

February 23, 2012

## Response of ADB to France on the Approval by Mail: Revised CTF Thailand Investment Plan

Replies to these queries are inserted below.

February 16<sup>th</sup>, 2012

### Update of the CTF Investment Plan for Thailand

#### Queries from the French chair

France welcomes the revision of the Investment Plan (IP) by the Government of Thailand and thanks the AU and the implementing MDBs for the work achieved to this effect. We also welcome the private sector orientation proposed by the new IP.

In order to ensure full comprehension of the scope of these revisions and their adequacy to the CTF principles, we kindly require additional information on the following questions – all concerning AsDB's new RE program:

- **Context:** the original IP included description of the national policy framework regarding RE, but the revised IP could use some updates in this respect. In particular, the Thai National Energy Policy Council passed in July 2010 a resolution agreeing in principle to work towards establishing a fixed feed-in tariff instead of an adder; is it expected to impact the Thai RE market, and how?

#### **Reply:**

*As of early 2012, there has been no movement to adopt fixed feed-in tariffs (FIT) in place of the current adders. The impacts posed by the use of a fixed FIT would greatly depend on a variety of externalities within the scope of the GOT's policy domain. One possible effect would be the perception of a lower amount of incentive provided to project developers, resulting in an increase in the perceived first-mover risks. As this policy move has yet to materialize, ADB does not wish to speculate further on possible project-level impacts.*

*Despite the existence of the tariff adders, RE development for electric power remains very low: as noted in paragraph 18 of the CIP Update (CIP-U), electricity has the lowest share of alternative energy development. The major policy change since 2009 is the updated grid decarbonization objective noted in paragraph 19 and Figure 3 of the CIP-U. Figure 3 shows the decarbonization objective requires a 25% decrease in grid intensity from present to year 2030. This is all the more challenging considering that alternative energy development as of 2010 was mostly in forms other than electricity (as explained in para. 18 of the CIP-U). The decarbonization goal requires that all future fossil power capacity additions be completely offset by zero-carbon electricity, in addition to which an additional 25% decrease in GHG intensity is required. The case for aggressive expansion of RE for electricity generation is quite clear. [We would also note that the original CIP made the case for intervention in RE development because the tariff adders were not sufficient.]*

- **Technical issues:** the IP doesn't mention possible actions to reinforce the electricity grid, so as to handle fast-growing RE production. Are such actions not needed in the short term, or are they taken care of by other entities?

**Reply:**

*Thailand has one of the best-developed grids in Southeast Asia, which already accommodates hydropower imports. Grid expansions are being considered to facilitate further power trading with neighboring countries.*

*The projected mix of adding biomass, waste-to-energy (WTE), solar, and hydro electricity generating capacity will have a low impact in terms of grid stability. Biomass typically runs as baseload and should enhance grid stability, as the AEDP calls for biomass to account for 66% of RE capacity by 2022. Solar is expected to comprise the largest share of future RE capacity, and with its inherent load-following characteristics it does not present an insurmountable challenge, as the AEDP calls for solar to account for only 9% of RE capacity by 2022 (this would increase to 15% if the solar objective is increased to 1000 MW and the overall objective is increased to 6608 MW). Gas-fired generation and hydropower plants also provide flexible output to balance intermittent loads. Only wind systems may become the most problematic with respect to grid stability and dispatch, but wind is projected to comprise less than 3% of total RE capacity by 2022. [The AEDP objectives are presented in Table 2 of the main text of the original CIP; the table was not reproduced in the CIP-U for sake of brevity.]*

- **Market impact:** could more detailed information be provided regarding the barriers in the RE market that the program aims at lifting, and how exactly the CTF intervention would allow it (more details on the "risk coverage")? As can be seen in the document, some subparts of the RE sector, and in particular the solar energy, are raising increased interest from the private sector; besides, the AsDB has already closed two utility scale solar projects without CTF.

**Reply:**

*As discussed above, the existing tariff adders appear quite attractive on paper, but the reality is that the adders have not been readily monetized to finance RE projects. Without a roster of completed projects with demonstrable market development impacts (e.g. establishment of business models, lowering of entry costs, etc.), first-mover risks with respect to project implementation, technological risks due to resource intermittency, and the high capital cost of equipment will continue to be present within the market. As such, it would continue to be difficult in scaling-up and replicating RE projects.*

*It is important to note that ADB's projects which have already closed financing used some grant funding to enhance the overall financing package to make it more attractive to the project sponsors. With CTF, a major effort will be made to fund RE development on a project finance basis, which has yet to happen at scale. [ADB's*

*1st RE project was a loan made against the sponsor's balance sheet , and not a project finance transaction. The 2<sup>nd</sup> RE project was the 1st RE project in Thailand executed on a project finance basis.]*

*(These are of course key question, not only because concessional funds are precious resources, but also because the impacts of the program rely heavily on the replication effect ; for instance, the ton of GHG reduction becomes less costly in this program compared to original IBRD public sector plan only after taking into account a replication by 10...)*

**Reply:**

*The GHG reductions shown in Table 4 of the original CIP included some de facto replication and scale-up, as the IBRD investments via Specialized Financial Institutions envisioned \$400 million of private sector participation. IBRD projected a total of 1.6 MtCO<sub>2</sub>e/y reductions by 2022, and noted the replication and scale-up potential as the balance of the AEDP objectives, i.e., 5608 MW – 700 MW = 4908 MW. As shown in Table 5 of the CIP-U, the replication and scale up potential is estimated as an additional 6500 MW given the very high potential for solar power.*

- **Subsidiarity:** could more evidence be provided against the risk of evicting private actors (who are not totally absent from the market) or non concessional DFIs from the RE production sector? What is the articulation with IFC's parts of the IP (T-SEFF and T-SEF)?

**Reply:**

*Additional CTF funding for the private sector is intended to crowd in additional private sector investment. This is no risk of « evicting private actors. » There is no overlap between IFC's programs and ADB's program.*

- **Cofinancing:** what kind of partnerships and cofinancing arrangements could be expected with other DFIs or local commercial banks?

*(AFD would in particular welcome collaboration on such projects.)*

**Reply:**

*All projects will be co-financed with local banks. ADB has ensured in past projects that its involvement leads to significant participation of commercial banks by reducing the overall risk perception of the project. ADB will continue to do so and confirms that all projects will include local commercial banks in the consortium.*

*Partnership and cofinancing arrangements will vary from project to project, and it is premature to present any project-specific information until the CIP Update is endorsed.*

- **Civil society consultation :** in light of the recent discussion about the Philippines' revised IP, could the Committee be informed of all consultations undertaken/ envisaged?

**Reply:**

*The MOF / PDMO noted during the June and August 2011 missions that there is regular consultation with business associations, who eagerly await the shift in CTF resources from public to private sector. GOT has consulted with other government departments as well; in fact, the Cabinet reviewed and approved the CIP-U for submittal to the CTF Trust Fund Committee.*