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	Werner Betzenbichler	Werner.Betzenbichler@tuev-sued.de			

Request for review

Dear Sirs,

Please find below the response to the request for review formulated for the CDM project with the registration number 407. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,

Signed Werner Betzenbichler

Werner Betzenbichler
Carbon Management Service

Signed Michael Rumberg

Michael Rumberg

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Response to the CDM Executive Board

Requests for review No. 1 – 3 (the content ist he same in all requests):

1. The project activity uses an old Version of SSC methodology I.D, which is no longer valid. The PDD has to be adjusted to current version 8, valid from 3 March 2006 onwards.

2. It is not clear how much of fuel (PK Shell) would be used for producing steam for process heating and how much for generating electricity. It is also not clear how much is the demand for electricity in the existing palm oil refinery and how much additional electricity generation would be needed for the new unit of the refinery.

3. There is not enough information in the PDD to verify the appropriate definition and application of the North Sumatra Grid as the boundary for the "current generation grid".

4. The investment analysis used to demonstrate additionality is not complete and it is inconsistent. The PDD mentions that transportation costs are not considered for both diesel (baseline) and PK Shell (project), however investment analysis presented in Appendix 1 accounts for US$18/MT as transportation costs of PK Shell. Also, the main variable used to compare the scenarios is the payback period, which would not be enough for investment decision (IRR should be also calculated). Moreover, the project used the North Sumatra Grid average emission factor (0.66 kg$C0_2$/kWh) to estimate GHG reduction. But while estimating project's payback period under the CDM, the emission factor of diesel (0.9kg C02/kWh) was applied. This is inconsistent. If the North Sumatra Grid average emission factor (0.66 kg CO_2/kWh) were used in this calculation, the payback period would be higher (5.8 years) than that determined in the PDD (5.2 years).

Responses bv TUV SÜD:

Response on Issue No 1:

This request (usage of wrong methodology version) is not applicable (incorrect) in the case of MNA project:

The validation of the project started already in August 2005. It is correct, that the new version No. 8 of SSC methodology I.D is valid since March 3rd, 2006, but this refers only to new projects starting validation after the day of publishing the new methodology version. But „old“ projects, which started the validation long before the day of validity of the new methodology version still could use the old version No. 7 for a transition period of 8 weeks.

The project was uploaded by DOE TÜV SÜD (with a number of other „old“ CDM projects using also old versions of the methodologies) on April 28th, 2006, which is exactly 8 weeks after publishing the new version.

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So it was still possible to use the old methodology version No.7 for the registration of this project.

Response on Issue No 2:

a. Consumption of PK Shell:

For producing steam for process heating around 135,000 tonnes of PK Shell per year is required (in total for the site). The new plant needs 70 000 t of PK Shell for steam generation for oil production. The new electricity project requires 87,300 tonnes per year (see Appendix 3).

Most of the required PK Shell can be obtained by the new MNA palm oil mill; the rest can be supplied by other palm oil mills in the same region.

If the supply with PK Shells from the region unexpectedly would really be insufficient, additionally empty fruit bunches from the new MNA palm oil mill can be used to ensure sufficient biomass for both the boilers for process heating as well as for electricity production.

There furthermore is no relevant risk for a shortage of biomass in this project as additionally also empty fruit bunches from other palm oil mills located near to Kuala Tanjung (MNA Plant) could be used if this would become necessary.

The investment decision is based on a full utilization of the new plant. A shortage of biomass casn be excluded. For maintenance or in case of technical problems with the steam boiler for process heat the old boiler running on medium fuel oil will we used.

There is no impact of the biomass electricity plant on on the production of steam using medium fuel oil for back up purposes.

b. Consumption of Electricity:

The operation of the new palm oil mill requires approximately 1.2 MW of electricity. The total electricity consumption on the site is about 14MW.
The remaining required electricity, which cannot be supplied by the new power plant, will be obtained from the grid or, which happens often; from diesel generators as the guarantee of a stable electricity supply is weak due to the information received during the on-site audits.
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Response on Issue No 3:

All information (definition of the grid; list and type of plants and consumed fuels; map, illustrating the boundaries of the North Sumatra Grid) has been obtained from the state owned Indonesia-wide electricity supplying company PT. PLN (Perusahaan Listrik Negara). The required information to calculate the emission factor of the grid for the reference year 2004 is available in annex 4 of the PDD and in further information submitted directly to the validator.

The information is considered as sufficient for a small scale project.

Furthermore it has to be pointed out that the usage of the carbon emission factor of the North Sumatra grid is a conservative approach. According to the information received during the on-site audit there are frequent problems with a stable electricity supply for MNA plant. In these cases electricity needs to be produced by back-up diesel boilers. The carbon emission factor of diesel is explicitly higher than the one calculated for the North Sumatra Grid.

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Response on Issue No. 4:

Investment decision:
MNA decided to go for this project and to start the project planning already in December 2004. The decision was based on a preliminary investment planning on basis of data available to MNA at this specific date.
As the project participants had no decided experiences with the application of small scale CDM-methodologies (which after this date also have undertaken some revisions) the preliminary investment decision has been carried out on the general assumption that a carbon emission factor for diesel generators of 0.9 kg CO_2/kWh could be used and the price for selling the CERs would the 6 US$ per tonne of reduced CO_2 emissions. The need for changes of some assumptions in the PDD results from the later validation process and the necessity to switch from SSC-methodology AMS-I.A to AMS-I.D. However, the question of additionality has to be assessed of the documentation/data available at the stage when the decision was made to go for the project and not on a later stage. Thus a revision of the investment decision was not necessary in the opinion of the Validator.

Furthermore the additionality tool does not prescribe directly to use the IRR. In MNA Company the pay-back period calculation is used as most critical parameter for making investment decisions. This could be confirmed during the on-site audits in Indonesia.

MNA additionally has carried out an ex-post IRR calculation based on the data from the pay-back calculation. The outcome of this calculation was that the IRR without CERs would be 7.3% and with CERs 15.8% (assumptions: revenues from selling the CERs are 6 US$ per tonne of CERs and the carbon emission factor (CEF) is 0.9 kg CO_2/kWh (Diesel). The CEF used in the final PDD current results in an IRR of 11.6 % in project case (assumption: CEF of the North Sumatra Grid is 0.66 kg CO_2/kWh). This confirms in any case that the CERs change the project from an unattractive investment into a more attractive project.

Transportation costs:
Emissions from transport of diesel (baseline at the stage of developing the first PDD version) and PK Shell (project case) have not been included in the calculations of emission reductions. This proceeding is clearly described in the PDD and in line with the methodology version 7 of AMs-I.D.
Deviant from this proceeding transport costs have been indirectly included in the investment plan because the prices of diesel and PK Shell used in the payback period calculation have been based on the real prices paid to the supplier/carrier for delivering the fuels at the gate of MNA. And these real prices include transportation costs.
In the opinion of the validator this is no contradiction as the investment planning and the proceeding to calculate the emission reductions are not directly linked.

Additionality:
It has to be clearly stated that the assessment of the investment analysis was only one part of the additionality proof for this project.
According to the simplified procedures for small scale projects (Appendix A (information on additionality)) additionality is proven in case at least one of the following barriers does exist for a small scale CDM-project:

a.) investment barrier
b.) technological barrier
c.) barrier to prevailing practice

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d.) Other barriers as for example institutional barriers etc.

As it could be plausibly, retraceable and transparently demonstrated that the project is t he first project of biomass based electricity generation in the palm oil sector in Sumatra (prevailing practice is to use diesel for electricity generation or to buy the electricity) and that MNA has no experience in electricity generation based on biomass sources the investment analysis is not an indispensable requirement to prove the additionality.