

[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 THE COMMENTS FROM SWITZERLAND

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

1. General

1.a.

(C/Q) Given the separate approval requests for SREP funding, we understand that each request shall be handled separately. Is this also the understanding of the WB and GoH?

(A) Yes, it is the understanding that each project and funding request shall be handled separately

1.b.

(Q) Please explain why the requested SREP contributions were shifted from Project II to Project I.

(A) The IP provided a funding range for project I and II, which the assumption that exact amounts would be subject to the outcome of project preparation.

The increase in funding of Project I (RE for metropolitan area) responded to the need to have sufficient demonstration effect. The design of Project I evolved from what was originally envisaged in the IP (i.e. RE in Port-au-Prince grid and Port-au-Paix isolated grid) in the aftermath of Hurricane Matthews and the limited improvement of EDH operational management. These events shifted the focus to the southern part of the country, which has significantly been affected by the natural disaster, and where the EDH grids operate in a semi-autonomous way which allows for revenues to be ring-fenced. The focus on smaller grids is likely to have higher demonstration impact (a combined visible effect of cost reduction and service improvement), but it also implies higher costs (lower economies of scale compared to one centralized project). This means that higher level of funding is needed to deliver a meaningful project size. (See also response to 2.a and 2.f)

1.c

(Q) Please explain how these SREP contributions relate to the endorsed IP, which has 5 components and includes non-grant contributions to be managed by IFC.

(A) The endorsed IP has 5 components, 4 of which are expected to be co-financed by SREP (there is no SREP funding allocation to component 4 – small hydropower rehabilitation).

These for component were split into 2 WB projects:

- a) Project I (RE for Metropolitan Area): the on-grid project focusing on EDH grids (IP components 1 and 2)
- b) Project II (RE and Access for All): the off-grid project (IP component 3)

The “Enabling framework and capacity and skills” component (IP component 5) is partially allocated to the two projects.

The endorsed IP indicatively allocated USD 30 million to the World Bank (USD 21-23 million) and IFC (USD 7-9 million), with the assumption that exact amounts for each project would be ascertained during the preparation phase. After a thorough discussion, the World Bank and IFC have arrived at the final proposed breakdown of USD 22.5 million for the World Bank and USD 7.5 million for IFC. The indicated breakdown will allow both Implementing Entities to pursue their pipelines in a manner allowing an efficient and timely use of the SREP funds.

The IFC’s USD 7.5 million are split into USD 0.5 million grant funds to support advisory work and USD 7 million non-grant funds to support investment projects. The advisory work is progressing and IFC expects to submit a proposal to SREP Sub-Committee soon.

1.d

(Q) What happens now to these non-grant contributions?

(A) IFC continues to work on building a pipeline against the USD 7 million investment allocation. One potential investment was dropped at a fairly advanced stage and now several opportunities are being pursued with a view to submit a proposal for the SREP Sub-committee review and approval in December 2017.

2. Project I (Renewable Energy for Metropolitan Area)

2.a

(C/Q) We understand that Project I corresponds to Component I of the IP. Is our understanding correct?

(A) Project I (RE for Metropolitan Area) correspond to component I and II of the SREP IP, which are related to EDH's managed grids. Component I was subsequently dropped due to technical challenges related to losses and grid integration (see paragraph 7 of Annex 2 and associated footnote 48 – page 43 of the PAD) and Component II was expanded to provide a demonstration effect, which could be replicated at a larger scale if successful. Due to the need to rebuild the South of the country post hurricane Mathew, the focus has shifted from Port de Paix to the southern EDH grids.

2.b

(Q) With regards to the business model (PAD Annex 2: para.16, p.46) we understand that the initially planned PPP model is considered not feasible and that a publicly financed solar investment will be implemented under Project I instead. In table A2.5 (p.49) several examples of investments along three sites and different scenarios regarding the level of PV share are listed. Which is the combination selected for Project I?

(A) That is correct, the assessment at this time is that a PPP option is not feasible. Five small and medium-sized EDH grids (2-12MW) were prioritized (out of a total of nine) as suitable off-takers for the solar PV plants. Priority was given to areas devastated by Hurricane Matthew. Selection criteria for the EDH sites include size, likely technical compatibility with the solar PV + battery plant, status of local grid and generation, logistics of PV and battery installations, availability of public land for the PV plant, potential for demonstration effects in post project scale-up, and ability to generate revenues to cover O&M costs. Final sites will be selected by MTPTC Energy Cell in consultation with EDH and MEF and in agreement with the World Bank, based on the confirmation of the selection criteria and taking into account the emerging economic development priorities of the GOH.

Table A2.5 shows different combinations of projects that are economically feasible within the given budget, resulting in 6-12MWp of solar PV capacity, depending on (i) whether the priority is on displacing fuel (lower PV share and small or no battery) or improving service (larger battery), and (ii) whether private sector funding can be mobilized. For the first demonstration project, the Government is leaning towards a medium share of PV – a scenario that will allow a combined benefit of reduced fuel and improved service. Phase II investment will be evaluated in Phase II depending on what is the outlook for attracting private sector financing then.

2.c.

(Q) How will a replication be driven once and if the demonstration project is realized?

(A) The initial project will demonstrate that it is feasibility to sustainably inject solar PV power in small grids in Haiti. Similar projects could then been undertaken in other (EDH and non-EDH) grids financed by the public sector or private investors (on the strength of a guarantee), if the conditions are favorable. The demonstration effect will help

both in terms of (i) easing EDH concerns about adding solar PV power on its grid, and (ii) reducing private sector risks for the replication.

2.d.

(Q) What is the grid absorption capacity for

(A) The question seems to be incomplete.

2.e.

(Q) In the IP and related answers to questions you referred to an EDH recovery program. What is the status of this program and to what extent was/is it successful?

(A) In 2016, the EDH recovery plan led to concrete action under the MoF oversight and with technical assistance from WB and IDB. Several of the pre-defined "action items" were complete, such as: (i) reshuffling of EDH commercial management; (ii) ensuring sustainable operation of EDH billing software; and (iii) switch thermal plants from diesel to HFO to reduce generation cost. On a macro level, with IMF impulse and donors support, GOH managed to lower budget transfers to EDH from \$200m to \$147m (2015-16). Further improvements were expected in 2016-17, partly thanks to the commissioning of 18MW hydropower in Peligre in August 2016 (first of 3 turbines under rehabilitation). However, hurricane Matthew that hit Haiti in October 2016 and accelerated devaluation of the local currency (45 to 65 Gourdes for 1 US\$, or 44% in 12 months), negatively impacted the progress made (all EDH expenses are paid in US\$ and all their revenues in Gourdes). Donor support is ongoing, and newly elected Government affirmed leadership of the EDH recovery plan. However, the results reached so far are not yet at a level that would provide sufficient confidence for private investors to move forward with on-grid projects with EDH as unique off-taker.

2.f

(C) We noticed that the financial leverage for Project, in the (most probable) worst case scenario is 1:0.4 This is far below the expectations for SREP and also not consistent with SREP IP where a leverage factor between 1:1 and 1:5 was anticipated.

(A) The leverage factor was largely driven by anticipated private investment in the proposed solar PV plant in the Port-au-Prince grid, which was subsequently deemed non feasible due to technical constraints (see paragraph 7 of Annex 2 and associated footnote 48 – page 43 of the PAD). It should also be noted that Hurricane Matthews, which hit Haiti in October 2016, after the endorsement of the Investment Plan, and severely damaged infrastructures in the southern part of the country caused GoH to focus on rebuilding infrastructure, expanding quality access and improving electricity services in the affected areas, in order to rebuild livelihoods and economic opportunities. The combination of the damages caused by the natural disaster which were estimated at \$1.89 billion, the severe devaluation of the local currency (44% in 2016) the political uncertainty resulting from contested presidential elections the same year, does not make Haiti an attractive prospect for private investment in the short term. As a result of the change of circumstances since the IP was approved, the previously anticipated leverage ratio has been revised downwards.

2.g

(Q) What is the alternative to this SREP co-financed project for EDH to reinstate power to its grids?

(A) The main alternative to the SREP co-financed project in EDH grids is the status quo EDH supply solution: very limited hours per day of unreliable power supply and 100 percent diesel-based generation. The status quo would thus result in: high cost of service; high suppressed demand; as well as sustained levels of GHG emissions and associated damages to global and local environment, and to community health. By demonstrating the feasibility and benefits of RE/hybrid-based power supply, the SREP co-financed project will lay the foundation for a broader and

faster integration of RE in EDH grids on a larger scale, which will lead to lower cost of EDH service, more access to modern electricity services, reduced diesel imports and thus reduced government subsidies to EDH.

3. Project II (Renewable Energy and Access for All)

3.a

(Q) We understand that Project II is co-financed by the CTF Off-Grid Energy Fund. Is this fund now approved and operational?

(A) The CTF Off-grid Energy Fund is part of the Haiti Modern Energy Services for All project, which was approved by CTF in October 2015. The project is scheduled to be presented to the WB's Board of Directors in July 2017, along with the SREP-supported projects.

3.b

(Q) According to your statements a failure to get additional SREP grant funding of \$1.38 million for which you propose to defer application to June 2017, would affect the installed RE generating capacity by 5 MW (PAD Annex 7: Box A7.1 p.134-5). This is far more than the possible shortfall of \$1.5 million for component I would affect (1 MW). How do you explain such a difference?

(A) The curtailment of \$1.5 million from Project I which is largely publicly funded (with limited or no private sector co-financing), will merely lead to a smaller PV plant. However, reducing \$1.38 million for the productive and community uses component (in Project II) will have a larger impact as this activity has a more significant leverage potential from multiple sources including WB (through the Bank's Agriculture and Trade and Competitiveness Global Practices (GPs), and Water GP for RE-based irrigation solutions), private investors and OGEF. It will therefore facilitate the deployment of a larger quantity of RE. The challenge grants envisaged under that sub-component represent seed capital for energy enterprises or other integrators presenting innovative viable business plans for sustainable provision of renewable energy for agriculture and other rural enterprises. The purpose of the challenge grants is to build viable business models that could in the long-run be replicated on commercial terms. A relatively high amount of private sector co-financing is therefore assumed, leading to the multiplier effect.

3.c

(Q) Why do you propose to allocate this possible (and probable) shortfall to sub-component 2b, if the impact on installed RE generating capacity is so substantial? A reduction on sub-component 2c which is to a larger extent co-financed by CTF OGEF would likely have a lesser (negative) impact.

(A) The CTF funding being extended to GoH as a loan, grants are kept to a minimum amount (i.e. \$1 million). Component 2.c. allows OGEF to expand its menu financing by providing grant that will help increase affordability (by buying down the tariff). Experience of other countries show that some amount of grant financing is required to support the early growth of off-grid businesses, and to shift the market towards higher quality products. A reduction of funding of sub-component 2.c will cripple expansion of electricity services to the poorest population, and while that will result in lower reduction of MWp targets, it would result in a very significant reduction of people provided with energy access target, which would affect the Government's plans for ensuring universal access to electricity by 2030. Component 2b was considered to be most portable and thus, able to absorb a funding shortfall without a significantly affecting the number of beneficiaries under the project.

4. Procedural comment

(C): In a more general sense we consider the proposed application in two stages (May 2017 and June 2017), under which missing SREP contributions due to unavailability of SREP funds (grants) will be sought/reinstated if other

projects fail to come forward, problematic and not in line with our understanding of the revised pipeline management system.

(A) The MDB Committee, in discussing a sealed pipeline (as part of the revised SREP Pipeline Management Policy), agreed to “trim” the amount of grant funding requested from some projects so that the sealed pipeline will match the available (grant) resources. If some projects scheduled for May submission are not submitted and grant resources become available in June, the MDBs will have the option of requesting the “trimmed” amount to be added back to the projects that have been submitted/approved in May. The trimmed amounts for the Haiti program was \$1.38 million, allocated to project II. Please see the revised SREP Pipeline Management and Policy under review and approval by the Sub-Committee.

In addition, there was an indicative USD 2 million grant allocation to IFC under Component 1 to facilitate a potential PPP transaction. After a thorough discussion, the World Bank and IFC reached an agreement for the World Bank to utilize USD 1.5 million of that allocation for enhance the impact of Project I. Given that the USD 2 million were not originally part of the sealed pipeline and because the shortage of grant funding for sealed pipeline projects, the USD 1.5 million is kept on the reserve list, until June when the sealed pipeline is reviewed by the MDB Committee with a view that if there is sufficient grant money available, it will be included in the sealed pipeline and submitted for funding approval.