

## CTF - IFC PHILIPPINES RENEWABLE ENERGY ACCELERATOR PROGRAM

### Comments/Questions from CTF TFC

		<b>Comments/Questions</b>	<b>Responses</b>
United States	1.	<p>On a different note, while we understand some members' concerns about approving the Philippines REAP proposals before feed-in tariff (FIT) regimes are finalized, we think that waiting to approve allocation of CTF funding until such a time will in fact result in needless delays. It is our understanding that the particular projects will be developed over the course of the next 6, 9 or 12 months, at which point IFC will know and carefully consider the final FIT structures as they determine the appropriate level of concessionality for each investment and negotiate the final terms. Additionally, because these are pioneer investments we do not believe that a FIT will provide a sufficient early entrant incentive and that CTF funds will still be required to activate these first movers.</p>	<p>We appreciate your support.</p>
Germany	2.	<p>Given that a more detailed regulatory framework is expected in the next couple of weeks, which would provide a much better basis for specifying the necessary support measures, we suggest that the proposal is resubmitted after sufficient information has been obtained. We do realize the time constraints, but would like to point out that we only expect a short delay, which would much improve the quality of the proposal.</p>	<p>While we recognize that the FIT levels are expected to be announced before the end of 2010, we feel that there are advantages for moving ahead versus waiting for the FIT levels to be announced.</p> <p>IFC joined the government in their engagement efforts to ensure the FIT levels are appropriate to generate sustainable levels of RE development in the long run, but are not so high that they stress governments budgets beyond what is sustainable. IFC joined government officials from the Philippines along with other industry stakeholders on a visit to Germany to study its experience with solar power generation. During that visit, the group including</p>

			<p>IFC engaged with parliament members who led the development of Germany's renewable energy program and who shared experience and advice on how to effectively implement the Philippines' own RE program including the implementation of FIT.</p> <p>IFC expects that final FIT levels will be sufficient to encourage sustainable development of the targeted sectors in the long term, but will not be high enough to entice the early movers that have higher risks (given there is not yet a track record of development) and higher costs (as the RE sub-sectors identified are in the nascent stage of development and as they move through a regulatory system that is newly formed and still establishing its procedures). As a result, even with an adequate FIT level a CTF program would still be needed to catalyze the first movers and a delay in the CTF program would only delay development of the sector.</p> <p>It should be noted that by the time the actual CTF concessionality rates and terms are negotiated for sub-projects, the FIT levels will be known (IFC would not invest its own funds, much less CTF's without knowing the revenue stream of its projects). The funding parameters outlined in the CTF proposal are not the actual amount of subsidy offered to sub-projects but the floor or outside limit that IFC could negotiate on an individual project. IFC is submitting its proposal now so that it can begin the due diligence phase of project development (which for infrastructure projects can take several months).</p>
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			government establishing an inappropriate FIT level is mitigated by the thorough due diligence it is undertaking to determine the right FIT level, IFC believes it is beneficial to move forward now versus waiting for the FIT levels to be announced.
	3.	We consider the materialization of the described multiplier effect due to the showcase character of the initial pioneer projects to be co-financed by CTF funds and the achievement of the expected developmental impacts speculative at this point in time.	The multiplier effect noted in the proposal was based on the catalytic impact achieved through IFC's investments in the Philippine power sector and particularly its support of the privatization of the country's generation assets. Under the Electric Power Industry Reform Act ("EPIRA") enacted in 2001, the country aimed to transform the sector from one that is government-dominated to private sector-led by, inter alia, privatizing generation assets. There was little progress made in sector reform until June 2006 (when there was only a total of 120MW of generation capacity privatized). IFC initially got involved in the financing of the privatization of a 360MW hydro plant in 2007 and since then has helped catalyze private investment in the sector with more than 4,500MW of generation capacity privatized to date.
	4.	REAP will seek to support total additional capacity installation of 10MW+ for solar power generation, 80MW wind power generation and 15MW+ biomass power generation. According to the proposal the primary resource base (solar, wind, biomass) for these projects may well be sufficient in the Philippines. Nonetheless, the capacity factor of 18% assumed for solar projects does appear very ambitious for the Philippines. The investment sums foreseen for the proposed solar and	The 18% capacity factor for solar projects is based on an existing 1MW solar project in the country (which IFC helped facilitate grant financing from GEF in 2004) and a recently operational 6MW solar project in Thailand (a tropical country like the Philippines) for which IFC provided equity investment.  The investments for the wind projects are based on current estimates by project developers and include transmission costs.

	<p>biomass projects are plausible. The investments proposed for wind power installation seem to be very high.</p>	
5.	<p>Overall, the IP remains very unspecific and provides insufficient information on the financial viability of the individual projects.</p> <p>The release of specific rules for the Renewable Energy Act of 2008 relating to Renewable Portfolio Standards, feed-in tariffs and net metering for qualified end-users is expected in the third quarter of 2010. The final design of such regulatory initiatives is critical in order to determine whether additional CTF funding is required for the proposed investments. Consequently, the level of concessionality offered under REAP should be critically reflected and closely monitored.</p>	<p>The proposal does not provide project level details per the terms of the “<i>CTF Products, Terms and Review Procedures for Private Sector Operations (Annex B)</i>” approved in March 2010. In private sector proposals, project level details are not included i) because it is against the confidentiality policies of the MDBs and ii) because at the time of program submission, only some of the pipeline projects have been identified. The Philippines proposal has been designed based on actual projects being developed by proponents who have approached IFC for possible financing, but which would not be financially viable with financing at full commercial terms.</p> <p>Per the explanation above, IFC expects that the FIT levels will be set high enough to encourage ongoing development but not high enough to entice first movers into the market. For these first movers the level of concessionality would need to be determined on a case by case basis to ensure minimum subsidies are offered. IFC has developed an internal infrastructure to review the subsidies and investment structures being offered to each sub-project in order to avoid over subsidizing.</p>
6.	<p>Despite the overall acceptability of the programmatic approach it appears that many important issues can only be verified upon the release of the new regulatory initiatives. Therefore, we recommend that the proposal</p>	<p>Please see comments in 2 above.</p>

	<p>be resubmitted for review and approval after clarification of the regulatory framework to be expected in the coming months, or to look for other ways to make the proposal more specific.</p>	
7.	<p>Inconsistencies exist in the proposal regarding the potential necessity for the use of mezzanine or equity funds in the different sub-sectors wind, solar and biomass. Overall, the financing terms envisaged seem very low. An appraisal whether such low pricing is truly necessary to obtain an acceptable level of project's risk/reward balance for private investors is not undertaken in detail in the proposal and also seems highly dependent upon future regulatory mechanisms. As mentioned in the proposal it should be ensured that the concession element for the financing of the proposed investments is limited to a minimum necessary to overcome key private investment barriers.</p>	<p>We appreciate the need to limit the subsidy element of CTF financing and this will be done through an investment review process which is undertaken separately for the CTF investment versus IFC's investment for its own account. Such an investment review process will entail a very rigid due diligence which will address not only the viability of the project but also the necessity of CTF funding and under what (concessionary) terms. The terms outlined in the proposal are not the terms that will be offered to all CTF sub-projects, but the outside parameters under which IFC could negotiate an individual CTF investment (eg. the pricing in the proposal is the floor pricing that could be offered to a client – but actual sub-project pricing is likely to be higher than this; the tenor noted in the proposal is the maximum tenor that could be offered to a sub-project – but it could be shorter....). Final terms will be a matter of prevailing market factors and the results of specific negotiations with each project sponsor.</p>
8.	<p>Potential for GHG Emissions Savings It is estimated that REAP will directly contribute to GHG reductions of 3.04 million tons CO<sub>2</sub>e. This estimate assumes that support will be provided to approximately 10MW solar (GHG reduction of 0.24 million tons CO<sub>2</sub>e), 80MW wind (GHG reduction of</p>	<p>The multiplier effect assumes that the FIT will be set at a level that is sufficient to encourage long term sustainability of the sector but not high enough to address the barriers that exist for first movers (see 2. above). We believe this is a reasonable expectation given the government's thoroughness in researching the impacts of tariffs that are set too</p>

	<p>1,75 million tons CO<sub>2</sub>e) and 15MW biomass (GHG reduction of 1.05 million tons CO<sub>2</sub>e). Due to its demonstration impact a 5x multiplier is assumed in the proposal leading to estimated indirect impacts in the development of 525MW and GHG reductions of 15.2 million tons of CO<sub>2</sub>e. Whether such figures will be achievable will to a large extent depend upon the future regulatory framework and on the sufficiency of tariffs.</p>	<p>high or too low. Large deviations in the FIT level could have an impact on the ultimate scale of replication, but we do not expect this to be significant.</p>
9.	<p>According to the proposal biomass, solar and wind technologies have so far been highly underdeveloped in the Philippines (0,2% share of current electricity generation mix). The experiences with grid-tied, MW scale wind, solar and biomass power generation as envisaged under REAP are currently limited in the Philippines.</p>	<p>The limited development of biomass, solar and wind technologies in the Philippines makes these RE subsectors ideal candidates for CTF financing. IFC's cofinancing also ensures that the structuring and experiences from investments in such technologies in other countries will be transferred to the Philippines investments.</p>
10.	<p>Demonstration potential at scale The justification for the demonstration potential at scale is based on the demonstration effect evoked by supporting and enabling early MW-scale private-sector wind, solar and biomass projects in the Philippines. It is assumed that due to decreasing equipment pricing over time and the reduction of perceived risks of such "new" technologies as pioneer projects have successfully been implemented and that wind, solar and biomass can be transformed into traditional, commercially viable renewable energy sectors under the regulatory support of the Government of the Philippines.</p>	<p>Please see response 5 on why project details are not included in the proposal and response 3 on the replication potential of the project.</p>

	<p>Furthermore, the proposal estimates that the initial projects supported by REAP will initiate a five-fold increase in projects and lead to GHG emission reductions of 15.20 million tons of CO<sub>2</sub>e (current energy sector annual production: 142 million tons of CO<sub>2</sub>e). However, as the financial viability of the projects cannot be appraised at this stage and regulatory measures are not yet fully released, the potential for replication and growth to scale are hard to assess in a comprehensive manner.</p>	
11.	<p>Development Impact The proposal expects that REAP will have the following developmental impacts.</p> <ul style="list-style-type: none"> <li>- Achievement of a <u>diversification of the Philippine's power generation mix</u>. The power sector currently represents the principal GHG emission source in the Philippines.</li> <li>- Development and support of <u>related sectors</u> (especially agriculture in the case of biomass).</li> <li>- Creating opportunities for potential future <u>renewable energy equipment manufacture</u> in the Philippines.</li> <li>- Parallel support of the development of these sectors in <u>neighbouring countries in South East Asia</u>.</li> <li>- <u>Direct and indirect job creation</u> through the program.</li> <li>- <u>New enterprises</u> to be created through the program.</li> <li>- <u>Access to energy for individuals</u></li> </ul>	<p>IFC will be monitoring the development impact of CTF funded projects as we do for every other project. We have selected "Direct and Indirect Jobs created through the program" and "Number of new enterprises created" as Performance Indicators to measure impact on poverty. IFC will work to include gender, access to energy, and market development indicators in this tracking exercise. Since these projects will be new projects, we do not have a baseline to report at this moment. These performance indicators will be monitored through a mid-term and/or final consultative evaluation.</p>

	<p>through the provision of additional energy from low-carbon technologies to the central grid (no interconnection of new homes/individuals foreseen).</p> <p>The Government of the Philippines wishes that poverty alleviation forms an integral outcome of the CTF assistance. Further details on the MDG-Relevance of the program are not referenced. Thus, pro-poor benefits of the projects envisaged are not very clear.</p>	
12.	<p>Overall, achieving the proposed developmental impacts seems to be challenging. Similarly, the number of jobs to be created through the proposed projects as well as building the industrial capacity to manufacture wind, solar and biomass power plant infrastructure within the Philippines as a result of the proposed number of projects seem optimistic.</p>	<p>We recognize that achieving the development impacts of all our target countries is challenging and see that as the role of CTF. The proposal will aim to address non-investment related barriers through its advisory work to further increase the probability of success of the program.</p>
13.	<p>As the CTF funds foreseen for REAP will only be sufficient to promote a limited number of renewable energy projects it is of high importance that parallel advisory services foreseen in the proposal will enable knowledge transfer from the initial projects supported by REAP and address key non-investment barriers.</p>	<p>IFC fully agrees with this statement and is ready to begin implementation of its Advisory Services program upon approval of the CTF program</p>
14.	<p>Overall, information on the current and future tariff situation in the Philippines, existing market failures and the interlinkage between those and the proposed projects are not elaborated upon in detail in the proposal.</p>	<p>Please see response 2 above.</p>

		However, such information would be needed to determine the need for additional CTF funding on a broader basis.	
United Kingdom	15.	It is not clear from the proposal whether the financing proposed will be sufficient to achieve the stated objectives. Is there any analysis that supports the contention that all three of the sectors can be transformed with the envisaged levels of investment? This seems to be a major risk that is not adequately considered. If the investments proved insufficient to transform the target sectors where would this leave the project? Would there not be a greater likelihood of success if the program were focused solely on one of the stated sectors?	<p>This question is trying to determine if there is more catalytic impact in doing 3-4 investments in one technology versus, for example, doing 1-2 in each. While there is no quantitative assessment to be done in this regard (since there is little data on the impacts of transformational approaches in infrastructure sectors – this is what the CTF aims to generate), the proposed approach seeks to broaden the impact of the program by investing in several sectors which can provide future developers with technology specific performance data within Philippine’s new regulatory environment. At the same time, the program’s advisory and knowledge management work seeks to benefit the whole RE sector (eg. helping one biomass, wind and solar company to access the CDM market, and the capacity it builds within the country to do this, is expected to support future technology development in each of those sectors in the future).</p> <p>If the investments supported by CTF did not result in replication, the result would still be successful direct investments with an absolute GHG impact. In addition, the program would have helped Philippines diversify its energy resources to achieve its targeted/ideal mix of power supply.</p>
	16.	Like German, we are concerned about impact that the publication of the FIT levels has on the assumptions made in the proposal. We	Please see response 2 above.

		think that it would add certainty to the proposal if it were held back until the FIT is announced.	
	17.	The proposal goes into a lot of detail with respect to the Development Impact but doesn't carry this through to the Performance Indicators and baselines. WE would propose that these be developed while we wait for the FIT announcement.	IFC will be monitoring the development impact of CTF funded projects as we do for every other project. We have selected "Direct and Indirect Jobs created through the program" and "Number of new enterprises created" as Performance Indicators to measure impact on poverty. Since these projects will be new projects, we do not have a baseline to report at this moment. These performance indicators will be monitored through a mid-term and/or final consultative evaluation.
France	18.	Establishing a feed-in tariff pricing is key to settle the level of concessionality. We have two remarks on this point: on the one hand, (i) we share the German and UK concerns on this regard about the link between the publication of the FIT levels and the assumptions made in the proposal. On the other hand, (ii) would the FIT chosen allow for a real replication of the project and translation into second and third rounds?	Please see responses 2, 3 and 8 above.
	19.	The assumptions leading to the proposed levels of concessionality, rather high, and the use of the different mechanisms such as mezzanine and equity, are not clearly explained, need to be detailed.	Please see response 7 above.
	20.	The project is targeting 2-3 projects with a high concessionality. This could lead to a strong distortive effect, especially on local banks. How will such a distortion be	The project is targeting 3-4 investments with the \$19M CTF funds allocated for investments. The subsidy associated with the CTF component of the investment will be structured to bring the

		prevented?	<p>risk/reward profile of the projects to a level where the developers will want to do the project (and where the cash flows can support such the interest payments). If regular commercial financing were available for such projects at pricing that enabled the projects to happen, then CTF would not be necessary. IFC's assessment of the market, and the developers with which it has spoken, indicate that existing projects would not be financially viable at commercial rates.</p> <p>Once project success has been demonstrated (ie. projects are successfully repaying their debt), the interest rates offered by commercial banks should lower, and the returns required to compensate developers for the risk they take should lower. As a result, the market should be able to take off without further CTF subsidies. This evolution of market development should ensure that one developer is not advantaged or disadvantaged over another (ie. the benefits of the CTF subsidy would play the same role as the reduced interest rates and other costs and lower risk that the future developers experience).</p>
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