Clean Technology Fund (CTF)

India Grid-Connected Rooftop Solar Program (P155007)

Responses to Comments from the United States and Germany received on December 18th, 2015

Comment	Team Response
United States	
Based on the size of the project, we're surprised to see that there are not multiple commercial banks involved. Why is SBI the only commercial bank involved in the project?	There are two MDBs and one bilateral involved in the India Rooftop PV program. Specifically, the Asian Development Bank and KfW are also helping the Government of India stimulate lending for GRPV through parallel programs that are being implemented through Punjab National Bank and Indian Renewable Energy Development Agency, respectively. Each external partner has been assigned to develop the program in great depth at one particular financial entity in the initial phase, because the Government of India would like there to be a number of options for rooftop developers, aggregators and customers interested in borrowing for GRPV and has accordingly assigned each lender to set up these three programs with a different large domestic lending institution. It is expected that these three programs will facilitate learning on different models of rooftop development in the country. Once these three Indian lending institutions, which have nationwide reach and presence, have successfully implemented their respective rooftop programs and established track records based on their individual portfolios, the learnings will be shared with other domestic commercial banks.
We echo Germany's request to include local content requirements in the risk matrix. We also note that when reviewing the revised Investment Plan, we inquired about the status of LCRs in forthcoming projects and the World Bank recommended that they be discussed on an individual project basis. The proposal, however, provides no mention of possible LCRs. We request a more in-depth discussion about LCRs and how they may affect the project.	The proposed project does not have any requirements for local content. The specifications for eligible panels which are being developed will have no bias in favor of local or any other panels. The proposed project is mainly targeted at industrial and commercial customers who are not eligible for Government subsidy and hence do not have to comply with local content requirements. In addition, due to inefficiencies in distribution of government subsidy, many customer who otherwise qualify for subsidy (e.g. residential and government buildings) are also foregoing the subsidy and choosing to procure internationally. In any case given the economics of Rooftop PV in India at the moment, it is the industrial and commercial consumers who pay the highest tariffs to the discom and therefore these are the obvious first movers to rooftop PV to meet at least a part of their electricity requirements at a lower unit cost than they can obtain from the grid. In many states, residential customers still pay below the cost of Rooftop PV power and therefore are unlikely to switch over. As a result, on a practical level, the team does not see LCR to be a major risk for the program. However, the team takes note of this request, and will include discussion on LCRs in the program document.

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United States	
While the proposal indicates that it has "a focus on mobilizing private sector investments and commercial lending," it requests a significant amount of public sector resources without much specificity as to the source or nature of that private sector financing. What sources of private sector investment does the proposal seek to tap? Primarily equity from project developers and aggregators? Have future partners already been identified? Please provide some additional discussion on this topic.	Private sector investors are required to put in at least 30% of project costs as equity, since SBI will never lend more than 70% of project cost. SBI is already seeing interest for its debt fund from several large developers and aggregators. Once the program is approved, SBI expects to move quickly to sign up prospective customers. In addition, it is worth noting that the program aims to build SBI's capacity to lend for GRPV by enabling it to pilot a debt fund for GRPV. This program will enable SBI to get a better sense of the risk profile, technical requirements and performance characteristics of the GRPV market. Upon the conclusion of the program, SBI is committed to launching a second phase of the program with its own resources and in syndication with other Banks. Apart from inquiries to SBI from third party owners like aggregators and large developers of rooftop PV, there are also third party investors who want to own panels on rooftops in order to seek fiscal benefits. They are neither the aggregator nor the rooftop owner, and they operate under a different business model. They buy large numbers of panels and enter an agreement with an aggregator to find willing rooftop owners who wish to host these panels (or lease them) and buy electricity. This shows a few of the ways in which private investment is mobilized for Rooftop PV.
The proposal targets commercial lending in the rooftop sector. Will solar rooftop count against existing concentration limits for the energy sector? If not, why not?	Recently there was a directive from the Reserve Bank of India (which regulates commercial banks) to indicate that power sector exposure limits would be separate from renewable energy exposure limits.
Have structures been contemplated as to how to finance grid connected rooftop PV? What phase of the proposed program will the deal structures be considered? Has there been any thought given to structuring these transactions with a securitization in mind, which would involve standardizing documents and credit enhancements to get bond holders comfortable with investing?	Currently there is no debt available for GRPV in the market. In this context, this program aims to fill this gap by helping set up the first debt fund for GRPV in the country. The program aims to stimulate third party owned models of GRPV development, which will facilitate large scale installations and market aggregation of rooftop PV. Securitization transactions are not the primary focus as banks in India do not like to sell down well-performing assets. This was repeatedly observed with loans made to the thermal power sector and to the hydro sector, when banks were offered opportunities to refinance their loans through selling off part of the book through securitization and asset backed bonds. The concept did not take off as commercial banks were unwilling to participate in releasing their assets. Thus while the program does not explicitly focus on structuring transactions with securitization, it is expected that the program will help grow the GRPV market in India to a stage where such transactions could be envisaged.

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United States	
There appears to be a discrepancy between the estimated costs of CO2 reduction between the main document and the Annex. Can the World Bank please clarify which figure is correct?	In the main project appraisal document, the marginal abatement cost of GHG emission is calculated at US$ 1.5/ton (see page 18), which is also consistent with what is presented in the CTF Annex (see page 76). The marginal abatement cost was computed as the project's NPV divided by lifetime CO2eq avoided emissions. There is a different cost estimate to measures the cost effectiveness of CTF investment, simply dividing the CTF financing by lifetime GHG emissions avoided, which is US$ 8.4/ton (see page 70). Please be informed that they are two different measures.
Germany	
Please ensure the reliable mechanisms will be in place for batteries that have exhausted their lifetime to be collected/recycled to avoid environmental hazards.	The program indeed plans to institute reliable mechanisms for disposal of batteries. This issue is being covered in the Bank environment safeguard assessment and SBI has agreed to mainstream such requirements in the program.
We would also suggest to include in the risk matrix the issue of local content requirements in order to get access to the 30% subsidy provided by the Indian government. As far as we know there is currently a court case initiated by the US against India at WTO, which in the first hearing has been decided against India.	See above for detailed discussion on this. As advised, we will include a discussion on risks associated with LCR in the risk matrix.