



GEF SECRETARIAT REVIEW FOR FULL/MEDIUM-SIZED PROJECTS*
THE GEF/LDCF/SCCF TRUST FUNDS

GEF ID:	5063		
Country/Region:	Iraq		
Project Title:	Catalysing the Use of Solar Photovoltaic Energy		
GEF Agency:	UNDP	GEF Agency Project ID:	5137 (UNDP)
Type of Trust Fund:	GEF Trust Fund	GEF Focal Area (s):	Climate Change
GEF-5 Focal Area/ LDCF/SCCF Objective (s):	CCM-3; CCM-3; Project Mana;		
Anticipated Financing PPG:	\$0	Project Grant:	\$2,227,273
Co-financing:	\$10,255,000	Total Project Cost:	\$12,482,273
PIF Approval:		Council Approval/Expected:	
CEO Endorsement/Approval		Expected Project Start Date:	
Program Manager:	David Elrie Rodgers	Agency Contact Person:	Robert Kelly

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion ¹	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
Eligibility	1. Is the participating country eligible?	DER, August 9, 2012. Yes.	
	2. Has the operational focal point endorsed the project?	DER, August 9, 2012. Yes. Dr. Ali Al-Lami, Ministry of the Environment, endorsed the project on August 7, 2012 with a total amount of \$2,538,000.	
Agency's Comparative Advantage	3. Is the Agency's comparative advantage for this project clearly described and supported?	DER, August 9, 2012. Yes.	
	4. If there is a non-grant instrument in the project, is the GEF Agency capable of managing it?	DER, August 9, 2012. Yes.	
	5. Does the project fit into the Agency's program and staff capacity in the country?	DER, August 9, 2012. Yes.	
	6. Is the proposed Grant (including the		

*Some questions here are to be answered only at PIF or CEO endorsement. No need to provide response in gray cells.

¹ Work Program Inclusion (WPI) applies to FSPs only. Submission of FSP PIFs will simultaneously be considered for WPI.

FSP/MSP review template: updated 11-22-2010

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Resource Availability	Agency fee) within the resources available from (mark all that apply):		
	• the STAR allocation?	DER, August 9, 2012. Yes.	
	• the focal area allocation?	DER, August 9, 2012. Yes. The endorsement letter approves \$2,538,000 which is the entire CCM focal area allocation for Iraq.	
	• the LDCF under the principle of equitable access	DER, August 9, 2012. NA	
	• the SCCF (Adaptation or Technology Transfer)?	DER, August 9, 2012. NA	
	• Nagoya Protocol Investment Fund	DER, August 9, 2012. NA	DER, August 9, 2012. NA
	• focal area set-aside?	DER, August 9, 2012. NA	
Project Consistency	7. Is the project aligned with the focal /multifocal areas/ LDCF/SCCF/NPIF results framework?	DER, August 9, 2012. Yes.	
	8. Are the relevant GEF 5 focal/ multifocal areas/LDCF/SCCF/NPIF objectives identified?	DER, August 9, 2012. Yes. The project supports CCM-3, renewable energy.	
	9. Is the project consistent with the recipient country's national strategies and plans or reports and assessments under relevant conventions, including NPFE, NAPA, NCSA, or NAP?	DER, August 9, 2012. Yes.	
	10. Does the proposal clearly articulate how the capacities developed, if any, will contribute to the sustainability of project outcomes?	DER, August 9, 2012. Yes. The proposed policy development should lead to replication after the project is over.	
	11. Is (are) the baseline project(s), including problem (s) that the baseline project(s) seek/s to address, sufficiently described and based on sound data and assumptions?	DER, August 9, 2012. Yes. The baseline project is fairly well described. At CEO endorsement, please supply additional details on the role for IPP.	

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Project Design	12. Has the cost-effectiveness been sufficiently demonstrated, including the cost-effectiveness of the project design approach as compared to alternative approaches to achieve similar benefits?		
	13. Are the activities that will be financed using GEF/LDCF/SCCF funding based on incremental/additional reasoning?	DER, August 9, 2012. Yes. The proposed GEF activities will provide more focus on Solar PV opportunities which should lead to accelerated market penetration.	
	14. Is the project framework sound and sufficiently clear?	DER, August 9, 2012. Please address the following comments. Component 1 a) The general technology focus of the project appears to be distributed Solar PV for rooftops; distributed roof-top solar thermal to provide water heating; hybridized systems for AC/water; and small scale (1-2MW) solar PV power plants. Please check the consistency of the references to the technology throughout the PIF. b) The project puts a strong emphasis on distributed roof-top Solar PV air conditioning. There is also mention of hybridized systems that integrate Solar PV/thermal adsorption chillers. This technology has been proven expensive and challenging for years, and appears to have been moderately successful in larger scale commercial applications. If this project is planning to focus on small-scale residential applications then please justify how the cost and technology issues will be addressed. For example, would the project serve more customers more quickly and advance	

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		<p>solar penetration into the marketplace if the focus was on simple rooftop solar PV and solar hot water installations rather untested and likely expensive solar AC systems?</p> <p>d) We do not understand the reference to "off-grid" applications. In common parlance, we refer to centralized or distributed generation. Perhaps the project is trying to make a distinction between distributed roof-top Solar powered PV units that may never be grid-connected; or even small scale power plants (1-2MW) that may serve neighborhoods or communities that do not have grid access. But greater precision is needed. Is it realistic that roof-mounted solar PV systems in Baghdad will power AC, especially at night, without being grid-connected? We believe it is valuable for the project to examine the full range of options, including grid-connected systems, that might contribute to overall system efficiency. Please consider using the term "distributed" instead of off-grid. Please clarify that grid-interconnection will be addressed, including issues such as net-metering. (For example, see the recent PIF #5063 for Egypt for good coverage of grid inter-connection issues.)</p> <p>e) The concept for small scale distributed generation is valuable. However, we question the viability of a 1-2 MW system as being too small for consideration by IPP. As noted on page 9, this 1MW system would power only</p>	

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		<p>300-400 homes. Najaf is much bigger than that, and the project already proposes to implement 1,000 roof-top solar pv systems. So 1-2MW seems too small to attract the attention of future IPP. Please consider the option to be larger, such as 5MW or 10MW systems.</p> <p>Component 2</p> <p>f) This component is very important for the project success. We would like to see more emphasis placed on the development of regulatory schemes that better integrate Solar PV systems with other options, such as IPP. A policy on grid-interconnection for distributed PV systems is needed to ensure that investments are not stranded and that the utility will be required to buy solar generated power to help improve system efficiency. The policies developed should be inclusive of all Solar options, not just limited to Solar AC. Please confirm.</p> <p>g) Please use this project as an opportunity to generate and implement policy for renewable IPP. With a such a large gap between electricity supply and demand, IPP could be a true life-saver in meeting this gap over the next several years. IPP could potentially have much larger impact than roof-top systems. Please clarify.</p> <p>h) We are concerned over the language on page 9 that states: "...develop off-grid systems with minimal dependencies on existing infrastructure and institutional processes, which will help with isolation</p>	

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		<p>and identification of policy needs and financial incentives that will not have serious ripple effects on other Government policies in the wider power sector and the increasing private sector involvement in service delivery." It is highly optimistic to think that real progress on distributed generation with an opportunity to scale will not have "serious ripple effects." We believe it is vital that this effort been seen as a key element of broader energy policy development in an integrated fashion that leads to closing the demand/supply gap and improving system efficiencies. Utility politics are a reality and must be dealt with openly. Please clarify.</p> <p>Component 3</p> <p>i) Please provide greater precision distinguishing the activities in component 3 from component 2. Activity 3.1 appears to duplicate the policy options in 2.1. Please revise and justify.</p> <p>j) Component 3.4 appears to duplicate 1.2. Please revise and justify.</p> <p>k) In general, the distribution of roof-top systems should designed to lead to replication by testing roof-top systems in a variety of applications and across a variety of consumer groups. The PIF describes allocation of roof-top systems to civil servants. Please clarify how such allocation would be implemented and address concerns regarding fairness, equity, and replicability.</p>	

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		<p>DER, August 31, 2012.</p> <p>a) Thank for providing the clarification of "solar PV AC/water heater units." Comment cleared.</p> <p>b) The response makes a strong case that systems need to be designed for residential application when the grid may not be working. So the emphasis on Solar PV AC/water heating is appropriate for this project. Comment cleared.</p> <p>d) Clarification has been provided and grid integration is now included in the project. Comment cleared.</p> <p>e) The project will now aim for larger distributed Solar PV power plants that could attract IPP. Comment cleared.</p> <p>f) & g) & h) Project activities focused on regulatory schemes, utility policies and IPP issues are now included. We especially like the analysis to potentially redirect fossil-fuel subsidies to support renewable energy. Comments cleared.</p> <p>i) & j) The project sub-components have been aligned and duplication eliminated. Comments cleared.</p> <p>k) Distribution will be expanded beyond civil servants to include small businesses. Security issues will have to be addressed. Comment cleared.</p>	
	<p>15. Are the applied methodology and assumptions for the description of the incremental/additional benefits sound and appropriate?</p>	<p>DER, August 9, 2012. Please clarify how the benefits for the solar air conditioning systems are counted for 12 hours per day; yet the document mentions night-time cooling needs on page 5 of the PIF. Won't the need for</p>	

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		<p>storage systems further increase the complexity and cost of solar AC systems?</p> <p>DER, August 31, 2012. The response clarifies that night-time operation will involve grid inter-connection, which is now include as a project activity. Costs will be examined during the PPG phase. Comment cleared. At CEO endorsement, we expect a presentation on the unit costs for Solar PV AC/water heater units. Please also remember that this GEF project should not fund research and development, but should focus on demonstration and diffusion.</p>	
	<p>16. Is there a clear description of: a) the socio-economic benefits, including gender dimensions, to be delivered by the project, and b) how will the delivery of such benefits support the achievement of incremental/additional benefits?</p>	<p>DER, August 9, 2012. Yes.</p>	
	<p>17. Is public participation, including CSOs and indigeneous people, taken into consideration, their role identified and addressed properly?</p>	<p>DER, August 9, 2012. Yes.</p>	
	<p>18. Does the project take into account potential major risks, including the consequences of climate change and provides sufficient risk mitigation measures? (i.e., climate resilience)</p>	<p>DER, August 9, 2012. Yes.</p>	
	<p>19. Is the project consistent and properly coordinated with other related initiatives in the country or in the region?</p>	<p>DER, August 9, 2012. Yes.</p>	
	<p>20. Is the project implementation/ execution arrangement adequate?</p>	<p>DER, August 9, 2012. Yes.</p>	

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	21. Is the project structure sufficiently close to what was presented at PIF, with clear justifications for changes?		
	22. If there is a non-grant instrument in the project, is there a reasonable calendar of reflows included?		
Project Financing	23. Is funding level for project management cost appropriate?	<p>DER, August 9, 2012. No. The request for PMC is \$107,273. The maximum allowed is 5% of the GEF sub-total of \$2,120,000 which would be \$106,000.</p> <p>DER, August 31, 2012. Yes. The PMC has been reduced to \$106,000 and the released funds (\$1,273) have been added to Component 3. Comment cleared.</p>	
	24. Is the funding and co-financing per objective appropriate and adequate to achieve the expected outcomes and outputs?	<p>DER, August 9, 2012. Please see comments in box 14. We would like to see component 3 better defined or reduced in cost.</p> <p>DER, August 31, 2012. Component 3 is better defined and reduced in cost; funds have been transferred to Component 1. Comment cleared.</p>	
	25. At PIF: comment on the indicated cofinancing; At CEO endorsement: indicate if confirmed co-financing is provided.	<p>DER, August 9, 2012. The amount of national government co-financing is reasonable. Please increase the Agency co-financing. We would hope to see private sector co-financing to improve the co-financing ratio. Please clarify.</p> <p>DER, August 31, 2012. Agency co-financing has been increased. Additional private sector co-financing will be identified during the PPG phase. At CEO endorsement, please document all</p>	

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		confirmed co-financing. For example, please clarify if the financing provided by the Ministry of Electricity and the Model Town developers (up to \$12-15 million for the 5 MW solar PV power plant) can be listed as co-financing. Comment cleared.	
	26. Is the co-financing amount that the Agency is bringing to the project in line with its role?	DER, August 9, 2012. Yes.	
Project Monitoring and Evaluation	27. Have the appropriate Tracking Tools been included with information for all relevant indicators, as applicable?		
	28. Does the proposal include a budgeted M&E Plan that monitors and measures results with indicators and targets?		
Agency Responses	29. Has the Agency responded adequately to comments from:		
	• STAP?	DER, August 9, 2012. NA	
	• Convention Secretariat?	DER, August 9, 2012. NA	
	• Council comments?		
	• Other GEF Agencies?	DER, August 9, 2012. NA	
Secretariat Recommendation			
Recommendation at PIF Stage	30. Is PIF clearance/approval being recommended?	DER, August 9, 2012. Not at this time. The PIF is well developed but a few comments need to be addressed. Please respond to comments in boxes 14, 15, 23, 24, and 25. DER, August 31, 2012. Yes. The PIF has been technically cleared and may be included in an upcoming Work Program.	
	31. Items to consider at CEO endorsement/approval.	DER, August 9, 2012. a) Please carefully respond to the issues about grid-integration and coordination	

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		<p>among IPP, utility providers, and distributed generation. Policies for grid-inter-connection may be very important.</p> <p>DER, August 31, 2012</p> <p>b) At CEO endorsement, we expect a presentation on the unit costs for Solar PV AC/water heater units.</p> <p>c) Please include documentation in the CEO endorsement clarifying that this GEF project will not fund research and development, but will focus on demonstration and diffusion.</p> <p>d) Please document private sector co-financing opportunities and include all confirmed co-financing.</p>	
Recommendation at CEO Endorsement/ Approval	32. At endorsement/approval, did Agency include the progress of PPG with clear information of commitment status of the PPG?		
	33. Is CEO endorsement/approval being recommended?		
Review Date (s)	First review*	August 09, 2012	
	Additional review (as necessary)	August 31, 2012	
	Additional review (as necessary)		
	Additional review (as necessary)		
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* **This is the first time the Program Manager provides full comments for the project. Subsequent follow-up reviews should be recorded. For specific comments for each section, please insert a date after comments. Greyed areas in each section do not need comments.**

REQUEST FOR PPG APPROVAL

Review Criteria	Decision Points	Program Manager Comments
PPG Budget	1. Are the proposed activities for project preparation appropriate?	DER, August 9, 2012. Some of the components make sense, such as the stakeholder consultations and component design for the project. However, the

		<p>market assessment appears very expensive and duplicative of project activities.</p> <p>a) Consider dropping the market assessment from the PPG; or else remove duplicate activities in the PIF.</p> <p>b) The length of time for the PPG - 11 months - is much too long. Considering the preparatory work by UNDP in Iraq, this project design can take place much faster in our view. Please comment.</p> <p>DER, August 31, 2012.</p> <p>a) The market assessment cost has been reduced; analysis of IPP regulatory issues has been added. Comment cleared.</p> <p>b) PPG has been reduced to 9 months. Comment cleared.</p>
	2. Is itemized budget justified?	<p>DER, August 9, 2012. We understand UNDP has already performed significant consulting with Iraq and developed numerous partnerships. Given that the project includes significant analysis and assessment, the need for the PPG at this budget level is not clear. Please consider dropping the market assessment and re-directing the \$50,000 for other project components.</p> <p>DER, August 31, 2012.</p> <p>The market assessment cost has been reduced; analysis of IPP regulatory issues has been added. Comment cleared.</p>
Secretariat Recommendation	3. Is PPG approval being recommended?	<p>DER, August 9, 2012. Not at this time. Please address the comments.</p> <p>DER, August 31, 2012. Yes.</p>
	4. Other comments	
Review Date (s)	First review*	August 09, 2012
	Additional review (as necessary)	August 31, 2012

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