GEF SECRETARIAT REVIEW FOR FULL/MEDIUM-SIZED PROJECTS[1]

Country/Region: Indonesia
Project Title: Indonesia: Wind Hybrid Power Generation (WHyPGen) Marketing Development Initiatives
GEFSEC Project ID: **3953**
GEF Agency Project ID: 4223 (UNDP) GEF Agency: UNDP
GEF Focal Area (s): Climate Change
GEF-4 Strategic Program (s):
Anticipated Project Financing ($): PPG: $0 GEF Project Allocation: $2,156,200 Co-financing: $7,550,000 Total Project Cost: $9,706,200
PIF Approval Date: Anticipated Work Program Inclusion: March 31, 2010
Program Manager: Dimitrios Zevgolis GEF Agency Contact Person: Manuel L. Soriano

Review Criteria	Questions	Secretariat Comment at PIF/Work Program Inclusion [2]	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)
Eligibility	1. Is the participating country eligible?	Yes, Indonesia signed the Climate Change Convention on 5 June 1992.	
	2. If there is a non-grant instrument in the project, check if project document includes a calendar of reflows and provide comments, if any.		
	3. Has the operational focal point endorsed the project?	Yes, by letter dated 11 September 2008.	
	4. Which GEF Strategic Objective/ Program does the project fit into?	It fits into the Strategic Program on Promoting Market Approaches for Renewable Energy.	
	5. Does the Agency have a comparative advantage for the project?	UNDP has a comparative advantage in the area of renewable energy on capacity development and TA.	
Resource Availability	6. Is the proposed GEF Grant (including the Agency fee) within the resources available for (if appropriate):		
	• The RAF allocation?	Indonesia : Climate Change allocation $18,350,000, utilization $11,840,448, pipeline $0, Available $6,509,552	

[1] Some questions here are to be answered only at PIF or CEO endorsement. Please do not answer if the field is blocked with gray.
[2] Work Program Inclusion (WPI) applies to FSPs only. Submission of PIF of FSPs will simultaneously be considered for WPI. For MSPs, once the PIF is approved by CEO, next step will be to continue project preparation until the project is ready for CEO approval.

Review date: January 05, 2010

	• The focal areas?	Yes.	
	• Strategic objectives?	N/A	
	• Strategic program?	N/A	
Project Design	7. Will the project deliver tangible global environmental benefits?	The project will deliver GEBs due to the displacement of diesel-based electricity generation. However the estimations provided are not clear and coherent. In p.8 of the PIF the total emission reduction is estimated at 208,600 tons annually, while in p.5 it is calculated to 1.77 million tons for 10 years. While it is clear that the demonstration project involves the installation of 1 MW of wind capacity, there is no indication of the wind capacity that will be installed after the project. Also the emission factor should be provided. Finally, direct project benefits should be differentiated from the indirect ones. DZ, Sept 29, 2009: The direct benefits are linked with the installation and operation of 1MW wind capacity. Indirect benefits are linked with the installation of 100MW wind capacity in the period 2013-2016. Though the direct benefits seem reasonable, the installation of 100MW wind capacity in a 3-year period seems exaggerated, especially if it is taken into account that another 100MW of diesel capacity will be installed in the same period. The project outputs are not deemed sufficient to generate investments of this magnitude in only three years for the following reasons: i. The project will propose a supportive policy framework, but its adoption and implementation from the government is not guaranteed. Even if the supportive framework is adopted immediately, the market needs to pass a maturation period in order to generate such investments, as the international	

		experience exhibits. ii. The project doesn't deal with the technical limitations of grids to absorb the energy provided by an intermittent source as the wind. Large-scale installation of wind turbines in island communities calls for investments in the grids and a different, non-conventional design approach. DZ, Nov 6, 2009: The direct benefits of the project are 2,066t CO2 emission avoided annually. The indirect benefits (linked with the installation of 100MW of wind capacity in the 3 years after the project end) are considered overambitious. No evidence is provided regarding how this target can be set at first place, given that the PIF states that "there is no certainty as to where and the magnitude of the wind energy resources." DZ, Jan 4, 2010: The comment has been addressed.	
	8. Is the global environmental benefit measurable?		At CEO endorsement the indirect benefits foreseen should be analytically justified.
	9. Is the project design sound, its framework consistent & sufficiently clear (in particular for the outputs)?	The project is designed on the notion of on-grid wind hybrid power generation systems, and in particular wind turbine systems combined with diesel generation. However, this approach also involves the development of diesel generation in parallel and such activities cannot be supported by GEF. Therefore, the project should be redesigned in order to concern the facilitation of on-grid Wind Power Generation. In this case the project components should be reformulated so as to concern TA and investment activities addressing only the promotion of wind energy systems. Also, in the case of investment support by GEF, GEF should cover only the	

		incremental investment costs. Another issue that should be clarifies is whether the BPPT, an NGO in the field of research, is the most appropriate agency for the implementation of the project. Since this is a project of national interest that has to do with the development of renewable energy in national level, one would expect that that the Ministry of Energy would be the most appropriate actor for the implementation of the project, since it is the governmental body that formulates and implements the energy policies. Specifically, under the Ministry of Energy there is an Agency that is specialized in Energy and Electricity Technology (EERDC) so it might be a more appropriate implementing agency. DZ, Sept 29, 2009: The second part of the above comments has been addressed, however the first part remains. The project insists in addressing the facilitation of hybrid installations, however this is an unnecessary argument. It is common sense, at least according to the current knowledge, that due to the intermittency of wind (and other renewable) energy production, the 100% renewable supply can be only achieved with the use of energy storage systems and innovative design techniques. For this reason, none of the GEF projects aims to such a target, and this project is no exception. In fact, GEF projects should promote market approaches for the supply of and demand for renewable electricity in grid-based systems, and they should not include any parallel investments in fossil-fuel generation. In this manner, any investments that will take place in the country and involve BAU activities as the installation of	

		equipment as diesel engines shouldn't be part of the co-financing of the project. Also the argument that the project doesn't promote the connection of single wind turbines or wind farms to the grid because it is not economically and commercially feasible is not understood; that's exactly why GEF invests in renewable energy. DZ, Nov 6, 2009: The budget of the investment component (which is wrongly described as TA only) is 4.36 million USD. The GEF objective is "the partial replacement (to the maximum extent possible) of diesel power generation with wind energy-based power generation," so finance for baseline activities is included in the definition of cofinancing only when such activities are essential for achieving the GEF objective (GEF/C.20/6/Rev.1). According to the UNDP's response, the co-financing includes only the project proponents' contribution for the 1MW wind power generation. In this case the proposed budget (4.36mUSD) is too high, and at this cost it would justify the installation of more wind power capacity (for example at least 2 MW). Also, Component 4 alludes to the improvements of available tax incentives for RE without mentioning any other incentives; does it mean that the project will only redesign/improve available fiscal incentives? Won't other incentives (e.g tariffs, preferential grid-access, project grants, etc.) be considered? Also, under Component 6 it should be reiterated that only activities that concern wind power should be financed by the project; any activities that concern the electricity generation from diesel shouldn't be mingled	

		with the activities supportive to wind power. DZ, Jan 4, 2010: The comment has been addressed.	
	10. Is the project consistent with the recipient country's national priorities and policies?	The Government of Indonesia has introduced a Policy on Renewable Energy Development. This project is a part of its actions towards implementing this policy.	
	11. Is the project consistent and properly coordinated with other related initiatives in the country or in the region?	There is reference to the coordination with other projects on the same field but this is quite vague. If there are specific wind energy projects in the country or in other countries that are going to be coordinated with this project, then more specific reference to them would be appropriate. DZ, Sept 29, 2009: The comment is addressed.	
	12. Is the proposed project likely to be cost-effective?	There is no clear assessment of the penetration of wind energy in the country's energy mix that will be achieved by this project, so the assessment of its cost-effectiveness is not possible. DZ, Sept 29, 2009: The project will be cost-effective as long as the overambitious indirect benefits are achievable. DZ, Nov 6, 2009: The cost-effectiveness of the project is very low, considering its direct benefits. The inclusion of the proposed indirect benefits improves the cost-effectiveness, however, as already mentioned, the indirect benefits are based only to the project proponents' contemplations and not on any evidence. The cost-effectiveness can be improved substantially if the demonstrated wind power plants have more wind power capacity.	

	13. Has the cost-effectiveness sufficiently been demonstrated in project design?		
	14. Is the project structure sufficiently close to what was presented at PIF?		
	15. Does the project take into account potential major risks, including the consequences of climate change and includes sufficient risk mitigation measures?	The risk analysis is very vague and generic. It should be specific for the situation of the specific country. DZ, Sept 29, 2009: The comment is addressed.	
Justification for GEF Grant	16. Is the value-added of GEF involvement in the project clearly demonstrated through incremental reasoning?	The incremental reasoning provided is based on the idea that in the absence of the project the country will continue installing only fossil-fuel-based generation. This is too simplified; Indonesia already use hydro energy and geothermal energy and it also has a renewable energy policy. A more comprehensive analysis of the renewable energy trends and other projects undertaken in parallel should be provided in order to support the demonstration of the added value of GEF involvement. DZ, Sept 29, 2009: The comment is addressed. DZ, Nov 6, 2009: The initial comment has been addressed. Certainly, the Agency should take into account the other comments about the cost-effectiveness, the design, and the benefits of the project; and these comments are not supportive of the value-added of GEF involvement. DZ, Jan 4, 2010: The comment has been addressed.	
	17. Is the type of financing provided by		

	GEF, as well as its level of concessionality, appropriate?		
	18. How would the proposed project outcomes and global environmental benefits be affected if GEF does not invest?		
	19. Is the GEF funding level of project management budget appropriate?	PM GEF funding is 8% of the total GEF funding.	
	20. Is the GEF funding level of other cost items (consultants, travel, etc.) appropriate?		
	21. Is the indicative co-financing adequate for the project?	The project involves TA and investment and the half of co-finacing is directed to the investment part. However, it seems that the co-financing involves not only the wind energy systems but also the diesel systems that shouldn't be part of the GEF project. DZ, Sept 29, 2009: As mentioned in previous comments, co-financing should not include any costs that refer to the installation of diesel gensets. It can include costs that refer to equipment that support the grid connection of the wind turbines (relays, switches, load control units, etc.). DZ, Nov 6, 2009: Co-financing, especially that for the investment component, is too high to justify the installation of just 1 MW of wind power capacity. More investments in wind capacity could be supported with such high co-financing. DZ, Jan 4, 2010: The comment has been addressed.	
	22. Are the confirmed co-financing amounts adequate for each project component?		

	23. Has the Tracking Tool[3] been included with information for all relevant indicators?		
	24. Does the proposal include a budgeted M&E Plan that monitors and measures results with indicators and targets?		
Secretariat's Response to various comments from:	STAP		
	Convention Secretariat		
	Agencies' response to GEFSEC comments		
	Agencies' response to Council comments		
Secretariat Decisions			
Recommenations at PIF	**25. Is PIF clearance being recommended?**	No, the project should be redesigned in order to concern the promotion only of wind energy systems. DZ, Sept 29, 2009: No. It is proposed that the Agency should discuss the proposal with GEFSEC before resubmitting it. DZ, Nov 6, 2009: Given that the GEF funding and the co-financing directed to the demonstration activity justify at least the installation of 2 MW of wind capacity, the PIF clearance will be recommended if when the wind capacity of the demonstration plants is modified accordingly. DZ, Jan 4, 2010: PIF has been recommended by PM for CEO clearance.	
	26. Items worth noting at CEO Endorsement.		

[3] At present, Tracking Tools apply to Biodiversity projects only. Tracking Tools for other focal areas are currently being developed.

Recommendation at CEO Endorsement	**27. Is CEO Endorsement being recommended?**		
Review Date	1st review		
	2nd review		
	3rd review	November 06, 2009	

REQUEST FOR PPG APPROVAL

Review Criteria	Decision Points	Program Manager Comments
PPG Budget	1. Are the proposed activities for project preparation appropriate?	The general scope of the activities seems appropriate, however they should be redesigned in order to reflect the project's new design. DZ, Nov 6, 2009: The comment has been addressed.
	2. Is itemized budget justified?	The budget is too high for the project preparation, considering the total project cost. PPG is almost equal to 7% of the total GEF funding which is too high just for the preparation of the project. The shift of GEF funding from the PPG to the project funding is proposed. DZ, Nov 6, 2009: Some costs covered only by cofinancing are not justified, such as the PPG exercise management and communications; they are in total equal to 25% of the total preparation budget. Assigning costs to PPG exercise management is not something frequent to UNDP projects; and the communication costs (telephone costs?) are simply too high. DZ, Jan 4, 2010: The comment has been addressed.
	3. Is the proposed GEF PPG Grant (including the Agency fee) within the resources available under the RAF/Focal Area allocation?	
	4. Is the consultant cost reasonable?	The number of international consultants' person-weeks is too high for the nature of the project. Instead, the involvement of more LCs is proposed. DZ, Nov 6, 2009: Consultant costs should not be covered only by the GEF. It is incoherent why the project proponents do not share these costs with the GEF, while they co-finace significantly the

		project and at the same time express strong commitment for the promotion of RE in the country by setting high expansion targets. DZ, Jan 4, 2010: The comment has been addressed.
Recommendation	**5. Is PPG being recommended?**	No, PPG should be reformulated in response to the redesign of the project and the comments about the PPG cost. DZ, Nov 6, 2009: No. Consultant costs should be co-financed, management and communication costs should decrease, and the GEF contribution should decrease subsequently. DZ, Jan 4, 2010: PPG recommended by PM. If the FSP PIF is cleared by CEO for entry into work program, then PPG will be presented to CEO for approval.
Other comments		
Review Date	1st review	
	2nd review	
	3rd review	November 06, 2009

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