

CLIMATE INVESTMENT FUNDS

May 24, 2017

**[APPROVAL BY MAIL]: HAITI: RENEWABLE ENERGY AND ACCESS FOR ALL (WORLD BANK)
(SREP) (XSREHT047A) AND HAITI: RENEWABLE ENERGY FOR THE METROPOLITAN AREA
(WORLD BANK) (SREP) (XSREHT050A)**

RESPONSE FROM WORLD BANK TO COMMENTS FROM UNITED KINGDOM

Thank you for giving us the opportunity to respond to your questions and address your concerns.

Comments.

(C3) The budget for Component 2 (Off-grid Distributed Renewable Energy) on pages 14 and 52 does not add up correctly. It seems that the figure should be USD71.5 million.

(A) Thank you for the comment. The figures will be corrected on the pages 14 and 52.

Questions

1a.

Component 1 (Grid connected distributed renewable energy) will demonstrate the feasibility and benefits of injecting solar PV generation into EDH grids, which currently run on diesel power.

a. What will happen to the diesel gensets that are displaced by solar PV generation?

Response:

Solar power will reduce diesel generation but not necessarily diesel capacity, since this capacity will be needed during peak hour. The daily diesel generation, and therefore consumption of diesel fuel, however, is expected to be reduced, resulting in reduced costs for EDH (as well as improved service for EDH clients – see also response to 1.c)

1.b

Will they be decommissioned, sold, redeployed to other parts of the island or scrapped?

Response: We do not foresee any decommissioning of diesel plants in the short term. See also response to 1.a above.

1.c

What % of Haiti's current electricity generation capacity will be converted to renewable energy through these projects?

Response: The answer at this stage is unknown and will depend on the detailed results of feasibility studies. Haiti currently has generation shortages. The average hours of supply are only 14 hours per day, and often even less in smaller isolated grids the project aims at supporting. The objective of the demonstration project is to add sufficient solar PV and battery capacity combination in order to reduce some current diesel fuel consumption but also increase the hours of service for EDH customers. There is an obvious trade-off between these two goals - more hours mean less diesel savings etc. We will have a better sense of this trade-off once we complete a detailed feasibility study, and certainly only when the demonstration project is up and running, during which time these impacts will be carefully monitored and used to define the investments for Phase II in order to maximize / optimize the combined impacts of these two factors (reduced diesel consumption and improved service).

2.

Sub-component 2b - (Renewable energy for productive and community use) makes reference to a number of agricultural and industrial activities that will benefit from access to electricity (pages 16 and 17). Is it envisaged that electricity will be provided to existing ventures or to new ventures and if so what types of support? It seems from the information provided, that there will not be any support offered to these ventures. We assume that the provision of electricity will involve new processes of production, the purchase of new machinery/equipment to gain the productivity benefits. It seems that both technical assistance and

finance is needed to ensure that these ventures are able to reap the full benefits of the access to the electricity they will have.

Response: We fully agree, and this is integrated in the project support in two ways. First, the project will support innovative business models for supplying energy for promising, replicable and scalable productive uses, including agri-businesses, some of it identified in the annex (others may emerge during implementation). The project support indeed would therefore focus on supply side. Note that there are emerging business models worldwide, which are targeting productive uses, combining supply side intervention with TA for the use of the newly acquired energy (see for example SunCulture in Kenya). The focus will be on supporting such approaches – therefore a challenge grant. In fact, the available lessons learned show that sustainable impact can only be achieved if energy support is linked to the support along the full supply chain. The allocation of these challenge grants will be competitive, based on the evaluation of proposals and business plans submitted as part of a call for proposal that will be launched as part of that initiative. SREP support will take the form of co-financing for new machinery, solar panels, etc., depending on the content of the business plans. We agree that this will require both technical and financial assistance. The technical assistance and financial support will be provided through existing ongoing projects developed by the World Bank's Agriculture and Trade and Competitiveness, and Water Global Practices.

The list of World Bank projects for which SREP will provide TA/financing for agri-businesses and community uses include: Agriculture: Relaunching Agriculture - Strengthening Agriculture Public Services II Project (GAFSP - IDA) (P126744)
Competitiveness: Haiti Business Development and Investment Project (P123974) Education: Haiti - Education for All Project - Phase II (P124134) Water: HT Sustainable Rural and Small Towns Water and Sanitation Project (P148970).

The amount of financing leveraged through these projects is \$3 million. See Table 3 on paragraph 73 (page 20) of the main PAD document and Table A2.1 on paragraph 5 (page 42) on Annex 2.

It should be noted that the full implementation of this component is dependent on whether the project can reclaim the \$1.38 million that was trimmed to account for the shortage in grant money. Should this not be possible, the component will be reduce to a small pilot with a grant allocation of \$0.62 million (see Table in Box A7.1, page 134 of the PAD Annex 7).

3.

Page 142 makes reference to improved educational outcomes through improved access to electricity. Can you provide evidence to support this statement? Our understanding is that this has not yet been definitively proven.

Response: Point taken, you are right. The improved educational outcomes as a result of electrification are not yet definitively proven. A number of recent studies, including the recent SEAR impact evaluation, however, show increased study time (which we agree is not the same as educational outcomes). We will rephrase accordingly. Please note, though, that because of this uncertainty we actually have not included these benefits in EIRR calculation. The otherwise calculated "core benefits" (saved fuel etc.) suffice for NPV>0 at hurdle rate. If educational benefits were considered, this would only increase EIRR.