomponent 1A: Investment in decentralized generation and hybrid minigrids in Lofa County. This subcomponent would finance installation of hybrid mini-grids, possibly using the options of hydro, PV, and diesel generation plants in combinations that are still under evaluation. Support would be provided to: (i) a hybrid generation plant and mini-grid in Voinjama (estimated 50,000 inhabitants); and (ii) a hybrid generation plant and mini-grid to serve Zorzor (estimated 30,000 inhabitants). Financing would include the generation facilities as well as distribution lines and connections for households and small businesses, and the choices of generation technologies will be finalized during Project preparation.

5. Subcomponent 1B: Operation and maintenance contracts to ensure the sustainability of the rural electricity mini-grids established in Subcomponent A. This subcomponent will finance the technical assistance needed to define the best business model for the sustainable operation and maintenance of the hybrid mini-grids, to ensure the sustainability of the provision of electricity services in this remote region, isolated from the national grid. The selection of this business model will be grounded on a sound business plan and on the new legal framework of the sector (see component 3). Technical assistance will also be used to define the tariff needed to be charged to users that will ensure the sustainability of the services once they enter into operation. Another important aspect that will be defined through the technical assistance will be the ownership of the assets after they have been built and have started operations. RREA, with the help of international consultants financed by USAID, has already begun work on the ownership and business models for commercialization of the systems based on a menu of possible options (e.g., public rural utility, cooperative, private operator and hybrid business models). Technical assistance provided under this component will build on this work.

6. Component 2: Technical assistance for rural electrification regulations and project implementation (estimated cost US\$1 million). This component would finance assistance to develop the regulations for decentralized electricity services to complement the new Electricity Law and the sectoral regulatory framework currently being finalized. This component would also support preparatory studies for future investments, capacity building, and Project implementation support.

7. Subcomponent 2A: Regulation of decentralized electricity service using isolated grids. The new Electricity Law and regulations focus mainly on the national grid. Areas not reached by the national grid are not regulated and rely on informal service providers that offer expensive and unreliable service based on small diesel generators. This subcomponent would support the development of regulations for isolated mini-grids. These regulations would develop the technical and financial standards and mechanisms for the establishment and operation of the decentralized mini-grids and for monitoring their performance, possibly including models of O&M contracts and concessions with private operators and developers. It would also establish the quality-of-service, technical, and safety standards of isolated grids in Liberia. Equally important, these regulations would include transitional clauses to ensure a smooth transition in the longer term between the current isolated nature of the mini grids and the new situation that will arise when the national grid will reach these communities in Lofa County.

8. Sub-Component 2B: Preparatory studies to develop a pipeline of rural electrification projects. This subcomponent would support the preparation of decentralized rural electrification investment projects to build a robust pipeline for future funding. The studies would cover project preparation activities such as pre-feasibility studies, demand assessment, energy systems optimization, etc.

9. Sub-Component 2C: Project Implementation support and capacity-building. The proposed Project would support the strengthening of the technical capacity of RREA and MLME in areas related to rural electrification and renewable energy, mainly in planning, policy, regulation, project identification, and project implementation. Other stakeholders like LEC, local authorities and community members, and private companies would also benefit from capacity building with respect to such rural electrification systems.

10. Component 3. Market development of stand-alone solar systems (estimated cost US\$1 million). This component would finance the scaling-up of the GEF-financed and World Bank administered Lighting Lives in Liberia activity that has been underway to supply pico-PV products in Liberia since 2012. It would further develop the distribution, marketing, and sale of pico-PV products and scale up into supporting plug-and-play SHSs on a broad national scale by assisting the transfer of the solar products procurement and importation from RREA to commercial importers/distributors. Under this component, the proposed project would create a credit facility providing access to working capital to importers/distributors to incentivize the engagement of a commercial actor to procure the products and distribute to the 15 retailers operating in the country. The establishment of the credit facility is considered a crucial step to transition from a small, public-sector initiative to a sustainable, private-sector led and commercially viable market for solar products (implementation arrangements are to be defined during preparation). The allocated amount will be used as a capital endowment for the credit facility, and during preparation the team will look for additional funding to cover financing costs and technical assistance to the financing institutions and the importers/distributors interested in participating actively in this market.

#### **D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

11. The identified rural area is in the North of Lofa County, a rural economic and agricultural hub in the border with Guinea and Sierra Leone. The capital of this county is Voinjama, a highly populated center in the area. This area is located more than 200 km from the national grid and there are no prospects in the mid-term to reach this area with the national grid, nowadays only serving Greater Monrovia. The area is mostly an agricultural area.

#### **E. Borrowers Institutional Capacity for Safeguard Policies**

12. The Rural Renewable Energy Agency (RREA) will finance the safeguard-related studies. RREA will carry out the safeguards studies, which include an Environmental and Social Management Framework (ESMF), since the exact location of the project footprint is not yet known. An ESIA will be carried out when the preliminary results of the technical studies provide an exact indication of the project footprint. It will identify potential environmental and social impacts and devise mitigation and monitoring measures. In order to address potential land acquisition and/or resettlement and/or losses of assets or access to resources, a Resettlement Policy Framework (RPF) will also be prepared. During project implementation, once the physical area for the small hydropower plant and PV-diesel facilities has been identified in the feasibility study, the RPF will guide the preparation of a Resettlement Action Plan (RAP). The safeguard-related studies will be approved by the Ministry in charge of Environment and by the World Bank, and disclosed in the country and at the Bank InfoShop prior to appraisal.

13. RREA has very weak social and environmental management capacity and to strengthen the E&S department, it will hire new staff. RREA will also be provided with adequate Technical Assistance to improve the capacity to supervise the implementation of the ESIA/ESMP and RAP.

14. The recommended safeguards category for the project is “B”, as the type of interventions foreseen would not have major impacts on the population or the environment.

#### **F. Environmental and Social Safeguards Specialists on the Team**

Paivi Koskinen-Lewis (GSURR)

## **II. SAFEGUARD POLICIES THAT MIGHT APPLY**

<b>Safeguard Policies</b>	<b>Triggered?</b>	<b>Explanation (Optional)</b>
Environmental Assessment OP/BP 4.01	Yes	Because the location of the works is not known, an ESMF will be prepared, consulted upon, and disclosed prior to appraisal. An ESIA will be prepared, once feasibility studies confirm the physical footprint, to manage and mitigate the construction and operational environmental and social impacts of the small hydropower plants and PV facilities.
Natural Habitats OP/BP 4.04	TBD	The presence of natural habitat at the location of the facilities to be built is not yet known.
Forests OP/BP 4.36	No	
Pest Management OP 4.09	No	

Physical Cultural Resources OP/BP 4.11	TBD	It is not yet known if Physical Cultural Resources are present at the project sites.
Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/ BP 4.12	Yes	Since the exact location of the works is not known, an RPF will be prepared, consulted and disclosed prior to appraisal. It addresses potential land acquisition/resettlement and/or losses of assets or access to resources. In case land acquisition and/or resettlement is required in relation to the construction of the hydropower plant and PV-diesel facilities, the RPF will guide the preparation of a RAP.
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/ BP 7.60	No	

### III. SAFEGUARD PREPARATION PLAN

**A. Tentative target date for preparing the PAD Stage ISDS:** 13-Jul-2015

**B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing<sup>1</sup> should be specified in the PAD-stage ISDS:**

Update of ESMF and RPF will be launched in June by LEC.

ESIA and RAP will be elaborated after the feasibility studies of the mini-grids and electrical lines in January 2016.

### IV. APPROVALS

Task Team Leader(s):	Name: Clemencia Torres De Mastle, David Vilar Ferrenbach	
<b>Approved By:</b>		
Safeguards Advisor:	Name: Johanna van Tilburg (SA)	Date: 17-Aug-2015
Practice Manager/ Manager:	Name: Meike van Ginneken (PMGR)	Date: 17-Aug-2015

<sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.