



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

GEF ID:	5732		
Country/Region:	Turkey		
Project Title:	Sustainable Energy Financing Mechanism for Solar PV in Forest Villages in Turkey		
GEF Agency:	UNDP	GEF Agency Project ID:	5323 (UNDP)
Type of Trust Fund:	GEF Trust Fund	GEF Focal Area (s):	Climate Change
GEF-5 Focal Area/ LDCF/SCCF Objective (s):	CCM-3;		
Anticipated Financing PPG:	\$100,000	Project Grant:	\$3,780,000
Co-financing:	\$52,500,000	Total Project Cost:	\$56,480,000
PIF Approval:	April 28, 2014	Council Approval/Expected:	May 27, 2014
CEO Endorsement/Approval		Expected Project Start Date:	
Program Manager:	David Elrie Rodgers	Agency Contact Person:	John O'Brien

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
Eligibility	1. Is the participating <b>country eligible</b> ?	DER/XT, Mar 14, 2014. Yes.	DER, November 12, 2015. Yes.
	2. Has the <b>operational focal point</b> endorsed the project?	DER/XT, Mar 14, 2014. Yes. A letter dated December 18, 2013 in the amount of \$3,713,500 is attached.	DER, November 12, 2015. Yes.
Resource Availability	3. Is the proposed Grant (including the Agency fee) within the <b>resources available</b> from (mark all that apply):		
	• the STAR allocation?	DER/XT, Mar 14, 2014. Yes.	DER, November 12, 2015. Yes.
	• the focal area allocation?	DER/XT, Mar 14, 2014. Yes. The remaining CCM allocation is \$4,199,021 after accounting for other pending projects, leaving sufficient funds to cover this project which will need \$3,713,500	DER, November 12, 2015. Yes.

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

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

FSP/MSP review template: updated January 2013

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
		including PPG and fees.	
	<ul style="list-style-type: none"> <li>• the LDCF under the principle of equitable access</li> </ul>	NA	NA
	<ul style="list-style-type: none"> <li>• the SCCF (Adaptation or Technology Transfer)?</li> </ul>	NA	NA
	<ul style="list-style-type: none"> <li>• the Nagoya Protocol Investment Fund</li> </ul>	NA	NA
	<ul style="list-style-type: none"> <li>• focal area set-aside?</li> </ul>	NA	NA
Strategic Alignment	<p>4. Is the project aligned with the focal area/multifocal areas/ LDCF/SCCF/NPIF <b>results framework and strategic objectives</b>?</p> <p><i>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).</i></p>	DER/XT, Mar 14, 2014. Yes. The project is aligned with CCM3, Promote Investment in Renewable Energy Technologies.	DER, November 12, 2015. Yes.
	<p>5. Is the project consistent with the recipient <b>country's national strategies and plans</b> or reports and assessments under relevant conventions, including NPFE, NAPA, NCSA, NBSAP or NAP?</p>	DER, Mar 14, 2014. Yes.	DER, November 12, 2015. Yes.
	<p>6. Is (are) the <b>baseline project(s)</b>, including problem(s) that the baseline project(s) seek/s to address, sufficiently described and based on sound data and assumptions?</p>	<p>DER/XT, Mar 14, 2014:</p> <p>a) Please provide some context to the numbers of average annual sunshine and the average total radiation intensity, such as comparing them to California's figures.</p> <p>b) Regarding current electricity usage in forest villages, please provide: electrification rate, electricity mix and rough condition of grid.</p>	DER, November 12, 2015. Yes. The project design is very close to the PIF.

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
Project Design		<p>DER/XT, Mar 21, 2014:</p> <p>a) Information provided. comment cleared.</p> <p>b) The grid is 100%, therefore this project focuses on adding Solar PV to the mix. Comment cleared.</p>	
	<p>7. Are the components, outcomes and outputs in the <b>project framework</b> (Table B) clear, sound and appropriately detailed?</p>	<p>DER/XT, Mar 14, 2014:</p> <p>Please address the following comments:</p> <p>a) Component 1: Please describe the incentives of all actors in the value chain, especially the utilities' incentives in integrating solar PV power.</p> <p>b) Component 1: Please compare the pros and cons of two potential business models.</p> <p>c) Component 2: Please explain how the four pilot villages will be selected and what the selection criteria will be.</p> <p>d) Component 2: Please explain if phases one and two both will take place during the project duration.</p> <p>e) Component 3: Please justify that commercial banks will be interested in lending to small scale solar PV projects, if there is no major drop of technology costs.</p> <p>f) Component 3: Please explain what the major outputs and outcomes will be related to the 20 workshops around the country.</p> <p>g) There is confusion between the</p>	<p>DER, November 12, 2015. At the time of PIF approval, the Secretariat requested the following to be addressed at CEO endorsement:</p> <p>a) Conduct a market assessment for various business models and described on page 10</p> <p>b) Please provide a detailed strategy to establish synergies with the projects: UNDP-GEF Integrated Approach to Management of Forests in Turkey, and UNDP Utilization of Renewable Energy Resources and Increasing Energy Efficiency in Southeast Anatolia Region, by the CEO approval stage.</p> <p>c) Please be more specific about your strategy in incentivizing the private sector at the CEO approval stage as noted on page 13.</p> <p>Most of these were addressed in the CEO endorsement request. However, please respond to the following comments:</p> <p>1) Regarding a) it appears that component 1 still includes "detailed evaluation" of business models. Please explain what has been done during the project preparation phase to conduct a market assessment for various business</p>

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
		<p>investment component 2.2 "at least \$12.6Million in soft loans for additional projects" and component 3.1 "ORKOY successfully provides soft loans ....for at least 30 MW" Please clarify whether this activity is part of the project period using co-financing, or is direct post project benefits. Also, please clarify if the outcome should only be listed once and in which component.</p> <p>h) Given the rapid evolution of the Solar PV marketplace, we expect a very thorough market assessment, development of innovative business models, clear description of the supply chain, and clear description of financing options by time of CEO endorsement.</p> <p>DER/XT, Mar 21, 2014:  a) Comment cleared.  b) Pros and cons described. Comment cleared.  c) Added. Comment cleared.  d) Yes, both will be during project period. Comment cleared.  e) The answer is sufficient for PIF Stage. Comment cleared. At CEO endorsement, please identify bank partners and document the parameters that will be needed for them to enhance loans for Solar PV, especially considering zero-interest loans from the government.  f) Comment cleared.  g) The 30 MW is during project period. Comment cleared.  h) Market assessment will be conducted during PPG phase. Comment cleared.</p>	<p>models.</p> <p>DER, December 14, 2015.  1) The market assessment has been provided, Thank you! Comment cleared.</p>

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
	8. (a) Are global environmental/adaptation benefits identified? (b) Is the description of the incremental/additional reasoning sound and appropriate?	DER/XT, Mar 14, 2014: Please provide rough estimates of solar PV power in the electricity mix of Turkish forest villages in three cases: i) current status; ii) future projection without GEF support; iii) future projection with GEF support.  DER/XT, Marh 21, 2014 Comment cleared.	DER, November 12, 2015. Yes. The estimated GHG emissions benefits will be 2.5 million tCO <sub>2</sub> e direct, and 1.4 tCO <sub>2</sub> e indirect for a total of 3.9 million tCO <sub>2</sub> e over the life of the investments.
	9. Is there a clear description of: a) the <b>socio-economic benefits</b> , 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?		DER, November 12, 2015. Yes.
	10. Is the role of public participation, including CSOs, and indigenous peoples where relevant, identified and explicit means for their engagement explained?	DER/XT, Mar 14, 2014: Please explicitly explain how the general public will be involved in decision-making.  DER/XT, Marh 21, 2014 Comment cleared.	DER, November 12, 2015. Yes.
	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)	DER/XT, Mar 14, 2014: Risk mitigation measures can be further elaborated at the CEO approval stage.	DER, November 12, 2015. Yes.
	12. Is the <b>project consistent and properly coordinated</b> with other related initiatives in the country or in the region?	DER/XT, Mar 14, 2014:  Please provide a detailed strategy to establish synergies with the projects: UNDP-GEF Integrated Approach to Management of Forests in Turkey, and	DER, November 12, 2015. Yes.

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
		<p>UNDP Utilization of Renewable Energy Resources and Increasing Energy Efficiency in Southeast Anatolia Region, by the CEO approval stage.</p> <p>DER/XT, Marh 21, 2014 Comment cleared.</p>	
	<p>13. Comment on the project's <b>innovative aspects, sustainability, and potential for scaling up.</b></p> <ul style="list-style-type: none"> <li>• Assess whether the project is innovative and if so, how, and if not, why not.</li> <li>• Assess the project's strategy for sustainability, and the likelihood of achieving this based on GEF and Agency experience.</li> <li>• Assess the potential for scaling up the project's intervention.</li> </ul>	<p>DER/XT, Mar 14, 2014:</p> <p>a) This project's sustainability and the potential to scaling up, to a large extent, depends on if commercial banks will be attracted to small-scale solar PV projects in forester villages. Please be more specific about your strategy in incentivizing the private sector at the CEO approval stage.</p> <p>b) Please clarify if private sector engagement is expected to happen during the project period; or after the project period. Please clarify why any private sector bank would be interested while ORKOY is providing zero-interest loans.</p> <p>c) Please comment on whether a different business model would be more replicable. For example, the government funding would go for project pipeline development and feasibility studies, then present packages of bankable projects to private sector banks. This approach could prepare the full supply chain for replication. Please comment.</p> <p>DER/XT, Mar 21, 2014: a) Agreed to include this during PPG. Comment cleared.</p>	<p>DER, November 12, 2015. This project has the innovative aspects identified at the PIF stage.</p>

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
		b and c ) Response is adequate. More work on business models will be conducted during PPG. comment cleared.	
	14. Is the project structure/design sufficiently close to what was presented at PIF, with clear justifications for changes?		DER, November 12, 2015. Yes.
	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?		DER, November 12, 2015. Yes.
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?	DER/XT, Mar 14, 2014. Yes.	DER, November 12, 2015. Yes.
	17. <u>At PIF</u> : 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? <u>At CEO endorsement</u> : Has co-financing been confirmed?	DER/XT, Mar 14, 2014. We have a concern regarding the claiming of \$12.6 million in soft loan co-financing for the project. As explained on page 12, the \$12.6 million appears to be aspirational and is not something UNDP or ORKOY will be able to confirm at the time of CEO endorsement. Please clarify.  DER/XT, Mar 21, 2014. The response indicates the \$12.6 million will be firmed up with a co-financing letter at the time of CEO endorsement. Comment cleared.	DER, November 12, 2015. Yes. co-financing has increased since PIF approval.
	18. Is the funding level for <b>project management cost</b> appropriate?	DER/XT, Mar 14, 2014. Yes. GEF Project Management Cost (PMC) is about 5% of the GEF grant without PMC.	DER, November 12, 2015. Yes.
	19. <u>At PIF</u> , is PPG requested? If the requested amount deviates from	DER/XT, Mar 14, 2014. Yes.	DER, November 12, 2015. Yes.

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
	<p>the norm, has the Agency provided adequate justification that the level requested is in line with project design needs?  <u>At CEO endorsement/ approval</u>, if PPG is completed, did Agency report on the activities using the PPG fund?</p>		
	20. If there is a <b>non-grant instrument</b> in the project, is there a reasonable calendar of reflows included?	DER/XT, Mar 14, 2014. There is no non-grant instrument.	DER, November 12, 2015. NA
Project Monitoring and Evaluation	21. Have the appropriate <b>Tracking Tools</b> been included with information for all relevant indicators, as applicable?		DER, November 12, 2015. Yes.
	22. Does the proposal include a <b>budgeted M&amp;E Plan</b> that monitors and measures results with indicators and targets?		DER, November 12, 2015. Yes.
Agency Responses	23. Has the Agency adequately responded to comments from:		
	<ul style="list-style-type: none"> <li>• STAP?</li> </ul>		DER, November 12, 2015. Yes. STAP had 6 questions. Each question was responded to with adequate explanation.
	<ul style="list-style-type: none"> <li>• Convention Secretariat?</li> </ul>		DER, November 12, 2015. NA
	<ul style="list-style-type: none"> <li>• The Council?</li> </ul>		DER, November 12, 2015. Not at this time. Please address the comments from Germany: Germany agrees with the comments by STAP on the careful selection of demonstration sites and on the revision of the calculated mitigation cost and potential. - Germany welcomes the formulation of a NAMA to further establish and support the medium term development of solar PV in Turkey. To ensure the



Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
			<p>successful development of a NAMA, the design of MRV systems and indicators as envisaged under Component 3 needs to be well aligned from the beginning with the NAMA development under Component 1. Indicators should not only focus on GHG emissions but also include other non-GHG related aspects such as the progress of the NAMA and potential co-benefits.</p> <ul style="list-style-type: none"> <li>- Germany would welcome further information on the assigned responsibilities for the development of a NAMA.</li> <li>- Clarification on the amount of co-financing that can be expected from the villages, especially when considering the individual household model and given that forest-villagers are among the poorest of the country, is necessary.</li> <li>- The relation between technical and financial (and other) criteria in the weighing for the selection of pilot sites should be elaborated upon.</li> <li>- Germany suggests involving the Turkish Ministry of Energy in the further process.</li> </ul> <p>The project document responds adequately to the NAMA question, pilot site selection, and the Ministry of energy involvement. However, additional brief responses on MRV and village co-financing is needed.</p> <p>DER, December 14, 2015. The response reports that MRV will be a key part of the project. MRV has been included in</p>

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
			the project document on page 49 and page 19 of the request for CEO endorsement. Village co-financing has been estimated and is reported in the documents. Comments cleared.
	<ul style="list-style-type: none"> <li>Other GEF Agencies?</li> </ul>		DER, November 12, 2015. NA
<b>Secretariat Recommendation</b>			
<b>Recommendation at PIF Stage</b>	<b>24. Is PIF clearance/approval being recommended?</b>	<p>DER/XT, Mar 14, 2014. Not at this stage. Please address the comments in boxes 6,7, 8, 10, 12, 13, and 17.</p> <p>DER/XT, Mar 21, 2014. All comments cleared. This project is technically cleared and is a candidate for inclusion in an upcoming work program.</p>	
	25. Items to consider at CEO endorsement/approval.	<p>DER/XT, Mar 21, 2014.</p> <p>a) Conduct a market assessment for various business models and described on page 10</p> <p>b) Please provide a detailed strategy to establish synergies with the projects: UNDP-GEF Integrated Approach to Management of Forests in Turkey, and UNDP Utilization of Renewable Energy Resources and Increasing Energy Efficiency in Southeast Anatolia Region, by the CEO approval stage.</p> <p>c) Please be more specific about your strategy in incentivizing the private sector at the CEO approval stage as noted on page 13.</p>	
<b>Recommendation at CEO Endorsement/Approval</b>	<b>26. Is CEO endorsement/approval being recommended?</b>		<p>DER, November 12, 2015. Not at this time. Please respond to comments in boxes: 7 and 23</p> <p>DER, December 14, 2015. All</p>

Review Criteria	Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
			comments cleared. The project is recommended for CEO endorsement.
	First review*	March 14, 2014	November 12, 2015
	Additional review (as necessary)	March 21, 2014	December 14, 2015
<b>Review Date (s)</b>	Additional review (as necessary)		

\* **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.**