

DRAFT

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Date: 05/17/2010 09:16 AM  
Subject: Antw: Approval of IFC's Thailand Renewable Energy Accelerator Program

Dear colleagues,

thank you very much for the program document "Thailand Renewable Energy Accelerator Program".

In order to approve it we would like to seek clarification on a number of issues.

1. The range of financing terms for the individual projects under the proposal is rather wide: we would welcome a more detailed justification of these concessional terms, as well as the finance market, and additional, more specific information (s. para 19 of CTF Financing Products, Terms and Review Procedures for Private Sector Operations).

If confidentiality agreements should be required in order to share this information we suggest a joint confidentiality agreement for all MDB's to be prepared by the Admin Unit/MDB committee.

2. In relation to this, we would welcome more detailed information on the base-tariff as well as the assumptions on which the long-term and short-term expectations for both the solar sector and wind sector concerning regulatory support are based.

3. We noted the assumptions concerning the demonstration potential. A more detailed explanation as to the basis of these assumptions would allow us to feel more confident about the potential of a CTF support.

4. Given the currently unstable political climate in Thailand we would be interested in reasons of WB and IFC to selectively reengage, in particular with CTF-financing. Also, apart from context as to other measures you are undertaking in order to off-set the dampening effects of these political tensions on the investment climate, we would also be interested to learn about possible attempts to overcome obstacles for implementation.

Attached (below) you will find a more detailed assessment.

Thank you very much for your consideration  
Kind regards  
Annette

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## **Comments on CTF Private Sector Proposal “Thailand Renewable Energy Accelerator Program”**

Financial Volume: up to 39 Mio. USD CTF Loan,  
+ 500,000 USD Grant for advisory services  
+ 500,000 USD Grant for Implementation & Supervision budget)

Purpose of the program: The Thailand Renewable Energy Accelerator Program aims at promoting private sector development in Thailand’s Alternative Energy Development Plan (AEDP). This is proposed via supporting Solar and Wind-Projects under the program.

### **Summary**

With respect to the financing terms: It is our concern that the Trust Fund Committee is not yet provided with the necessary information to be able to approve the proposal.

With respect to the sectoral issues: Given that it is considered in line with the purpose of the CTF to support programs in such an early stage, the proposal could from our point of view in general be approved given that the clarifications regarding the “project proposal” as outlined below are provided.

### **General Comment on the Financing Terms**

The program planning seems to be in an early stage and we are concerned that the CTF Trust Fund Committee (TFC) is currently not equipped with sufficient information to live up to its responsibility (see para 19 CTF Financing Products, Terms and Review Procedures for Private Sector Operations).

Justifications have to be provided for private sector operations as to why such specific terms are required in a particular market for each project. It seems the range of terms for this project is rather wide and additional arguments for that would be welcome. We would also welcome a more detailed explanation of these rather concessional terms, including an analysis of the local financing market, and possibly a range of terms that is narrowed down a bit more to what would be realistic and required. The terms of CTF funds in the private sector should in general be explained relative to market requirements and be priced independently of the MDB terms.

It needs to be made explicit, that (at least) the pari passu clause also applies to other MDBs (here ADB) than IFC if they are involved in the financing.

If confidentiality agreements are required for this case, we suggest that a joint confidentiality agreement for all MDB be prepared by the CTF Admin Unit in order to substantially simplify these processes in the future.

### **General Comments on the Project Proposal**

It seems a very relevant issue to kick start a number of projects in the solar and wind energy sectors in Thailand in order to foster larger scale involvement of the private sector in these industries. This effort seems worthy of support.

Information on government subsidies (renewable premia) for solar and wind power production are provided, and are interesting and important. Some more detailed information on the base tariff for “conventional power” and how this price is determined in Thailand would be interesting and very much welcome. This includes an analysis as to long- and short term sustainability of private investments.

Related to this, a scenario – possibly a brief narrative – about to what extent the replication potential depends on the announcement of prolonged feed-in-tariffs in Thailand. Perhaps it might be considered to add this to the list of risks associated with the program.

The currently very volatile political climate should also be considered in more detail, in particular the implementation problem.

## Investment criteria

### 1. „Potential for GHG Emissions Savings”

#### CO2 Emission–Reduction / Programme-Duration:

- Expected GHG emission reductions of 50 MW of Wind or Solar power over a lifetime of 30 are estimated at around 1.3 Mio Tons CO2e.

#### Technology Development / Abatement Potential:

- The proposal assumes a 10x multiple by an indirect demonstration impact (approx leading to 1 GW solar/wind generation capacity). This would then consequently lead to CO2 reduction around 26 Mio T of CO2 (still assuming a lifetime of 30 years).

### 2. „Cost-Effectiveness“

#### Costs / Abatement Potential:

- The assumptions above lead to implicit reductions of 0.064 tons per CTF Dollar spent. This corresponds to roughly 15 CTF-USD per ton. However, this is by no means a measure for the cost-effectiveness of abatement. (i) not the amount of CTF funds is the relevant figure for the abatement cost, but a corresponding grant element; (ii) possibly other subsidized financing (e.g. by the CTF of the ADB) may contribute to make the projects viable; (iii) GoT also provides a feed-in-tariff which is equivalent to a subsidy. An abatement cost measure (in USD per ton) would therefore probably be larger.

### 3 “ Demonstration potential at scale”

#### Emission Reduction by Replicating the programme approach:

- Potential for solar power in Thailand is very large providing the country with a substantial comparative advantage when it comes to applying PV technology. The wind potential is still substantial albeit not as obvious as for solar energy. In relevant areas average wind speeds of 6.4 m/sec are cited by the proposal. For specific projects, however, actual measurements are obviously crucial.

#### in absolute figures:

- The proposal assumes that the envisaged project will contribute to ten times the installation via demonstration effects which would then mean an installed capacity of roughly 1 GW in wind or solar. This would be a substantial contribution to the target formulated by the GoT of roughly 5.6 GW of renewable power generation by 2020.

#### Elements that will support replication and development of renewable energy sector:

- Private sector experience in investing in these renewable energy technologies will be crucial in reaching ambitious renewable targets. Unless a critical amount of projects are undertaken by the private sector in the respective technologies, it will be very difficult to have private capital move into renewable electricity production without constant subsidies.
- Within the advisory components (or other) joint wind (or solar irradiation) measurements may be performed and further foster private sector interest – and possibly competition for attractive sites.

#### Areas of concern:

- The proposal rightly points at the fact that the premia paid on top of the base tariff for power based on conventional resources by the GoT are – albeit fairly sufficient as such – only guaranteed for a time horizon of ten years. Under current conditions, the type of supported projects would therefore not be financially sustainable.
- Somehow related to this is the issue of the base tariff. The base tariffs are crucial for the financial viability and crucial for the replication potential. (This has previously been discussed at hand of the investment plan.) Although it is plausible that the private sector does not have substantial influence on power price regulation some information

on the general level (and perhaps volatility, trend) of the base tariff for electricity would substantially help to build an expectation regarding the replication potential.

Potential impact private public sector relations:

- This is a private sector programme.

Appraisal of chart on expected emission reduction:

- Not covered.

**4 „Development Impact“**

The major goal is to contribute to reaching the renewable target and develop the private sector renewable energy generation industry – notably wind and solar – in Thailand. For the relevant technologies there are already producers within Thailand. Consequently, the program can be expected to contribute to the growth of the local energy manufacturing industry – or know-how in general – regarding the respective technologies wind and solar.

Impacts on energy intensity of the gross national product:

- Not specified.

MDG-Relevance:

- There is no reference made on the MDGs in the document.

Side effects for the environment and eco system:

- It is expected that IFC environmental and social standards will be applied. Serious negative environmental impacts are not expected.

**5 „Implementation Potential“**

The program will not be an independent initiative but it will help the GoT to implement its overall longer term strategy, the 15 year Alternative Energy Development Plan. The goals of the plan are to increase the share of renewable energy from roughly 6.4 per cent today to 20 percent in the year 2020.

Co Financing:

- CTF financing of USD 25(15) million per solar (wind) project is leveraged by USD 40(25) million IFC funds and USD 110(85) million private sector funds.  
IFC will seek to co-finance projects with the ADB, who is also active in Thailand.

**6 Relation to bilateral development cooperation**

- The German development cooperation disposes of a comparatively small project portfolio in Thailand. Financial cooperation has been phased out a while ago.