



RESPONSE TO POINTS RAISED DURING REQUEST FOR REVIEW

Subject: Request for review – 5731 Biomass based power plant in Batu Pahat in Johor State, Malaysia

Bureau Veritas Certification had performed the validation of the CDM Project Activity 5731 - "Biomass based power plant in Batu Pahat in Johor State Malaysia". Subsequently, there was a Request for Review in which 03 points were raised. Bureau Veritas Certification would like to provide its responses to the issues raised as given below.

1) The DOE is requested to further validate the suitability of the input values used in the investment analysis, in particular: i) the DOE is requested to cross-check the price of each biomass used in the project activity, in addition to that, ii) the DOE is requested to confirm whether the price of biomass based on the contract signed between group companies could reflect the market price as per paragraph 111 of VVM version 1.2. Please refer to paragraph 111 of VVM version 1.2..

Response:

Cost of biomass validated:

Biomass Fuel Type	Fibre	EFB	Palm Kernel Shell	Wood
Cost of Fuel considered for investment analysis	RM 35/ton	RM 15/ton	RM 106/ton	RM 40/ton

The biomass fuel is expected to procure from its group company Bell Palm Industries Sdn Bhd and some external sources. The validation team has cross-checked fuel supply agreement between Bell Palm Industries Sdn Bhd and Bell Eco Power Sdn Bhd dated 17th July 2008 and quotation from supplier and thus found appropriate. Currently, Bell Palm Industries Sdn Bhd is supplying its biomass to other company and once the project activity is in operation, it will supply its biomass to Bell Eco power Sdn Bhd based on fuel supply agreement signed on 17th July 2008. BVCH also cross checked sales invoice slips of the biomass issued by Bell Palm Industries Sdn Bhd to Sincerely Dyeing & Finishing Sdn Bhd, Yong Ting Enterprise, Kok An Enterprise, BP Soon Lee Enterprise, Kah Hwa Industries Sdn Bhd, Tong Tatt Trading and Eng Huat Trading which shows that the biomass price deemed for the Investment analysis reflects market price. The table below shows the actual cost of biomass supply by Bell Palm Industries Sdn Bhd to other company:

Date of invoice	Invoice To	EFB	Fibre	Palm Kernel Shell
31-03-2008	Sincerely Dyeing & Fishing Sdn Bhd	RM15/ton	-	-
30-05-2008	Yong Ting Enterprise	RM18/ton	-	-
30-05-2008	Sincerely Dyeing & Fishing Sdn Bhd	RM18/ton	-	-
31-07-2008	Kok An Enterprise	-	RM38/ton	-
30-06-2008	BP Soon Lee Enterprise	-	RM37/ton	-
30-04-2008	Kah Hwa Industries Sdn Bhd	-	RM35/ton	-
31-03-2008	Tong Tatt Trading	-	-	RM105/ton
31-05-2008	Eng Huat Trading	-	-	RM115/ton
30-06-2008	Tong Tatt Trading	-	-	RM118/ton
31-07-2008	Eng Huat Trading	-	-	RM120/ton

In addition, the validation also cross-checked the biomass fuel cost in website and the price for biomass

fuel are as follows:

For PKS Prices <http://www.carigold.com/portal/forums/showthread.php?t=33612>, From this Validation team has confirmed that the price of PKS is RM130/ton in April 2008;

Reference to one registered similar project in Malaysia (PA 6384), EFB prices is RM20/ton based on investment decision on 24 September 2009. Thus, the estimated EFB price of RM15/ton in the PDD is deemed appropriate.

Mesocarp fibre is not a commonly traded commodity and therefore market prices are not readily available publicly. However, as an additional cross check, the prices of mesocarp fibre and EFB were checked on the basis of its calorific value.

Based on PKS price of RM106/ ton and a calorific value of 17.3 GJ/ ton, the price works out to about RM6.13/ GJ. Based on this, the price of mesocarp fibre with a calorific value of 11.1 GJ/ ton works out to RM68.01/ton and price of EFB with a calorific value of 5.3 GJ/ton works out to RM32.5/ton. The biomass prices considered by PP are therefore conservative.

Even with PKS price of RM70/ ton which was available at 2005, the price of mesocarp fibre and EFB work out to RM44.91 and RM 21.4/ ton respectively which are still higher than the prices considered in the PDD.

Based on the above assessment, the validation team is in the opinion that the cost of biomass estimated in the PDD is deemed appropriate.

As for the cost of wood residues/chips, the validation team has cross-checked quotation from external suppliers i.e Tan Lian Heng Timber Sdn Bhd (quotation dated 31-04-2008) and Kilang Kayu Peserai (quotation dated 15-04-2008) which shows that the cost of wood residues/chips is RM45/ton and RM40/ton respectively. Hence, the estimated cost of RM40/ton for wood residues/chips is deemed reasonable and reflect market price.

2) The PP/DOE is requested to explain why the production overheads, operating expenses and cost of sales are not included in the sensitivity analysis, given that the PDD and appendix Investment Analysis_BatuPahat biomass project sensitivity for operating costs.xls only took the cost of biomass into account in the sensitivity analysis. The DOE is also requested to validate the probability of the occurrence of scenarios as per paragraph 111(e) of VVM version 1.2 Please refer to paragraph 111(e) of VVM version 1.2.

Response :

It was actually proposed to carry out Sensitivity for the entire O&M costs excluding biomass cost, since biomass price was fixed by a sales agreement. By oversight, only biomass price was considered for the sensitivity. The revised spread sheet with sensitivity for O&M costs excluding biomass is attached. Sincerely regret for the error.

The sensitivity analysis showed that the variation $\pm 10\%$ of uncertain factors could not increase the IRR to cross the benchmark. Furthermore, the validation team concluded that the variation range of uncertainty factors is impossible to be achieved, since:

With a decrease in operation and maintenance cost (including biomass cost) by 10%, the IRR may reach 9.93%. However, it is unlikely to happen as generally operation and maintenance cost are not expected to decrease but increase. Information from Department of Statistics Malaysia shows that consumer price index has kept growing over the years and thus the annual operation and maintenance cost is not likely to decrease.

With a decrease in operation and maintenance cost (excluding biomass cost) by 10%, the IRR is slightly lower than the benchmark. Sensitivity analysis is carrying out for the entire operation and

maintenance costs including biomass cost which is not the likely scenario. Since biomass cost is fixed as per the sale agreement and is not likely to fluctuate, the biomass cost has been excluded from the sensitivity analysis. BVCH has cross-checked fuel supply agreement /30/ between Bell Palm Industries Sdn Bhd and Bell Eco Power Sdn Bhd and confirm the agreement is for a period of 21 years from the date of the agreement with fixed rates for the biomass supply. Furthermore, a decrease of 10% for operation and maintenance costs is not likely to happen as generally operation and maintenance cost are likely to increase due to unexpected breakdowns, increased cost of consumables, services etc. This is further confirmed by checking consumer price index from Department of Statistics Malaysia which shows decrease in operation and maintenance cost is not the likely scenario.

3) The PP/DOE is requested to explain how the policy barrier-monopoly market and prevailing practice barrier would prevent the implementation of the project activity and how CDM could alleviate these identified barriers please refer to GUIDELINES FOR OBJECTIVE DEMONSTRATION AND ASSESSMENT OF BARRIERS.

Response:

Since the investment analysis clearly establishes the investment barrier, other barriers are removed from the amended PDD. However, we would like give our explanation for these barriers.

Monopoly market barrier is quite a strong barrier as the power sale price is decided by the monopoly buyer and the price at which the power needs to be sold makes the project financially unviable as can be seen from the IRR calculations. No obligation for the monopoly buyer to pay viable rates for the sold electricity, no alternative sale mechanism to get higher price forces the PP to sell it to the monopoly buyer at the price decided by the monopoly buyer; since the project activity becomes unviable, it prevents the implementation of the project activity.

Regarding prevailing practice barrier, as demonstrated in the PDD, there was not a single palm biomass based grid connected electricity generation plant in Peninsular Malaysia (West Malaysia); that is the project activity would be first of its kind which is clearly a barrier for implementation of the project activity.

We hope you will find above responses in accordance with the points raised in Request for Review.

Yours faithfully



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