

Luxembourg, 16.12.2020

Public

Environmental and Social Data Sheet

Overview	
Project Name:	EDF OFF-GRID AFRICA
Project Number:	2019-0753
Country:	Regional – Africa
Project Description:	Framework Loan financing EDF's off-grid solar projects and ventures in Sub-Saharan Africa. The first allocations will be located in Kenya, Togo and Zambia.
EIA required:	no
Project included in Carbon	Footprint Exercise ¹ : no

Environmental and Social Assessment

Environmental Assessment

The Project is a Framework Loan aimed at providing access to sustainable energy and irrigation to households and micro-entrepreneurs in Sub-Saharan Africa (SSA). This Framework Loan will finance the Promoter's (Electricité de France, EDF) capital injections into off-grid electrification investee companies in SSA with EIB eligible expenditure programmes. The allocations appraised included two companies providing Solar Home Systems (SHS) for households in Togo and Kenya, solar pumping and efficient irrigation solutions for farmers in SSA, and solar-battery mini-grids in Zambia.

The systems provided by the investee companies and financed under the operation are small in size and typically include solar panel arrays of up to 12 kW_p, inverters, lead-acid or lithiumion batteries, direct current pumps, and electronics. The systems may include LED lights, and the customer may select further equipment such as additional LED-lights, TV, drip irrigation systems, etc. These systems will not require an EIA under local legislation, nor would they fall under the scope of Annex II of the EIA Directive, if they were located in the EU.

When acquired by the customer, the solar systems are displacing kerosene lamps, dieselpowered irrigation pumps or the use of single-use batteries, and thereby significantly contributing to mitigation of climate change and of environmental risks related to unsafe disposal of single-use batteries. In addition, in the case of irrigation systems, they are improving water usage efficiency by small farmers.

 $^{^1}$ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 20 000 tons CO₂-e/year absolute (gross) or 20 000 tons CO₂-e/year relative (net) – both increases and savings.



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Limited negative environmental impacts could arise from health and safety issues related to the inappropriate handling of batteries or electronic equipment (notably at the time of disposal). Considerable e-waste is expected to arise from the operation in four to six years (after the average lifetime of the units and the appliances). To mitigate this risk, the promoter is committed to actively reducing its adverse environmental impact in this respect, by encouraging battery recycling by its clients (offering them a discount on their next product / upgrade). It is also in the process of establishing a more systematic e-waste scheme in the relevant countries of operation, to ensure the maximisation of the re-use of some components (such as plastics, handles, circuits and cables), whilst ensuring the appropriate handling of more polluting items (like batteries).

Thus, overall, the Project is expected to have limited environmental risk.

Social Assessment

The Project is expected to have social benefits thanks to the provision of access to modern electricity and appliances for lighting and other services (e.g. mobile phone charging, radio or TV providing access to information), as well as potentially access to other economic and social activities (lighting for shops, electricity for cafés or restaurants). In addition, the irrigation systems financed by the Project will significantly improve agricultural yields and revenues for smallholder farms.

Being naturally suited for off-grid use, the products financed by the Project are particularly popular in rural areas or for people not having access to the national grid (e.g. poor suburban dwellers) or for people who cannot afford the grid connection fee. The operation is therefore expected to particularly reach people at the bottom of the pyramid, who are both especially vulnerable and likely to benefit the most.

Solar home systems or solar mini-grid connections displace other forms of energy supply, such as kerosene lamps, which are both polluting and dangerous, especially for women and children who spend the most time at home. Their use is also beneficial for these two populations, by enhancing their experience of the provided energy service (such as lighting), enabling e.g. women to have an economic activity at night and/or children to study after dark.

Solar irrigation systems have very low operating and maintenance costs. They displace manual pumping – very labour intensive and time-consuming – or diesel-powered pumps, which are polluting and require regular re-fuelling and maintenance. Thus, solar pumps free up time for income generation activities, as well as funds otherwise used to buy diesel or to pay for pump repairs. In addition, solar pumps can provide access to water in case of reduced rainfall, hence allowing for a more regular and secure income stream to farmers.

Other Environmental and Social Aspects

Environmental and social impacts of the products provided by the investee companies are currently taken into account by a set of procedures and policies of each investment company, including a code of conduct and other information on gender and employment monitored for internal and external business stakeholders. The investee companies recognise the importance of these aspects and the necessity to formalise them into more robust Environmental Social Management Systems (ESMS), as they develop and increase the number of customers. The Bank proposes an undertaking with the FI to accompany this process of formalisation with a corrective action plan as appropriate for each allocation.



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Conclusions and Recommendations

The Project is environmentally and socially sound and, as women and children benefit from the operation, it supports the Bank's gender action strategy.

On-going actions initiated by the Promoter should adequately tackle the operation's limited environmental and social risk - associated with the safety of the electric equipment envisaged in the solar systems deployed and with the management of solar batteries' end-of-life. The Bank will follow up on this during monitoring:

- The Promoter is committed to more systematically establishing within each investee company – a waste handling system for their products, which should adequately address environmental risks and ensure proper procedures for the disposal/recycling of used batteries and other e-waste. The Bank has proposed an undertaking to obtain information on progress with regard to this aspect in particular.
- 2. In the continuation of its efforts to have a more consolidated Environmental and Social Management System (ESMS), the Bank requires the Promoter to develop an ESMS for each investee company which complies with the Bank's Environmental and Social Standards, including the appointment of responsible E&S staff. The ESMS will also cover e-waste management and recycling, consumer and data protection, and labour conditions.

Under these conditions, the operation is considered acceptable for EIB financing in E&S terms.