



GEF-6 GEF SECRETARIAT REVIEW FOR FULL-SIZED/MEDIUM-SIZED PROJECTS THE GEF/LDCF/SCCF TRUST FUND

GEF ID:	9574		
Country/Region:	Vanuatu		
Project Title:	Barrier Removal for Achieving the National Energy Road Map Targets of Vanuatu (BRANTV)		
GEF Agency:	UNDP	GEF Agency Project ID:	5926 (UNDP)
Type of Trust Fund:	GEF Trust Fund	GEF Focal Area (s):	Climate Change
GEF-6 Focal Area/ LDCF/SCCF Objective (s):	CCM-1 Program 1;		
Anticipated Financing PPG:	\$100,000	Project Grant:	\$2,639,726
Co-financing:	\$16,100,000	Total Project Cost:	\$18,739,726
PIF Approval:		Council Approval/Expected:	
CEO Endorsement/Approval		Expected Project Start Date:	
Program Manager:	Ogawa Masako	Agency Contact Person:	Manuel Soriano

PIF Review			
Review Criteria	Questions	Secretariat Comment	Agency Response
Project Consistency	1. Is the project aligned with the relevant GEF strategic objectives and results framework? ¹	MO July 26, 2016 Yes. The project is aligned with the Program 1 of CCM1.	
	2. Is the project consistent with the recipient country's national strategies and plans or reports and assessments under relevant conventions?	MO July 26, 2016 (1) Please include specific languages in the PIF documenting alignment with the country's INDC. (2) Please include the following information in the PIF: - When was the INDC submitted to the UNFCCC? - Has the Country signed the Paris	Since Vanuatu already signed the Paris Agreement, its INDC is already referred to as NDC. Hence, there were no references in the PIF to the country's INDC but its NDC. Vanuatu submitted its INDC to UNFCCC on 29 September 2015. The Paris Agreement was signed by Vanuatu's Prime Minister in New York early this year on 22 April 2016.

¹ 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 the project's contribution toward achieving the Aichi Target(s)?

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		<p>Agreement?</p> <p>- How does the project propose to align with and contribute to implementation of the INDC, including reference to specific measures or activities in the INDC that will be addressed by the project activities?</p> <p>MO August 15, 2016 Information was provided. Comments cleared.</p>	<p>The project is actually intended to build on the country's NDC, in addition to its National Energy Road Map (NERM), and Nationally Appropriate Mitigation Actions (NAMA). The alternative scenario that the proposed GEF project will bring about include actions that will contribute to the eventual implementation of relevant sustainable energy and low carbon projects identified and promoted in the Vanuatu NERM, as well as in the country's NAMA and NDC documents. This would involve making use, in a rational and cost-effective manner, of available feasible RE and non-RE resources to ensure socio-economic growth that contributes to increased climate resilience, productivity and income generation of the citizens, and GHG emission reduction.</p> <p>Per the country's NDC, the main mitigation contribution is to achieve the outcomes and targets under the National Energy Road Map (NERM) and 2nd NC, and that Vanuatu's main mitigation option will be for a close to 100% transition to RE for electricity production to be achieved by 2030. This target was also included in Vanuatu's INDC (now NDC). However, considering the current rate of progress, i.e., 29% RE electricity in 2015, if this continues, Vanuatu will not meet</p>

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			<p>the 2020 target (65% RE electricity) or the NDC target for 2030 (100% RE electricity). The facilitation of the achievement of the NERM targets, among which is the 100% RE electricity NDC target is the objective of this proposed GEF project.</p> <p>Among the climate change mitigation actions in the NDC that will be facilitated by the proposed GEF project are: (1) National Energy Road Map; (2) Rural Electrification NAMA; (3) Off grid renewable energy projects under Scaling Up Renewable Energy in Low Income Countries Program; and, (4) Energy efficiency measures to contribute to the target 15% energy savings in the energy sector.</p>
Project Design	3. Does the PIF sufficiently indicate the drivers ² of global environmental degradation, issues of sustainability, market transformation, scaling, and innovation?	<p>MO July 26, 2016</p> <p>(1) The proposed project is innovative by introducing community-based RE and improving access to financial resources. However, because the proposal covers on and off-grid RE and EE, it does not show priorities and it is not clear if this innovative activity will realize transformation. Please review the components and prioritize the activities.</p> <p>(2) Awareness and Capacity barriers</p>	<p>(1) As stated in the PIF, the objective of the proposed project is to facilitate/enable the achievement of the sustainable energy, energy access and green growth (i.e., low carbon development) targets as stated in the NERM . The sustainable energy targets refer mainly to the electricity generation utilizing RE resources, and energy efficiency in the electricity and electricity end-use sectors; energy access targets refer to electricity access in and around grid areas (or concession areas), as</p>

² Need not apply to LDCF/SCCF projects.

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		<p>are duplicating with policy, institutional and technical barriers, such as installing and management of RE technologies. Please revise this section, so that the alternative scenario and project component do not duplicate with other components.</p> <p>(3) On financial and technical barriers, there are no discussions available on energy efficiency. Also it is not clear if there are any financial barriers in on-grid RE. Please include the relevant barriers.</p> <p>MO August 19, 2016 This project will target all priorities of Vanuatu's the National Energy Road Map. Comments cleared. The CEO endorsement request is expected to clearly articulate detail activities and appropriate result frameworks so that the barriers will be addressed through this project.</p>	<p>well as in off-grid areas; and green growth targets refer to electricity generation from biofuels. There are already baseline activities being done in the country regarding sustainable energy but due to some barriers, the level of achievement is not even near the set target. There are also baseline activities on energy access, i.e., electrification within and around utility concessional areas or in urban/peri-urban areas, but not much yet in off-grid areas. On the green growth area, the country is targeting, among others, the utilization of biofuels for electricity generation. In line with expanding further the work in this area, the proposed project will focus on low carbon development, which will not only cover RE utilization for non-power applications, energy efficiency, and low carbon and energy-integrated development planning.</p> <p>Hence, the priority areas that the project will focus on are in facilitating the achievement of the NERM targets on sustainable energy, energy access and LCD. Addressing the barriers to the timely achievement of the targets in these areas will be the approach that will be employed. Instead of the current approach of addressing the specific technical, investment and operational requirements of individual projects (e.g., on rural electrification), an integrated way of</p>

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			<p>understanding and removing the typical barriers encountered in developing, implementing, operating and maintaining power generation (RE and non-RE) projects in Vanuatu would be more cost effective. With the barriers removed, or at the very least minimized, more investments on RE-based power generation and LCD activities can be expected enabling the achievement of the set NERM targets. Note that the way the GEF funding has been allocated to each project component more or less manifests the way the prioritization of the interventions that was done in the conceptualization of the proposed GEF project, with interventions to address technical barriers and financial barriers getting the biggest share of the GEF incremental budget at about 40% and 33%, respectively. This is to say that the prioritization was also based on the extent of barriers that have to be addressed to enable the achievement of the target in each of the specific NERM area.</p> <p>(2) The awareness and capacity barriers are not duplicating with the other types of barriers, and this fact is clear in the description of the barriers. What could be considered as "duplication" is the capacity development approach of removing barriers. As presented in the PIF, there are proposed capacity development activities</p>

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			<p>in addressing the lack (and to certain extent absence) and inadequacy of capacity or capability in regards the technical, information, institutional and financing aspects of sustainable energy and low carbon development. To avoid confusion, all capacity development activities (including those for enhancing awareness) are now consolidated in Component 1 of the proposed GEF project. Component 1 has been changed to Capacity Enhancement on Sustainable Energy and Low Carbon Development.</p> <p>(3) Despite the potential energy and energy cost savings, consumers often fail to carry out EE improvements due to a variety of barriers/challenges. There is a lack of awareness of the benefits of EE and of investments and behavioral changes that could make energy use more efficient. As in the case of RE technologies, in many cases, cultural traditions, social norms, and habits limit consumers' willingness to change their behavior. Investing in energy efficient appliances generally involves upfront costs for consumers that may face financial constraints. Furthermore, the type of technical, logistical, financial, and policy barriers that pose challenges to the uptake of energy efficient initiatives in the energy end use sectors of the country are by and large the same as that for RE</p>

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			<p>development and utilization.</p> <p>The grid-connected RE-based power generation projects also have financing challenges, mainly due to high capital costs of RE-based power generation systems (geothermal, solar, wind, and hydro), and the high operating costs of biofuel-based power generation, specifically for CNO-based biofuel because of the high value of copra as an export good.</p>
	4. Is the project designed with sound incremental reasoning?	<p>MO July 26, 2016 (1) Vanuatu has implemented Renewables Readiness Assessment supported by IRENA and developed NAMA supported by UNDP. Please clarify if these results are reflected in the PIF, and prioritize the activities based on these existing results (please see box 3). (2) All components of this proposed project include assessment activities. However the above Renewables Readiness Assessment and NAMA also have done similar analysis. Please explain the added value of this project to these existing initiatives, and revise the PIF accordingly.</p> <p>MO August 19, 2016 Comments cleared.</p>	<p>(1) The Renewables Readiness Assessment (RRA) that was done by IRENA including the Rural Electrification NAMA were among the bases of the NERM, which in turn is what this proposed project is basically promoting and assisting to implement. The RRA came up with useful recommendations for the utilization of Vanuatu's RE resources. It reiterates that Vanuatu has an excellent solar resource and that this resource is available throughout the populated areas of the country and could be used to generate electricity to offset the cost of imported fuels. In terms of major mitigation options this report identifies a mix of geothermal, wind, biofuels and solar PV as the key technologies suitable for Vanuatu. The NAMA on Rural Electrification in Vanuatu through RE-based electrification is designed as a holistic framework that will help Vanuatu</p>

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			<p>to move towards a low-carbon pathway while advancing long-term sustainable development benefits. In addition to the NERM and the Scaling Up Renewable Energy in Low Income Countries (SREP) report, both the RRA and NAMA reports were the main bases of Vanuatu's NDC. These fact have been emphasized in the relevant sections of the PIF.</p> <p>Based on the targets set in the NERM and NDC, and the relevant recommendations of the RRA and NAMA, the focus of the proposed project is on the enhanced utilization of feasible RE resources for electricity and non-electricity applications for supporting socio-economic development in Vanuatu. The priority areas shall be on sustainable energy, energy access, and green growth (low carbon development).</p> <p>(2) The RRA that was done by IRENA in 2015 was a comprehensive review of renewable energy development at present in Vanuatu to improve understanding of the RE sector. It identified and analyzed key issues associated with and arising from the development and utilization of available RE resources. This assessment, which was also the basis of the NAMA, came up with a summary of recommendations and opportunities for scaling up RE development and utilization</p>

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			<p>in the country. Among these recommendations are the conduct of specific reviews , which are now being suggested to be carried out under the proposed GEF project. In addition to that, the assessments/reviews that will be carried out under the proposed project are intended to adequately address and remove specific barriers that currently are hindering the achievement of Vanuatu's NERM targets.</p> <p>In that regard, the proposed assessments in the PIF are not duplicating the RRA and NAMA assessments. Rather, the proposed GEF project is complementing, and taking on the recommendations of, the RRA and NAMA.</p>
	5. Are the components in Table B sound and sufficiently clear and appropriate to achieve project objectives and the GEBs?	<p>MO July 26, 2016</p> <p>All components (1) Please see box 3 and prioritize the activities to be implemented under this project. (2) The estimated target of about 343,030 tonnes of CO2 from the proposed amount of financing is very low. Please improve the project's target contribution to GEBs by prioritizing project activities and identifying opportunities to have a greater impact. (2) Please clarify if commercial and industrial sectors as energy user and</p>	<p>(1) Per the response in Question 3, what were prioritized are the aspects of the NERM that the project will cover, namely sustainable energy, energy access, and green growth (low carbon development). The prioritization was mainly based on the extent of barriers that have to be addressed to enable the achievement of the target in each of the specific NERM area. This is also manifested by the way the GEF funding has been allocated to each project component, with interventions to address technical barriers and financial barriers getting the biggest share of the GEF incremental budget at about 40% and 33%, respectively.</p>

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		<p>RE developer are targeted by this proposed project. If so, please include them in the relevant components and in the stakeholder section.</p> <p>Component 1</p> <p>(3) Green growth is very general theme and may include various activities beyond sustainable energy. In addition there is no national policy provided on this theme. In order to develop better project framework, please revise this component to focus the prioritized mitigation actions, namely sustainable energy and energy access (on-grid and off-grid RE, and EE).</p> <p>(4) The outcome of this component is the improved awareness and attitude toward sustainable energy, but all detail activities discuss capacity development. As a result, capacity development targeted by this component may also duplicate with other components. Also the target level of awareness/capacity is not clear enough to develop the result framework. If this component focuses awareness and access to the information, please revise activities and avoid duplication with the other components.</p> <p>Component 5</p>	<p>(2) Please note that the stated CO₂ emission reduction amount is mainly from actions that will lead to the realization of the %RE electricity targets in 2020 and 2030. This however is a conservative estimate inasmuch it only considers those that are expected during the project implementation period and during a 10 year influence period. If the lifetime (average 25 years) CO₂ emission reduction is considered, this can be up to about 484,830 tons CO₂. This can even be more when the GHG emission reductions that will also come from fossil fuel substitutions in other energy end-uses particularly in rural areas using available feasible RE resources are taken into account. Sustainable energy initiatives that would lead to the improvement of the specific energy consumption of energy end use sectors through improved energy utilization efficiency and other LCD activities will also contribute to this. A more detailed estimation of the potential amount of CO₂ emission reductions will be done during the project design stage when the most likely sustainable energy and low carbon technology (non-power) application demonstrations and replications are identified, assessed and designed.</p> <p>(2) The commercial and industrial sectors</p>

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		<p>(5) Please indicate on page 12 that the outcome (i) is from technical assistant and (ii) from investment.</p> <p>(6) Please clarify (b) demonstration projects for outcome (i) and (b) demonstrations in pilot communities for outcome (ii) are the same activities or different ones.</p> <p>MO August 19, 2016 Comments cleared. The CEO endorsement request is expected to improve the target of GHG emission reduction. Also the request should clearly articulate detail activities, technologies, stakeholders, places of demonstrations, and appropriate result frameworks.</p>	<p>are among the energy end-use sectors that are covered by this project. The involvement of the private sector (commercial and industrial entities) is now stated in the stakeholder section of the PIF.</p> <p>(3) In the context of the proposed project, green growth refers to low carbon development (LCD). Please note that the updated version of the NERM (June 2016) better emphasizes Vanuatu's vision for sustainable energy and sustainable development. In particular, it expands on the potential role of RE and EE, by introducing new EE targets and a new priority area—“green growth”—that explicitly links Vanuatu's economic growth with opportunities in the energy sector. In this regard, the country intends to promote the use of green energy for sustainable development by expanding the use of locally produced bio-fuels as an alternative to fossil fuels for electricity generation and transport; use of RE in Vanuatu's main economic sectors; appropriate use of RE and EE technologies in the water sector; and improve energy-related business and technical skills among rural island people. These are all stated in the updated NERM.</p> <p>The proposed GEF project will assist the government in their green growth (low</p>

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			<p>carbon development) objectives, particularly on the formulation of appropriate LCD policies; development and showcasing of applicable LCD technologies and measures in the end-use sectors; assisting end-users in the financing of their feasible LCD (RE/EE) projects; and facilitating productive applications of RE (for power and non-power purposes) in rural areas.</p> <p>(4) Among the proposed interventions to improve awareness and attitude toward sustainable energy and LCD is capacity development (which would typically include activities related to information, communication and education). The evaluation activities are meant to determine the extent of improvement in awareness and attitude toward sustainable energy and LCD. There are also 2 major activities that are included in Component 1 that are not directly on "capacity development", but are instrumental in the dissemination and sharing of information and in gauging, among others, the actual energy supply, demand and consumption in the various energy end use sectors of the country.</p> <p>As per response to Question 3 (Item 2) above, to avoid confusion, all capacity development activities are now consolidated in Component 1 (renamed</p>

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			<p>Capacity Enhancement on Sustainable Energy and Low Carbon Development) of the proposed GEF project. The section on barrier analysis clearly shows that many of the things that are absent, lacking or inadequate in the country to understand, conceptualize, design, plan, implement, operate and maintain systems and frameworks for sustainable energy LCD systems is the low level of capacity (policy making and planning, institutional, technical, financial, and information) in the country. Please note that capacity development is a common thread that links the interventions that are needed to remove the barriers.</p> <p>(5) The suggested corrections have been reflected in the PIF.</p> <p>(6) Outcome I (Activity b): Preparation and approval of engineering designs and implementation plans of demonstration projects on sustainable energy and low carbon technology applications that will contribute to the rural electrification program of the country and the achievement of NERM targets “ This will be prior to the demonstration, and will involve the provision of technical assistance in the preparation and approval (by relevant authorities) of engineering designs and implementation plans of the demo projects. The owner/developer of a</p>

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			<p>demo projects will be assisted in the design of the project particularly in the incorporation of the incremental features that would enhance the energy savings and GEBs from the projects.</p> <p>Outcome ii (Activity b): Conduct of detailed evaluation of the energy and operational performances of the different sustainable energy and low carbon technology application demonstrations in pilot on-grid and off-grid communities – This is during the implementation and operation of the demonstration, and will involve the evaluation of the actual operating parameters, in general, and of the resulting energy saving and GHG emission reductions, in particular.</p>
	6. Are socio-economic aspects, including relevant gender elements, indigenous people, and CSOs considered?	MO July 26, 2016 Yes.	
Availability of Resources	7. Is the proposed Grant (including the Agency fee) within the resources available from (mark all that apply):		
	<ul style="list-style-type: none"> The STAR allocation? 	MO July 26, 2016 Yes. CCM STAR allocation for Vanuatu is \$3,000,000. The proposed project requests \$2,999,999 including Agency Fee and PPG. There is no other CCM project requesting STAR allocation.	
	<ul style="list-style-type: none"> The focal area allocation? 		
	<ul style="list-style-type: none"> The LDCF under the principle of 		

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	equitable access		
	<ul style="list-style-type: none"> The SCCF (Adaptation or Technology Transfer)? 		
	<ul style="list-style-type: none"> Focal area set-aside? 		
Recommendations	8. Is the PIF being recommended for clearance and PPG (if additional amount beyond the norm) justified?	<p>MO July 26, 2016 Not at this time. Please address comments in box 2, 3, 4 and 5.</p> <p>MO August 19, 2016 All comments cleared. Program Manager recommends CEO PIF clearance.</p>	
Review Date	Review	July 26, 2016	
	Additional Review (as necessary)	August 19, 2016	
	Additional Review (as necessary)		

CEO endorsement Review			
Review Criteria	Questions	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
Project Design and Financing	1. If there are any changes from that presented in the PIF, have justifications been provided?		

CEO endorsement Review

Review Criteria	Questions	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
	2. Is the project structure/ design appropriate to achieve the expected outcomes and outputs?		
	3. Is the financing adequate and does the project demonstrate a cost-effective approach to meet the project objective?		
	4. Does the project take into account potential major risks, including the consequences of climate change, and describes sufficient risk response measures? (e.g., measures to enhance climate resilience)		
	5. Is co-financing confirmed and evidence provided?		
	6. Are relevant tracking tools completed?		
	7. <i>Only for Non-Grant Instrument:</i> Has a reflow calendar been presented?		
	8. Is the project coordinated with other related initiatives and national/regional plans in the country or in the region?		
	9. Does the project include a budgeted M&E Plan that monitors and measures results with indicators and targets?		
	10. Does the project have descriptions of a knowledge management plan?		

CEO endorsement Review			
Review Criteria	Questions	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
Agency Responses	11. Has the Agency adequately responded to comments at the PIF ³ stage from:		
	• GEFSEC		
	• STAP		
	• GEF Council		
	• Convention Secretariat		
Recommendation	12. Is CEO endorsement recommended?		
Review Date	Review		
	Additional Review (as necessary)		
	Additional Review (as necessary)		

³ If it is a child project under a program, assess if the components of the child project align with the program criteria set for selection of child projects.