

# CLIMATE INVESTMENT FUNDS

February 12, 2016

---

**APPROVAL BY MAIL: INDONESIA: GEOTHERMAL ENERGY UPSTREAM DEVELOPMENT PROJECT  
(GEUDP) (WORLD BANK) (CTF) -XCTFID112A**

Comments Received from the United Kingdom

Hi Mafalda,

Thank you for this proposal, please see some questions/comments from the UK below:

### **Learning**

We are pleased to see that the proposal draws on similar work that the World Bank and others have done in other countries (eg. Turkey, Armenia and Mexico) and from the work of other, well positioned entities such as the GEF, ASTAE and ESMAP and is mobilising their resources appropriately to support this project. It is important that lessons from other projects are learned and incorporated into new projects as they emerge. However there is little in the project documentation to show that the team have learned lessons from other geothermal investments in Indonesia (particularly CTF ones). Given that the vast majority of the revised Indonesian IP is for geothermal development, we'd expect to see more evidence of learning from other geothermal investments and on sharing lessons with other MDBs from other programs. For example, we know that there have been considerable delays and slow disbursements to other CTF geothermal projects in Indonesia- have any lessons been learned from this, or have policy reforms made a difference to this recently? What reassurance can you give that this project won't be similarly delayed?

### **Project developer**

On page 32 it mentions that the project developer does not have to bear any risk in the exploration phase: "If developers do not secure project financing, they would not be required to pay back the cost of exploratory drilling activities carried out by the government- neither in full nor in part as that would discourage private participation, which is key to furthering the sector"

- Is this fair? How does this compare to cost sharing mechanisms in other countries such as Japan or US?
- How much will the risk premium (that the developer has to pay if the exploration is successful) be? How does this compare to other projects e.g. is there a comparable premium in the recent IDB geothermal project?
- What do developers have to do to be awarded a license? Do they have to pay for it, or are there conditions attached to the license itself (e.g. if developers cannot show that they have started production drilling within, say, a year of being awarded the license then they lose it or pay a penalty)?
- Could you provide more detail on the incentives that ensure that reaching financial close & paying back the exploration drilling costs doesn't become less attractive to developers than simply sitting on the license and not spending any more of their own funds – for example on slightly more difficult sites, or if they run into financial difficulties.
- Could you provide some more information on the local banking market, is there an appetite to support geothermal? Are there any risks around a potential lack of local financial support?

### **Additional WB funding**

The proposal is ambiguous with regard to the \$300 million from the World Bank. At times it is included as a subsequent investment under component 3 (page 19) and is included in the leveraging calculations. On page 34, it states that the World Bank is “considering” the \$300 million investment and that these resources would only be committed upon successful completion of the exploratory drillings. The Results Framework on page 41 seems to split the \$300 million into 2 parts, one within a 5 year implementation period and one within a 15 year period. This appears to be portraying a best case scenario only. What might a worst case scenario look like, or is it not likely?

### **Results**

Page 45 - “Based on unlocking 65MW of geothermal capacity per cycle, and given the revolving nature of the proposed facility, it is expected that funds will flow back every three years over a 15 year cycle, therefore enabling the aforementioned capacity of 260MW over the lifetime of the facility.”

- Please could you provide more detail on how this is calculated? We calculated  $65\text{MW} * (15/3) = 65\text{MW} * 5 = 325\text{MW}$ , not 260MW.
- Was this based on region-specific data?
- We think that recycling the funds this number of times feels quite ambitious as there may be a number of factors that could prevent projects from reaching financial close and repaying the costs of exploration drilling. We understand that successful projects are expected to pay a premium to address this risk so could the project team provide more detail on how the premium will be sized in order to help recover the funds?
- Are we right in assuming that the calculation of “GHG emissions reduced or avoided” based is based on 65MW rather than 260MW?
- What is the expected success rate of exploration / drilling programs? How does this compare to other projects
- What is the expected public/ private split of the \$390m leveraged from the Private/Public sector?
- Could you explain how the cost effectiveness Investment Cost per Tonne has been calculated? (7.5 US\$/tCO<sub>2e</sub> for CTF funding and 75.6US\$/tCO<sub>2e</sub> for total funding)
- Given that the GEF is funding the TA element of the fund, how will the results be attributed to the two projects to ensure that there is no double counting?

### **Investment Criteria**

Part of the CTF Investment criteria is an analysis of the expected reduction in the cost of the technology due to technological progress and scale effect at a global level, and/ or through organisational learning and scale effects at the country level. Could you provide more information on this and add it to the proposal?

[http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_Investment\\_Criteria\\_Public\\_Sector\\_final.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_Investment_Criteria_Public_Sector_final.pdf)

## **Risks**

Generally we think that more detail should have been provided in the risk section of the proposal.

- Does the fact that Indonesia is located in a seismically volatile region pose a risk to the project? Is there a reason why this risk has not been included?
- Given the inherent uncertainty with this technology, could you provide more detail on how the risks around exploration / drilling is being managed (is it possible that no geothermal resource will be discovered?)?
- Also if the corruption/fiduciary risk is substantial then there should be more evidence of how this will be managed at a project level – references to close engagement and a possible GAF seem quite vague.
- Could you provide more detail on the technology risks?
- Similarly, we had some concern over “Induced development could lead to land disputes, illegal land uses, damage or loss of natural habitats and forests, and reduced watershed.” Could you provide more explanation on how such a risk would be managed before approval (currently it says that “impacts will need to be considered, and mitigation planned for, during the project”)

Kind regards,

Kate