

October 7, 2013

Response of ADB on Approval by mail: Indonesia: Private Sector Geothermal Energy Program (ADB)

Zhihong,

Please see attached ADB's consolidated responses to the comments on the above-referenced proposal from the US and UK governments (NB - none of Germany's comments required a response). We would appreciate if you could send to the TFC and upload to the website at your earliest convenience.

Cheers and best regards,
Don Purka
ADB

Indonesia Private Sector Geothermal Power Program Comments from the Trust Fund Committee

1. Comments from the United States

Attached please find comments and questions on the Indonesia geothermal project from the U.S. which would help us formulate our position on this project. The geothermal industry in Indonesia has been struggling despite significant theoretical potential, in large part because of a complicated and fragmented institutional framework, including inconsistencies in the permitting/licensing process, frequent changes in laws with respect to renewable energy, interconnection and other issues related to PLN's status as a monopoly, etc.

The new CTF program appears to intend that by facilitating the completion of some of the existing projects and demonstrating their viability, it will encourage further private sector interest in geothermal beyond the initial 750 MW. Given the record over the past decade and the substantial institutional issues that remain, however, we are concerned that support for these transactions alone, if they are not matched with further institutional, utility, and enabling environment reforms, will greatly limit their influence as demonstration projects to attract further private sector investment and development efforts.

We understand that World Bank and ADB (as well as other development banks such as KfW) have been working with Indonesian Government institutions in the past few years to seek solutions, particularly in finding ways to streamline the tender (for concession areas), permits and license process (which involves local governments and several technical ministries), and to reduce upfront investment risks.

It is important that efforts to improve the financial environment for geothermal in Indonesia should coordinate and track with efforts to reform the overall regulatory/policy environment, to ensure that institutional problems do not inhibit the gains from potential renewed private sector interest in geothermal. We would like to know more about how the ADB views such linkages and how they intend to facilitate them.

Is the project subject to the Indonesian local content requirements which are part of Geothermal law was passed in 2003 (Law No. 27 of 2003) How are the project organizers meeting the requirements of the law? How are the local content requirements structured? How would they impact project development and the costs?

Are the projects subject to Indonesia's Negative Investment List, under which foreign companies are permitted to own up to a maximum of 90% of the operation and maintenance service of a geothermal facility, and 95% of either geothermal drilling service or geothermal power plant.

ADB Response: On the linkages between broader policy, institutional and regulatory issues, and expanded private sector participation, ADB and other development financing partners have been coordinating efforts with the Government on all the issues for several years and will continue to do so. ADB's Private Sector Operations Department (PSOD) program proposal is intended to create and instill investor confidence by clearing some of the project backlog, which will create and build momentum for expanded private sector participation. The program has been formulated with a clear view of the policy issues noted by the US.

Geothermal history in Indonesia might be characterized in 3 stages or phases: (i) pre-financial crisis (pre-1997-98), (ii) post-financial crisis (2003 – 2009), and (iii) post-recovery (2009-onward). Stage 1 initiated most of the existing operating geothermal power plants which are

summarized in Table 1 of the program proposal. Stage 3 comprises mainly greenfield projects which will benefit from the evolving policy/regulatory framework including recent tariff adjustments. Stage 2 comprises various projects which are at various stages of development but which are not expected to benefit from the Stage 3 policy framework. These are obviously in between Stage 1 and 3 which might be referred to as “greyfield” projects; a common characteristic of stage 2 projects is that they sit in “the valley of death” between technical viability and commercial reality. In this context, the proposed program targets Stage 2 project development, and is not a policy lending exercise: rather, it complements various efforts on the policy agenda being supported by ADB public sector operations led by its Southeast Asia regional department and other financing partners (World Bank, USAID, JICA, KfW, AFD, *et al*). As outlined in the updated CTF Country Investment Plan (IP, approved in April 2013), the Government believes the best use of CTF funds for geothermal development in the near term is via private sector operations; endorsement of the IP Update implicitly acknowledged that the current proposal should not be conditioned on the parallel policy agenda.¹

As noted in the updated IP and in the ADB-PSOD program proposal, the overall financing needs for the geothermal subsector are approximately USD 25 billion in the foreseeable future. Given the investment magnitude and geographic scope, all of the major financing partners are supporting the Government on geothermal development (please see para 28 and Annex C). There are well-established coordination mechanisms and there is ample space and need for technical and financial assistance, otherwise the Government would not have requested CTF support for the private sector investment program. The current proposal is a logical output of ADB’s coordinated assistance to the Government and private sector developers, described further below.

ADB provided technical assistance to the Government for establishing the geothermal development risk reduction fund during 2011-2012. This fund was considered as a potential destination for CTF funds delivered through an ADB public sector loan; as the project preparation advanced, the Government made the decision to curtail public sector borrowing from MDBs (this history is discussed in the updated IP) and ultimately the decision was made to shift CTF funds to private sector channels where readiness could be ascertained. The development risk reduction fund has been launched under the aegis of the Ministry of Finance (MOF) with Government funds, and JICA has taken a lead role among the donors in supporting the fund. Prior ADB assistance is summarized in paragraph 15 of the program proposal.

ADB is currently working with PLN to prepare an investment program for Sungai Penuh Geothermal Unit 1 power plant and is also supporting PT GEODIPA in early stage project preparation work of their expansion geothermal projects, along with providing technical assistance on procurement, environmental and social safeguards, drilling program, etc. More information is available on ADB’s website.

KfW is helping the government of Aceh to develop a geothermal prospect on a public-private partnership model. IBRD is administering a \$6 million grant to Pertamina Geothermal Energy (PGE) for overall project implementation support. IFC has undertaken a systematic screening and ranking of 17 candidate projects to establish priorities for future PPP tendering by the local governments. JICA has also provided technical assistance to support PPP development in the sector.

¹ As stated in paragraph 18 of the Clean Technology Fund, *Guidelines for Investment Plans*, dated August 6, 2009, endorsement of country investment plans provides the respective governments and multi-lateral development banks (MDBs) with the “license” to develop and process the project concepts presented.

ADB-PSOD has been actively involved with various private sector developers on the candidate investments noted in the program proposal; these activities complement other ADB and financing partner support. As noted in paragraph 14 of the program proposal, it is unrealistic to expect any dramatic policy shifts in the immediate future until the current pipeline of projects at an advanced stage of development reach financial closure. Alternatively stated, the overall Government and donor efforts comprise a policy/regulatory “push” while the Stage 2 projects and the proposed program constitute part of the private sector demand “pull.” The “push” has been actively supported for several years as described above. The proposed investment program will expand the private sector “pull” which is needed to deliver some of the Stage 2 projects to financial closure, without which “Stage 3” may never materialize with commercial funding.

In terms of specific laws and regulations passed by the Government which relate to local content, it is challenging to broadly answer this question with respect to the geothermal sector. It is only possible to evaluate in the context of individual geothermal projects, which requires detailed information from project sponsors and their legal counsel. The 2003 geothermal law was passed after most IUP licenses (and projects under this Program) were awarded and had their feasibility study approved by the Government, and therefore, would not strictly apply. However the Ministry of Industry Regulation No. 54/2012 applies to the construction of all electricity generating stations for the provision of goods and service². There are explicit exceptions to that regulation, when local goods and services may not be as favorable to the project company as procuring the goods and services from overseas, taking into account price, quantity, reliability, etc. Based on feedback we have received from project sponsors, these local content requirements apply to their EPC contractor and are not overly restrictive (approximately 20-30%). The project sponsors seek to logically maximize the provision of goods and services available in Indonesia, to design and implement the project in a cost efficient manner. Feedback from local sources is that these content requirements are not strictly enforced by the relevant ministry and only one known case of a “warning letter” was issued to a private power project; no fines were imposed.

Throughout ADB’s support in the geothermal sector, ADB knows of no cases in which local content requirements (or the Indonesia foreign investment negative list) have adversely affected large scale geothermal project development or costs. The same conclusion has been confirmed by private sector contacts and a former JICA staff involved in the sector. There is well-documented interest and involvement from foreign investors and contractors on geothermal projects in Indonesia (which has included support from US government agencies such as the US Trade and Development Agency, Overseas Private Investment Corporation).

2. Comments from Government of the United Kingdom:

Creating a group of successful geothermal projects delivered outside the public sector has very considerable potential to catalyse local institutions to fund future investments - Indonesia has huge geothermal potential for this with not much over 1000 MW exploited. This programme could add another 750 MW and is an excellent opportunity for demonstrating new business models. For that reason, we would like to clarify the following:

² Original question from US government cited MEMR Regulation 11/2009, which sets forth the requirements of developing a geothermal business under the new regime, namely licenses and other obligations that need to be fulfilled by the winner bidder of Geothermal Working Area. There is no provision concerning local content in MEMR Regulation 11/2009.

Under seniority, the documents state 'CTF loans may be disbursed ahead of other lenders to finance exploration and drilling-related civil works, services and expenses'. If this is the case, it seems that the other private and public finance may not share any of the early stage risk. It would be useful to know a bit more about why this structure is required.

This links to a question about at what stage of the project it is expected that private finance will come in and how the levels of concessionality will be determined as appropriate (how will the appropriate instrument in each project be selected)?

ADB Response: ADB proposes both senior and subordinated loan options under this program. We are designing instruments that specifically target the risks perceived by the commercial lenders and investors, and apply the principal of minimal concessionality. In some cases, we will be a senior lender to some of these projects and only subordinate the loans where we feel it is justified by clear need and/or a financial viability gap. Because the capital expenditures for these projects are quite large (\$4-5m per MW, as noted in the proposal), the additionality of a relatively small amount of CTF as senior lender may be limited.

One of the critical issues on one particular project is whether the existing well data is sufficient to justify the full MW capacity of the plant (as designed by the investors) and full amount of debt requested from the senior lenders. Our geothermal technical advisor has indicated that once drilling results on the next 2-3 wells is received, the certainty of the steam reservoir modeling will be significantly improved. Therefore, a potentially valuable role for CTF is to consider disbursing ahead of other senior lenders to address their explicit risk concerns to approve more than \$1 billion of loans. In this particular case, CTF may be disbursed merely 3-5 months (out of a 2.5 year construction schedule) ahead of other senior lenders. The private sector sponsors have already invested more than \$100m of equity in this particular project, so they are already at risk and will continue to inject equity alongside CTF. We think this is an effective use of relatively small amount of CTF funds and balanced risk sharing.