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ZLS-ZE-246/99

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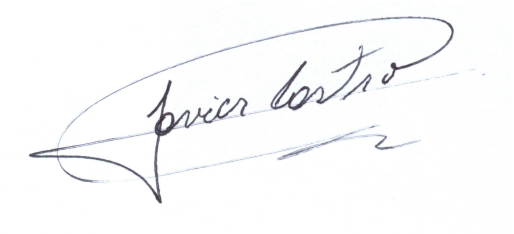
	Javier Castro	Javier.Castro@tuev-sued.de			

Response to Request for Review

Dear Madam/Sirs,

Please find below the response to the request for review formulated for the CDM project “Listrindo Kencana Biomass Power Plant” with the registration number 1936. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,



Javier Castro
Certification Body Climate and Energy

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Comment No.1:

The PP/DOE is requested to provide reliable evidence that CDM was considered prior to the project start date and that continuing and real actions were taken to secure CDM status for the project activity in parallel with its implementation, following the guidelines from paragraph 5, EB 41, Annex 46.

Response by Project Participant

In the following response, we would like to explain our situation concerning (a) the starting date of the Project, (b) our awareness of CDM and (c) concrete action that we have taken to pursue CDM.

Our first encounter with carbon credit was during a public seminar held by the Department of Energy and Mineral Resources (DEMR) of Indonesia on 22 December 2003 (meeting note and partial translation enclosed). During the meeting, it was explained to us that CDM is one of the strategy that is promoted by DEMR to finance renewable energy project. Since then, we have been actively seeking information on the credibility of such a new financial instrument (at the time) to help our project.

It is pertinent to note that at the time, information was scarce and the Indonesian DNA was not yet established. However, with the continuing development of CDM internationally, we grew increaseingly confident with the CDM and its benefits to our Project. On the other hand, we were fully aware of the critical nature of electricity supply in Bangka and the dire needs to increase power generation capacity on the Island, which has deteriorated today due to little progress (recent pledge letter from Governor of Bangka-Belitung enclosed as attachments 01a and 01b). However, our parent company was willing to (partially) finance the Project – to minimize loss of time (pending to negotiations) with the strong belief that the Project's CDM status will eventually be secured.

We proceeded with the order for the steam turbine on 12 December 2004, which has been adopted as the starting date of Project in the PDD. However, due to high uncertainty of both the new electricity law and the Power Purchase Agreement as explained in the PDD, we decided to halt the project activity to await a more conducive environment. Meanwhile we continued seeking ways to pursue CDM through discussion with various international institutions.

Following various discussions with several parties, we entered into serious discussions with the Royal Danish Embassy, and submitted our final proposal by 3rd of October 2005. By 28 November 2005, we received confirmation by the Royal Danish Embassy that this proposal was considered as a candidate project (email enclosed), and further commercial discussion followed. The Project was due to signed Letter of Intent with the Royal Danish Embassy on February 09th 2006. With growing certainty of the CDM revenue, we decided to resume purchasing and the contract for the most critical item of this Project (the boiler) was signed on 20 February 2006. It is pertinent to note that the discussions with the Royal Danish Embassy stalled following the raising political tension in relation with the Prophet Mohammad Cartoon in Jakarta. As consequence to this, Listrindo restarted discussion with different party before concluding with Mitsubishi UFJ Securities on June 1st, 2006.

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For ease of reference, a table summarizing the chronology for the Project is provided below.

Date	Event	Note
22 December 2003	Listrindo Kencana staff attended CDM seminar held by Department of Energy and Mineral Resources.	Evidence of CDM awareness prior to project start. Documentation attached as Attachment 02.
20 November 2004	Listrindo Kencana Board meeting during which action plan on pursuing CDM was discussed.	Evidence of CDM awareness prior to project start. Documentation submitted at the time of request for registration.
12 December 2004	Order for steam turbine.	Project start date as shown in PDD.
15 December 2004	Uncertainty in law in power sector due to annulment of electricity law, discussions with electricity buyer (state owned PLN) slowed down.	Referred to PDD
Early 2005 –	Project construction activities halted.	
03 October 2005	Project Idea Note (Proposal) to Danish Embassy was finalized	Evidence of continuing and real actions taken to secure CDM status. Documentation attached as attachment 03.
28 November 2005 and 16 January 2006	Confirmation from Royal Danish Embassy that Project is candidate for its purchasing program. Talks with the Danish continued on until end 2006 on possible sale of CERs.	Evidence of continuing and real actions taken to secure CDM status. Documentation attached as attachments 04 and 05.
20 February 2006	Signing contract with the boiler supplier. The boiler is the most critical item of the Project.	Resumption of construction activity. Documentation attached as attachment 06.
1 June 2006	Final proposal was concluded with Mitsubishi UFJ Securities, CDM consultant to the Project.	Evidence of continuing and real actions taken to secure CDM status. Documentation attached as attachment 07.
13 September 2006	Contract executed with Mitsubishi UFJ Securities.	Evidence of continuing and real actions taken to secure CDM status. Documentation attached as attachment 08.
18 December 2006	Requesting proposal from TUV-SUD for this Project.	Evidence of continuing and real actions taken to secure CDM status. Documentation attached as attachment 09.
3 February 2007	First uploading of PDD on the UNFCCC website	Evidence of continuing and real actions taken to secure CDM status.
19 April 2007	TUV-Sud filing of clarification request (AM_CLA_0046)	
25 August 2007	Second uploading of PDD on the UNFCCC website, in response to MP clarification on AM_CLA_0046 and version change to methodology AMS-III.E.	
8 May 2008	Third uploading of PDD on the UNFCCC website due to change in applied methodology from AMS-I.D. and AMS-III.E to AMS-I.D. only.	

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We discussed this chronology extensively with our DOE during the validation process, and also showed all relevant documentation including those accompanying this response. However at the time both parties agreed that it was rather unnecessary to provide too detailed discussions in the Project Design Document, and focused only on the earliest evidences.

We trust that this response demonstrates that (a) we were fully aware of the CDM at the time of project inception and (b) we have taken all reasonable action to actively pursuing CDM revenue to ensure the continuity of this Project.

Response by TÜV SÜD:

Evidence of considering incentive from CDM prior to the project start date (minutes of management meeting held on 20 November 2004) has been uploaded together with the PDD for registration. Page 3 and 4 of the document provide the English translation of the minutes of meeting.

The document evidences that revenues from the sale of carbon credits have been considered as potential financial benefit to the projects 1st phase, 6 MW, which started prior to validation. Furthermore the document substantiates the need of the PP to become more familiar with the CDM procedures and to seek respective professional support (Action plan states i.a.: “Inquire who are the players in trading CER and seek for professional consultant in regards to CDM).

The first 6 MW turbine was ordered on 12th of December 2004 (Annex 2 of the validation report – Information Reference List (IRL) - IRL 7). By 28th of November 2005, PP received confirmation that the PPs project activity was considered for final shortlisting for the Danish CDM Facility (Attachement 04 Correspondence with RDE.pdf). Based on this evidencing document, it can be concluded that continuous actions i.a. getting information on CDM process and its actors, getting in contact with representatives of the Danish CDM Facility, preparation of the proposal, were needed and undertaken during the year 2005, although corresponding email documentation is not available. However the results of these efforts are evidenced by the short listing and the subsequent acceptance letter received by PP for support under the Danish CDM Project Development Facility, dated 16th of January 2006 (05 Signing of LOI with RDE.pdf).

Contractual arrangements for the purchase of the biomass boiler – being the crucial and specific equipment for the renewable power plant - have been concluded after this confirmation of the Royal Danish Embassy, on 20th of February 2006. The respective contract was presented to the audit team at on-site audit.

Final proposal for providing CDM services by Mitsubishi UFJ Securities was submitted to PP in June 2006. TÜV Süd was contacted on 18th December 2006. In January 2007 PDD was submitted for validation. At the time of on-site audit, in February 2007, the project was still under construction and plant commissioning was foreseen for the end of that year, only.

All information provided with respect to CDM consideration and related activities has been found to be consistent and credible, substantiating the timeline of the project activity and demonstrating that in parallel with the projects implementation, continuing and real actions were undertaken to receive CDM status. The step-wise approach of the project activity (2 X 6 MW), with the second step not being implemented yet, underlines the importance of CDM to the project.

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Comment No. 2:

The DOE is requested to clarify how the project boundary reported in the PDD is confirmed and validated, given that the project is located within a palm oil plant with an existing captive power plant also using biomass residues for energy generation.

Response by Project Participant

We would like to further emphasize that Listrindo Kencana is a separate legal and physical entity from Sawindo Kencana. Our facility is located within Sawindo Kencana plantation, and next door to the factory (not within the factory), and separated physically by fence, and thus not a capacity addition to Sawindo Kencana.

At the time of validation site visit, construction is underway. However, the validator can easily distinguish the two facilities. The only common facilities are (a) weighing bridge to the complex and (b) conveyor belt to continuously transfer fibrous empty fruit bunches from Sawindo Kencana to Listrindo Kencana.

We have also demonstrated to our validator that the Project is not installed for purpose of supplying captive electricity to Sawindo Kencana, by way of (a) energy balance of the palm oil mill as well as (b) statement from PLN that Sawindo Kencana was never a customer of PLN (the sole electricity distribution company) since its inception in 2000.

During the validation process, the validator also instigated discussion to ensure that measures must be taken to demonstrate that none of the electricity generated by Sawindo Kencana is sold to the grid via Listrindo and claim emission credit. We made statement at the time of validation, that the electrical wiring of the two companies will be totally disconnected such that Sawindo Kencana can-not supply electricity to Listrindo Kencana and vice versa without going through PLN. As additional measure, we are committed to fully monitor the biomass movement/stock (item 3 of Section B.7) such that a reliable heat and energy balance can be performed.

Response by TÜV SÜD:

In compliance with the project boundary definition given by AMS I.D, version 13, the project boundary includes the physical, geographical site of the renewable power plant fuelled with EFB and kernel shell. The power plant is located within the Sawindo Kencana palm oil plantation and processing complex, in the vicinity of the palm oil mill, however a clear physical and geographical boundary of the site is existing. The projects position relative to the Sawindo complex is shown in Figure 3 of the PDD. The project boundary described in the PDD has been verified at on-site audit. It has been verified that:

1. Listrindo Kencana and Sawindo Kencana are distinct entities and also

2. The 12 MW power plant (2 x 6 MW) being implemented by Listrindo Kencana is physically distinct from cogeneration unit (2.2 MWe backpressure steam generation unit) at Sawindo Kencana complex (see also Validation Report, Annex 1 Validation Protocol, Table 1b, B.2.1.4. p. A 61)

It can be therefore confirmed that there is a clear separation between Sawindo Kencana facilities, including the captive cogeneration unit at Sawindo Kencana palm oil mill, fuelled by fibre and shell, and the biomass power plant of the project activity (Listrindo Kencana) fuelled by EFB and shell.

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Moreover during validation process evidencing documentation has been provided by the PP that the project activity supplies the total net electricity to the grid (Annex 2 of the validation report – Information Reference List (IRL) - IRL 18, IRL 21) and that Sawindo Kencana palm oil mill is covering their own energy demand by a separate captive power plant fuelled with fibre and shell (IRL 33, IRL 34). PP demonstrated that the available fibre and parts of the shell provide sufficient energy in order to fulfil the needs of the palm oil mill process and that surplus shell is available at Sawindo Kencana palm oil mill. A written statement of PLN, the state owned electricity company, confirms that Sawindo Kencana palm oil mill is not connected to the Bangka Belitung grid and never purchased grid electricity (IRL 34).

Thus it can be verified that there will be no electricity supply from the project activity to the palm oil mill and a deviation of biomass from Sawindo Kencana to the project activity is unlikely (see resolution of CR 13/14, Annex 1 to the Validation report, Table 2 – Resolution of Corrective Action and Clarification Requests, page A 94-95).

Comment No.3:

The PP/DOE is requested to clarify why the project emission from transportation of biomass residue is not included in the baseline emissions.

Response by Project Participant

The Project adopted methodology AMS I.D version 13, and we (as concurred by the validator) believe that the PDD has fully met the applicability conditions. The methodology specified that the only baseline emission applicable is emission associated with the electricity displaced by the renewable energy units. As such, we did not include transportation emissions in either the project or baseline emissions.

While we were fully aware that the transportation of biomass itself will incur emission from transportation, we did not include this emission source as we thought this project emission was negligent as compared to the baseline emission from transportation. The use of a native energy source available within Bangka Island effectively offsets consumption of diesel oil, which must be transported to Bangka from the main Island of Sumatra, located a considerable distance away. Considering that the emission from transportation of diesel oil to the Island of Bangka is not considered as a source of baseline emission, we believe that our approach of not applying transportation emission both in the baseline and project scenarios is justified as conservative in our case.

For transparency, it is noted that the project emissions from transportation due to the project activity was estimated as approximately 404 tCO_2/yr for phase I and 1,027 tCO_2/yr for phase II, in total representing about 2.5% of CERs. It is emphasized that this amount is smaller than the transportation-related emissions in the baseline. The calculation as well as relevant data are provided below.

Table 1: Input values for calculation of transportation emissions

Parameter		Phase I	Phase II
Emission factor		0.00077 tCO_2/km (using NCV = 0.043TJ/t, emission factor = 74.8 tCO_2/TJ and fuel economy of 4,165km/t, for diesel)	
On-site[1]	Truck capacity	4	
	Average round-trip distance	0.5km	
	Amount of EFB from Sawindo[2]	46,000 t/yr	0 t/yr
	Amount of Shell from Sawindo	12,075 t/yr	0 t/yr
Off-site	Truck capacity	8	
	Average round-trip distance	240km	
	Amount of Shell from other suppliers	17,445 t/yr	44,458 t/yr

Using the above data, the transportation-related emissions can be calculated as follows. In the below example, the emissions related to the off-site transportation of 17,445 t/yr of shells is calculated.

Emission = 17,445 t/yr ÷ 8 t/trip x 240 km/trip x 0.00077 t CO_2/km = 403 t CO_2/yr

The calculation is repeated for all sources of biomass and results shown in the ensuing table.

Table 2: Transportation-related emissions

Type of biomass	Phase I	Phase II	Combined Phase I and II
EFB from Sawindo	0[2]		
Shell from Sawindo	1 t/yr	0 t/yr	1
Shell from other suppliers	403 t/yr	1,027 t/yr	1,430 t/yr
Total	404 t/yr	1,027 t/yr	1,431 t/yr
Estimated emission reductions	28,892 t/yr	28,892 t/yr	57,784 t/yr
% of CERs	1.4%	3.6%	2.5%

Response by TÜV SÜD:

The project comprises the installation of a new renewable energy generation unit for grid electricity supply to the Bangka Island grid. According to the simplified baseline methodology AMS I.D, version 13, which is the applicable methodology for the project activity, the baseline emissions are the annual kWh generated by the renewable unit multiplied by an emission coefficient. The methodology does not require to consider project emission from transportation of biomass residue in the baseline emissions and it has also been confirmed by the audit team that no clarification of SSC WG addresses such a requirement. Additionally according to the "General guidance on leakage in biomass project activities": "…All other emission sources are likely to be smaller than 10% (each) - including transportation of raw materials and biomass, fossil fuel consumption for the cultivation of plantations - and can therefore be neglected in the context of SSC project activities". Therefore the emission from transportation has not been included in the emission reduction calculations.

[1] For simplicity, the term "on-site" is used to describe movements both within the Listrindo Kencana facility and between Listrindo Kencana and Sawindo Kencana, which are next to each other.
[2] No emissions are associated with the transportation of EFB, which is transported by conveyor belt powered by the Project's own carbon-neutral electricity.

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Simplified methodology AMS III.E ("Avoidance of methane production from decay of biomass through controlled combustion"), however, requires the consideration of project emissions from incremental transportation, thus PDD version 2.02 dated 31/01/2007 and PDD version 3.1.0 dated 16/08/2007, which applied both components, AMS I.D. and AMS III.E, considered respective project emissions from transportation of biomass fuel and residue from combustion process. But during validation process PP omitted the project component of methane emission avoidance and thus the methodology specific components of project emissions from incremental transportation.

A revised PDD version involving only the component of renewable electricity generation is submitted for registration. In line with the methodology PP calculates the simplified baseline as product of net electricity supplied to grid and the grid emission factor. It can be confirmed that the Bangka Island grid is totally dominated by diesel based power plants and that paragraph 8 of AMS I.D., version 13, p.2/11 has been applied correctly.

Comment No.4:

The DOE is requested to clarify how the parameters proposed for monitoring, particularly those related to monitoring of emissions from transportation of biomass residues, are validated and confirmed.

Response by TÜV SÜD:

The list of parameters presented in chapter B.7.1 of the final PDD is considered to be complete with regard to the requirements of the applied methodology AMS I.D, version 13. According to the methodology there is no requirement for monitoring of emissions from transportation of biomass residues.

The kWh produced by the renewable generating unit and supplied to the grid is the most important parameter (AMS I.D. paragraph 12, p. 5/11). The monitoring within the project will be based on elecricity meter records from Listrindo Kencana and the state electricity company.

Furthermore the methodology requires to monitor the amount of biomass and fossil fuel input (AMS I.D., paragraph 14, p. 5/11). Each type of biomass fuel shall be monitored separately (paragraph 17, p. 6/11). Within the project activity the shell and EFB consumption is monitored using a mass balance approach based on the quantity of fuel delivered to the plant and the difference in the quantity held in stock over a the monitoring period. The quantity of biomass fuel delivered to the plant comprises:

- Shell from suppliers outside Sawindo Kencana - $BF_{SH,NSK,y}$
- Shell delivered from Sawindo Kencana - $BF_{SH,SK,y}$
- EFB delivered from Sawindo Kencana – $BF_{EFB,SK,y}$

Provision for monitoring the quantity of fossil fuel consumed by the project in case of co-firing is provided in the PDD, although it has been anticipated that this situation is to be unlikely. In addition EFB from suppliers outside Sawindo Kencana will be monitored – if any. Specific fuel consumption has been specified in part B.6.2. of the PDD for all potential fuels to be used as per AMS I.D., paragraph 15, p. 5/11. This will allow to maintain material and energy balance of the project plant for quality assurance and to deduct the electricity from fossil fuels in case fossil fuel is used in line with AMS I.D., paragraph 16 and 18, p. 5/11 and 6/11).