



Utility-Scale Solar PV Program

Country / Region: **Nigeria** | Project Id: **PCTFNG230A** | Fund Name: **CTF** |

MDB : **International Finance Corporation**

Comment Type	Commenter Name	Commenter Profile	Comment	Date
Comment 1	Douglas Gibb	United Kingdom	<p>Thank you for circulating the proposal from IFC entitled, Nigeria: Utility-Scale Solar PV Program. Having considered the proposal, we have some areas that we would like some additional clarity.</p> <ul style="list-style-type: none"> • The Financial Intermediation component of the CIP was intended to help overcome the financing and market barriers for low carbon investments, can the project team provide an explanation on whether these barriers have been addressed sufficiently in order to justify switching CTF finances to support Utility Scale Solar PV supported by Private Sector investment? • From the proposal, it is unclear when the project team anticipate the sub-projects will be operational and able to supply power to the grid. Given the challenges outlined in the proposal, and working within the CTF Cancellation Policy deadlines, could the project team provide an assessment on whether finance can be disbursed within the timeframe and then the resulting PV installations to begin supplying power to the grid? • Could the project team explain the rationale for the assumption that USD 30m of concessional financing provided by the CTF will leverage USD 100m from the Private Sector and result in the installation of a total of 100MW PV in Nigeria. • Could the project team provide additional information on the number of jobs it expected to be generated from this proposal, and could this be disaggregated by gender. <p>We look forward to the IFC responses. With regards Doug</p>	Jul 20, 2017
Response 1	Andrey Shlyakhtenko	IFC	<p>1. "...whether the financing and market barriers have been addressed sufficiently in order to justify switching CTF finances"</p> <p>The Financial Intermediation component is one of three components of the Nigeria CTF Country Investment Plan (CIP). Specifically, the Nigeria CIP includes Utility-Scale Solar PV component, Transport sector component, and Financial Intermediation component, which collectively establish exceptionally ambitious targets in delivering impact along those three dimensions. Despite the coordinated efforts by MDBs and the Government of Nigeria (GoN), progress of the CTF CIP has been slow and difficult. This is evident from the lowest, among all the CTF countries, funding approval rate (stood at 10% at the end of 2016) and even lower disbursement rate. IFC, in coordination with AfDB and the WB, has continued looking for opportunities to move the CTF agenda forward and is now very excited at the possibility of delivering impact in the utility-scale solar PV segment of the market.</p> <p>At the same time, due to the difficult lending environment in Nigeria, IFC's engagement with local Financial Institutions (FIs) have not yet resulted in a sufficiently advanced pipeline of projects that could be delivered within reasonable timeframe and with reasonable certainty. IFC remains engaged with local FIs, but does not expect that projects can be delivered in a manner that would meet current CTF timeframe and objectives.</p> <p>While the progress on the Financial Intermediation component remains slow, in the last few years, solar PV projects have emerged and there exists an opportunity to catalyze the market with the support of the CTF. Currently, there are no expectations that local FIs will be in a position to finance utility-scale solar PV projects and debt financing for these projects will likely be provided by International FIs (IFI). However, the successful financing of one of the very first private sector grid-connected solar PV projects in Nigeria is expected to demonstrate the viability of the solar PV sector not only to international investors, but also to local FIs, facilitating their participation in the follow up projects. Ultimately, this inclusion of the local FIs and enhancements to the conditions for their participation in financing</p>	Aug 04, 2017



of domestic solar PV projects will indirectly contribute to fulfilling the objectives of the Financial Intermediation component of the CIP.

2. "...when the sub-projects will be operational and able to supply power to the grid" From the technical, sponsor commitment, and lenders' readiness standpoints, the most advanced project in IFC's pipeline is in a good shape and could be implemented rapidly. Grid connection is straightforward and the grid in the particular location of the project is strong. Nevertheless, the sector situation in Nigeria remains difficult and the first utility-scale grid-connected solar PV projects will likely face a multitude of challenges that may affect the pace and probability of success of the projects. The key ingredients (or potential impediments) of the successful delivery of solar PV projects in the country, however, are (a) successful implementation of the Power Sector Recovery Program elaborated between the GoN, the WBG, and other development partners and (b) ability of involved parties (including GoN and NBET) to reach workable agreement on bankable project documents (which will be largely modeled after recent successful Azura Edo IPP).

Provided that the Sector Recovery Program goes ahead as planned, IFC expects that Board approval could be obtained well before the end of 2019, within the timeframe established by the CTF Pipeline Management and Cancellation Policy. The commitment and disbursements will likely happen shortly after the Board approval, pending satisfactory meeting of the disbursement conditions and in line with the disbursement schedule that would aim to tailor concessional element to the project needs. Given that the solar PV plants can be constructed quickly, it is reasonable to expect the plants becoming operational within 12-18 months of financial close.

3. "...the rationale for the assumption that USD 30m of concessional financing provided by the CTF will leverage USD 100m from the Private Sector and result in the installation of a total of 100MW PV in Nigeria."

Given the existing pipeline of the solar PV projects in Nigeria, including the ones IFC is actively involved in, IFC anticipates that within the next two to three years, IFC will be able to support projects with an aggregate installed capacity of about 100 MW. With the current prevailing global costs of solar PV projects, with adjustment to Nigeria specifics, market conditions, cost of capital, etc., IFC expects the total project cost for that capacity to be around USD 115-130 million.

Based on IFC's analysis of project economics, likely financing structure, and concessional element needed to make projects financially viable, IFC expects that around 25 percent of the financing package of these projects may need to have a concessional element. This constitutes about USD 30 million and hence the assumption of the need for approximately USD 30 million of CTF funds. The remainder of the financing package (approximately USD 85-100 million) will come from commercial sources (including project sponsors, IFC, and other IFIs). The numbers above are very much in line with IFC's experience in solar PV in Sub-Saharan Africa and global trends in the solar PV sector.

4. "...additional information on the number of jobs it expected to be generated from this proposal, and could this be disaggregated by gender."

The Program will generate jobs both during the construction and during the operation of the solar PV plants. For 100 MW of solar PV capacity, an estimate number of jobs generated, based on the standards in the market, could be around 300 jobs during construction, and 30 jobs during operation. At this moment, it is not possible to disaggregate these estimates by gender, but IFC, as part of its development impact reporting, will endeavor to track the numbers of jobs disaggregated by gender.

Comment 2 Daniel Morris United States CIF AU, Jul 24, 2017

Thanks for the chance to review the Nigeria Utility-scale Solar PV Program. At this point in the process, staff should have done enough environmental and social due diligence to be able to give this a category ranking. As such, our question is: has an initial environmental evaluation been undertaken? If so, what is the category? danny

Response 1 Andrey Shlyakhtenko IFC Aug 04, 2017

1. "...has an initial environmental evaluation been undertaken? If so, what is the category?"

The review and assignment of the Environmental and Social Impact Assessment (ESIA) and rating are done at the individual project level. For the most advanced project in the IFC's pipeline, the ESIA was approved by the Federal Ministry of Environment, following a public disclosure and a review by relevant local stakeholders. The ESIA report was then reviewed by IFC and a revised report conforming to IFC Performance Standards was issued. Similarly, a GAP analysis has been developed working together with IFC Environmental and Social (E&S) specialist.

The ESIA assessment identified certain potential land/resettlement issues (which are quite common in Nigeria) that need to be resolved. The IFC E&S team will further



assess and assist with these issues during the development of the project via IFC InfraVentures and then over the course of due diligence for the project finance investment, including developing a strategy and an action plan for resolving outstanding issues during the construction phase of the project. Pending this further work and due to the potential land issues, the project has been provisionally classified as a Category A project (significant impact), according to IFC's Environmental and Social Review Procedure.

Comment 3 Norgate Child United
Job share Kingdom

Dear Mafalda,

Sep 20,
2017

We would very much like to thank the project team for working with us in developing our understanding of the proposal and for the additional information they have provided on the proposal entitled *Nigeria: Utility-Scale Solar PV Program*, submitted by the International Finance Corporation (IFC), for review and approval of a CTF allocation of USD 29.3 million (USD 19.5 million in senior loans and USD 9.8 million in subordinated debt). Along with the associated proposal to reallocate USD 30.0 million of the USD 50.0 million that was allocated for the *Nigeria: Financial Intermediation for Clean Energy/Energy Efficiency* project to the new *Nigeria: Utility-Scale Solar PV Program*.

We are encouraged that the latest attempt at power sector reform in Nigeria is showing some positive signs of progress, and welcome IFC's continued efforts to deploy utility-scale PV. However we note that the challenges are considerable and that scarce CTF resources have already been tied up, and effectively unproductive for 7 years. Further, their effective utilisation in Nigeria over the next few years is far from assured.

We understand that the Government is seeking to proceed with PV contracts that have already been awarded. Whilst this may not occur, we feel that the justification for concessional finance for 'first movers' will be reduced if some of these projects proceed. Given the high level of deployment of solar elsewhere and the advances in distributed energy in Nigeria, the costs of introducing a new technology seem to be limited in this case. We also note that main cost for developers in Nigeria surrounds issues of process, regulatory uncertainty and payment risk (which are part of the wider power sector reform), with new technology and financing costs being secondary.

In view of the above we are prepared to approve the proposal, but request that matters should be further reviewed both by IFC and the CIF Admin Unit before the end of 2018 if;

- 1) Utility scale solar projects have already proceeded in Nigeria by this time thus calling into question the benefits of further concessional finance to overcome 'first mover' issues.
- 2) Projects to utilise the funds have not been approved by IFC's Board.

We feel the above process will allow CTF resources to be recycled on a timely basis if necessary due to either not being needed or further delays to reforms in Nigeria.

Many thanks,

Zoe