



Luxembourg, MC decision 16.11.2022

Environmental and Social Data Sheet

Overview

Project Name: WEST AFRICA RURAL ELECTRIFICATION EXPANSION
 Project Number: 2022-0245
 Country: Nigeria
 Project Description: Financing of mini-grids in Nigeria
 EIA required: no
 Project included in Carbon Footprint Exercise¹: no
 (details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

The project aims at providing access to clean and affordable energy for households and SMEs in Nigeria by financing the development and construction of about 150 small PV-hybrid mini-grids. The mini-grids with a total PV capacity of 15 MWp are expected to directly benefit about 54,000 households and 6,000 SMEs, providing initial electrification or substituting polluting and more expensive diesel-generated electricity supply. The promoter, Husk Power, was established in 2008 in India, where it has already 120 operational mini-grid sites.

Environmental assessment

At a national level, the project is subject to the applicable environmental regulations in Nigeria including but not limited to the National Policy on the Environment (NPE) of 1989, the Environmental Impact Assessment Act No. 86, 1992 (FMEEnv) and the Land Use Act (1978).

As a prerequisite for the Performance Based Grants (PBGs) of the Nigeria Electrification Programme (NEP), the Promoter screens and proposes mini-grid subprojects, and conducts E&S due diligence for each mini-grid before submitting its proposals for funding. The Rural Electrification Agency (REA) together with the Project Management Unit (PMU) (set up by the World Bank for the NEP) reviews, returns, approves or rejects the proposal. For approved proposals, the Promoter prepares site-specific E&S documents, which must be verified by REA/PMU before construction can commence. During construction and operation, the Promoter must maintain E&S compliance while REA continues to monitor its E&S performance.

For each of the mini-grids the promoter will compile relevant E&S information about the project and relay it to REA/PMU. REA/PMU is in charge of the verification of the initial E&S screening and categorisation performed by the Promoter. Due to the size and characteristics of the 100 kW mini-grids, it is envisaged that the impacts will be low or medium (particulate emissions, increase in noise levels, and limited changes in physical environment during construction phase) and therefore the projects will fall under the category that requires Environmental and Social Management Plans (ESMP) and not full Environmental and Social Impact Assessments (ESIA). That was the case with

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO₂e/year absolute (gross) or 20,000 tonnes CO₂e/year relative (net) – both increases and savings.



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the first developed sites (not part of this project) under operation. Any site requiring involuntary resettlement or livelihood restoration are classified as high impact and require instead an ESIA, Resettlement Action Plans (RAPs) and/or Livelihood Restoration Plans (LRPs).

According to the established procedures, the promoter carries out the ESMP/ESIA, which includes a description of the project, the local context, identification and assessment of risks and potential impacts on the population and environment, including fauna, flora, water, soil, during construction and operation. ESMP proposes mitigation measures. ESMP/ESIA is reviewed by the Federal Ministry of Environment, which may also conduct site visits and issues an environmental authorisation.

Because the mini-grids are currently in the development phase, not all assessments have been performed. The Promoter will therefore submit all ESMP/ESIA and relevant authorisations to the EIB as a contractual disbursement condition.

Potential significant negative impacts could be associated with the unsatisfactory disposal of waste and in particular e-waste. The promoter is aware of such impacts and will develop a waste management plan in line with EIB E&S standards.

No significant negative impacts on sensitive natural habitats or other biodiversity dimensions (e.g. bird collision – linked to their possible perception of solar panels as water bodies) are expected for the projects.

Some positive local environmental benefits are expected during operation, given the replacement of polluting power generation options (diesel/kerosene) with a cleaner fuel mix, which is expected to avoid local air pollution (in addition to avoiding global GHG emissions).

The share of diesel generation (for backup power production only) will remain limited and the borrower will be required to stay below the Emission Performance Standard threshold set in the EIB Energy Lending Policy (250 gCO_{2e} per kWh). Therefore, the project is considered to be aligned with the policies set out in the Climate Bank Roadmap and the Energy Lending Policy of the Bank and thus it is fully Paris Aligned.

EIB Carbon Footprint Exercise

The Project produces CO₂ emissions when power is generated using back-up diesel generation sets instead of solar PV panels. The combined use of solar power production and batteries nevertheless allows for the avoidance of at least 90% of an alternative power base using only diesel. The Project therefore enables carbon savings estimated at 14.4 ktCO_{2e}/year.

Social Assessment

The Project is expected to positively affect the beneficiary communities by enabling access to and/or improving the quality of electricity supply. The electricity produced through the mini-grids aims to support local economic development, for example by allowing small entrepreneurs that otherwise would not have access to electricity to increase productivity by allowing them to increase the use of machinery, extend working and opening hours etc. This is likely to have subsequent economic and social benefits, for example by creating job opportunities, improving access to educational and health services, or improving street lighting leading to greater security in the medium term.

Due to their size, the mini-grids require small parcels varying from 1000 to 2000 square metres. Land for mini-grid sites will be acquired or leased from individuals, families, or communities. With the help of local authorities, mini-grid site land is identified for the purposes of the project. In the event that local authorities cannot provide free public land, consultation takes place to identify a suitable land plot



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whose owner voluntarily agrees to sell/lease and the process is finalised on a willing buyer-willing owner basis. Involuntary resettlement is expected to be small-scale and limited. Economic displacement is possible (e.g. cutting of economic trees). For compensation and for any potential loss of income, where applicable, the promoter develops a resettlement action plan and livelihood restoration plan, which is part of the authorisation process (cleared by the World Bank PMU at NEP) and will be submitted to the Bank.

The Promoter has started its gender journey supported by Swedfund and FMO, focusing particularly on the company's operations in India. They have undertaken a gender assessment of both internal policies (global applicability) and the operations and services they provide. HUSK has an ambition to ensure that its products and services better target women and specifically address women and girls' energy poverty. The promoter has an aspirational commitment to increase the number of women in leadership and in the workforce in Nigeria to reach 30% and put in place specific initiatives for equal opportunities (in line with the 2X employment criteria). Therefore, it is expected that the operation will contribute to gender equality and the company is on track to become 2X compliant over the term of the EIB financing.

The pricing strategy is designed to address all types of customers and the feedback from customers (of already established mini-grids) thus far has been positive demonstrating the strong improvement in their lives, including also cheaper energy than the one provided by gensets and reliability as compared to Solar Home Systems.

Recent reports are pointing out the possibility of use of forced labour in the supply chain of solar PV panels. The promoter's policy rejects the use of any form of forced or compulsory labour. The promoter shall cascade this requirement to the solar PV module suppliers to ensure that the supply chain of the solar PV panels used in the project is compliant with the applicable provisions of the relevant labour standard of the Bank, and shall avoid the use of forced labour.

Public Consultation and Stakeholder Engagement

As part of the PBG site-specific proposal, REA/PMU requires the Promoter to submit a detailed stakeholder engagement document in the form of Minutes of Engagement following face-to-face meetings with the local community with photos and a signed attendance list with relevant contact details of people of the community attending the stakeholder engagement events. In addition, as part of the PBG approval process, REA/PMU required the Promoter to set up a project-specific Stakeholder Engagement Plan and Grievance Redress and Feedback Mechanism for people to report concerns or complaints, if they feel unfairly treated or are affected by any of the mini-grid projects. In addition, the promoter has developed a separate grievance management system that formalises the management of customers' grievances at project level (Internal Central Grievance Register). This system will run in parallel with the existing local one, where complaints are registered at REA level.

Other Environmental and Social Aspects

The promoter has an existing E&S system and policies in place and a dedicated E&S expert responsible for global operation. The Promoter shall appoint a dedicated E&S specialist responsible for the Nigeria operations. As the project rolls out the promoter is committed to hiring additional expert(s) if needed. Furthermore, in recent years, Swedfund, one of the main investors, and FMO, one of the first investors, have provided E&S support to guide and monitor the E&S aspects, including the implementation of an Environmental and Social Action Plan (ESAP), which was based on a gap analysis carried out by an experienced independent environmental consultant at corporate level.

The promoter will develop an Occupational Health and Safety Management System in line with OHSAS 18 001 and integrated in the Quality management system.



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The promoter has also developed an ESMS and is committed to enhancing it further to fully integrate the EIB standards and requirements, such as the list of excluded activities, classification of critical habitat and rights and interests of vulnerable groups.

Conclusions and Recommendations

Based on the information available and subject to appropriate conditions (see below) and monitoring, the project is expected to be acceptable for Bank financing in environmental and social terms.

- The promoter shall ensure ensure that the manufacturing of the key pieces of equipment used in the projects – in particular solar PV panels -, is compliant with the relevant labour standards of the EIB and does not involve forced labour across their value chain.
- In order to mitigate Health and Safety risks, the promoter will hold information sessions with the communities regarding the use and risks of electricity and provide evidence of such sessions as part of its annual reporting.
- The promoter shall submit information on the agreement with the identified waste company available in the region and information about the experience and/or systems which this company has, especially in relation to e-waste.
- The promoter shall enhance its ESMS in order to integrate the EIB standards, including but not limited to a list of excluded activities, standard on Vulnerable Groups and on Stakeholder engagement, Resettlement, Labour Rights and Critical Habitat restrictions.
- The Promoter shall appoint a dedicated E&S specialist responsible for the Nigeria operations. Given that the exact design, footprint and associated impacts of the underlying projects have not been determined, the promoter shall develop a Resettlement Policy Framework commensurate to the size of the projects and relay it to the Bank.

In addition to the conditions mentioned above, the following undertakings are proposed:

- The promoter shall submit all ESMP/ESIAs/RAPs/LRPs and relevant authorisations to the EIB.
- The promoter shall submit to the Bank annual E&S performance reporting including E&S incidents and corrective actions.
- The average emissions of the mini-grids in the project scope may not exceed the Emission Performance Standard (EPS) of 250g CO₂-equivalent per kWh on an annual basis, throughout the entire duration of the project. The promoter shall present a detailed calculation to justify adherence to the EPS as part of its annual E&S reporting to the Bank (during the monitoring period of the Project), as well as upon request by the Bank, as the case may be (i.e. shares of power produced per year from solar PV and from Diesel and number of operating hours of the diesel backup system, emission performance of the individual diesel engines etc.).
- The promoter shall enhance the E&S team in line with the progress of the implementation of the mini-grids.
- The promoter shall publish all ESMP and any other formal E&S study if required on the promoter's website and submit the link to the Bank.