Haiti Modern Energy Services for All Project
World Bank Response to Questions from the U.K.
September 30, 2015

The World Bank task team has taken the liberty of changing the order of questions asked (in **bold,** below) in its response to the U.K.:

Question: It is unclear why this project is classified as a public sector programme when the Fund manager will be a competitively selected private sector entity?

Response: The Borrower is the Government of Haiti and the project is a public sector program which is channelling a substantial portion of the resources to support energy access through the private sector. The project demonstrates recognition of the potential of the private sector to provide energy access-related products and services to target market segments, and complements activities funded under IDA and SREP Grant projects. The Government will establish the Off-grid Electricity Fund (OGEF) and hire a competent private sector Fund Manager to administer the funds on its behalf to channel the majority of the SREP resources (all except $1.5 million TA component) to the private sector.

Question: The PAD does not contain explicit information on how project meets additional investment criteria applicable to private sector programs, which is mandatory for all DPSP projects (i.e. financial sustainability, effective utilisation of concessional finance, mitigation of market distortions, and risks), please could project team provide this?

Response: With regard to the request for further information on criteria for private sector projects, viz. financial sustainability, effective utilization of concessional finance, mitigation of market distortions, and risks, please see the team's response below:

Financial sustainability

CTF resources in the project will complement and leverage existing World Bank and future climate finance investments. Investments supported by the project will support provision of energy access services that will offer lower lifetime costs as well as lower recurring costs, making them more sustainable options compared to existing choices for consumers (typically either low quality systems or diesel generators). It is expected that this initial, relatively modest public funding will leverage larger private sector funding for sustainable energy access.

The ***Off-Grid Electricity Fund (OGEF)*** described in Component 2 of the project document, will help support and scale-up a variety of private enterprises that have the potential to be run as financially sustainable and profitable businesses promoting energy access. Each beneficiary firm will present viable business plans addressing targeted market segments, which will be assessed to ensure sustainable operation of off-grid systems. The quality and realism and sustainability of the business plan, including demonstration of financial sustainability and profitability at scale, are the key criteria used for the evaluation of the business plans, as specified in the OGEF Operating Guidelines under development. The initial public investment is targeting key barriers in the context

of financing and expanding energy access in Haiti, and aim to making the sector more financially sustainable in the medium term.

First, support for development of a regulatory framework in Component 1 will help move the sector toward a more financially sustainable footing by addressing key investor risks. Second, the OGEF investments in off-grid energy companies will jump-start the market by demonstrating viable business models with the potential for profitability once they achieve scale. .

Effective utilization of concessional finance

Concessional finance is focused on removing early stage policy, regulatory and market barriers, in particular addressing various (initially, often inflated) risk perceptions from consumers and investors alike in order to build necessary conditions that would allow phasing out of public support over time ("market transformation approach" described in Annex 2). These include:

- Building confidence of consumers in renewable energy products and technologies by increasing the market share of high quality products, evening the playing field with fossil fuel alternatives and focusing on the development of business models that allow consumers to "test" technologies at low risk (e.g. DESCO model)

- Building confidence of investors and financiers by reducing regulatory risk, and demonstrating profitable business models with growth potential.

Concessional CTF resources will be deployed in a range of different modalities, including regulatory support, performance-based grants and upfront financing, including equity and debt. This, in turn, will help mobilize private enterprise and resources to promoting energy access using viable business models based on consumer needs and their ability to pay.

Mitigation of market distortions

In rural areas, in particular, where only 5% of the population enjoys access to grid electricity, the lack of energy access represents a market failure with a significant opportunity cost to Haiti's economic and human development.

Unlike urban areas, which have service from existing energy service providers using diesel generators and other technologies, the demand from rural and peri-urban customers have typically been unmet. Until recently, individual diesel systems and kerosene were the only available lighting/power solutions for most people and businesses in rural areas. Considering the high costs of running diesel generators, most rural households turn to low-quality, low-performance technologies: inefficient candles and kerosene lighting; poor quality solar lanterns; and (less commonly) small diesel gen-sets – all of which provide very limited services, at high unit cost (as measured in $/kWh and in $/lumen-hours) and have negative environmental and health externalities. These high costs are not only a burden on the rural household budgets, but they are constraining growth and productivity of agri-businesses and other rural SMEs. At the same time, superior supply options for these market segments exist, and many of them are already in the piloting stage in Haiti (e.g. pay-as-you-go solar kits and smart mini-grids), but face regulatory and financing barriers to reach scale.

Focusing the project to reduce the risks to serve rural consumer segments that are largely under-served or served with poor quality choices, will help attract viable market players to address the market failure and will not distort the market. The majority of the OGEF resources will be provided on market terms as equity or debt. Subsidies provided by OGEF are limited, time-bound and designed to decline over time, as private entities come forward to meet the market opportunities in rural areas.

Risks

Key project level risks and related mitigation measures are as follows:

Political stability: The political uncertainty and potential instability are the main risk the Project is currently facing. To mitigate the risk, the CTF project is being built on strong consultative process carried out as a part of the preparation of the SREP program and will continue building broad-based support for the Project, ensuring that project design is transparent and well understood. The project will also rely on the dialogue and networks developed under the off-grid activities of the IDA project.

*Governance and Capacity***:** Poor governance and weak institutional and implementation capacity could undermine CTF project implementation. In this respect, the CTF project could specifically suffer from the following risks:

- *Political interference in the evaluation of sub-projects.* To mitigate this risk, OGEF will be implemented through a competitively selected fund manager that will evaluate the projects according to standardized and transparent criteria. The Fund Manager will be responsible for investment decisions based on agreed rules and procedures stipulated clearly in the Operating Guidelines. Adherence to these rules will be followed by the Advisory Committee, which will include both governmental and non-governmental members.
- *OGEF governance risks.* Given that the Fund Manager will have an authority over the investment decision, there is a potential risk of a conflict of interest and other potential abuse of the Fund Manager's powers. This risk will be mitigated by setting up a governance structure which would (i) align Fund Manager interest with those of the Government (e.g. Fund Manager's financial interest in Fund's success); and (ii) provide checks and balances on Fund Manager's powers through setting up transparent rules in the Operating Guidelines, and (iii) setting up Advisory Committee with Government and non-Governmental representatives, providing oversight of the Fund Manager's activities.
- *Slow disbursements due to implementing agency capacity constraints.* To mitigate this risk, implementation capacity will be one of the key criteria for selecting the Fund Manager responsible for the implementation of Components 2 and 3. MTPTC, which will implement Component 1, will continue benefitting from extensive capacity building under the IDA and SREP projects.

*Policy and regulations***:** The project could suffer from changing government priorities, although due to the very low energy access rates in rural areas, and the broad-based support for rural electrification, a complete reversal of interest in this intervention is unlikely. A more immediate

risk is the Government failure to enact a facilitating regulatory framework. However, minimum conditions for investing in off-grid electrification already exist, as demonstrated by a strong project pipeline and a number of pilot projects already on the ground – which would allow OGEF's initial investments. Component 1 will continue improving this framework.

*OGEF disbursements***:** One of the risks of the OGEF facility is that funds could remain unused due to a lack of interest and/or capacity of private sector providers or a difficulty to contract the Fund Manager. Risk mitigation measures are: (i) the existence of an initial pipeline of off-grid projects, across various technologies and business models (see Annex 2); (ii) the expressed interest of several local and international FIs in managing the fund, allowing a competitive process to select a Fund Manager; (iv) incentives (in the fee structure) for the Fund Manager to explore new market opportunities and to maximize impacts and sustainability of the investments; (iii) the ongoing consultations with key stakeholders about financing terms to ensure terms respond to their needs; (iv) the provision of technical assistance to all key stakeholders, and (v) the flexible design of OGEF – allowing it to invest resources based on the market demand, and allowing for adapting financing terms based on the demand.

Lack of coordination with utility (EDH). Off-grid businesses will require time to recover costs and reach profitability. One of the risks that they are facing is electrification of their communities by EDH. This risk is in particular relevant for village grids that have stranded assets that cannot be easily removed and re-applied elsewhere. In the short term, the risk is modest as EDH is very unlikely to undertake a major expansion in rural areas, given the backlog of investments in its existing grids. However, in future years, as EDH conditions improve, this risk can become substantial. The project will therefore establish a coordination mechanism with EDH from the onset (exchanging information on electrification plans). In addition, the regulatory framework that would be developed with the Project support will address what happens to off-grid systems in the case of the electrification of communities by the EDH grid.

Question: Some business lines suggested foresee the use of results-based grants. How is this compatible with minimum concessionality principle under CTF's private sector approach and ambition to revolve the proceeds of the fund through the Fund's 10-year lifetime?

Response: The "minimum concessionality" principle will be applied to all the sub-projects and will require that the level of subsidy is not greater than necessary to induce the intended investment. Overall, the grants will constitute an extremely smallr part of OGEF funds. Two types of results-based grants are proposed under the OGEF, each of which will be used to the minimum extent required for the commercial off-grid energy access sector in Haiti, namely (i) Results-Based Financing (RBF) Grants to retailers/distributors of solar lanterns and pico solar home systems; and, (ii) Start-up/ RBF Grants to DESCOs and mini-grid business that are building a customer base to become viable.

Results-Based Financing (RBF) for solar lanterns. RBF grants are targeted to the small solar retail market, which target the lowest income customers with small lanterns and systems. The early market for such products in Haiti has been served by sellers of cheap, low quality products, which fail quickly and cause "market spoilage", i.e., customers conclude that "solar is no good" and they and their peers consequently don't buy any solar products. This has been recognized a barrier for the penetration of higher quality renewable energy products in the Haitian market. In order to

create conditions for higher-end products and services to enter the market, it is therefore necessary to increase the penetration of high quality solar lanterns and solar kits on the market. Experience from other markets (e.g. East Africa) shows that as the penetration of higher quality products increases, consumers start differentiating products (e.g. brand recognition) and are less reluctant to buy more expensive products that have been demonstrated to work. The proposed RBF scheme will be a time-bound subsidy for each high quality (Lighting Global certified) product sold on the Haitian market. The grant will be results based (paid upon verified sale), will be limited to only 30% of the product value initially and declining on annual basis (being 0 by the fifth year of the project), and overall total amount for this subsidy will be limited to $1 million (less than 10% of the OGEF amount).

Start-up/Results-Based Financing for DESCO companies. All of the successful DESCOs operating in Africa today were launched with a combination of grants and equity investment. The risk to initial investors is simply too high without partially reducing that risk with grants. And the risk in Haiti is higher (while overall market is smaller) than in East African countries where DESCOs have launched. Two types of grants will be available. Start-up grants ($50-100,000) not exceeding $400,000 total (less than 4% of the total OGEF amount) will be used to launch 3-4 DESCOs. Their initial growth will be supported by equity and results-based financing (RBF). RBF will be available only as a complement to equity investments (which will be provided on commercial terms), and will be lower than the equity investment in the DESCO company. RBF Grants will be tied to key milestones demonstrating DESCO's progress towards the targets specified in the business plan, and will aim at reducing the equity risk to OGEF and other equity investors, effectively bringing the equity risk to a commercial level by partially financing growth with RBF Grants.

Question: We note that when describing the compliance with the CTF investment criteria in the Development Impact section of Annex 7 (p109) there is mention of the development of local industry. Are you able to quantify the number of jobs created and is there a reason why this metric is not included in the Results Matrix?

Response: We do expect that the creation, growth and improved rural outreach of renewable energy access firms to be triggered by the CTF Haiti project will indeed have significant positive effects on employment and added value in these firms, as well as local microenterprises interacting with the latter. However, we cannot include jobs created as a separate metric on top of the enterprise indicator, because deriving solid estimates for the quantity and quality of these jobs is extremely difficult (both in general - and even more so in this specific case, due to the unusually broad range of technologies, business models and enterprise stages the OGEF will invite to participate). However, based on similar projects by the World Bank and EnDev, the jobs that will be created and/or improved would include: (i) local technicians who serve as extension agents and O&M agents for the participating firms; (ii) more staff in the participating firms due to their increased sales volumes and expanded product range; (iii) added jobs in suppliers of the participating firms; as well as (iv) additional and/or improved jobs in local micro and small enterprises who use the improved energy access provided by the OGEF firms and can improve or expand their productive energy uses thanks to the better quality and/or price of electricity. While we cannot include it as an indicator with a pre-defined target, project M&E will track the creation of firms, jobs and value added on both energy supply and demand side, using solid methods such

as the ones applied by EnDev (www.endev.info) and proposed by the ESMAP/AEI/GIZ PRODUSE publications (www.produse.org).