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

GEF ID:	**5287**		
Country/Region:	**Panama**		
Project Title:	**Solar Water Heater Market Development and Energy Efficiency Project**		
GEF Agency:	**UNEP**	GEF Agency Project ID:	
Type of Trust Fund:	**GEF Trust Fund**	GEF Focal Area (s):	**Climate Change**
GEF-5 Focal Area/ LDCF/SCCF Objective (s):		**CCM-2; CCM-3;**	
Anticipated Financing PPG:	**$45,660**	Project Grant:	**$1,918,182**
Co-financing:	**$8,142,000**	Total Project Cost:	**$10,151,502**
PIF Approval:	**May 01, 2013**	Council Approval/Expected:	
CEO Endorsement/Approval		Expected Project Start Date:	
Program Manager:	**Ming Yang**	Agency Contact Person:	**Emile GUEI (GROUPE EOULEE)**

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**?	ANW, February 27, 2013: Yes	MY 8/15/2014 Yes.
	2. Has the **operational focal point** endorsed the project?	ANW, February 27, 2013: Yes	
Resource Availability	3. Is the proposed Grant (including the Agency fee) within the **resources available** from (mark all that apply):		
	• the STAR allocation?	ANW, February 27, 2013: Yes, the CC Allocation is US$2,160,000 which is within the funding requested by the proposed project. The $2,160,000 requested includes project preparation cost, project cost and agency fees.	MY 8/15/2014 Yes.
	• the focal area allocation?	N/A	MY 8/15/2014

*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.

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion [1]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
			Yes.
	• the LDCF under the principle of equitable access	N/A	MY 8/15/2014 N/A
	• the SCCF (Adaptation or Technology Transfer)?	N/A	MY 8/15/2014 N/A
	• the Nagoya Protocol Investment Fund	N/A	MY 8/15/2014 N/A
	• focal area set-aside?	N/A	MY 8/15/2014 N/A
Strategic Alignment	4. Is the project aligned with the focal area/multifocal areas/ LDCF/SCCF/NPIF **results framework and strategic objectives**? *For BD projects: Has the project explicitly articulated which Aichi Target(s) the project will help achieve and are SMART indicators identified, that will be used to track progress toward achieving the Aichi target(s).*	ANW, February 27, 2013: Yes, the project is aligned with CCM-2 and CCM-3 Strategic objectives.	MY 8/15/2014 Yes. It is aligned with CCM-3: Promote Investment in Renewable Energy Technologies.
	5. Is the project consistent with the recipient **country's national strategies and plans** or reports and assessments under relevant conventions, including NPFE, NAPA, NCSA, NBSAP or NAP?	ANW, February 27, 2013: Yes, the project is consistent with the Second National Communication of Panama which lists a range of climate change mitigation options in the energy sector, including solar PV and thermal energy as well as energy efficiency options (efficient boilers, water heaters,lighting and motors) and specifically mentioning solar heating as a mitigation option. The project is also in line with Panama's energy policy which promotes and provides incentives for renewable energy development.	MY 8/15/2014 Yes, as in the PIF.
	6. Is (are) the **baseline project(s),** including problem(s) that the	ANW, February 27, 2013: a) Please strengthen the demonstration of	MY 8/15/2014 Yes.

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion [1]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
Project Design	baseline project(s) seek/s to address, sufficiently described and based on sound data and assumptions?	the incrementality of this project as solar water heating (SWH) is a commercially viable and an available technology. b) Please clarify the key or the main barriers the proposed project intends to remove. ANW, April 5, 2013: a) According to the Agency, the technology has failed to make substancial inroad, despite efforts of some Panamanian companies and institutions to promote the technology, which is mainly due to its higher up-front cost in comparison with other water heating technologies. Comment cleared b) Barriers identified in the PIF. Comment cleared	The barriers to preventing SWH systems from development in Panama are stated on page 16 in Section A.5.
	7. Are the components, outcomes and outputs in the **project framework** (Table B) clear, sound and appropriately detailed?	ANW, February 27, 2013: a) Please clarify how the proposed project will work with local financial institutions to provide affordable financing to the end-user who will purchase the solar water heater equipment b) Please clarify how the project intends to reduce the cost of solar water heaters for the end-user in the long run ANW, April 5, 2013: a) Explanation provided. Comment cleared. b) Explanation provided. Comment cleared	MY 8/15/2014 Not at this time. Please put a quantitative target for each of the expected outputs where applicable. In expected output 1.1 on page 1, for example, please indicate the number of SWH-relevant regulation and policy instruments, and recommended policy framework to be reviewed. For outputs 2.1, 2.2, 2.3, 2.4, 3.3, and 4.2, the GEF Secretariat also expects indicative numbers to be shown in Table B (Project Framework). In particular, for output 4.2, please specify it in square meters of SWH equipment. These numbers will help justify the budget of the GEF fund. MY 10/10/2014

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion [1]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
			Not at this time. Please see the above comments and address them. While dogging so, the agency needs to put most important numbers such as the total targeted amount of solar water heater installations in both unit and in MWth, the number of policy initiatives, financial mechanisms, standards to be verified, etc. etc. MY 12/16/2014 Yes. Comments cleared.
	8. (a) Are global environmental/ adaptation benefits identified? (b) Is the description of the incremental/additional reasoning sound and appropriate?	ANW, February 27, 2013:Yes	MY 8/15/2014 Yes.
	9. 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?		MY 8/15/2014 Yes, on page 30.
	10. Is the role of public participation, including CSOs, and indigenous peoples where relevant, identified and explicit means for their engagement explained?	ANW, February 27, 2013:Yes	MY 8/15/2014 Yes, CSOs are engaged in project investments (page 3). But the main text of the CEO ER document does show any information on indigenous peoples. Please indicate if the project is relevant to indigenous peoples. MY 10/10/2014 Not at this time. The agency responded the comments but

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion [1]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
			did not revise the GEF ER document. Please revise it accordingly. MY 12/16/2014 Yes. Comments were cleared.
	11. Does the project take into account potential major risks, including the consequences of climate change, and describes sufficient risk mitigation measures? (e.g., measures to enhance climate resilience)	ANW, February 27, 2013:Yes	MY 8/15/2014 Not completed at this time. Please identify the risk due to the consequences of climate change. MY 10/10/2014 Not at this time. The agency responded the comments but did not revise the GEF ER document. Please revise it accordingly. MY 12/16/2014 Yes. Comments were cleared.
	12. Is the **project consistent and properly coordinated** with other related initiatives in the country or in the region?	ANW, February 27, 2013: a) The National Environment Authority (ANAM) is the executing partner for this project, however it is expected that the National Secretariat of Energy (SNE) will take the lead on energy issues. Please clarify how the project will engage SNE, especially when it comes to the review of policy and regulatory framework for solar water heaters. b) The body responsible for implementing technical standards (i.e. quality control standards for solar water heaters) is not mentioned. Please clarify the role of this body in the proposed project. ANW, April 5, 2013: a) Explanation provided. Comment cleared.	MY 8/15/2014 Yes.

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion [1]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
		b) The Body for standards and quality control is COPANIT that will be involved in particular in Output 2.1	
	13. Comment on the project's **innovative aspects, sustainability, and potential for scaling up**. • Assess whether the project is innovative and if so, how, and if not, why not. • Assess the project's strategy for sustainability, and the likelihood of achieving this based on GEF and Agency experience. • Assess the potential for scaling up the project's intervention.	ANW, February 27, 2013: a) Please clarify the innovativeness of this project. b) Please clarify the buy-in of the proposed project from the key stakeholder, especially the Government c) Please clarify how the project outcomes will be sustained after project closure d) Please clarify whether there are measures to secure the institutional and financial stability of the project e) Please clarify how this project will lead to large-scale replication and scaling up ANW, April 5, 2013: a) The innovativeness of this project lies in jumpstarting the market of SWH by simultanenously developing markets and strengthening the SWH technology support and supply system (suppliers, service providers, installers). Comment cleared b)Explanation provided. Comment cleared c) A brief explanation provided in the PIF. Comment cleared d) A brief explanation provided in the PIF. Comment cleared e) A brief explanation provided in the PIF. Comment cleared	MY 8/15/2014 Yes.
	14. Is the project structure/design sufficiently close to what was presented at PIF, with clear justifications for changes?		MY 8/15/2014 Yes. The project structure and design were changed. Specifically, the energy

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion [1]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
			efficiency component (CCM-2) was dropped, but the Agency justified it.
	15. Has the cost-effectiveness of the project been sufficiently demonstrated, including the cost-effectiveness of the project design as compared to alternative approaches to achieve similar benefits?		MY 8/15/2014 The Agency did not undertake cost-effectiveness analyses to evaluate alternative technologies against the SWH technology, but per renewable energy technology literature, so far, the SWH technology is most cost-effective among all renewable energy technologies. MY 10/10/2014 Not at this time. The agency undertook the analysis, but did not put the key results in the main body of the CEO ER document. Please present results of the cost-effectiveness analysis in Section B.3 on page 31. MY 12/16/2014 Yes. Comments were cleared.
Project Financing	16. Is the GEF funding and co-financing as indicated in Table B appropriate and adequate to achieve the expected outcomes and outputs?	ANW, February 27, 2013: Yes	MY 8/15/2014 No. It cannot be commented at this time. Please add quantitative numbers for the expected outputs in Table B. Then, comments can be made. Please also see comments in Box. 7. MY 10/10/2014 Not at this time, since the agency has not put the numbers in Table B as requested in the comments dated 8/15/2014. MY 12/16/2014

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion [1]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
			Yes. Comments were cleared.
	17. At PIF: Is the indicated amount and composition of co-financing as indicated in Table C adequate? Is the amount that the Agency bringing to the project in line with its role? At CEO endorsement: Has co-financing been confirmed?	ANW, February 27, 2013: a)The co-financing provided by UNEP is small with less than 1% of the total co-financing and in-kind only. Please increase the co-financing, and articulate why UNEP has a clear comparative advantage to undertake a national level project like this one. b) Also, please clarify how this project "compiles with UNEP's program of works (POW)," particularly by indicating POW's inclusion of this tye of work and activities at the national level. ANW, April 5, 2013: a) Co-financing by UNEP has been increased to USD 100,000 and comparative advantage has been elaborated in section B.3. Comment cleared b) Explanation provided in section B.3. Comment cleared.	MY 8/15/2014 Not at this time. The total OFP endorsed amount is less than the total budgeted amount in Table A (and Table B). Please reduce the project budget. Please also double check the co-financing amounts in the co-financing letters and in Table C to make sure they are consistent. My 10/10/2014 Not at this time. The first comment was cleared, but the second one was not. Please (1) split the $1.248 million co-financing from ANAM into cash and in-kind, and present the figures in two rows; and (2) translate the co-financing letters from Spanish into English. MY 12/16/2014 Yes. Comments were cleared.
	18. Is the funding level for **project management cost** appropriate?	ANW, February 27, 2013: No, the project management cost provided is 10.94% of the GEF-grant subtotal funding which is higher than the 10% limit. Please revise the project management cost to 10% of the GEF-grant subtotal funding. ANW, April 5, 2013: The project management cost has been reduced to USD 175,000 (equivalent to 10% of the sub-total). Comment cleared	MY 8/15/2014 Not at this time. The percentage is current, but the amount is wrong since the total amount of GEF fund budget is more than what the OFP endorsed. MY 12/16/2014 Yes. Comments were cleared.
	19. At PIF, is PPG requested? If the requested amount deviates from	ANW, February 27, 2013: Yes, a PPG of $45,660 is requested.	MY 8/15/2014

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion [1]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
	the norm, has the Agency provided adequate justification that the level requested is in line with project design needs? At CEO endorsement/ approval, if PPG is completed, did Agency report on the activities using the PPG fund?		Not at this time. Please PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS. See Annex C. MY 10/10/2014 Yes. Comments were cleared.
	20. If there is **a non-grant instrument** in the project, is there a reasonable calendar of reflows included?	ANW, February 27, 2013: This is a grant.	MY 8/15/2014 N/A
Project Monitoring and Evaluation	21. Have the appropriate **Tracking Tools** been included with information for all relevant indicators, as applicable?		MY 8/15/2014 Yes.
	22. Does the proposal include a **budgeted M&E Plan** that monitors and measures results with indicators and targets?		MY 8/15/2014 Yes, in Annex G.
Agency Responses	23. Has the Agency adequately responded to comments from:		
	• STAP?		
	• Convention Secretariat?		
	• The Council?		
	• Other GEF Agencies?		
Secretariat Recommendation			
Recommendation at PIF Stage	**24. Is PIF clearance/approval being recommended?**	ANW, February 27, 2013: Not at this time, please address the comments in boxes 6,7,12,13,17 and18 ANW, April 5, 2013: The PIF has been technically cleared and is being recommended for CEO approval.	
	25. Items to consider at CEO endorsement/approval.	ANW, April 5, 2013: a) Confirmation and detailed analysis of GHG emission reduction figures	

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion [1]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
		b) A budgeted M&E Plan that monitors and measures results with indicators and target	
Recommendation at CEO Endorsement/ Approval	**26. Is CEO endorsement/approval being recommended?**		MY 8/15/2014 Not at this time. Please address comments in Boxes: 7, 11, 16, 17, and 19. MY 10/10/2014 Not at this time. Please address comments in Boxes: 7, 10, 11, 15, 16, and 17. MY 1/26/2015 Yes. All comments were cleared.
Review Date (s)	First review*	February 27, 2013	August 15, 2014
	Additional review (as necessary)	April 05, 2013	October 10, 2014
	Additional review (as necessary)		January 26, 2015

* **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.**