UNDP Management Response Template

MID TERM REVIEW - Removal of Barriers to Solar PV Power generation in Mauritius, Rodrigues and Outer Islands Date: 23 June 2015 Position: Environment Programme Analyst Unit/Bureau: UNDP Mauritius Country office

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Unit/Bureau:

Overall comments:

Although the cost of power generation using solar PV technology has come down (due to a general trend of reduction in the capital cost of solar PV and fiscal measures by the connected solar PV facilities and the consulting assignment to Mercados for MSDG. The project has been instrumental in the establishment of grid-connected solar PV power in order to achieve the planned objectives, outputs and outcomes of the project, an extension of time will be required. We conclude that the project has been instrumental in regulatory barriers (long time required to receive clearances) still remain. Some of the remaining barriers will be addressed during the remaining implementation period. However, The project has partially succeeded in doing so. Some technology (availability of solar resource data), financial (need for support by fiscal incentives due to viability gap) and The project was intended to remove a number of legal, regulatory and market barriers which hamper realisation of the potential of solar PV energy for on-grid electricity generation based technologies., In view of this gap, any further capacity addition will still require the feed-in tariff support or other matching fiscal incentives. Government, including a reduction in VAT, no land-use conversion charges etc.), there is still a difference in the cost of generation using solar PV technology and other fossil fuel-Government. This became possible as the project supported the difference in tariff between the fossil fuel power plants and the cost of procurement of power from solar PV plants. generation facilities in Mauritius. The project has been able to create capacity of about 10 MW, which is the target capacity by 2025 for solar PV as per the strategy of the The achievements of the project up to the time of MTR are largely attributable to the proactive actions by CEB to engage with the private sector towards the creation of grid-

Evaluation Recommendation or Issue 1: Time extension of 15 months until the end of 2016 to complete the project

lowering many of the barriers towards grid-connected solar PV in Mauritius; however, the barriers have not been wholly removed

utilisation of funds for feed-in tariff support provided to the beneficiaries, formalisation of regulations based on the recommendations of the consultants, etc the project in September 2015. This is despite significant progress having already been made towards achievement of results. Notable results which can be achieved during the recommended extension of time are the creation of the 'Solar Map', operationalisation of solar PV facilities being supported under the project, disbursement and monitoring of There was delay of about two and half years in the start of the project. Accordingly, most of the outcomes and outputs of the project will not be achieved by the scheduled end of

Key Action(s) Time Frame	rame	Responsible Unit(s)	Track	ring*
		7	Status	Comments
1.1. Project extension will be requested from UNDP GEF for up June 2015	15	UNDP CO		

Recruitment of a full-time Project Assistant, to provide support to accelerate implementation of the project

seat. It is recommended that UNDP recruits a full-time project assistant to provide dedicated support to the project team. members of CEB (one fulfilling the responsibility of project manager and the other the responsibility of Project Assistant), who maintain their regular job responsibilities. Due to lack of dedicated human resources, some of the project management activities such as preparation of work plans, coordination, stakeholder consultations etc. at times take a back The start of the project was delayed due to persistent failure to recruit a project manager by MEPU. Presently, project management has been entrusted to two full-time staff

Key Action(s)	Time Frame	Responsible Unit(s)	Trac	king
			Status	Comments
2.1. Recommendation will be put as an item of the agenda of the July 2015	July 2015	UNDP CO		



next steering committee.				
Evaluation Recommendation or Issue 3: Easier environmental clearance procedures for solar PV plant projects	arance procedures for solar PV plant proj	ects		
Current regulations require solar PV projects to undergo a complete EIA, in order to obtain a formal environment clearance, which is time consuming (as mentioned in the log frame (outcome 1.4) the average time to secure all required construction licenses and permits can take up to 12 months). Discussions with the private sector solar PV facilities being supported under the GEF project, revealed that EIA for the projects may take anywhere from 6 months to 12 months. It is recommended that an outcome be added to examine the possibility of having faster environment clearance procedures (without comproment integrity). One possibility that may be examined in this recond	go a complete EIA, in order to obtain a formal environment clearance, which is time consuming (as mentioned in the log quired construction licenses and permits can take up to 12 months). Discussions with the private sector solar PV facilities EIA for the projects may take anywhere from 6 months to 12 months. It is recommended that an outcome be added to clearance procedures (without compromising environment integrity). One possibility that may be examined in this regard is to	clearance, which is time consunts. Discussions with the primonths. It is recommended the regrity. One possibility that m	ning (as mentionec vate sector solar PN at an outcome be a	I in the log V facilities dded to
have recourse to a PER (Preliminary Environmental Review) instead of a full EIA. Management Response: Facilitating the implementation of PV plans has always been one of the core aims of the project. Therefore the recommendation will be	full EIA.	aims of the project. Therefore	re the recommen	dation will be
taken up with the relevant authorities in view of easing the EIA process.	ocess.	anns of the project. Therefore		dation will be
Key Action(s)	Time Frame	Responsible Unit(s)	Tracking	king
2.1 Discussion to the control of the	1.1.0016		Status	Comments
5.1 Discussion to be initiated at the next steering committee with the representative of the Ministry of environment	July 2015	Project manager		
Evaluation Recommendation or Issue 4: Initiate activities related to outreach and communication	to outreach and communication			
Outreach, information dissemination, communications and awareness creation activities have not yet been taken up. Considering that such activities have a multiplier effect towards achievement of the objectives and the results it is recommended that dedicated efforts be made towards this commonent (Output 8) of the provisor	s and awareness creation activities have not yet been taken up. Considering that such activities have it is recommended that dedicated efforts be made towards this commonent (Outwit 5) of the project	Considering that such activities commonent (Outsut 5) of the	ies have a multiplic	r effect
	be requested with initiating this comp	onent asap as the other com	ponents are now	well on track
Key Action(s):	Time Frame	Responsible Unit(s)	Tracking	cing
			Status	Comments
4.1 Discussion to be initiated at the next steering committee	July 2015	Project management team		
Evaluation Recommendation or Issue 5) Follow-up activities f	Follow-up activities for acceptance of recommendation of consultants for regulations	consultants for regulations		
Consultants were appointed to suggest policy, legal and regulatory measures for the solar PV sector. As the consultants have submitted their report, the work progress reports show the activities of regulatory measures as completed. It needs to be appreciated that the indicators on achievement do not relate to the completion of studies but, rather, to having regulations in place. The steering committee should follow up regularly with the Government on the recommendations by the consultants to ensure issuance of the regulatory measures. Until such time regulations are in place, these corresponding	gal and regulatory measures for the solar PV sector. As the consultants have submitted their rep measures as completed. It needs to be appreciated that the indicators on achievement do not reations in place. The steering committee should follow up regularly with the Government on the suance of the required regulatory measures. Until such time regulations are in place, these corre	the consultants have submeter indicators on achiever up regularly with the Gover time regulations are in plac	itted their report, ent do not relate nment on the e, these correspoi	the work to the nding
outcomes and activities should not be shown as completed.	A			
Management Response: The consultancy assignment for the policy and regulatory part is not financed by the UNDP GEF project but by AFD under a separate consultancy. Therefore as and when the regulations will be finalized, the project will follow up with the MEPU to ensure that they are enforced.	y and regulatory part is not financed ed, the project will follow up with the	by the UNDP GEF project MEPU to ensure that they	out by AFD unde are enforced.	r a separate
Key Action(s)	Time Frame	Responsible Unit(s)	Tracking	ding
			Status	Comments
5.1 Project team to liaise with the MEPU representative on the steering committee to be appraised of progress	July 2015	Project management team		



Currently, there is no mechanism to monitor record and report co-financing to the project. It is recommended that procedures be developed for project

Evaluation Recommendation or Issue 6) Monitor and report co-financing

project management team to start to monitor level of co-financing 6.1 Discussion will be initiated at the next steering committee and Key Action(s) Management Response: The project management team will be requested to monitor co-financing as part of the next PIR exercise management to monitor record and regularly report co-financing to the project. July 2015 Time Frame Project Management Responsible Unit(s) Status Tracking Comments

Evaluation Recommendation or Issue 7) Organise capacity building for private sector and financial personnel

capacity building management companies), and financial institutions (commercial banks, leasing and hire-purchase companies) be closely involved while creating awareness and measures to the lending institutions has a multiplier impact. It is recommended that officials of the private sector (solar PV suppliers / installers, facilities To promote private sector investment, awareness creation, capacity building and training of private sector personnel play an important role. Applying such

to be part of the training. Management Response: The consultancy for capacity building for financial personnel will be awarded by July 2015. The private sector has already been invited

Key Action(s)	Time Frame	Responsible Unit(s)	Track	ing
			Status	Comments
7.1 Training activities to take place in the coming months	July 2015	Project management		
following award of contract		team		
Evaluation Recommendation or Issue 8) Technical training for grid connectivity at higher voltage	for grid connectivity at higher volt	age		

mig for grid connectivity at might voltage

solar PV be organised in this field is recommended that appropriate training courses for the trainers of MITD (Mauritius Institute of Training and Development) and or the technicians working on small-scale PV systems are connected to the grid at lower voltage. As medium-scale and large-scale solar PV need to be connected to the grid at higher voltage, it Under the SSDG programme run by the Government prior to this project, training courses were carried out to ensure availability of trained manpower. However,

Management Response: It is agreed that one of the objectives of the project was to assist in the training of technicians for the installation of PV systems. The MITD will be contacted and possibility of the project assisting with this training will be examined.

8.1 Discussion will be initiated at the next steering committee and meeting to be called with MITD once budget available is reassessed. Status Comment Project management team	Key Action(s)	Time Frame	Responsible Unit(s)	Tracl	king
e and July 2015				Status	Comments
	8.1 Discussion will be initiated at the next steering committee and meeting to be called with MITD once budget available is re- assessed.	July 2015	Project management team		

already carrying out relevant research work on the assessment of solar resources that the possibilities of collaborating with University of Mauritius (while preparing an RFP for Outcome 3.1) be explored. It is also notable that the University is data are required, thus it would take about 15 months to prepare the solar map). In order to optimally utilise the available resources and time, it is recommended Deployment of pyranometers at different locations to collect data and subsequent preparation of the solar map is a time-consuming process (generally year-long



Management Response: One of the objectives of the project was to purchase pyranometers to assist in solar mapping. An assignment is currently ongoing in view of developing a more accurate solar map for Mauritius. The University researcher will be invited to a steering committee in order to look into the possibility of collaboration.

Key Action(s)	Time Frame	Responsible Unit(s)	Trac	king
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9.1 Discussion will be initiated at the next steering committee	July 2015	Project management		
and meeting to be called with MITD		team		

(for capacity building, awareness creation, training etc.) and financial support (to provide fiscal incentives such as feed-in tariff support, subsidies, etc.) from the support or through other fiscal measures (grants, subsidies, interest rate draw-down support etc.). It is recommended that possibilities to obtain technical support technologies. Thus, it will be necessary to continue to provide fiscal incentives for future PV installations. Such incentives may be provided as feed-in tariff In the foreseeable future, the cost of generation of electricity using solar PV technology is unlikely to be at par with the cost of generation using fossil fuel Green Climate Fund be explored. Management Response: A proposal for the GCF is currently in preparation. However, preliminary feedback received from the GCF Secretariat indicates that the GCF does not want to support Feed in Tariffs in the long-term, nor bind government into long-term subsidies.

10.1 GCF proposal in preparation July 2015 UNDP CO Comments	Key Action(s)	Time Frame	Responsible Unit(s)	Trac	king
July 2015 UI				Status	Comments
	10.1 GCF proposal in preparation	July 2015	UNDP CO		

The implementation status is tracked in the ERC.

