Information Note on the Decision Regarding the Request for Registration of

"Pure-low Temperature Waste Heat Recovery for Power Generation (2X7 MW) in Guangdong Tapai Cement Co., Ltd." (2445)

I. Background

A. Summary of Proposed Project Activity Submitted for Registration

The designated operational entity (DOE), Japan Quality Assurance Organisation, submitted a proposed projected activity for registration under the clean development mechanism (CDM).

The proposed project activity involves the installation of a waste heat recovery (WHR) plant capable of generating 14 megawatts (MW) of electricity from two seven MW steam turbines. The waste heat would be derived from two dry process clinker production lines at a cement plant owned by Guandong Tapai Group Co Ltd. (Tapai Group), one of the project participants (PPs). The electricity generated would be used by the Tapai Group's cement plant.

B. Summary of the Issue: Additionality

The issue subjected to review is whether the proposed project activity is additional.[1] In the request for registration, the PPs asserted and the DOE validated that the proposed project activity is additional by claiming barriers that would prevent the implementation of the proposed project activity without registration as a CDM project activity. During the review process, the PPs put forth and the DOE validated a second argument that the project is additional. The PPs argued and DOE validated that the internal rate of return (IRR) of the proposed project activity is lower than the benchmark asserted as appropriate by the PPs and validated by the DOE.

C. Procedural Background

The request for registration was submitted to the Executive Board on 22 June 2009.[2] Following the submission of the request for registration, three members of the Executive Board submitted a request for review of the of the proposed project activity within eight weeks of the submission of the request for registration, pursuant to decision 4/CMP.1, annex III, "Procedures for review as referred to in paragraphs 41 of the modalities and procedures for a clean development mechanism" (procedures for review), paragraph 2. The PPs and the DOE provided their initial comments (dated 25 August 2009), within two weeks of being notified of the request for review.

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[1] "A CDM project activity is additional if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity pursuant", pursuant to decision 3/CMP.1, annex, paragraph 43.

[2] The request for registration was submitted to the Executive Board after payment of the registration fee and the secretariat determined that the submission was complete, in accordance with EB 44 report, annex 7, "Procedures for the Registration of a Proposed CDM Project Activity".

The Executive Board took those initial comments into account and, at its forty-ninth meeting, placed the proposed project under review (EB 49 report, paragraph 38 (g)) and decided on the scope of the review (EB 49 report, annex 12), in accordance with paragraphs 10 and 11 of the procedures for review.

Accordingly, the review team established by the Executive Board sent to the PPs and the DOE a request for clarification and further information pursuant to paragraph 15 of the procedures for review. The PPs and the DOE provided their response (dated 28 September 2009) to the request for clarification within 5 working days of receiving the request for clarification.

II. Discussion

A. PPs and DOE Responses to Request for Review and Request for Clarification

In their responses dated 25 August 2009 and 28 September 2009, the PPs continued to assert and the DOE continued to validate barriers that would prevent the implementation of the proposed project activity without the benefits registration as a CDM project activity. In particular, the asserted barriers are: (1) investment barriers, (2) technological barriers and (3) the first-of-its-kind barrier.

In their response to the request for clarification dated 28 September 2009, the PPs put forth and the DOE validated an investment analysis, which they asserted demonstrates and validates that the proposed project activity is financially unattractive. At the outset, it was noted that the PPs put forth the investment analysis in their response to the request for clarification. That is, in the project design document (PDD), the PPs solely relied on the argument that the project was additional based on barriers, despite having the option of also putting forth the investment analysis in the PDD.

Regarding the investment analysis, the PPs conceded and the DOE validated that Tapai Group's internal equity IRR benchmark of 20 percent does not apply to the proposed project activity. Also, the PPs asserted and the DOE validated that the National Development reform Commission (NDRC) cement industry equity IRR benchmark of 12 percent should not apply to the proposed project activity because it is below Tapai Group's internal equity IRR benchmark.

To assert that the proposed project is financially unattractive, the PPs applied and the DOE validated a payback period investment analysis. Tapai Group used its internal guidelines that require a payback period of no longer than 10 years to proceed with a project. The PPs then conducted and the DOE then validated an analysis to show that the proposed project activity would have a payback period of 13 years.

B. Issues Considered by the Executive Board

The DOE contracted by PPs bears the responsibility of validating the proposed project activity submitted for registration, pursuant to pursuant to decision 3/CMP.1, annex, "Modalities and procedures for a clean development mechanism" (modalities and procedures), paragraph 37. Among other things, this provision requires the DOE to validate the additionality of the proposed project activity submitted for registration.

The methodology applied to the proposed project activity was ACM0012, version 2, "Consolidated baseline methodology for GHG emission reductions for waste gas or waste heat or waste pressure based energy system". Under this methodology, PPs are required to demonstrate and DOEs are required to validate the additionality of the proposed project activity using the "Tool for the demonstration and assessment of additionality" (the Additionality Tool) (EB 39, annex 10).

1. Barriers Analysis

Under the Additionality Tool, PPs may conduct and DOEs may validate a barrier analysis to demonstrate that there are realistic and credible barriers that would prevent the implementation of the proposed project activity without the benefits of the CDM. These asserted barriers may include: (1) investment barriers other than economic or financial barriers, (2) technological barriers and (3) a barrier that the proposed project activity is the 'first of its kind'. As indicated above, the PPs asserted and the DOE validated all three barriers.

First, because the proposed project activity was financed by Tapai Goup's own equity, it raised concerns that there was no investment barrier to the proposed project activity. Under the Additionality Tool, a DOE may validate an investment barrier (also referred to as an "access-to-finance barrier") by demonstrating that: (1) similar activities have only been implemented with grants or other non-commercial finance terms,[3] or (2) no private capital is available from domestic or international capital markets due to real or perceived risks associated with investment in the country where the proposed project activity is to be implemented. The DOE did not validate either of these elements. In addition, The PPs' 28 September 2009 response states that "the only option to the project owner was to fund the project entirely from its own capital resources as the option to defer payments over a longer term, through the form of a loan, was not available" (page 5). The availability of this financing raised concerns regarding the credibility of the asserted investment barrier.

Second, it was considered that the technology barriers identified by the PPs and validated by the DOE, while real, are not prohibitive. The principal technological barrier identified by the PPs and validated by the DOE is the use of the Chinese technology that the PPs opted to purchase. At the time of the start date of the proposed project activity, this technology had an operational track record of eight years. The existence of this operational track record cast doubt on the credibility of the asserted technology barriers.

Third, first-of-a-kind barrier analysis put forth by the PP and validated by the DOE raised concerns that there was not a first-of-a-kind barrier. In raising this barrier, the

[3] Similar activities are defined as activities that rely on a broadly similar technology or practices, are of a similar scale, take place in a comparable environment with respect to the regulatory framework, and are undertaken in the relevant country/region.

PPs asserted and the DOE validated that the scope of the analysis should be limited to: (1) the Guangdong province, (2) the cement industry, (3) cement plants with a capacity greater than 4000 tons per day and (4) the Chinese WHR technology. Further, WHR plant technology is a common technology and the PPs did not assert that there is a material a difference when applying this technology to a cement plant. Because of the limited scope of the analysis of first-of-a-kind barrier analysis put forth by the PP and validated by the DOE, the first-of-kind barrier was not considered credible.

2. Investment Analysis

As stated above, in response to the request for review and request for clarification, the PPs put forth, and the DOE validated a payback investment analysis, which was not put forth in the PDD. The PPs conceded and the DOE validated that Tapai Group's internal equity IRR benchmark of 20 percent should not apply to the proposed project activity. Also, the PPs asserted and the DOE validated that the NDRC cement industry equity IRR benchmark of 12 percent should not apply to the proposed project activity because it is below Tapai Group's internal equity IRR benchmark. The PPs calculated and the DOE validated that the equity IRR of the proposed project activity is 17.08 percent, which is greater than the NDRC cement industry equity IRR benchmark of 12 percent.

The PPs conceded and DOE validated that the NDRC benchmark should not apply to the proposed project activity because it is below Tapai Group's internal benchmark and because investments in energy efficiency projects are often outside the scope of normal investments that a company makes. Because the NDRC benchmark meets the conditions of paragraph 6 (d) of the Additionality Tool, it was considered that these are not acceptable reasons for dismissing the NDRC benchmark.

In addition, as stated above, the PPs are required to demonstrate and DOEs are required to validate the additionality of the proposed project activity using the Additionality Tool. In choosing to use a payback investment analysis, the PPs opted to use and the DOE validated the use of "any other indicators" under paragraph 6 (e) of Step 2 of the Additionality Tool. However, paragraph (6) (e) may only be used if the PPs can demonstrate and the DOE can validate that the options contained in paragraph 6 (a)–(d) are "not applicable" and that the chosen "indicator is appropriately justified". It was considered that that PPs did not demonstrate and the DOE did not validate that the options contained in paragraph 6 (a)–(d) are not applicable as required by the Additionality Tool.

III. Conclusion

In accordance with paragraphs 17 and 18 (c) of the procedures for review, during its fiftieth meeting the Executive Board concluded that it could not register the proposed project activity (EB 50 report, paragraph 65 (b)). Specifically, the Executive Board concluded that the PPs and the DOE "have failed to substantiate the additionality of the proposed project activity via either:

(i) Barrier analysis as the: the entire project cost is covered through the equity fund, which raises concern on the credibility of investment barrier, in particular, the access to finance; the presented technological barriers are generic in nature; and the first-of-its-kind barrier is not supported by reliable evidences; or
(ii) Investment analysis as the means of selection of the benchmark is not in accordance with the Tool for the demonstration and assessment of additionality, version 5.2.”

In accordance with paragraph 42 of the modalities and procedures, the proposed project activity may be resubmitted for validation and registration provided it meets the requirements for validation and registration.

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History of the Document

Project 2445	Related to EB 50, Paragraph 65 (b)	**Decision Class**: Ruling **Document Type**: Information Note **Business Function**: Registration