

Cover Page for CTF Project/Program Approval Request¹

1. Country/Region	Nigeria	2. CIF Project ID#	(CIF AU will assign ID.)
3. Investment Plan (IP) or Dedicated Private Sector Program (DPSP)	<input checked="" type="checkbox"/> IP <input type="checkbox"/> DPSP	4. Public or Private	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Private
5. Project/Program Title	Utility-Scale Solar PV Program		
6. Is this a private sector program composed of sub-projects?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
7. Financial Products, Terms and Amount			
	USD (million)	EUR (million) ²	
Grant			
Fee on grant			
MPIS (for private sector only)	0.7		
Public sector loan			
• Harder terms			
• Softer terms			
Senior loan	19.5		
Senior loans in local currency hedged			
Subordinated debt / mezzanine instruments with income participation	9.8		
Second loss Guarantees			
Equity			
Subordinated debt/mezzanine instruments with convertible features			
Convertible grants and contingent recovery grants			
Contingent recovery loans			
First loss Guarantees			
Other (please specify)			
Total	30.0		

¹ This cover page is to be completed and submitted together with the MDB project/program proposal when requesting CTF funding approval by the Trust Fund Committee.

² Please also provide USD equivalent in the column to the left

Funding request: USD 30.0 million

Funds requested in this proposal are made available by reallocating USD 30 million from the IFC’s USD 50 million *Financial Intermediation for Clean Energy and Energy Efficiency* component of the CTF Nigeria Country Investment Plan. To formalize this reallocation, concurrently with this funding approval request, IFC is submitting the Amendment to the CTF Nigeria Country Investment Plan.

8. Implementing MDB(s)	IFC
9. National Implementing Agency	Private sector
10. MDB Focal Point	Andrey Shlyakhtenko, CTF coordinator, ashlyakhtenko@ifc.org Joyita Mukherjee, CIF focal point, jmukherjee1@ifc.org
11. Brief Description of Project/Program (including objectives and expected outcomes)³	<p>The <i>Utility-Scale Solar PV Program</i> (the <i>Program</i>) will build on the IFC’s experience in the solar PV sector across the globe and will draw on recent progress in similar solar PV CTF programs in Honduras, Thailand, and other countries. The <i>Program</i> will support first-mover utility-scale private sector solar PV projects in Nigeria in order to: (a) generate a demonstration effect and help create a track record; (b) support emerging RE regulatory framework and demonstrate bankability of the new RE PPAs; and (c) stimulate the entry of commercial developers and lenders into solar PV markets – in Nigeria and broadly in Sub-Saharan Africa. The <i>Program</i> will finance at least one utility-scale private sector solar PV project in Nigeria for a capacity (or aggregate capacity, if it is more than one project) of up to 100 MW.</p> <p>Nigeria enjoys a good solar resource, particularly in the more arid Northern regions where Direct Normal Irradiance (DNI) can reach 2,000 kWh/m² per year. With that irradiation, the country could install up to 1,046 GW of solar PV capacity, which would generate 1,833 TWh of electricity per year, satisfying not only current demand, but also significant future demand growth. Yet, for many years, the investment environment for large-scale RE sector had remained weak and government reforms and enhancements to enabling environment had failed to result in a pipeline of bankable projects.</p> <p>Over the last few years, recognizing the need to unblock the bottlenecks for RE development, the Government of Nigeria has taken multiple steps to improve the regulatory environment in renewable energy sector in general and solar PV segment in particular. These steps included adopting National Renewable Energy and Energy Efficiency Policy, approving the FiT Regulations for Renewable Energy Sourced Electricity (REFIT) for certain technologies (including small scale solar PV), and issuing generation licenses to several IPP developers for grid-connected solar PV projects not covered by the REFIT. The progress, however, has slowed down due to significant deterioration of the energy sector sustainability and limited liquidity. To rectify the situation, the government embarked on a concerted effort – supported by the World Bank Group – to develop and implement a “Power Sector Recovery Program: 2017 – 2021”, which over the last few months began showing early signs of success.</p> <p>Developers remain interested in advancing their projects and recent early progress of the Recovery</p>

³ Please provide the information in the cover page or indicate page/section numbers in the accompanying project/program proposal where such information can be found.

Plan has reactivated the discussions around several large-scale solar PV projects, but, so far, none of the utility-scale solar PV projects has reached financial closure. IFC has been engaged with some of the solar PV developers with the most advanced projects in the country. In one of these projects IFC has already invested through its InfraVentures Fund in order to support the early-stage project development. The further progress of the project development work will be linked to the progress and success of the Recovery Program.

Given the remaining barriers, however, a blended financing structure will very likely be needed to achieve project bankability for the first private sector solar PV projects. In particular, the high investment risks and capital costs (due to unproven enabling environment) as well as high development costs (associated with first ever utility-scale solar PV) require concessional financing in order to help achieve a tariff level sustainable in the longer term. Having a sustainable level of the tariff is critical, as it will help reduce the risk of renegotiation of the tariff in the future and decrease the uncertainties for the developers and lenders. IFC will use the CTF funds provided by this *Program* to reduce the tariff down to the levels that can be sustained in the long term, ultimately benefitting the end consumers, while ensuring that lenders' requirements are satisfied.

The *Program* is expected to directly support the installation of up to 100 MW of solar PV capacity that will mobilize about USD 100 million of private sector financing and result in 74,700 tCO₂e of GHG emission reductions per year and 1,500,000 tCO₂e over the life of the *Program*. Further, by delivering new RE capacity, increasing energy supply, improving quality of access to sustainable electricity, and displacing carbon-intensive generation in Nigeria, the *Program* will likely have a broader impact with spill-over effects across the African continent.

For more detailed description of the *Program*, objectives, and expected outcomes please refer to the *Utility-Scale Solar PV Program* proposal.

12. Consistency with CTF investment criteria⁴

(1) Potential GHG emission reductions	Please see section 2.1 of the <i>Utility-Scale Solar PV Program</i> proposal
(2) Cost-effectiveness	Please see section 2.2 of the <i>Utility-Scale Solar PV Program</i> proposal
(3) Demonstration potential at scale	Please see section 2.3 of the <i>Utility-Scale Solar PV Program</i> proposal
(4) Development impact	Please see section 2.4 of the <i>Utility-Scale Solar PV Program</i> proposal
(5) Implementation potential	Please see section 2.5 of the <i>Utility-Scale Solar PV Program</i> proposal
(6) Additional costs and risk premium	Please see section 2.6 of the <i>Utility-Scale Solar PV Program</i> proposal

⁴ Same as footnote 3.

Additional CTF investment criteria for private sector projects/ programs	
(7) Financial sustainability	Please see section 2.7 of the <i>Utility-Scale Solar PV Program</i> proposal
(8) Effective utilization of concessional finance	Please see section 2.9 of the <i>Utility-Scale Solar PV Program</i> proposal
(9) Mitigation of market distortions	Please see section 2.8 of the <i>Utility-Scale Solar PV Program</i> proposal
(10) Risks	Please see section 2.10 of the <i>Utility-Scale Solar PV Program</i> proposal
13. For DPSP projects/programs in non-CTF countries, explain consistency with FIP, PPCR, or SREP Investment Criteria and/or national energy policy and strategy.	
N/A	
14. Stakeholder Engagement⁵	
Stakeholder engagement will take place at the sub-project development stage and will follow the IFC rules and procedures. The work will be organized in an effective way, similar to other projects undertaken by IFC in RE markets across number of countries.	
15. Gender Considerations⁶	
Gender aspects will be given thorough consideration and addressed at the sub-project level depending on the issues and opportunities that are identified at the appraisal stage for each sub-project.	
16. Indicators and Targets	
Project/Program Timeline	
Expected start date of implementation ⁷	N/A
Expected end date of implementation ⁸	N/A
Expected investment lifetime in years (for estimating lifetime targets)	20
Core Indicators	Targets⁹
GHG emission reduced over lifetime (tonnes of CO ₂ -eq)	1,500,000
Annual GHG emission reduced (tonnes of CO ₂ -eq/year) ¹⁰	74,700
Installed capacity of renewable energy (MW)	100
Number of additional passengers using low-carbon transport per day	N/A
Energy savings cumulative over lifetime of investment (MWh)	N/A
Annual energy savings (MWh/year) ¹¹	N/A
Identify relevant development impact indicator(s)	Targets

⁵ Same as footnote 3.

⁶ Same as footnote 3.

⁷ Insert N/A if dates cannot be determined at the time of submission (e.g. private sector programs).

⁸ Same as note 7.

⁹ Insert value or N/A if indicator is not applicable to the project/program.

¹⁰ Choice of upon completion of the project/program, or on the maximum year, or on a representative year.

¹¹ Same as note 10.

17. Co-financing		
	Please specify as appropriate	Amount (in million USD)
• MDB 1	IFC	30
• MDB 2 (if any)		
• Government		
• Private Sector		70
• Bilateral		
• Others (please specify)		
Total		100
18. Expected Date of MDB Approval		
Given the complexity of the market and early stage of the sector development, investments may take as long as through 2019 to reach IFC Board approval		

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