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Request for review

Dear Sirs,

Please find below the response to the request for review formulated for the CDM project with the registration number 1877. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,

Javier Castro
Carbon Management Service

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Response to the CDM Executive Board

Issue 1:

The DOE is requires to provide a clear validation opinion on the technological barrier or prevailing practice barrier to demonstrate the additionality of the project activity.

Response by TÜV SÜD:
The additionality of the project is clearly demonstrated with the technological barrier. The following scientific sources, referenced in the PDD, were consulted to assess the technological barrier:

- Barrier Analysis for the Supply Chain of Palm Oil Processing Biomass (Empty Fruit Bunch) as Renewable Fuel (Eco-Ideal Consulting Sdn. Bhd. & Mensilin Holdings Sdn Bhd , 2006)
- Applicability of European Technologies in ASEAN Market (EC-ASEAN COGEN Programme, 2004)
- Diagnóstico Sobre uso Energético de los residuos de biomasa. SERN (Sixto Aguero, 2004)
- Maximising Energy Recovery from Palm Oil Wastes (Stowell & Tubb, 1999)
- Treatment of EFB for recovery of residual Oil and Additional Steam Production (H.K Jorgensen, 1985)
- Registered CDM project Sahabat Empty Fruit Bunch Biomass Project. Reference number: 0288

The scientific sources clearly underpin that due to its various technological complexities, such as preparation, handling, burning, boiler maintenance and disposal of ashes, the use of Empty Fruit Bunch (EFB) for electricity generation is an experimental technology. This is not only true for Malaysia where this cutting edge technology is developed, but especially for Honduras where the EECOPALSA biomass project is the first initiative of a palm oil mill to use EFB for energy generation. This was also confirmed during the on-site visit through direct communication with various stakeholders.
The risks related to application of an unproven technology, the use of new types of feedstock and being the first mover in Honduras are substantial and would prevent the project from being implemented in absence of additional revenues from CDM. Therefore the additionality of the project activity is clearly demonstrated.

Response by Project Participant:
EFB are generally not suitable for combustion in conventional boilers due to their high moisture (ranging 65%) and low heating value (67.75 t/TJ for 36% humidity after pre-processing). The high moisture content of EFB affects the operating efficiency of the boiler and increases the SFC, thus potentially increasing the quantity of biomass needed and consequently the operational costs of the boiler. On the other hand the low density of EFB poses a serious challenge for proper operation (feedstock preparation, feed in and energy density in the burning chamber). Additionally, the resulting ash from combustion adheres to the walls of the combustion chamber requiring shut downs to remove these ashes and of course affecting the efficiency of combustion.
As proven by the cited scientific sources the project entity is taking serious risks in applying a technology that is yet to prove its proper functioning not only in Honduras. It is worthwhile mentioning that this project is the first palm oil mill (POM) biomass project in Honduras making use of EFB. It is also the first POM biomass project in Honduras to generate and sell surplus electricity to the national grid.

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Issue 2:

The DOE should clarify the starting date of the project as the PDD (section C.1.1) refers to 31 November 2007 while the validation report (p44) states 15 December 2007.

Response by TÜV SÜD:
The project starting date is November 31th, 2007, considered as the date of delivery of the boiler and supported by the manufacturers invoice. The date in the validation report was not update after correcting the value in the PDD to be in line with the requirements. The revised Validation Report with the correct value will be uploaded if required by the Executive Board.