



Shared Infrastructure for Solar Parks - Phase I

Country / Region: **India** | Project Id: **XCTFIN210A** | Fund Name: **CTF** |

MDB : **International Bank for Reconstruction and Development**

Comment Type	Commenter Name	Commenter Profile	Comment	Date
Comment 1	Kate Robinson	United Kingdom	The UK is happy to approve USD 50.0 million (USD 48.0 million in softer-term loan and USD 2.0 million in grant) for the proposal entitled, India: Shared Infrastructure for Solar Parks Project; and, USD 30.0 million in softer-term loans for the proposal entitled, India: Transmission for Power Evacuation from Solar Parks Project, submitted by the Government of India and the World Bank. Please note, as for all the India Solar projects, we would expect the project team to consider whether there is the possibility of utilizing local manufacturing and help local manufacturers develop their capacity if required. This would therefore result in an increase in the number of jobs generated by the project. Given the scale and ambition of this project we think that appropriate consideration should be given to conducting an independent evaluation either focusing on the solar projects or even all the projects under the India IP.	Jan 12, 2016
Comment 2	Abu Zaki	United Kingdom	The UK is pleased to approve the phased funding approach proposed by the Government of India and the World Bank for India: Shared Infrastructure for Solar Parks Project. However there are some minor consistency and data quality issues raised in the proposal which should be addressed, but these should not delay the approval. <ul style="list-style-type: none"> • It appears that the project attributes all the GHG emission saving to the CTF funding. We request the World Bank to ensure that GHG emission savings are calculated and attributed to funders in a proportionate and consistent manner, and avoid duplication of reporting between different sub-components of this project. • The economic rate of return has been halved from 7% in the original proposal to 3.5% in the phased delivery. Can the World Bank team confirm that the ERR has not fundamentally changed from the original proposal 	Oct 31, 2016
Comment 3	Batley Waqas	United Kingdom	We would be grateful for further information on the following: MNRE representatives and others at the recent CTF solar event in Delhi were suggestions concessional finance no longer needed as infrastructure costs could be recouped from developers. Is there need for Concessional Finance here? We would also be grateful for further information on the pipeline and the readiness of the sub projects.	Sep 12, 2018
Response 1	Nadia Taobane	IBRD	Regarding the need for concessional financing: There are two models on which solar parks are working in India. One where infrastructure costs (upfront fee and user charges) are spread over longer tenor of the project and hence reflected in lower discovered tariffs (for instance, Rewa Solar Park). The other model is where such infrastructure costs are recouped upfront by the solar park developers. Some state implementing agencies prefer the latter model as it reduces their stake (by not investing any money) in the solar park. However, one of the most important challenge in this model is payment of high upfront infrastructure costs by the private sector players without having assurance of timely handing over of land and availability of transmission evacuation system, amongst others, putting the entire project (and private players' investments) at risk. Thus, even though the latter model seems to be more prevalent than the former, the challenges are being observed in the pace of uptake of solar parks. Given the above context, the World Bank project is helping replicate good practices from the previously successful parks (based on first model) including those under Phase-I. The CTF funds are a critical pillar to the World Bank's engagement in Solar Parks as concessional long-term financing helps the project developers in spreading the costs over longer tenor leading to lower tariffs benefitting the end-consumer and making the energy mix of the country greener and cleaner. A detailed assessment of the REWA solar bids comparing this solar park model (where CTF and World Bank concessional financing played a significant role) to other similar bids in the country (including some with solar parks) has been	Oct 05, 2018



completed.

Key findings from this study confirm the importance of using concessional funds for solar parks in India.

The competitive terms and conditions offered reflect in the tariff proposed by the bidders. The longer tenor of the loan has enabled to spread the user charges over the longer period, contributing to lower significantly upfront fee as well as lower NPV of user charges.

The involvement of World Bank has brought the confidence in the international developers that land and safeguards issues have been duly taken care of and hence brought them to the state tender for the first time, increasing competition and impacting positively the results of the tender.

Regarding the Phase II pipeline of projects:

Like the Phase-I of the project, the Phase-II will also be supporting the Solar Parks under the "Solar Park Scheme" of the Government of India. The borrower for the project would be IREDA (same as Phase-I), which would on-lend to utilities that could be purely public sector owned (for instance, in case of Himachal Pradesh and Tamil Nadu) or joint ventures/SPV between public sector (51%) and private sector (49%) in case of private sector parks.

The World Bank team along with IREDA is in discussions with multiple solar park developers and the states to gauge their interest. Some of the more advanced parks being considered for the Pipeline for Phase-II are:

1. Solar parks under public-private ownership - IREDA has reached out to private sector players of which about 4 players have shown interest in exploring funding through World Bank-CTF project. The preliminary estimates are to set up cumulative solar capacity of about 1 GW with each park ranging from about 50 MW to 250 MW and spread across states of Maharashtra, Gujarat, and Rajasthan amongst others.
2. Himachal Pradesh – in Lahaul-Spiti region where there exist a huge potential of installing solar projects. The estimated potential is in the range of 5 GW, however the immediate focus is to bring along at least 1 GW. As transmission line has a long gestation period compared to solar project installation, the emphasis is being laid on initiating the work on establishing evacuation infrastructure for such potential solar projects. The team is conducting a scoping mission along with state government officials in the middle of October to take this process forward. Preliminary technical due diligence has already been done by the client. Based on the visit, detailed technical studies will be further undertaken.
3. Tamil Nadu – a 500 MW solar park has been approved by MNRE under Phase-II of the Solar Park Scheme for which the solar park implementing agency has reached out to the World Bank for possible support. The detailed project report is in final stages of preparation by the state implementing agency and will be taken forward from there.

Response 2 Batley Waqas United Kingdom

Thank you for the additional information and responding to our comments. The UK is content to agree to the request and looks forward to the project's successful implementation.
Regards,
Waqas Batley

Oct 10, 2018