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Att: CDM Executive Board

Your ref.:  
CDM Ref 1016

Our ref.:  
MLEH/ETEL

Date:  
04 June 2007

## **Response to request for review Kunak Jaya Bio Energy Plant (1016)**

Dear Members of the CDM Executive Board,

We refer to the requests for review raised by three Board members concerning DNV's request for registration of the project activity entitled "Kunak Jaya Bio Energy Plant" (1016), and we would like to provide the following response to the issues raised by these requests for review.

*1. Further justification for the choice of Option III in the investment analysis is required As the core business will require heat and power to be supplied by other sources in the absence of the project activity an investment comparison (Option II) could be considered more appropriate.*

### **DNV Response:**

According to the *tool for the demonstration and assessment of additionality* there are only limitations to apply the simple cost analysis (Option I). However, there is no requirement to either apply the investment comparison analysis (Option II) or the benchmark analysis (Option III). It is thus DNV's understanding that the both option II or III are equally applicable to project activities that generate financial or economic benefits other than CDM related income.

Moreover, as demonstrated by the response to the requests for review submitted by the project participants and DNV's response to the third issue raised by the requests for review, there are no other realistic investment options than the project activity itself. It is thus DNV's opinion that the choice of a benchmark analysis (Option III) is justified.

*2. For Option III justification is required regarding the suitability of the benchmark.*

### **DNV Response:**

We refer to the response to the requests for review submitted by the project participants which demonstrates that an IRR of 15% is a standard investment benchmark used by the project proponent. Moreover, as stated in DNV's validation report, the selected benchmark is reasonable and conservative since DNV's investigation showed that the palm oil industry in Malaysia expects an IRR of around 20% for any investment.

*3. Co firing of the biomass residues should be transparently assessed as a possible baseline for heat production and biomass.*

**DNV Response:**

We refer to the response to the requests for review submitted by the project participants which demonstrates that co-firing of EFB with any fossil fuels, in particular with liquid fuels such as MFO, is rare and technically challenging. It must also be noted that ACM0006 does not consider co-firing biomass residues as a likely baseline scenario (co-firing is only mentioned in the context of co-firing fossil fuels in the project plant in cases where the supply of biomass residues is limited). Hence, the co-firing alternative is in DNV's view not deemed as a realistic alternative.

*4. The generation of methane from landfilled biomass should commence one year subsequent to the landfilling. Therefore more information should be provided as to why the methane avoidance is estimated to occur in year one of the project activity.*

**DNV Response:**

It must be noted that in a baseline scenario the generation of methane would commence shortly after the biomass residues would be landfilled and left for decay in absence of the project activity. Hence, methane emissions are already avoided in year one of the project activity. However, DNV acknowledges that the one year intervals of the first order decay (FOD) model included in the *tool to determine methane emissions avoided from dumping waste at a solid waste disposal site* does not accurately determine methane emissions as they would actually occur in time in the baseline scenario. For a more accurate determination of the methane generation over time, the time intervals in the FOD model would need to be much shorter.

The tool states that "The model calculates the methane generation based on the actual waste streams  $W_{j,x}$  disposed in each year  $x$ , starting with the first year after the start of the project activity until the end of the year  $y$ , for which baseline emissions are calculated (years  $x$  with  $x = 1$  to  $x = y$ )". Moreover, the report of the 26<sup>th</sup> meeting of the Board states that "The Board further agreed that the tool mentioned in paragraph 35 above should estimate methane emissions avoided such that it credits emission reductions for waste disposed during the year  $y$ , at end of year  $y$ ". Hence, it is DNV's understanding that the avoidance of methane emissions can be credited to the project activity already in the first year of operation of the project for the amount of biomass for which landfilling is avoided in that year. However, given the ambiguity of this matter, further guidance by the Board on this issue may be provided as a consequence of the requests for review for the "Kunak Jaya Bio Energy Plant" project activity.

We sincerely hope that the Board accepts our above explanations.

Yours faithfully  
for DET NORSKE VERITAS CERTIFICATION AS



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