

**Joint Mission of the ADB / World Bank / IFC
Clean Technology Fund (CTF) Investment Plan Update for Indonesia
January 28 to February 1, 2013**

Aide Memoire

1. Per the letter from the Government of Indonesia dated 12 November 2012, a joint mission of the Asian Development Bank (ADB), the World Bank and the International Finance Corporation (IFC) visited Jakarta from January 28 to February 1, 2013 to assist the Government update Indonesia's Clean Technology Fund (CTF) Investment Plan (IP). The MDB team members are listed in Annex 1.
2. The objectives of the joint mission were to: (i) review implementation status of the original IP, including readiness of all existing components to move forward in a timely fashion; (ii) further assess circumstances and rationale for revising the IP; (iii) discuss possible reallocation of CTF resources within the existing priority sectors, if necessary, and assessing the impact of such changes on achieving the objectives and targets of the original IP; and (iv) consult with the Government and other key stakeholders on the proposed changes.
3. The mission is grateful for the cooperation it received from the Government officials and staff of relevant institutions met (see Annex 1 for the list of persons met). This draft aide memoire summarizes the main findings and agreements reached during the mission and they are subject to confirmation by the Government of Indonesia and the management of the World Bank, IFC and ADB. The findings were discussed at a wrap-up meeting on 1 February 2013, which was chaired by Dr. Ifra Ampri, Director, Center for Climate Change Financing and Multilateral Policy, Fiscal Policy Office, Ministry of Finance.

Summary

4. Through meetings and stakeholder consultations, the mission agreed with the Government that the IP should be revised. CTF funds not yet approved should be reallocated to the priority sectors established in the original plan [e.g., geothermal and financial transformation for energy efficiency (EE) and renewable energy (RE)]. The \$125 million allocated for ADB's sovereign loan for geothermal power development will be relocated to a larger (\$150 million) private sector geothermal program through ADB's private sector operations (ADB-PSOD). Due to needs identified in program development, up to half of IFC's \$50 million allocation for financial transformation for RE/EE will be reallocated to IFC's private sector geothermal program (total of \$50 million). The mission and the Government agreed that the revised IP will be finalized by 15 March 2013 and submitted to the TFC for re-endorsement (i.e., decision by mail) prior to the end of March 2013.

Mission's Findings and Agreements

5. **Strategic Uses of CTF:** The IP contains two main strategic uses of CTF financing: (i) scale-up of large-scale geothermal power, through both the public and private sector; and (ii) acceleration of initiatives to promote energy efficiency and small-scale renewable energy (particularly biomass cogeneration) through the private sector. A total of \$400 million was endorsed in April 2010 for these initiatives, broken down as follows: (a) \$125 million public sector loan for geothermal through the World Bank; (b) \$125 million for public sector loan for geothermal through ADB; (c) \$50 million in aggregate for private sector geothermal projects through IFC and ADB private sector operations; (d) \$50 million for EE/RE through IFC; and (e) \$50 million for EE/RE through ADB private sector operations.

6. The IBRD has obtained CTF and board approval for its Geothermal Clean Energy Investment Projects, which included \$125 million from CTF, for Pertamina Geothermal Energy (PGE), a public sector geothermal developer. ADB has completed project preparatory activities for its public sector geothermal project with PGE and PLN (state-owned power company and geothermal developer), which included \$125 million from CTF, and was planned for ADB board approval in fourth quarter of 2012. However, the government requested deferment of the ADB loan until 2013 pending internal discussions on alternative borrowing modalities, including direct lending to state owned enterprises without a government guarantee.
7. There was agreement that geothermal power and EE/RE remains the priority sectors for the government for greenhouse gas mitigation and the IP would be updated on this basis. The mission discussed different ways to accelerate the developments in these sectors, inclusive of both public and private sector initiatives through the MDBs. The mission also discussed the catalytic nature of CTF funds to unlock barriers and bring about transformative change for low carbon growth. The mission highlighted the importance of using CTF funds efficiently by mobilizing private sector financing and investment for renewable energy and energy efficiency projects.
8. **Structure of the Investment Plan:** The revised plan (the working draft is attached as Appendix 2) is comprised of projects that would be ready for TFC approval within the next 12 months after re-endorsement of the IP, for the remaining US\$275 million from the 2010 allocation. In addition, the Mission recommended that the Government and MDBs would periodically review the progress of the projects and programs in the revised IP. Other eligible projects (both public and private sector) that may not be ready during this time frame would be prepared and presented to CTF in the future, subject to the availability of additional CTF funds and/or a competitive allocation process. The Government of Indonesia reserves the right to formally prepare a Phase II investment plan should the TFC invite such proposals, inclusive of either public sector or private sector projects aligned with the strategic priorities.
9. The following provides an update on projects and programs that were outlined in the 2010 IP and validates the re-endorsement:

IBRD

10. The IBRD Geothermal Clean Power Project was endorsed by the TFC in December 2010, approved by the IBRD Board in July 2011, and became effective in June 2012. The total project costs are estimated at \$574.7 million, consisting of \$125 million from CTF, \$175 million from IBRD, and \$274.7 million from the project sponsor Pertamina/PGE. In parallel, the IBRD has been providing technical assistance to PGE with more than \$9.0 million grant trust funds for the purpose of preparing the proposed investment and further strengthening PGE's capacity building effort.
11. The Project aims to support the development of two geothermal development fields Ulubelu and Lahendong (Tompasso) with capacity of 110 MW and 40 MW respectively. So far the geothermal resources have been confirmed at both fields, and the tendering for the steam gathering system and power plant which are to be financed by IBRD and CTF loans is underway. The first disbursement of the CTF loan is expected by end 2013.
12. Even though all of its CTF allocation from the original IP has been approved, IBRD remains committed to working with PGE and other stakeholders to explore further opportunities to support geothermal development in Indonesia, building on its existing experience in Indonesia and other countries. It aims to mobilize additional resources to assist PGE in identifying project pipeline and

raise the readiness of PGE to absorb quickly additional CTF resources, if any, and other types of concessional financing that are needed to address the high resource risks associated with geothermal power generation.

ADB

13. ADB and Pertamina (borrowing on behalf of PGE) are now discussing a non-sovereign loan through ADB-PSOD¹ for early stage geothermal development (specific projects are still being discussed). In parallel ADB-PSOD has been engaged with private sector geothermal developers representing several hundred megawatts of new capacity across multiple projects. Some of these Fast Track projects have been delayed due to legal and contractual issues, but these have recently been positively resolved which will allow one advanced project to move forward with the lenders to financial close. Several other private sector geothermal projects are in the drilling exploration process, and may also go forward for financial close in the next 12-18 months.
14. However, resource risk remains the key barrier for proving the entire megawatt capacity of a project and also for catalyzing the full amount of commercial debt and equity required within the timeframe allocated by the license. CTF will be deployed to specifically mitigate these risks with lenders and investors via a programmatic approach. ADB-PSOD intends to seek TFC approval of the program in Q2 or Q3 of calendar year 2013. The total CTF allocation for ADB private sector geothermal development will become \$150 million (consistent with the allocations in the original IP).
15. The ADB-PSOD Private Sector EE/RE investment program is under preparation through a project preparatory grant (approved by the TFC in March 2012 and by the Government in December 2012). The investment pipeline comprises (i) EE in existing and new commercial and residential buildings; (ii) EE especially in heavy industries including cogeneration and cleaner production; and (iii) RE power generation through biomass, and possibly small hydropower, solar, and wind resources. Different financial instruments and intermediation arrangements are being considered². As commercial banks have demonstrated limited appetite for scaling up EE and RE funding, a learning-by-doing approach will be employed, in association with credible technical partners, to implement prototype investments; this early experience can then be transferred to financial institutions with an expedited learning curve. The CTF allocation for this program will remain at \$50 million. ADB-PSOD expects to submit a proposal for CTF Trust Fund Committee approval by Q4 of calendar year 2013.

IFC

16. Following discussions with project developers in geothermal, IFC is envisaging using CTF resources to help cover resource exploration risk for 2-4 geothermal projects in Indonesia. These projects are at various stages of early resource exploration, however all are considered to be among the most advanced geothermal projects under the "Second Fast Track Program." The objective is to support rapid development and construction of some early private sector geothermal projects that could have a substantial demonstrational and transformative role for private project developers.. IFC expects to submit a proposal for CTF Trust Fund Committee approval by Q1-2 of calendar year 2013 with a view of increasing the CTF fund allocation to \$40-50 million, by reallocating funds initially allocated to IFC's program for Private Sector Energy Efficiency & Renewable Energy.

¹ Processing of both public non-sovereign loans and private sectors follow CTF Private Sector Guidelines. Within ADB, both types of loans are processed and administered by ADB-PSOD.

² As referenced in the project preparatory grant proposal, ADB is considering an investment in the Global Climate Partnership Fund, alongside CTF funds, for investments in Indonesia.

17. Based on IFC's interactions to date, commercial banks are keen to tap into the potentially large market for sustainable energy finance (small-scale RE and EE financing), provided that appropriate concessional financing instruments and technical support are made available. Technical support is needed to design appropriate financial products, build capacity of staff to analyze the financial viability and risk profile of EE and small-scale RE projects, create partnerships/alliances with appropriate technology suppliers, and improve coordination with ESCOs on the conduct of energy audits for existing portfolio clients. IFC, therefore, plans to use CTF financing to address financing barriers to EE/RE investments by SMEs, such as substantial transaction costs, high perceived risks, collateral requirements, and limited expertise by banks to assess EE/RE projects. Moreover, IFC has also received interest from private project developers for RE projects, where IFC could make direct investments that would catalyze private sector investments in solar, wind, or biomass. Given the higher demand for CTF funds in geothermal projects, and relatively lower demand for RE/EE financing, IFC seeks to reallocate about \$15-25 million to the Private Sector Geothermal program. IFC expects to submit a proposal for RE/EE financing to the CTF Trust Fund Committee approval by Q3 of calendar year 2013.
18. The Government proposes to adjust priorities for CTF funding based on the present circumstances and the readiness of candidate project aligned with sector objectives. The private sector EE and RE financing programs continue to be high priority, but the improved tariff regime for RE has resulted in new project development activity and investor interest. Challenges remain to induce local financial institutions to lend for RE and EE. Geothermal development continues to be a high priority, and there is a need for interventions that will reduce upfront development risks, catalyze commercial lending for projects that proven some level of steam resources and facilitate greater private sector investments. The major changes proposed are to shift CTF resources from public to private sector modalities for geothermal power, and to shift a some amount of CTF funding from EE and RE financing programs to private sector geothermal development. Table 1 outlines the proposed revisions to the Investment Plan.

Table 1: Indicative Financing Plan for CTF Projects
(in \$ millions)

MDB / Program (MDB)	Total	CTF	MDB	Other Cofinancing
Geothermal Clean Energy Project (IBRD)	575	125	175	275
Private Sector Geothermal Program (ADB)	2,625	150	375	2,100
Geothermal Program (Investment & Advisory - IFC)	1,760	40-50	120	1,600
Energy Efficiency and Renewable Energy (IFC)	260	25-35	125	100
Energy Efficiency and Renewable Energy (ADB)	250	50	50	150
Total	5,470	400	845	4,225

Note: carbon finance is not expected to be mobilized as upfront cofinancing due to eligibility limitations, low prices, and high transaction costs. The proposed grant amount of up to \$2 million will be distributed across remaining program.

Consultations with Development Partners and Civil Society

19. Consultation with development partners, civil society including NGOs and energy industry associations was an integral part of the preparation of the revised IP. Ahead of the joint mission, a preparatory meeting was held with selected civil society representatives to identify stakeholders and develop a process for a consultation workshop to discuss the CIP revision. The consultation workshop, hosted by MOF, was held on 29th January 2013 and was attended by 21 representatives of civil society organizations as well as representatives of MOF, ADB, WB and IFC. The objectives of the workshop were to share information on the content and status of the IP, obtain inputs from civil society groups on the revision of the IP and identify a process for civil society engagement in the IP going forward. Workshop discussions focused on the continuing barriers in the policy and legislative environment for RE and EE, and opportunities for the involvement of smaller RE and EE project developers and financial intermediaries in CTF implementation. Potential civil society roles in implementation of the IP were identified as project consultations, community partnerships, and monitoring and evaluation; further meetings with civil society will be undertaken to elaborate their involvement.

Monitoring and Evaluation

20. In the revised IP, the Mission has revised the results framework in line with the revised CTF Results Framework (approved by CTF in November 2012). This includes additional focus on the monitoring and evaluation components during the implementation of CTF projects/programs.
21. To assist the Government improve its national framework on monitoring and evaluation, the revised IP includes a request of up to \$2 million grant for support in this regard. These funds can also be used to do impact evaluations as well as generate lessons learned from implementation of IP, which may also help Indonesia to scale up its investments in the priority sectors.

Timeline for Finalization of Revised IP

22. The following timeline was discussed with the Government for finalizing the revised IP:
 - Government of Indonesia to approve the aide memoire and provide written comments on the draft IP (the working draft is attached) by 15 February 2013
 - As lead MDB, ADB to revise the IP to incorporate all comments by 22 February and recirculate
 - The revised IP to be circulated to development partners and civil society on 22 February 2013. All comments to be submitted within two weeks to the Government of Indonesia.
 - In parallel, the Government of Indonesia to seek internal approvals of the revised IP by 1 March 2013
 - Government to submit the revised IP to the trust fund committee for decision by mail on 15 March 2013

On Behalf of the MDB Team:



Don Purka

Principal Investment Specialist, Asian Development Bank (Team Leader)

Annex 1

MDB Team Members:

ADB: Mr. Don Purka (Principal Investment Specialist; Team Leader), Mr. Rainer Hartel (Principal Investment Specialist, Private Sector), Mr. Jackie Surtani (Senior Investment Specialist, Private Sector), Mr. Jiwan Acharya (Senior Climate Change Specialist), Mr. Pradeep Tharakan (Climate Change Specialist), Mr. Dan Millison (Consultant, Renewable Energy).

IBRD: Mr. Gevorg Saryasan (CTF Coordinator), Mr. Peter Johansen (Senior Energy Specialist), Ms. Ahn Nguyet Phan (Senior Energy Specialist), Ms. Xiaoping Wang (Senior Energy Specialist).

IFC: Ms. Joyita Mukherjee (Senior Operations Officer, Blended Finance Unit), Mr. Alejandro Perez (Senior Investment Officer), Mr. Miles Stump (Sustainable Energy Finance Specialist), Mr. Haruhisa Ohtsuka (Investment Officer, Blended Finance Unit), Mr. Nyoman Yogi (Operations Officer, Advisory Services), Mr. Harry Alexander (Consultant, Advisory Services).

List of Government Officials Met:

1. Ifra Ampri, Director, Center for Climate Change Financing and Multilateral Policy, Fiscal Policy Agency, Ministry of Finance (PKPPIM BKF MOF)
2. Ramadhan Harisman, Head of Climate Change Division II, PKPPIM BKF MOF
3. Bara Ampera, Head of Energy and Transport, PKPPIM BKF MOF
4. Narendra Widjajanto, Finance Director, PERTAMINA
5. Budhi Himawan, Senior Vice President, Finance and Business Support, PERTAMINA
6. Dewo Broto Jokol, Multilateral Director, BAPPENAS
7. Ir. Tisnaldi, Director of Geothermal, MEMR
8. Dendy Kurniawan, Finance Director, GEO DIPA Energi
9. Wisnu Wardhana, Corporate Finance Manager – GEO DIPA Energi
10. Tri Adi S, Project and Structured Financing, PERTAMINA
11. Astuti T., Staf Korporat, PLN
12. Sjaiful Ruchijat, Head of Sub Directorate of Geothermal Investment and Cooperation, Directorate of Geothermal Energy - Ministry of Energy and Mineral Resources (MEMR) Yunus Seifulhar, Head of Sub Directorate of Geothermal Business Service and Guidance, Directorate of Geothermal Energy – MEMR Endang Heriyati, Treasury – PGE
13. Algian Prihenadi, Staff of Fiscal Risk Management, Office of Fiscal Policy (BKF) - MOFLeni Andrayani, Head of Section, Directorate General of Debt Management - MOF
14. Janial Abidin, Head of Section, Directorate General of Debt Management - MOF Hastazi, PIP
15. Yanuar, PIP
16. Evan Oktavianus, PKPPIM BKF – MOF