



FINAL VALIDATION REPORT

for the CDM Programme of Activities

AeroPod Composting and Co-composting Programme in Malaysia

Report No. 01 997 9105069746-1/2

Version No. 2.0, 20-12-2012

Designated Operational Entity (DOE)

TÜV Rheinland (China) Ltd

Unit 707, AVIC Building, No. 10B, Central Road, East 3rd Ring Road,
Chaoyang District, Beijing 100022,
People's Republic of China.
Tel.: +86 10 65 66 66 60 (ext.169)
FAX: +86 1065 66 66 67
E-mail: doe@chn.tuv.com

I. Programme of Activities (PoA) Description:

PoA title:	AeroPod Composting and Co-composting Programme in Malaysia		Report No.: 01 997 9105069746-1/2
Host Country:	Malaysia		Current revision No.: 2.0
Methodology:	AMS-III.F Version 10	<input type="checkbox"/> Large Scale	Date of current revision: 20-12-2012
		<input checked="" type="checkbox"/> Small Scale	Date of first issue: 15-06-2012
Annual average emission reductions (estimate):			Not applicable to the PoA
GHG reducing measure/technology:	Composting and co-composting technology		

Party	Project Participants / CME	Party considered a project participant	Contract party
Malaysia (Host)	CME: Natural Objective Sdn Bhd	No	<input checked="" type="checkbox"/>
Netherlands	PP: Carbon Partners Asiatica (Hong Kong) Co., Ltd.	No	<input type="checkbox"/>

II. Validation Team:

Validation Team			Role									
Full name	Affiliation TÜV Rheinland	Appointed for Sectoral Scopes (Technical Areas)	Team leader	Acting Team Leader	Local Expert	Team Member (Auditor)	Technical Expert	Acting Tech. Expert	Trainee Auditor	Technical Reviewer	Expert to TR	Trainee TR
Ms. Nelly Yong Tau Lan	Malaysia	1, 5, 11, 12, 13	X									
Mr. Azizan Zakaria	Malaysia	5, 11, 12, 13				X						
Ms. Carol Ng Siew Theng	Malaysia	15							X			
Ms Kamala Devi Muniandy	China	5, 11, 12, 13								X		

Validation Phases and Validation Status:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Desk Review | <input type="checkbox"/> Corrective Actions / Clarifications Requested |
| <input checked="" type="checkbox"/> Follow up interviews | <input checked="" type="checkbox"/> Full Approval and Submission for Registration |
| <input checked="" type="checkbox"/> Resolution of outstanding issues | <input type="checkbox"/> Rejected |

III. Validation Report:

Final approval	Released	Distribution
<input checked="" type="checkbox"/>	By: Mr. Praveen Urs	<input type="checkbox"/> No distribution without permission from the Client or responsible organizational unit
Date: 22-12-2012		<input checked="" type="checkbox"/> Unrestricted distribution

EXECUTIVE SUMMARY- VALIDATION OPINION

The validation team assigned by the DOE (TÜV Rheinland (China) Ltd.) has performed the validation of “AeroPod Composting and Co-composting Programme in Malaysia” on the basis of UNFCCC criteria for Clean Development Mechanism (CDM) programme of activities according to Article 12 of the Kyoto Protocol and the subsequent decisions by the COP/MOP and CDM Executive Board with regard to the simplified modalities and procedures for small-scale CDM project activities, the procedures for registration of a programme of activities and the application of approved methodologies. The validation findings are summarized in the validation report and the validation protocol.

The review of the Programme design documentations (i.e. PoA-DD, CPA-DD and real-case CPA-DD) and the subsequent follow-up interviews have provided the DOE with sufficient evidence to determine the fulfilment of stated criteria.

The chronological order of events for the validation activities conducted for this project as summarized as below:

No.	Validation Activities	Date
1	Desk review of preliminary PoA-PDD (version 01, 12-04-2012)	-
2	Public stakeholder comment process	20-04-2012 to 19-05-2012
3	On-site visit & interview of stakeholders	07-05-2012 to 09-05-2012
4	Issue of draft validation report & protocol with corrective action requests (CARs) and clarification requests (CLs)	07-06-2012 & 15-06-2012
7	Desk review of revised PoA-PDD (version 03, 04-12-2012)	20-12-2012
8	Issue of the final validation report (upon receiving all supporting documents & evidences for report preparation by the validation team)	20-12-2012

According to the web hosted PoA-DD, the programme is a bilateral PoA. The host country is Malaysia. The LoA from the Malaysia DNA (Environmental Management & Climate Change Division, Ministry of Natural Resources and Environment), has been received to confirm the voluntary participation of Natural Objective Sdn Bhd in achieving sustainable development. Similarly, the LoA for confirming Netherlands as the project participant from the DNA of Netherlands (Ministry of Infrastructure and the Environment, International Affairs Directorate) has been received.

The validation did not reveal any evidence that this project activity can be seen as a diversion of ODA. This has been confirmed through interview with the project participant /I01/ & review of non ODA declaration letter /P11/.

The CDM programme activities under the PoA had applied correctly the approved methodology AMS-III.F “Avoidance of methane emissions through composting”, Version 10 /B04/ and the following methodology tools were applied:

1. “Tool to calculate baseline, project and/or leakage emissions from electricity consumption”, Version 01, EB 39, Annex 7 /B05/
2. “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion”, Version 02, EB 41, Annex 11 /B06/
3. “Emission from solid waste disposal sites”, Version 06.0.0, EB65, Annex 19 /B10/

It is demonstrated that the PoA is not a baseline scenario. In the absence of the PoA, the baseline scenario will remain unchanged. Emission reductions attributable to a programme activity included to the

PoA are hence expected to be additional to any that would occur in the absence of the programme activity provided that the PoA meets the requirements for demonstrating additionality established in the PoA-DD.

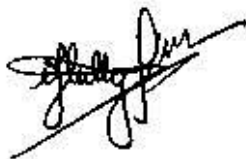
Monitoring plan and procedures have been presented in the PoA-DD. Relevant CDM training is not yet started. Draft training plans and schedules about CDM monitoring and technical aspects are available at the time of validation finalization.

The validation protocol describes total of (36) findings which include:

- (14) Corrective Action Requests for PoA (CARs)
- (10) Corrective Action Requests for Generic CPA (CARs)
- (11) Clarification Requests (CLs) for PoA (CLs);
- (1) Clarification Requests (CLs) for Generic CPA (CLs);
- (0) Forward Action Requests (FARs); and all findings have been closed satisfactorily.

In summary, subject to further clarification from the project participant, it is the validation team's opinion that the PoA, "AeroPod Composting and Co-composting Programme in Malaysia", as described in the web hosted PoA-DD, CPA-DD and specific case CPA-DD, meets all the relevant UNFCCC requirements for a PoA under the CDM and relevant host country criteria, and correctly applies the baseline and monitoring methodology AMS-III.F, Version 10 as detailed in the report. The validation team therefore recommend the proposed programme activity to be registered as a CDM Programme of Activities with the UNFCCC.

Ms. Nelly Yong Tau Lan (Team Leader)



TÜV Rheinland Malaysia Sdn. Bhd.
Selangor Darul Ehsan, 22-12-2012

Mr. Praveen Nagaraje Urs (DOE Manager)



TÜV Rheinland (China) Ltd.
Beijing, 22-12-2012

Abbreviations

AMS	Approved Methodology Small Scale
BF	Bio-Fertilizer
BOD	Board of Directors
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CER	Certified Emission Reduction
CH ₄	Methane
CL	Request for Clarification
CME	Coordinating/Managing Entity
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
CPA	Component Project Activity
COD	Chemical Oxygen Demand
DNA	Designated National Authority
DoE	Department of Environment
DOE	Designated Operational Entity
DR	Document Review
EB	Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reduction
GHG	Greenhouse Gases
GWP	Global Warming Potential
I	Interview
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
kWh	kilo Watt hours
LoA	Letter of Approval
MCF	Methane Correction Factor
MoV	Means of Verification
MP	Monitoring Plan
MW	Mega Watt
MWh	Mega Watt Hours
NGO	Non-Governmental Organization
NOSB	Natural Objective Sdn Bhd
ODA	Official Development Assistance
OMP	Operational and Management Plan
O&M	Operations and Maintenance
PDCA	Plan – Do – Check - Act
PDD	Project Design Document
POA	Programme of Activities
QA/ QC	Quality Assurance / Quality Control
SKM	Syarikat Kretam Mill Sdn Bhd
SOM	Silimpopon Oil Mill
t	Tonne
UNFCCC	United Nations Framework Convention on Climate Change
WACC	Weighted Average Costs of Capital

TABLE OF CONTENTS

EXECUTIVE SUMMARY- VALIDATION OPINION	3
1 INTRODUCTION.....	7
1.1 Objective	7
1.2 Scope	7
2 METHODOLOGY	8
2.1 Desk Review of the Programme Design Documentation	8
2.2 Follow-up Interviews with Programme Stakeholders	10
2.3 Resolution of Outstanding Issues	12
2.4 Internal Quality Control	14
2.5 Validation Team	14
3 VALIDATION FINDINGS	14
3.1 Programme of Activities Design Documents	16
3.8 Additionality	34
3.9 GHG Emission Reductions from a typical CPA	39
3.10 Monitoring Plan for a typical CPA	39
3.11 Sustainable Development	45
3.12 Environmental Impacts (at CPA level)	45
3.13 Local Stakeholder Consultation (at PoA level)	45
3.14 Comments by Parties, Stakeholders and NGOs	46
Appendix A: Validation Protocol	
Appendix B: Certificates of Competence	

1 INTRODUCTION

Natural Objective Sdn Bhd (hereafter referred as “the CME”) has commissioned the DOE TÜV Rheinland China Ltd. to perform validation of the proposed CDM Programme of Activities (PoA) “AeroPod Composting and Co-composting Programme in Malaysia” (hereafter called “the PoA”). This report summarises the findings of the validation of the PoA identified in the PoA Design Document (PoA-DD); the CDM Programme Activity Design Document (CPA-DD) template with generic information relevant to all CDM Program Activities (CPAs) to be included in the PoA; and the associated real case CPA-DD. The validation was performed on the basis of UNFCCC criteria for the PoAs under the CDM, as well as criteria given to provide for consistent programme operations, monitoring and reporting. The term “UNFCCC criteria” refers to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project /programme activities, the procedures for registration of a programme of activities and the subsequent decisions by the COP/MOP and CDM Executive Board. In addition to these criteria, host country criteria are also taken into account.

1.1 Objective

The purpose of a validation is to have an independent third party assess the PoA-DD, CPA-DD template and the associated real case CPA-DD (also known as specific CPA-DD). In particular, the eligibility criteria for inclusion and demonstration of additionality of CPAs, the programme’s baseline determination, monitoring plan, and the programme’s compliance with relevant UNFCCC and host Party criteria are validated in order to confirm that the programme design, as documented, is sound and reasonable and meets the identified criteria. Validation is a requirement for all CDM PoAs and is seen as necessary to provide assurance to stakeholders of the quality of the programme and its intended generation of certified emission reductions (CERs).

1.2 Scope

The validation scope is defined as an independent and objective review of the PoA-DD, CPA-DD template and the real case CPA-DD. The PoA-DD, CPA-DD template and the real case CPA-DD were reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project/ programme activities, the procedures for registration of a programme of activities as a single CDM project activity and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology AMS-I.D Version 17

The validation team has, based on the requirements contained in the Validation and Verification Manual and the procedures for registration of a programme of activities as a single CDM project activity employed a rule-based approach, focusing on the identification of significant risks for programme implementation and the generation of CERs.

The validation is not meant to provide any consulting towards the PoA Managing Entity, CPA Implementer(s) and/or project participant(s) (PP). However, stated requests for clarifications, corrective actions, and/or forward actions may provide input for improvement of the programme design.

2 METHODOLOGY

The validation consists of the following four phases:

- I a desk review of the PoA-DD, CPA-DD template and the completed CPA-DD;
- II global publication of the programme design documents (PoA-DD, CPA-DD and completed CPA-DD) in UNFCCC;
- III on-site visit and follow-up interviews with programme stakeholders
- IV the resolution of outstanding issues and the issuance of the final validation report and opinion.

The following sections outline each step in more detail.

2.1 Desk Review of the Programme Design Documentation

Documents provided by the project participant(s):

/P01/	PoA-PDD [initially published version], Version 01, Date: 12-04-2012 Specific CPA-DD [initially published version], Version 01, Date: 12-04-2012 Generic CPA-DD [initially published version], without version and effective date
/P02/	PoA-PDD [final version], Version 03, 04-12-2012 Specific CPA-DD [final published version], Version 03, 04-12-2012 Generic CPA-DD [final published version], without version and effective date
/P03/	Host Country Approval / Letter or Approval: Malaysia, DNA: Environmental Management & Climate Change Division, Ministry of Natural Resources and Environment Reference number : NRE(S) 602-2/11 Jld 16(28), Date: 14-08-2012
/P04/	Annex 1 Party Letter or Approval: Netherlands, DNA : Ministry of Infrastructure and the Environment Reference number : 2012ANL732, Date: 26-09-2012
/P05/	Modalities of Communication: Date: 03-09-2012
/P06/	Silimpocon CER-IRR Calculation Excel Spreadsheet, undated
/P07/	OMP (Operational Management Plan) Records (Work In progress)
/P08/	Natural Objective Sdn Bhd CDM Programme of Activities CME Coordinating / Managing Entity – Operational & Management Plan dated 8 October 2012, Issue 6.
/P09/	Contractual agreement between CME & CPA implementer – ‘Proposal for CDM Services: UNFCCC Programme of Activities’ signed by the director of Syarikat Kretam Mill Sdn Bhd on 7 May 2012
/P10/	Business licence – Natural Objective Sdn Bhd, dated 23 Feb 2012.
/P11/	Declaration of no public funding for PoA from the director of Natural Objective dated 7 May 2012
/P12/	Development Proposal for Silimpocon Bio-Waste Composting Project, dated 4 May 2012
/P13/	Letter from the Director of Syarikat Kretam Mill Sdn Bhd dated 6 April 2012 confirming no overlapping of project boundaries and no double counting of CERs

Background investigation and other referred documents/websites:

/B01/	Clean Development Mechanism Validation and Verification Manual, Version 01.2 <i>Remarks: This is applicable to this PoA since the project is being validated under VVM track</i>
/B02/	/B02.1/ UNFCCC, Small-Scale CDM Programme of Activities Design Document form (CDM-SSC-PoA-DD), Version 01, EB33, Annex 43
	/B02.2/ UNFCCC, Small-Scale CDM Programme Activity Design Document form (CDM-SSC-CPA-DD), Version 01, EB33, Annex 44
/B03/	Web sites referred www.ipcc.ch (for referring Emission factors) http://cdm.unfccc.int (for referring to applicable latest guidelines)

	Central Bank of Malaysia - Malaysia Government Securities Indicative Prices: http://www.bnm.gov.my/index.php?ch=12&pg=444 FTSE Bursa Malaysia Palm Oil Plantation Index http://www.ftse.com/Indices/FTSE_Bursa_Malaysia_Index_Series/index.jsp Department of Environment (Malaysian) http://www.doe.gov.my/portal/legislation-actsregulation-order/
/B04/	Approved Baseline & Monitoring Methodology: AMS-III.F, "Avoidance of methane emissions through composting", Version 10
/B05/	"Tool to calculate baseline, project and/or leakage emissions from electricity consumption", Version 01, EB 39, Annex 7
/B06/	"Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion", Version 02, EB 41, Annex 11
/B07/	Glossary of CDM Terms Version 07.0
/B08/	Guidelines On The Assessment Of Investment Analysis Version 05, EB 62, Annex 5
/B09/	Tool to determine the remaining lifetime of equipment, Version 01 EB50
/B10/	"Emission from solid waste disposal sites", Version 06.0.0, EB65, Annex 19
/B11/	Guidelines On The Demonstration And Assessment Of Prior Consideration Of The CDM, Version 04, EB 62, Annex 13
/B12/	General Guidelines to SSC CDM methodologies Version 17, EB 61, Annex 21 <i>Remarks: This is applicable to this PoA since the project is being validated under VVM track</i>
/B13/	Guideline on Assessment of Debundling For SSC Project Activities, Version 03, EB 54, Annex 13
/B14/	Standard For Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies For Programme of Activities, Version 01.0, EB 65, Annex 3 <i>Remarks: At the time of validation finalization in September 2012 for the PoA-DD, Generic CPA-DD & Specific CPA-DD webhosting, this standard is now applicable & the previous version is no longer applicable - see Item B20 below</i> <i>However, at the time for submission for registration, in response to EB 70, this standard is no longer applicable – see Item B23 below</i>
/B15/	Procedures for Registration of a Programme of Activities as a Single CDM Project Activity and Issuance of Certified Emission Reductions for a Programme of Activities", Version 04.1, EB 55, Annex 38 <i>Remarks: This is applicable to this PoA since the project is being validated under VVM track</i>
/B16/	Clarifications Regarding The Procedures For Registration of a Programme of Activities as a Single CDM Project Activity and Issuance of Certified Emission Reductions for A Programme of Activities, Version 01, EB 60, Annex 26 <i>Remarks: This is applicable to this PoA since the project is being validated under VVM track</i>
/B17/	Procedures for Review of Erroneous Inclusion of a CPA, Version 03, EB 61 Annex 22 <i>Remarks: This is applicable to this PoA since the project is being validated under VVM track</i>
/B18/	Vacant
/B19/	Guidelines on the Demonstration of Additionality of Small-Scale Project Activities, Version 09.0, EB 68, Annex 27 <i>Remarks: At the time of validation finalization in September 2012 for the PoA-DD, Generic CPA-DD & Specific CPA-DD webhosting, this guideline is now applicable & the previous version is no longer applicable - see Item B22 below</i>
/B20/	Standard For The Development Of Eligibility Criteria For The Inclusion Of A Project Activity As A CPA Under The PoA, Version 01.0., EB 63 Annex 3 <i>Remarks: At the time of on-site validation & PoA-DD, Generic CPA-DD & Specific CPA-DD webhosting, this standard is still valid until 25 July 2012. However at the time of validation finalization which is in September 2012, this standard is no longer valid & hence the latest</i>

	<i>standard has been applied – see Item B14 above</i>
/B21/	Guidelines For Demonstrating Additionality Of Microscale Projects Activities, Version 03, EB 63, Annex 23 <i>Remarks: At the time of on-site validation & PoA-DD, Generic CPA-DD & Specific CPA-DD webhosting, this standard is still valid until before EB68. However at the time of validation finalization which is in September 2012, this guideline is no longer valid & hence the latest guideline has been applied – see Item B18 above</i>
/B22/	Attachment A of Appendix B, Version 08, Annex 24 <i>Remarks: At the time of on-site validation & PoA-DD, Generic CPA-DD & Specific CPA-DD webhosting, this standard is still valid until before EB68. However at the time of validation finalization which is in September 2012, this guideline is no longer valid & hence the latest guideline has been applied – see Item B19 above</i>
/B23/	Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70

2.2 Follow-up Interviews with Programme Stakeholders¹

The following table identifies the personnel who have been interviewed and/or provided additional information to the presented documentation:

	Date	Name	Organization	Topic
/I01/	7-5-2012	Mr. Chiam Yaw Chung	Natural Objective Sdn Bhd	<ul style="list-style-type: none"> ▪ Management interview - CME • Programme description (by the CME) & discussion on the stated goal & policy, voluntary action; general operating & implementing framework of PoA • Review of PoA-DD, CPA-DD template, CPA-DD Case 1 • Project technology description • Baseline determination for a typical CPA & real case CPA of the PoA • Applicability of applied baseline & monitoring technology
		Mr. Khai Yip Mun	Natural Objective Sdn Bhd	
		Ms. Kyoko Tochikawa	Carbon Partners Asiatica (Hong Kong) Co., Ltd.	
		Ms. Margaret Wong	Carbon Partners Asiatica (Hong Kong) Co., Ltd.	

¹ The validation team carried out the desk review discussion & site visit on 7 – 9 May 2012 prior to the date of GSP closure (GSP period is from 20 April 2012 – 19 May 2012). Considering the validation work is carried out during the public stakeholder comment process, it is possible to receive comments from global stakeholders and the response from project participant for received comments should be validated during follow-up interviews. Thus the validation team has obtained confirmation from the project participant to confirm that in case of any negative comments arise and some or all of them were not addressed during site visit, the validation team would go for a second site visit. As a result, there are no comments during GSP.

/102/	8-5-2012	Mr. Chiam Yaw Chung	Natural Objective Sdn Bhd	<ul style="list-style-type: none"> Confirmation of site location Facility check Project design & process flow Technology used Environmental & social impacts Interview with representative of local villagers for public consultation. Interview with representative of local villagers living nearby the project site
		Mr. Khai Yip Mun	Natural Objective Sdn Bhd	
		Ms. Kyoko Tochikawa	Carbon Partners Asiatica (Hong Kong) Co., Ltd.	
		Ms. Margaret Wong	Carbon Partners Asiatica (Hong Kong) Co., Ltd.	
		Richard Chow	Romsheet Sdn Bhd	
		John Chong Yee Hin	Mill Project Manager, Silimpopon Mill	
		Ahmad Unggam	Supervisor, Felda Palm Industry Sdn Bhd	
/103/	9-5-2012	Mr. Chiam Yaw Chung	Natural Objective Sdn Bhd	<ul style="list-style-type: none"> Eligibility criteria & inclusion of a typical CPA & real case CPA of the PoA Additionality justification on PoA level & on typical CPA level including the real case CPA Monitoring plan assessment (including monitoring equipment, monitoring plan & data recording system / database, record keeping) Calculation information check & confirmation of baseline emissions & ER amount Local stakeholder consultation (both on PoA level & real case CPA) EIA done at CPA level including statutory clearances required for the implementation of CPA Double counting & de-bundling check Spreadsheets review Document review
		Mr. Khai Yip Mun	Natural Objective Sdn Bhd	
		Ms. Kyoko Tochikawa	Carbon Partners Asiatica (Hong Kong) Co., Ltd.	
		Ms. Margaret Wong	Carbon Partners Asiatica (Hong Kong) Co., Ltd.	

2.3 Resolution of Outstanding Issues

The objective of this phase of the validation is to resolve any outstanding issues which need be clarified prior to TÜV Rheinland's conclusion on the PoA design. In order to ensure transparency a validation protocol is customised for the programme. The protocol shows in transparent manner criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM PoA is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of five tables. The different columns in these tables are described in the figure below. The completed validation protocol for the PoA is enclosed in Appendix A to this report.

Findings established during the validation can either be seen as a non-fulfilment of CDM criteria or where a risk to the fulfilment of programme objectives is identified. Corrective action requests (CAR) are issued, where:

- i) mistakes have been made with a direct influence on programme results;
- ii) CDM and/or methodology specific requirements have not been met; or
- iii) there is a risk that the programme would not be accepted as a CDM PoA or that emission reductions will not be certified.

A request for clarification (CL) may be used where additional information is needed to fully clarify an issue.

A forward action request (FAR) may be raised to highlight issues related to the PoA implementation that require review during the first verification.

Validation Protocol Table 1: Requirement checklist for PoA DD

Checklist Question	Reference	Means of verification (MoV)	Comment	Draft and/or Final Conclusion
The various requirements in Table 1 are linked to checklist questions the programme should meet. The checklist is organised in different sections, following the logic of the small-scale PoA-DD templates, version 01. Each section is then further sub-divided.	Gives reference to documents where the answer to the checklist question or item is found.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (OK), or a corrective action request (CAR) due to non-compliance with the checklist question (See below). A request for clarification (CL) is used when the validation team has identified a need for further clarification.

Validation Protocol Table 2: Requirement checklist for g-CPA DD

Checklist Question	Reference	Means of verification (MoV)	Comment	Draft and/or Final Conclusion
The various requirements in Table 2 are linked to checklist questions the programme should meet. The checklist is organised in different sections, following the logic of the small-scale g-CPA-DD templates, version 01. Each section is then further sub-divided.	Gives reference to documents where the answer to the checklist question or item is found.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (OK), or a corrective action request (CAR) due to non-compliance with the checklist question (See below). A request for clarification (CL) is used when the validation team has identified a need for further clarification.

Validation Protocol Table 3 and 4: Resolution of Corrective Action and Clarification Requests on the PoA DD and g-CPA DD respectively.

CL/CAR No.	Observations	Reference	Summary of project owner response	Validation team conclusion
CL/ CAR XX	If the conclusions from the draft Validation are either a CAR or a CL, these should be listed in this section.	Reference to the checklist question number in Table 1 and 2 where the CAR or CL is explained.	The responses given by the project participants during the communications with the validation team should be summarised in this section.	This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 1 and 2, under "Final Conclusion".

Validation Protocol Table 5: List of forward action requests (FARs)				
FAR Number	Observations	Reference	Summary of project owner response	Validation team conclusion
FAR-XX	If the conclusions from the draft Validation are FARs, these should be listed in this section.	Reference to the checklist question number in Table 1 where the FAR is explained.	The responses given by the project participants during the communications with the validation team should be summarised in this section.	This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final Conclusion".

Figure 1. Validation protocol tables

2.4 Internal Quality Control

The validation report including the validation findings underwent a technical review. The technical review was performed by a technical reviewer qualified in accordance with TÜV Rheinland's qualification scheme for CDM validation and verification.

2.5 Validation Team

Validation Team			Type of Involvement						
Full name	Affiliation TÜV Rheinland	Appointed for Sectoral Scopes (Technical Areas)	Supervising the work	Desk review	Site Visit + Interview	Report and protocol Writing	Technical Expert Input	Reporting Support	Technical Reviewer
Ms. Nelly Yong Tau Lan	Malaysia	1, 5, 11, 12, 13	X	X	X	X			
Mr. Azizan Zakaria	Malaysia	5, 11, 12, 13		X	X			X	
Ms. Carol Ng Siew Theng	Malaysia	15		X	X			X	
Ms Kamala Devi Muniandy	China	5, 11, 12, 13							X

3 VALIDATION FINDINGS

The findings of the validation are stated in the following sections. The validation criteria (requirements), the means of verification and the results from validating the identified criteria are documented in more detail in the validation protocol in Appendix A.

The final validation findings relate to the programme design as documented and described in the PoA-DD and g-CPA-DD.

3.1 Approval and participation

Validation Opinion:

VVM paragraph 44 to 54

According to the PoA-DD, the proposed programme is a bilateral CDM PoA which involves 2 project participants: Natural Objective Sdn Bhd from Malaysia which is the host party and Carbon Partners Asiatica (Hong Kong) Co., Ltd. which is from the Annex 1 country.

Natural Objective Sdn Bhd acts as the coordinating / managing entity of the SSC-PoA. The host party, i.e. Malaysia meets all relevant participation requirements in CDM.

LoA's from host country & Annex 1 country are received /P3, P4/.

According to Section A.4.5, Annex 2 of the PoA-DD and the on-site interview with the representative from Natural Objective Sdn Bhd, there is no public funding will be received.

The validation did not reveal any evidence that this project activity can be seen as a diversion of ODA. This has been confirmed through interview with the project participant /I01/ & review of non ODA declaration letter /P11/.

Table 4: The below table summarizes the project participant and party involved.

Project participants	Natural Objective Sdn Bhd	Carbon Partners Asiatica (Hong Kong) Co., Ltd.
Parties involved	Malaysia (Host)	Netherlands (Annex I)
APPROVAL		
LoA received	Yes	Yes
Date of LoA	14 Aug 2012	26 Sep 2012
Reference to document	NRE(S) 602-2/11 Jld 16(28)	2012ANL732
LoA received from	PP	PP
Validation of authenticity	<ol style="list-style-type: none"> 1. The received original copy of the host LoA from the project participant was compared with LoA of those registered CDM projects which have the same DNA. The LoA were compared on the alignment, the standard format and signatory of the person who issued the letter & confirmed to be same. The validation team has confirmed the LoA are authentic. The letter(s) of approval was also found to be unconditional with respect to paragraph 45 (a) to (d) of Validation and Verification Manual Version 01.2 EB 55 Annex 1 /B01/. The validation team concluded that these letter(s) are in accordance with paragraphs 45 - 48 of Validation and Verification Manual Version 01.2 EB 55 Annex 1 /B01/. 2. The received original copy of the Annex 1 party LoA from the project participant was compared with LoA of those registered CDM projects which have the same DNA. The LoA were compared on the alignment, the standard format and signatory of the person who issued the letter & confirmed to be same. The validation team has confirmed these LoAs are authentic. 	

	<p>The authenticity of the letter of approval issued by The Netherlands DNA /P04/ have been confirmed its authenticity through email notification sent on which the CDM projects approved by NL Agency – Ministry of Infrastructure and the Environment.</p> <p>The letter(s) of approval was also found to be unconditional with respect to paragraph 45 (a) to (d) of Validation and Verification Manual Version 01.2 EB 55 Annex 1 /B01/. The validation team concluded that these letter(s) are in accordance with paragraphs 45 - 48 of Validation and Verification Manual Version 01.2 EB 55 Annex 1 /B01/.</p>	
Validity of LoA	1 year from the LoA issued date	Not specified
PARTICIPATION		
Party is party to Kyoto Protocol	Yes, ratified since 4 September 2002	Yes, ratified since 31 May 2002
Voluntary participation	Yes	Yes
Diversion of official development aid towards host country	No indication	No indication
Programme contribution to SD	Yes	Yes

Confirmation of MoC

The project MoC /P05/, was received from the CME. The validation team confirmed that the authorized signatories in the MoC are the same as in the LoAs /P03, P04/ for host & Annex 1 party respectively. The name of the contact person mentioned in the MoC is also consistent with the final PDDs /P02/.

3.1 Programme of Activities Design Documents

Validation Opinion:

VVM paragraph 55, 56, 57

The validation team validated that the provided PoA-DD /P01/ and CPA-DD /P02/ and completed CPA-DD /3/ are based on the currently valid PoA-DD template /B02/ and CPA-DD template /B02/.

3.3 Programme Description

Validation Opinion:

VVM paragraph 58 to 64

The objective of the “AeroPod Composting and Co-composting Programme in Malaysia” is to introduce a zero-waste concept to palm oil mills by introducing an advanced technology for co-composting, in recognition of the environmental burden caused by the lack of a sustainable waste management practice in the palm oil industry

Based on the local team experience & review of the local regulations in Malaysia, the validation team could confirm that there are no mandatory regulations on the development of composting & co-composting projects in Malaysia, including development of the same as PoA.

The validation team was also able to confirm as well (local team’s knowledge on the local regulations & review of the local regulations requirements in the website of Department of Environment, Malaysia) that in the absence of the CDM, the current regulations in Malaysia would not be changed & the CPAs under the PoA cannot be launched and that the PoA implementation would contribute towards sustainable development in Malaysia

The location of the PoA is in Malaysia. According to the PoA-DD, the database of all plants would be maintained by CME.

For the technology or measures to be employed by each CPA, the validation team had found that the PoA-DD had mentioned that the composting system of each CPA will be newly constructed at or in close proximity to either an existing or new palm oil mill.

Each CPA will produce bio-organic fertilizer in an aerobic environment. The process technology to be applied in the CPA is a high-tech organic composting system called AeroPod®, a new invention under patents over the decades-old tunnel composting system. The process will convert the mixture of solid bio-wastes and POME into high-value bio-organic fertilizers. The project technology descriptions in the PoA-DD have been cross checked with the Development Proposal for Silimpopon Bio-Waste Composting Project, dated 4 May 2012 /P12/

According to the PoA-DD, the starting date of the PoA is 20 April 2012. The start date of the PoA was determined based on the date of publication of the PoA-DD for global stakeholder consultation. This is in line with the latest published Glossary of CDM Terms Version 07.0 /B07/

The length of the PoA is taken as 28 years.

Herewith, the validation team summarizes **major** changes between webhosted PoA-DD and final version of PoA-DD for submission as follows:

Subject	Webhosted PoA-DD	Correction to webhosted PoA-DD in the final PoA-DD submission for registration with DOE assessment and reason of acceptance.
PoA-DD (project title / participants involved/ project location /project technology etc.)	AeroPod Composting and Co-composting Programme in Malaysia	Remains unchanged
Methodologies and tools applied (scope and version numbers)	AMS-III.F Version 10 /B04/	Remains unchanged
CER calculations (formula applied / amount of emission reduction)	Formulae applied consistent with AMS-III.F Version 10 /B04/ The CER amount calculation is demonstrated at specific CPA-DD level	Remains unchanged
Additionality: (benchmark / input values / analysis type / project start date / IRR or NPV values etc.)	Benchmark value / Financial indicator , IRR / CPA Start Date = defined specifically in specific CPA-DD	Remains unchanged
Monitoring (parameters / frequency)	As defined in the AMS-III.F version 10	Remains unchanged
Crediting period (type / start date)	This is defined in the Generic CPA-DD & Specific CPA-DD Section A.4.3.1 as follows: Date of inclusion of CPA in the PoA or date of commencement of the CPA's operation whichever is later	Remains unchanged

Please refer to Appendix A of this report for details of each change between webhosted PoA-DD and the final PoA-DD for submission. The Validation Team has carried out the validation process based on the Webhosted PoA-DD and raised CARs/CLs against the project by issuing the validation protocol.

With the updated information and corrections done on final PoA-DD, the PP has addressed all the CARs /CLs that were raised by the Validation Team.

It is concluded that the Validation Team has reviewed the project in line with the VVM (version 01.2) and all the evidence, corrections, justifications and updating done on the final PoA-DD with respect to CARs /CLs raised are accepted and closed by the Validation Team, issuing the positive validation opinion for project registration.

The validation team has confirmed that the project description of the project contained in the PoA-DD of AeroPod Composting and Co-composting Programme in Malaysia to be complete and accurate. The PoA-DD of AeroPod Composting and Co-composting Programme in Malaysia has complied with the relevant methodology, tools, forms and guidance at the time of PoA-DD submission for registration

3.4 Eligibility Criteria for CPA Inclusion

Validation Opinion:

VVM paragraph 134 to 137, 165, 167, 168

According to VVM paragraph 167, “the DOE shall assess the specified eligibility criteria in the POA-DD in order to determine whether or not these criteria are sufficient to ensure that all CPAs would comply with the CDM requirements applicable to the PoA, these requirements will include inter alia the means of demonstrating the additionality of the CPA and the applicability of the applied methodology. The eligibility criteria represent an essential element of ensuring the smooth functioning or programmatic CDM, therefore the DOE may raise CARs which ensure the ease of application of the eligibility criteria “

According to EB 65 meeting report paragraph 74, “DOEs may upload for registration PoA-related PDDs in which the previous guidelines have been applied not later than the calendar day (24:00 GMT) eight months from the publication date of this report”

Hence, at the time of on-site visit, the validation team has assessed the eligibility criteria compliance accordance to Standard for The Development of Eligibility Criteria for The Inclusion of Project Activity as A CPA Under The PoA, EB 63 Annex 3, Version 01.0. /B20/ which is still valid (until 25 July 2012)

However, at the time of the finalization of the PoA, the CME had updated the eligibility criteria in the PoA DD according to Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/

The following are the summary of the validation team’s opinion for the eligibility criteria assessed in the PoA-DD

Eligibility Criteria No.	Eligibility Criteria	Documentation to substantiate compliance	Validation opinion – PoA-DD level
1	The geographical boundary of the CPA.	Official documents such as mill license	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (a). The CME has already indicated that the geographic boundary of a CPA is within Malaysia consistent to the PoA geographic boundary.
2	Conditions to avoid double counting: (a) The location of the CPA and its GPS coordinates are uniquely identified. (b) Measures as elaborated in Section A.4.4.1 (ii) of the PoA-DD are followed to avoid double counting	(a) Specific CPA-DD Section A.4.1.2 (b) Confirmation from the CPA implementer	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (b).

3	Specifications of technology / measure: The composting process is based on the AeroPod system and plant design, a new in-vessel composting technology developed specifically for palm oil mill bio waste for quality assurance of compost production and operating procedures unique to AeroPod system.	Proposal / technical specification, including the level and type of service, performance specifications including compliance with testing/certification, from the technology provider	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (c).
4	The start date of the CPA will be checked through documentary evidence, the date which will be defined as the start date of the CPA. This date shall not precede the PoA-DD global stakeholder consultation publication.	Contract between each CPA implementer and NOSB to agree to proceed with the construction of the co-composting facility for the CPA, or contracts for purchasing main equipments/ construction services. The earlier date should be chosen. In case that no contract has been signed and therefore the underlying project has not started, an expected date of EPC (Engineering, Procurement and Construction) contract shall be used instead.	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (d).
5	Each CPA shall comply with the applicability and other requirements stipulated in AMS-III.F.	Specific CPA-DD Section B.2	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (e).
6	Each CPA shall meet the requirements pertaining to the demonstration of additionality in Section E.5 of the PoA-DD.	Specific CPA-DD Section B.3	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (f).
7	The PoA-specific requirements stipulated by the CME.	(a) Minutes of meeting and the attendance list of the local	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality,

	<p>(a) Local stakeholder consultations must be held by the CPA</p> <p>(b) As at current, an environmental impact analysis (EIA) is not required for co-composting projects. In case of EIA related regulation changes in the future, the CPA will follow the latest regulation.</p>	<p>stakeholder consultation,</p> <p>(b) EIA exemption letter from the Department of Environmental or EIA report (if required by the government).</p>	<p>development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (g).</p>
8	Each CPA shall affirm that it will not source public funding from Annex I parties. In case a CPA sources public funding from an Annex I party, that CPA shall obtain a CPA-level confirmation that such funding does not result in a diversion of official development assistance.	Declaration of no public funding signed by the CPA implementer.	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (h).
9	The small-scale CPA shall meet the threshold criterion described in “ <i>General Guidelines to SSC CDM methodologies (version 17)</i> ”. For methane recovery projects, the emission reductions every year will not go beyond the limits of 60 ktCO ₂ e/y over the entire crediting period.	CER calculation spreadsheet for each specific CPA-DD.	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (k).
10	Demonstration of whether the CPA is a de-bundled component.	Specific CPA-DD Section A.4.6	Yes, this is in line with the requirement defined in the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/, paragraph 16 (l).

Conclusion:

In line with the following paragraphs from the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/ for **development of eligibility criteria**, the validation team concluded that:

- **Paragraph 13 & 14:**

The CME has effectively developed the eligibility criteria for CPA inclusion under PoA according to the listed eligibility criteria in EB 70 (paragraph 16) & has included the eligibility criteria in the PoA-DD. The CME has positively demonstrated the usability of the eligibility criteria to assess the inclusion of the CPA (i.e. AeroPod Co-composting Programme for Silimpopon Mill in Sabah) in the generic CPA-DD.

- Paragraph 17**
 The eligibility criteria are verifiable, as evident via usability demonstration to assess the inclusion of the CPA (i.e. AeroPod Co-composting Programme for Silimpopon Mill in Sabah), via review of the corresponding supporting evidences & documentations.
- Paragraph 19**
 The eligibility criteria developed are objective and comprehensive to permit the assessment of the CPA inclusion in the PoA.
- Paragraph 19 & 20**
 The CME has demonstrated competencies to check the features of potential CPAs and ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA. The CME has developed and implemented a management system for CPA inclusion. The summary of the fulfilment of the management system criteria are explained as follows:

Paragraph 19	Validation Opinion
(a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies;	<p>The roles & responsibilities which are documented in the Natural Objective Sdn Bhd CDM Programme of Activities CME Coordinating / Managing Entity – Operational & Management Plan dated 8 October 2012, Issue 6 /P08/ are being applied for the specific case CPA</p> <p>This is also evident to the validation team during the review of actual records & documentations prepared by the personnel involved for CPA inclusion. The validation team also interviewed the personnel such as the PoA Operations personnel, Quality Control & Technical review personnel & document controller & cross check with the competency criteria fulfillment</p> <p><u>Conclusion:</u> The validation team concluded that the actual implementation of personnel having the defined roles & responsibilities possessed the necessary competencies for performing the CPA inclusion.</p>
(b) Records of arrangements for training and capacity development for personnel;	<p>Staff training arrangement / planning, including staff training records, OMP Records /P08/ which was established by the CME is also applicable for this specific case CPA since the personnel who are involved in the CPA inclusion (interviewed during the on-site visit) are also listed in the training records.</p> <p><u>Conclusion:</u> The validation team concluded that the personnel involved in the CPA inclusion has been adequately trained & noted that there are still trainings are being planned for the personnel as need arises.</p>
(c) Procedures for technical review of inclusion of CPAs;	<p>According to PoA-DD, technical review for inclusion of new CPAs will be carried out by as it is also being documented in the CME Coordinating/Managing Entity - Operational and Management Plan (OMP), dated 8 Oct 2012, Issue 6 /P08/.</p> <p><u>Conclusion:</u> The validation team concluded that the technical review for the inclusion of Specific CPA case: AeroPod Co-composting Programme for Silimpopon Mill in Sabah, has been conducted adequately according to the documented procedure /P08/.</p>
(d) A procedure to avoid double counting (e.g. to avoid the case of including a new	<p>According to PoA-DD, the CME will seek confirmation of CPA (by means of declaration) and also check any-double</p>

CPA that has already been registered either as a CDM project activity or as a CPA of another PoA);	<p>counting using public information sources like UNFCCC website data. Documented procedure Natural Objective Sdn Bhd CDM Programme of Activities CME Coordinating / Managing Entity – Operational & Management Plan dated 8 October 2012, Issue 6 has been established /P08/</p> <p><u>Conclusion:</u> The validation team concluded that the double counting procedure has been implemented adequately according to the documented procedure /P08/.</p>
(e) Records and documentation control process for each CPA under the PoA;	<p>According to PoA-DD, a serial numbering system will be implemented that uniquely identifies each CPA through numbers for the CPA and the CPA implementer. This serial numbering system will be used to record baseline and monitoring data on a continuous basis using a database. Documented procedure Natural Objective Sdn Bhd CDM Programme of Activities CME Coordinating / Managing Entity – Operational & Management Plan dated 8 October 2012, Issue 6 has been established /P08/.</p> <p><u>Conclusion:</u> The validation team concluded that the record & document control procedure has been implemented adequately according to the documented procedure /P08/.</p>
(f) Measures for continuous improvements of the PoA management system;	<p>The measures for continuous improvements defined in the Natural Objective Sdn Bhd CDM Programme of Activities CME Coordinating / Managing Entity – Operational & Management Plan dated 8 October 2012, Issue 6 /P08/ is acceptable by the validation team as this is also in line with the PDCA cycle concept (Plan-Do-Check-Act concept, defined in ISO 9001 Quality Management System).</p>
(g) Any other relevant elements.	<p>The remaining elements defined in the PoA-DD are additional to the descriptions provided for each of the management system criteria defined above & are found to be deemed appropriate & relevant. This is accepted by the validation team.</p>

- Paragraph 21**
 The AeroPod Co-composting Programme for Silimpopon Mill in Sabah included in the PoA has been positively assessed & confirmed that the eligibility criteria has been fulfilled
- Paragraph 22**
 Since this PoA developed involved only 1 methodology, hence this paragraph is not applicable for further assessment

3.5 Operational and Management Plan

Validation Opinion:

VVM paragraph 166

Requirements	Validation Opinion
Description of the operational and management arrangements established by the coordinating/managing entity for the implementation of the PoA, including:	As defined in the PoA-DD Section A.4.4.1, the operation & management of the PoA will be led by the CME, Natural Objective Sdn Bhd Detailed CME roles & responsibilities are defined & documented in the Natural Objective Sdn Bhd CDM Programme of Activities CME Coordinating / Managing Entity – Operational & Management Plan dated 8 October 2012, Issue 6 /P08/.
(i) A record keeping system for each CPA under the PoA	<p>Record keeping system for each CPA under the PoA has been well defined clearly in the PoA-DD Section A.4.4.1 & the validation team considered it to be practical</p> <p>The remaining records would be made available & continually will be updated by the CME during the crediting period of the PoA & the CPAs. This is accepted by the validation team.</p> <p>Specific CPA case: AeroPod Co-composting Programme for Silimpopon Mill in Sabah</p> <p>For this specific CPA case, the records maintained are listed in “OMP (Operational Management Plan) Records (Work In progress)” /P07/</p> <p>The remaining records would be made available & continually will be updated by the CME during the crediting period of the PoA & the CPAs. This is accepted by the validation team .</p>
(ii) A system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been already registered either as a CDM project activity or as a CPA of another PoA,	<p>As explained in Section 3.4 report above, the CME will seek confirmation of CPA (by means of declaration) and also check any- double counting using public information sources like UNFCCC website data.</p> <p>The CME had also considered should there be any overlap of project boundaries with an existing CDM project, the CPA implementer shall provide a written confirmation that:</p> <ul style="list-style-type: none"> - There is no sharing of feedstock (i.e. EFB, POME etc.) and hence there is no overlap of activities; or - If there is a sharing of feedstock (e.g. 10% of POME is used as part of the CPA, whilst 90% of the POME is used for a separate biogas CDM project), then an explanation of measures taken, such as sufficient metering, to ensure there can be no double counting. <p>In addition, the CME also ensures that the implementer of each CPA shall provide a written confirmation that should it carry out another CDM activity on the same premises as the CPA in future, it will ensure there is no double-counting of CERs by making sufficient provisions in the documentation for that future activity.</p> <p>Hence, the validation team considered the system / procedure to avoid double accounting to be deemed appropriate.</p> <p>Specific CPA case: AeroPod Co-composting Programme</p>

	<p>for Silimpopon Mill in Sabah</p> <p>The validation team has cross checked the GPS coordinates versus CDM pipeline in UNFCCC (registered project / under validation or CPA for another PoA).</p> <p>It is confirmed that “AeroPod Co-composting Programme for Silimpopon Mill in Sabah” is neither registered / to register as a single CDM project, not a CPA of another PoA</p> <p>No overlapping of project boundaries with another CDM registered project was found. Besides that, the CPA Implementer i.e. Syarikat Kretam Mill Sdn Bhd has provided a Letter from the Director of Syarikat Kretam Mill Sdn Bhd dated 6 April 2012 /P13/ confirming no overlapping of project boundaries and no double counting of CERs.</p>
<p>(iii) The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity.</p>	<p>The descriptions & evaluation mechanism for SSC-CPA included in the PoA Section A.4.4.1 is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity, has been defined clearly in the PoA-DD (according to paragraph 8, 9 & 10 of Guidelines On Assessment Of Debundling For SSC Project Activities, Version 03, EB 54, Annex 13 /B13/)</p> <p>Hence, the validation team considered the process of checking the de-bundling component of another CDM programme activity to be deemed appropriate.</p> <p>Hence, the validation team concluded that the requirement stipulated in the Guidelines On Assessment Of Debundling For SSC Project Activities, Version 03, EB 54, Annex 13 /B13/ are fulfilled.</p> <p>Specific CPA case: AeroPod Co-composting Programme for Silimpopon Mill in Sabah</p> <p>The validation team cross checked in the UNFCCC website & found that there is no other activity registered as small-scale CPA of a PoA, or applied to register another small-scale CPA of a PoA, or registered as CDM project activity, which:</p> <ul style="list-style-type: none"> (a) Has the same activity proposed small scale CPA implementer, or as the same coordinating or managing entity, which also manages a large scale PoA of same sectoral scope, and (b) The boundary is within 1 km of the boundary of the proposed small-scale CPA, at the closest point. <p>Thus, according to the Guidelines On Assessment Of Debundling For SSC Project Activities, Version 03, EB 54, Annex 13 /B13/, the proposed small-scale CPA of the PoA is not considered as a de-bundled component of a large scale activity</p> <p>Hence, the validation team concluded that the requirement stipulated in the Guidelines On Assessment Of Debundling For SSC Project Activities, Version 03, EB 54, Annex 13 /B13/ are fulfilled.</p>
<p>(iv) The provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being</p>	<p>Specific CPA case: AeroPod Co-composting Programme for Silimpopon Mill in Sabah</p> <p>Contractual agreement between CME & CPA implementer –</p>

subscribed to the PoA;	'Proposal for CDM Services: UNFCCC Programme of Activities' signed by the director of Syarikat Kretam Mill Sdn Bhd on 7 May 2012 /P09/, that the provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA are fulfilled.
------------------------	---

Conclusion:

The validation team concluded that the CME had clearly demonstrated the operational and management arrangements for the PoA in the PoA-DD and this complied with the VVM requirement paragraph 166, including the procedure for registration of a PoA /B15/ para 6(i).

3.6 Monitoring Plan

Validation Opinion:

VVM paragraph 122, 123, 124

The validation team was able to assess the monitoring plan defined in the PoA-DD. Conclusion of the assessments is summarised as follows:

- 1) Recording requirements has been defined & confirmed the records will be kept for at least 2 years,
- 2) Monitoring & measurements requirements have been defined in the respective procedures such as monitoring procedures, calibration procedure & quality assurance & quality check procedure,
- 3) Reporting & verification requirements have been defined,
- 4) Responsibility for record maintenance at CPA level has been defined,
- 5) Role & responsibility by CME to manage data aggregation, field visits, emission reduction calculation, cross checking CPAs to prevent double counting have been defined in the PoA-DD, and
- 6) Monitoring requirements has been identified in accordance with the methodology AMS-III.F /B04/ & the corresponding tools.

(i) Description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the amount of reductions of anthropogenic emissions by sources or removals by sinks of greenhouse gases achieved by CPAs under the PoA.

The CME has defined in the PoA-DD that each CPA will be verified individually.

(ii) In case the coordinating/managing entity opts for a verification method that does not use sampling but verifies each CPA (whether in groups or not, with different or identical verification periods) a transparent system is to be defined and described that ensures that no double accounting occurs and that the status of verification can be determined anytime for each CPA

The CME has defined a transparent system to ensure no double accounting & the status of the verification can be determined for each CPA, via cataloguing of each CPAs.

According to the document review in PoA-DD, detailed monitoring procedures, monitoring structure, monitoring items & functions are clearly demonstrated in the PoA-PDD which enable the monitoring plan to implemented feasibly.

Interview & on site assessment through physical inspection with the project participant & consultant has allowed the validation team to confirm that the monitoring plan defined in the PoA-DD is feasible to be implemented.

The description provided in the PoA-DD /P03/ on the operational and management arrangements was confirmed based on document review and through OSV interviews.

3.7 Baseline and Monitoring Methodology

3.7.1 Applicability of the selected methodology

Validation Opinion:

VVM paragraph 65 to 77

The proposed PoA & the subsequent CPAs applies the approved baseline methodology “Approved Baseline & Monitoring Methodology: AMS-III.F, “Avoidance of methane emissions through composting”, Version 10 /B04/, which also refers to the following tools:

1. “Tool to calculate baseline, project and/or leakage emissions from electricity consumption”, Version 01, EB 39, Annex 7 /B05/
2. “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion”, Version 02, EB 41, Annex 11 /B06/
3. “Emission from solid waste disposal sites”, Version 06.0.0, EB65, Annex 19 /B10/

Its applicability has been justified to the validation team in accordance with the requirements of the methodology. The validation team has performed document review & interview with the project participants. The summary of the methodology applicability assessment by the validation team are listed as follows:

AMS-III.F Applicability Assessment & Validation Opinion:

Extracted from PoA-DD Section E.2		Means of Validation
Applicability Criteria	Explanation	
1. This methodology comprises measures to avoid the emissions of methane to the atmosphere from biomass or other organic matter that would have otherwise been left to decay anaerobically in a solid waste disposal site (SWDS), or in an animal waste management system (AWMS), or in a wastewater treatment system (WWTS). In the project activity, controlled aerobic treatment by composting of biomass is introduced.	Each CPA avoids the emissions of methane to the atmosphere from biomass or other organic matter that would have otherwise been left to decay anaerobically in a solid waste disposal site (SWDS), and in a wastewater treatment system (WWTS). A controlled aerobic treatment by composting of biomass will be introduced for each CPA.	The validation team accepted the justifications since the PoA-DD had defined clearly that for every CPA, a controlled aerobic treatment by composting of biomass will be introduced for each CPA. In the Generic CPA-DD, this has been defined where the CPA avoids the emissions of methane to the atmosphere from EFBs, [other solid wastes] and POME that would have otherwise been left to decay anaerobically in a solid waste disposal site (SWDS), or in a wastewater treatment system (WWTS). This will be cross checked each time for every CPA inclusion stage
2. The project activity does not recover or combust landfill gas from the disposal site (unlike AMS-III.G .Landfill methane recovery.), and does not undertake controlled combustion of the waste that is not treated biologically in a first step (unlike AMS-III.E. Avoidance of methane production from decay of biomass through controlled combustion, gasification or mechanical/thermal treatment.). Project activities that recover biogas from wastewater treatment shall use methodology	The CPA does not recover or combust landfill gas, undertake controlled combustion of the waste, recover biogas from wastewater treatment, or involve co-digestion of organic matters.	Since in the Generic CPA-DD, it has been stated clearly that the CPA avoids the emissions of methane to the atmosphere from EFBs, [other solid wastes] and POME that would have otherwise been left to decay anaerobically in a solid waste disposal site (SWDS), or in a wastewater treatment system (WWTS) via a controlled aerobic treatment by composting of biomass which will be introduced for each CPA.; hence the justifications for the

Extracted from PoA-DD Section E.2		Means of Validation
Applicability Criteria	Explanation	
AMS-III.H .Methane recovery in wastewater treatment. Project activities involving co-digestion of organic matters shall apply methodology AMS-III.AO Methane recovery through controlled anaerobic digestion.		non-applicability of this conditions are accepted by the validation team.
3. Measures are limited to those that result in emission reductions of less than or equal to 60 kt CO ₂ equivalent annually.	Annual emission reductions of a CPA will be less than or equal to 60 kt CO ₂ equivalent.	The validation team accepted the justifications since this will be specified clearly & assessed at specific CPA-DD level.
4. This methodology is applicable to the composting of the organic fraction of municipal solid waste and biomass waste from agricultural or agro-industrial activities including manure.	Each CPA involves the composting of the organic fraction of biomass waste from agro-industrial activities (palm oil milling).	The validation team accepted the justifications since the PoA-DD had defined clearly that for every CPA, a controlled aerobic treatment by composting of biomass will be introduced for each CPA. In the Generic CPA-DD, this has been defined clearly that each CPA involves the composting of the organic fraction of biomass waste from agro-industrial activities (palm oil milling). Hence the justifications are accepted by the validation team.
5. This methodology includes construction and expansion of treatment facilities as well as activities that increase capacity utilization at an existing facility. For project activities that increase capacity utilization at existing facilities, project participant(s) shall demonstrate that special efforts are made to increase the capacity utilization, that the existing facility meets all applicable laws and regulations and that the existing facility is not included in a separate CDM project activity. The special efforts should be identified and described.	The CPA includes the construction of a new treatment facility. Expansion and increase capacity utilization at existing co-composting facility will not be involved.	The PoA-DD had specified clearly that only CPA includes the construction of a new treatment facility. This will be cross checked each time for every CPA inclusion stage.
6. This methodology is also applicable for co-composting wastewater and solid biomass waste, where wastewater would otherwise have been treated in an anaerobic wastewater treatment system without biogas recovery. The wastewater in the project scenario is used as a source of moisture and/or nutrients to the biological treatment process e.g. composting of empty fruit bunches (EFB), a residue from palm oil	The CPA involves co-composting wastewater and solid biomass wastes, where the wastewater would have otherwise been treated in the anaerobic open lagoon system located at the palm oil mill. In the CPA, the wastewater will be used as a source of moisture, pH balance and nutrients for the composting	The PoA-DD had specified clearly that only CPA involves co-composting wastewater and solid biomass wastes, where the wastewater would have otherwise been treated in the anaerobic open lagoon system located at the palm oil mill. This will be cross checked each time for every CPA inclusion stage.

Extracted from PoA-DD Section E.2		Means of Validation
Applicability Criteria	Explanation	
production, with the addition of palm oil mill effluent (POME) which is the wastewater co-produced from palm oil production.	process.	
7. In case of co-composting, if it cannot be demonstrated that the organic matter would otherwise been left to decay anaerobically, baseline emissions related to such organic matter shall be accounted for as zero, whereas project emissions shall be calculated according to the procedures presented in this methodology for all co-composted substrates.	Baseline emissions related to anaerobic decay of solid bio-wastes and POME will be accounted for as zero.	The PoA-DD as well as the Generic CPA-DD had specified clearly that baseline emissions related to anaerobic decay of solid bio-wastes and POME will be accounted for as zero. This will be cross checked each time for every CPA inclusion stage.
8. The location and characteristics of the disposal site of the biomass, animal manure and co composting wastewater in the baseline condition shall be known, in such a way as to allow the estimation of its methane emissions, using the provisions of AMS-III.G, AMS-III.E (concerning stockpile), AMS-III.D .Methane recovery in animal manure management systems. or AMS-III.H respectively. Project activities for composting of animal manure shall also meet the requirements under paragraphs 1, and 2 (c) of AMS-III.D. Further no bedding material is used in the animal barns or intentionally added to the manure stream in the baseline. Blending materials may be added in the project scenario to increase the efficiency of the composting process (e.g. to achieve a desirable C/N ratio or free air space value), however, only monitored quantity of solid waste or manure or wastewater diverted from the baseline treatment system is used for emission reduction calculation. The following requirement shall be checked ex ante at the beginning of each crediting period: (a) Establish that identified landfill(s)/stockpile(s) can be expected to accommodate the waste to be used for the project activity for the duration of the crediting period; or (b) Establish that it is common practice in the region to dispose off the waste in solid waste disposal site (landfill)/stockpile(s).	<p>The location and characteristics of the disposal site of the biomass and co-composting wastewater in the baseline condition will be identified. AMS-III.H will be employed to estimate the methane emissions.</p> <p>No composting of animal manure will be involved in the CPA. Blending materials may be added in the project scenario to increase the efficiency of the composting process. The monitored quantity of solid waste or wastewater diverted from the baseline treatment system is used for emission reduction calculation.</p> <p>It will be checked ex ante at the beginning of each crediting period that the landfill can be expected to accommodate the waste to be used for the project activity for the duration of the crediting period.</p>	<p>The PoA-DD as well as the Generic CPA-DD had specified clearly that the location and characteristics of the disposal site of the biomass and co-composting wastewater in the baseline condition will be identified. AMS-III.H will be employed to estimate the methane emissions.</p> <p>As stated clearly in the justifications for applicability condition no. 4, each CPA involves the composting of the organic fraction of biomass waste from agro-industrial activities (palm oil milling). Hence, this confirmed that animal manure composting is not applicable The use of blending materials & ER calculation based on the monitored quantity of solid waste or wastewater diverted from the baseline treatment system will be cross checked each time for every CPA inclusion stage.</p> <p>Similarly, it will be also cross checked at CPA inclusion level – the ex-ante determination at the beginning of each crediting period that the landfill can be expected to accommodate the waste to be used for the project activity for the duration of the crediting period.</p>

Extracted from PoA-DD Section E.2		Means of Validation
Applicability Criteria	Explanation	
9. The project participants shall clearly define the geographical boundary of the region referred in paragraph 8 (b), and document it in the CDM-PDD. In defining the geographical boundary of the region, project participants should take into account the source of the waste i.e. if waste is transported up to 50 km, the region may cover a radius of 50 km around the project activity. In addition, it should also consider the distance to which the final product after composting will be transported. In either case, the region should cover a reasonable radius around the project activity that can be justified with reference to the project circumstances but in no case it shall be more than 200 km. Once defined, the region should not be changed during the crediting period(s).	Not applicable, a criterion 8(a) is chosen.	Since the project activity involves only criterion 8 (a) above, this criteria is confirmed to be not applicable.
10. In case produced compost is handled aerobically and submitted to soil application, the proper conditions and procedures (not resulting in methane emissions) must be ensured.	The produced compost will be handled aerobically and submitted to soil application. The proper conditions and procedures for the soil application will be ensured such that methane emissions will not occur.	The PoA-DD as well as the Generic CPA-DD had specified clearly that the produced compost will be handled aerobically and submitted to soil application & the proper conditions and procedures for the soil application will be ensured such that methane emissions will not occur. The specific procedures to demonstrate how to comply with this criteria will be stated clearly at specific CPA-DD level & this is accepted by the validation team.
11. In case produced compost is treated thermally/mechanically, the provisions in AMS-III.E related to thermal/mechanical treatment shall be applied.	Not applicable. Compost produced will not be treated thermally/mechanically.	Since the project activity does involve any treatment of compost produced thermally / mechanically, this criteria is not applicable & accepted by the validation team.
12. In case produced compost is stored under anaerobic conditions and/or delivered to a landfill, emissions from the residual organic content shall to be taken into account and calculated as per the latest version of the Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site.	Not applicable. Compost produced will not be stored under anaerobic conditions and/or landfilled.	Since the produced compost will not be stored under anaerobic conditions and/or delivered to a landfill & also the fact the parameter " Soil application of the compost " is already added in the PoA-DD Section D.7.1 as one of the monitoring parameter, the validation team accepted the justifications as stated in the PoA-DD

Extracted from PoA-DD Section E.2		Means of Validation
Applicability Criteria	Explanation	
<p>26. The following conditions apply for use of this methodology in a project activity under a programme of activities:</p> <p>In case the project activity involves the replacement of equipment, and the leakage effect of the use of the replaced equipment in another activity is neglected, because the replaced equipment is scrapped, an independent monitoring of scrapping of replaced equipment needs to be implemented.</p> <p>The monitoring should include a check if the number of project activity equipment distributed by the project and the number of scrapped equipment correspond with each other. For this purpose scrapped equipment should be stored until such correspondence has been checked. The scrapping of replaced equipment should be documented and independently verified.</p>	Not applicable. The CPA involves the construction of new co-composting facility.	Since the PoA-DD & also the Generic CPA-DD clearly specifies that the CPA involves only construction of new co-composting facility, this criteria is not applicable.

Remarks: The applicability conditions fulfillment for the Specific CPA case: AeroPod Co-composting Programme for Silimpon Mill in Sabah are demonstrated as part of the eligibility criteria – see the separate validation report prepared for Specific CPA case: AeroPod Co-composting Programme for Silimpon Mill in Sabah, Section 3.4.

The project eligibility to a small-scale project was determined by the validation team through assessment of the eligibility criteria – See Section 3.4 above for further details.

All GHG emissions occurring within the CDM project activity boundary as a result of the implementation of the proposed CDM project activity are indicated as the project emissions according to the approved methodology. There will be no other expected GHG emissions which can contribute more than 1 % of the overall expected average annual emissions other than those stated in the approved methodology.

3.7.2 Project Boundary

Validation Opinion:

VVM paragraph 78 to 80

The project boundary was assessed in the context of physical site inspection, interviews & based on supporting evidences & documents submitted for the project design.

PoA-DD has fully described the project boundary in accordance with AMS-III.F /B04/ paragraph 13.

As indicated in the PoA-DD Section A.4.1.2, the physical / geographical boundary of the PoA is in Malaysia.

The sources and sinks of greenhouse gas identified in the PoA-DD & specific case CPA-DD are deemed appropriate. The project boundary has been clearly determined in accordance with the methodology (see below table). The validation team assessed the appropriateness of the justifications provided for inclusion / exclusion of the source of gas based on the review of feasibility study report, focusing on the project technical descriptions & equipment's proposed for the project /P08/ & also based on the validation team experience.

All assumptions, reference documents and relevant local policies and regulations are correctly quoted and referenced in the PoA-PDD & specific case CPA-DD. A comprehensive overview about all emissions included in the project boundary is provided in the PoA-PDD Section E.3 & specific case CPA-DD Section B.4 for project activity emissions and baseline emissions.

	GHGs involved	Included?	Justification
Baseline emissions	CO ₂	No	Disposal of biomass in landfills CO ₂ emissions from biomass decay in landfills are considered GHG neutral.
		No	Wastewater treatment processes (open lagoons) CO ₂ emissions from biomass decay in landfills are considered GHG neutral.
	CH ₄	Yes	Disposal of biomass in landfills Methane emission from biomass decay in the landfills.
		Yes	Wastewater treatment processes (open lagoons) Methane emission from anaerobic process.
	N ₂ O	No	Disposal of biomass in landfills Not significant. Excluded for simplification and conservativeness.
		No	Wastewater treatment processes (open lagoons) Not significant. Excluded for simplification and conservativeness

Project emissions	CO ₂	No	Composting process CO ₂ emissions from biomass decay in landfills are considered GHG neutral.
		No	Runoff water CO ₂ emission from biomass source is considered GHG neutral.
		Yes	Transportation of biomass and wastewater CO ₂ emissions from combustion of fossil fuel in transport vehicles.
		Yes	Electricity and/or fossil fuel consumption CO ₂ emissions from energy consumption of all equipment/devices installed by the project activity.
	CH ₄	Yes	Composting process Methane emissions for composting of organic waste
		No	Runoff water No runoff water leaving the composting facility. This emission source is not accounted.
		No	Transportation of biomass and wastewater Excluded for simplification. This emission source is assumed to be very small.
		No	Electricity and/or fossil fuel consumption Excluded for simplification. This emission source is assumed to be very small.
	N ₂ O	No	Composting process Excluded for simplification
		No	Runoff water Excluded for simplification. This emission source is assumed to be very small.
		No	Transportation of biomass and wastewater Excluded for simplification. This emission source is assumed to be very small.
		No	Electricity and/or fossil fuel consumption Excluded for simplification. This emission source is assumed to be very small.
Leakage	No leakage		Not considered in the project activity

In addition to the above, the CME has defined in the PoA-DD that all CPAs which will be included in the PoA are all located only in the Malaysia. Based on the local expert & team experience, the validation team could confirm that there are no mandatory regulations on the development of composting plants in Malaysia that mandate the CME to implement the proposed PoA or participating project units to undertake the project activity. The implementation of the PoA remains as a voluntary action.

3.7.3 Baseline Identification

Validation Opinion:

VVM paragraph 81 to 88, 105 to 107

According to AMS-III.F /B04/, paragraph 14 “*The baseline scenario is the situation where, in the absence of the project activity, biomass and other organic matter (including manure where applicable) are left to decay within the project boundary and methane is emitted to the atmosphere. The baseline emissions are the amount of methane emitted from the decay of the degradable organic carbon in the biomass solid waste or manure. When wastewater is co-composted, baseline emissions include emissions from wastewater co-composted in the project activity. The yearly Methane Generation Potential for the solid waste is calculated using the first order decay model as described in the latest version of the Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site. Baseline emissions from the manure composted are calculated as per the procedures of AMS-III.D.*”

The baseline determination is considered as transparent and reasonable.

The approved baseline methodology applicable to the project - explicit criteria - implicit criteria (e.g. available scenarios, applicability of formulas for BE/PE/LE calculations)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See details above
PDD includes all assumptions and data used by project participants	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	All assumptions and data defined in the PDD are justifiable and reasonable
All the references and documents used are relevant for establishing the baseline scenario	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	All references and documents are relevant to determine the baseline scenario.
All the references and documents used are correctly quoted and conservatively interpreted in the PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	All references and documents are conservative and reasonable to determine the baseline scenario.
All relevant policies / regulations considered are listed in the PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	All relevant regulations of the Host country have been considered by the project proponent.
Identified potential baseline scenarios reasonably represent what would/could occur in the absence of the proposed project activity	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	In absence of the project activity, there will be continual of disposal of empty fruit bunch to waste disposal site.
The baseline scenario selection is appropriate and determined according to the methodology	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-III.F version 10
The approved methodology used is applicable to the identified baseline scenario	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-III.F version 10

3.8 Additionality

3.8.1 CDM consideration of the PoA

Validation Opinion:

VVM paragraph 98 to 104

Prior consideration of CDM for PoA is not assessed by the validation team since there are no component of the programme will commence prior to the start date of validation

According to Clarifications Regarding The Procedures For Registration of a Programme of Activities as a Single CDM Project Activity and Issuance of Certified Emission Reductions for A Programme of Activities, Version 01, EB 60, Annex 26, paragraph 3,

“The Board agreed that the Guidelines for the demonstration and assessment of prior consideration of the CDM. do not apply to PoAs, as at present it is expected that no component of the programme will commence prior to the start date of validation”.

Hence, this is applicable & valid for the PoA. Since the **AeroPod Co-composting Programme for Silimpopon Mill in Sabah** has the starting date (01 March 2013 – at the time of validation finalization, no construction contract has been signed) which is not prior to the PoA webhosting date (i.e. 20 April 2012 – 19 May 2012), hence this CPA and all other subsequent CPAs being included to the PoA will have valid starting date which is automatically have met the requirements of CDM prior consideration.

3.8.2 Additionality of the PoA

Validation Opinion:

VVM paragraph 94 to 97, 167

The validation team has assessed the additionality of a PoA in accordance with the “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities” /B14/ paragraphs 7 to 9.

According to EB 65 meeting report paragraph 74, *“DOEs may upload for registration PoA-related PDDs in which the previous guidelines have been applied not later than the calendar day (24:00 GMT) eight months from the publication date of this report”.*

Hence, at the time of on-site visit, the validation team has assessed the additionality compliance accordance to Standard For The Development Of Eligibility Criteria For The Inclusion Of A Project Activity As A CPA Under The PoA, EB 63 Annex 3, Version 01.0. /B20/ which is still valid.

At the time of finalization of the validation, the CME has updated the additionality compliance according to the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 /B23/ - see below:

Paragraph 7. Additionality shall be demonstrated by establishing that in the absence of CDM, none of the implemented CPAs would occur.

Paragraph 8. PoAs that consist of one or more microscale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of the Guidelines for demonstrating additionality of microscale project activities.

Paragraph 9. PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of the “Guidelines for demonstrating additionality of small-scale project activities”.

Paragraph 11. Large-scale CPAs (i.e. CPAs that apply one or more large scale and small scale CDM methodologies), small-scale CPAs (i.e. CPA exclusively applying small scale CDM methodologies) and microscale CPAs (i.e. CPAs exclusively comprised of units that comply with microscale thresholds) may be included in the same PoA. The “Guidelines for demonstrating additionality of microscale project activities” may be applied to a large scale or small-scale CPA if all of the units in the CPA are below the thresholds that define microscale project activities. The “Guidelines on the demonstration of additionality of small-scale project activities” may be used for small-scale CPAs only.

Paragraph 13. The CME shall demonstrate that compliance with the additionality-related eligibility criteria set in the PoA design document will ensure that all the relevant additionality-related guidelines, tools or any requirements embedded in the methodologies are met.

Validation opinion:

According to PoA-DD Section E.5.1, the additionality will be demonstrated on CPA-level. The additionality will be demonstrated as investment barrier through application of investment analysis; in line with the Guidelines on the Demonstration of Additionality of Small-Scale Project Activities, Version 09.0, EB 68, Annex 27 /B19/ requirements.

Conclusion:

The validation team concluded that the CME has demonstrated "(i) the proposed voluntary measure would not be implemented" under absence of CDM support. The demonstration of additionality was in accordance with the "Procedures for Registration of a Programme of Activities as a Single CDM Project Activity and Issuance of Certified Emission Reductions for a Programme of Activities", Version 04.1, EB 55, Annex 38, para. 6 (e) /B15/ and "Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70 paragraph 7 to 9 and 11 & 13 /B23/.

3.8.3 Approach for demonstrating additionality of CPA under the PoA

Validation Opinion:

VVM paragraph 94 to 97

According to PoA-DD Section E.5.1, the additionality will be demonstrated on CPA-level. The additionality will be demonstrated as investment barrier through application of investment analysis; in line with the Guidelines on the Demonstration of Additionality of Small-Scale Project Activities, Version 09.0, EB 68, Annex 27 /B19/ requirements

The approach for demonstrating the additionality of CPA under the PoA for each type of CPA i.e. via investment barrier through application of investment analysis is validated as follows:

Additionality demonstration approach: Investment barrier

In summary, the followings key criteria have been considered by the CME for demonstration additionality via investment barrier approach for each CPAs & validation opinion conclusion:

No.	Items	Validation opinion
1	Type of investment analysis	<p>According to the PoA-DD Section E.5.1, benchmark analysis has been selected.</p> <p>As explained also in the POA-DD, the simple cost analysis is not applicable as CPA generates financial/ economic benefits not only from CDM related income, but also from the selling bio-fertilizer to farmers.</p> <p>The validation team has assessed the baseline scenario which also reveals that the continuation of the current situation - <i>The baseline scenario is the situation where, in the absence of the project activity, biomass and other organic matter (including manure where applicable) are left to decay within the project boundary and methane is emitted to the atmosphere.</i> Hence, the choice for the CPA Implementers are restricted to "invest or not to invest". The validation team concludes that the benchmark approach is the most suited as defined in the Guidelines On The Assessment Of Investment Analysis, Version 05 /B08/ paragraph 16.</p>
2	Financial indicator	<p>According to the PoA-DD Section E.5.1, the financial indicator selected will be Project IRR</p> <p>See below – Type of benchmark</p>

3	Type of benchmark	<p>According to the Guidelines On The Assessment Of Investment Analysis, Version 05 /B08/ paragraph 12, <i>“Local commercial lending rates or weighted average costs of capital (WACC) are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for equity IRR”</i>.</p> <p>The type of benchmark selected by the project participant is WACC (Weighted Average Cost of Capital) & this is an appropriate benchmark for project IRR.</p> <p>According to the Guidelines On The Assessment Of Investment Analysis, Version 05 /B08/ paragraph 13, <i>“In the cases of projects which could be developed by an entity other than the project participant the benchmark should be based on parameters that are standard in the market”</i>. Therefore the validation team concludes that the benchmark type selected is appropriate & conforms to the Guidelines On The Assessment Of Investment Analysis, Version 05 /B08/.</p> <p>The validation team also checked the appropriateness of the formulae used to calculate the benchmark, WACC The formulae stated in the PoA-DD i.e.</p> $r = w_d k_d (1 - T) + w_e k_e$ <p>Where:</p> <table><tr><td>r</td><td>WACC</td></tr><tr><td>w_d</td><td>Percentage of debt financing</td></tr><tr><td>w_e</td><td>Percentage of equity financing</td></tr><tr><td>k_d</td><td>Average cost of debt financing</td></tr><tr><td>k_e</td><td>Average cost of equity financing</td></tr><tr><td>T</td><td>Applicable corporate tax rate</td></tr></table> <p>The formulae used has been cross checked with public website such as Investopedia by the validation team [http://www.investopedia.com/terms/w/wacc.asp#axzz2Aef48m1U] & confirmed to be valid & correct.</p> <p>The PoA-DD further defined the followings to be determined:</p> <p><u>Average cost of equity financing</u></p> <p>The cost of equity, which is the rate of return of an asset, is determined using the Capital Asset Pricing Model (CAPM). CAPM takes into account the market risk of the asset, expected return of the market and expected return of a risk free asset, as follow:</p> $k_e = R_f + \beta_L (R_{m,premium} - R_f)$ <p>Where:</p> <table><tr><td>R_f</td><td>Risk free rate</td></tr><tr><td>β_L</td><td>Beta of the security</td></tr><tr><td>$R_{m,premium}$</td><td>Expected market return</td></tr><tr><td>$(R_{m,premium} - R_f)$</td><td>Equity risk premium</td></tr></table> <p>The use of CAPM is accepted by the validation team since it is in line with the Guidelines On The Assessment Of Investment Analysis, Version 05 /B08/ paragraph 14</p> <ul style="list-style-type: none">• Risk free rate: The risk free rate is the rate of return of an investment with zero risk, which can be determined by the government bond yield for	r	WACC	w_d	Percentage of debt financing	w_e	Percentage of equity financing	k_d	Average cost of debt financing	k_e	Average cost of equity financing	T	Applicable corporate tax rate	R_f	Risk free rate	β_L	Beta of the security	$R_{m,premium}$	Expected market return	$(R_{m,premium} - R_f)$	Equity risk premium
r	WACC																					
w_d	Percentage of debt financing																					
w_e	Percentage of equity financing																					
k_d	Average cost of debt financing																					
k_e	Average cost of equity financing																					
T	Applicable corporate tax rate																					
R_f	Risk free rate																					
β_L	Beta of the security																					
$R_{m,premium}$	Expected market return																					
$(R_{m,premium} - R_f)$	Equity risk premium																					

		<p>10 year (or with maturity which is closest to 10 years). Thus, the Malaysian Government Securities (MGS), which is the interest bearing long-term bonds issues by the Government of Malaysia, is appropriate for CAPM calculation. The MGS indicative prices are published on the website of Central Bank of Malaysia [Central Bank of Malaysia - Malaysia Government Securities Indicative Prices: http://www.bnm.gov.my/index.php?ch=12&pg=444] /B03/. The validation team considered the reference source used to determine the risk free rate as valid & appropriate for all future CPAs since all CPAs are located in Malaysia. Hence, the use of risk free rate value sourced from the public website of the Central Bank of Malaysia is appropriate & valid.</p> <ul style="list-style-type: none"> Beta: Beta is a measure of the market risk of an asset in comparison to the market as a whole. For the CPAs, estimation of beta is not required – see below. Expected market return: The market return is the return on the market portfolio, which can be determined using of the historical return of the stock market index. According to the PoA-DD, for the CPAs, the FTSE Bursa Malaysia Palm Oil Plantation Index will be employed. This Index is used to determine the return which incorporated the market risk of the palm oil industry. Thus, calculation of beta is not required The validation team accepted this after cross checking the public website of FTSE Bursa Malaysia Palm Oil Plantation Index /B03/ & confirmed market risk of the palm oil industry has been included. This is also appropriate for every CPAs in future – as already described in the PoA-DD Section E.2, applicability condition paragraph 4 “<i>Each CPA involves the composting of the organic fraction of biomass waste from agro-industrial activities (palm oil milling)</i>”. Hence, it is confirmed the use of expected market return values taken from the FTSE Bursa Malaysia Palm Oil Plantation Index as appropriate & valid. <p>The PoA-DD also further elaborates that for each CPA, WACC will be calculated to determine the attractiveness of the Project. A project activity is considered to be financially feasible when the project IRR is above or equal to the corresponding financial benchmark. Alternatively, if a WACC has already been calculated for another CPA (CPA-1) that has a CPA start date within 2 years of that CPA (CPA-2), then that CPA (CPA-2) may opt to apply the same WACC as the other CPA (CPA-1), the reasoning being that but for a change of regulations, there is unlikely to be a substantial change to the risk premiums that project owners in the same industry and implementing the same technology face. This is accepted by the validation team</p>
--	--	--

4	Investment analysis input parameters	<p>According to the PoA-DD Section E.5.1, it is stated that “<i>The parameters required for IRR calculation will be presented in the CPA-DD. It is noted that the input values shall be valid and applicable at the time of decision making and will be explained and/ or submitted to the DOE.</i>”</p> <p>This is in line with the Guidelines On The Assessment Of Investment Analysis, Version 05 /B08/ paragraph 6 “<i>Input values used in all investment analysis should be valid and applicable at the time of the investment decision taken by the project participant</i>” and accepted by the validation team.</p> <p>The specific input parameters that will be considered for every CPAs have been listed & specified in the PoA-DD as follows:</p>	
		Input parameter	
		Project Cost	
		O&M cost	
		Depreciation	Technical lifetime
			Depreciation rate
			Depreciation period
			Salvage value
		Revenue	Amount of bio-fertilizer produced
			Bio-fertilizer price
		Tax	Tax rate
			Debt ratio
			Loan repayment period
			Interest rate
		CERs	CER amount
			CER sales price assumption
		<p>The validation team concluded that the list of investment analysis parameters are considered to be appropriate for each CPA & has been incorporated consistently in the Generic CPA-DD</p>	
5	Sensitivity analysis	<p>According to the PoA-DD Section E.5.1, it will be demonstrated & assessed for 4 parameters i.e. capital cost, O&M cost, bio-fertilizer price and amount of bio-fertilizer produced. The validation team considered these parameters are appropriate for assessment in line with the Guidelines On The Assessment Of Investment Analysis, Version 05 /B08/ paragraph 20 which states that, “<i>Only variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation....</i>”; and article 21 states that, “<i>As a general point of departure variations in the sensitivity analysis should at least cover a range of +10% and 10%,.....</i>”</p> <p>The CME has identified these as the most critical assumptions. There are no other expenses or costs which could be subjected to variation as all of them have been considered either directly or indirectly in the sensitivity analysis.</p> <p>This is accepted by the validation team.</p>	

During on-site validation, the validation team assessed the approach used to demonstrate the additionality of the specific CPA case i.e. AeroPod Co-composting Programme for Silimpopon Mill in Sabah under AeroPod Composting and Co-composting Programme in Malaysia. **See the detailed assessment results in the separate report for AeroPod Co-composting Programme for Silimpopon Mill in Sabah.**

3.9 GHG Emission Reductions from a typical CPA

Validation Opinion:

VVM paragraph 89 to 93

The GHG emission reduction calculations are based on the formulae outlined in the methodology AMS-III.F version 10 /B04/. The validation team has confirmed the calculations are transparently documented & appropriate assumptions regarding the expected amount of electricity generated have been used to determine the emission reductions.

The table below summarized the applicability and justification of the project activity's emission reduction:

All assumptions made for estimating GHG are listed in the PoA-PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per PoA-PDD Section E.6.1
All data used by project participants are listed in the PoA-PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per PoA-PDD Section E.6.1
Their references and sources are also listed in the PoA-PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per PoA-PDD Section E.6.1
Formulas, parameters, values are complete, accurate, transparent and conservative	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per PoA-PDD Section E.6.1
All the references and documents used are correctly quoted and conservatively interpreted in the PoA-PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per PoA-PDD Section E.6.1
Methodology has been applied correctly to calculate project emissions, baseline emissions, leakage emissions and emission reductions	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-III.F version 10 /B04/ & methodological tool 1. "Tool to calculate baseline, project and/or leakage emissions from electricity consumption", Version 01, EB 39, Annex 7 /B05/ 2. "Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion", Version 02, EB 41, Annex 11 /B06/ 3. "Emission from solid waste disposal sites", Version 06.0.0, EB65, Annex 19 /B10/
All the emissions of baseline emissions can be replicated using information provided in the PoA-PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The baseline emissions can be replicated using the information in the PDD section E.6.1.

3.10 Monitoring Plan for a typical CPA

Validation Opinion:

VVM paragraph 122 to 124

See also Section 3.6 of this report

The monitoring plan presented in the PoA-PDD Section E.7 complies with the requirements of methodology AMS-III.F "Avoidance of methane emissions through composting", Version 10 /B04/, through cross checking of all parameters stipulated in the monitoring plan.

According to the document review in PoA-PDD, detailed monitoring procedures, monitoring structure, monitoring items & functions are clearly demonstrated in the PDD which enable the monitoring plan to be implemented feasibly.

Interview with the project participant & consultant has allowed the validation team to confirm that the monitoring plan defined in the PDD is feasible to be implemented.

3.10.1 Parameters determined ex-ante

Validation Opinion:

VVM paragraph 122

The following data and parameters were available during the validation and will remain fixed ex-ante throughout the crediting period:

Parameter	Value	Justifications as per PoA-DD	Means of Validation
ϕ_y	To be determined at CPA level based on the characteristics of the climate.	Option 1 was chosen. The appropriate factor shall be determined based on the climate where the SWDS is located. - Humid/wet conditions: 0.85 - Dry conditions: 0.8	Confirmed in accordance with AMS-III.F requirements
OX	0.1	-	Confirmed in accordance with AMS-III.F requirements
F	0.5	-	Confirmed in accordance with AMS-III.F requirements
$DOC_{f,y}$	0.5	For Application B, default value was chosen.	Confirmed in accordance with AMS-III.F requirements
MCF_y	To be determined at CPA level based on the characteristics of the SWDS.	<ul style="list-style-type: none"> - 1.0 for anaerobic managed solid waste disposal sites. These must have controlled placement of waste (i.e. waste directed to specific deposition areas, a degree of control of scavenging and a degree of control of fires) and will include at least one of the following: (i) cover material; (ii) mechanical compacting; or (iii) leveling of the waste; - 0.5 for semi-aerobic managed solid waste disposal sites. These must have controlled placement of waste and will include all of the following structures for introducing air to the waste layers: (i) permeable cover material; (ii) leachate drainage system; (iii) regulating pondage; and (iv) gas ventilation system; - 0.8 for unmanaged solid waste disposal sites – deep. This comprises all SWDS not meeting the criteria of managed SWDS and which have depths of greater than or equal to 5 meters; - 0.4 for unmanaged-shallow solid waste disposal sites or stockpiles that are considered SWDS. This comprises all SWDS not meeting the criteria of managed SWDS and which have depths of less than 5 meters. This includes stockpiles of solid waste that are 	Confirmed in accordance with AMS-III.F requirements
DOC_i	To be	For MSW, the following values for the different	Confirmed in

	determined at CPA level based on the type of waste.	waste types j should be applied:		accordance with AMS-III.F requirements
		Waste type j	DOCj (% wet waste)	
		Wood and wood products	43	
		Pulp, Paper and cardboard (other than sludge)	40	
		Food, food waste, beverages and tobacco (other than sludge)	15	
		Textiles	24	
		Garden, yard and park waste	20	
		Glass, plastic, metal, other inert waste	0	
<p>For the following residual waste types, project participants may use or derive default values, as follows:</p> <ul style="list-style-type: none">- For empty fruit brunches (EFB), as their characteristics are similar to garden waste, the value for garden, yard and park waste in table above may be used as a default.- For industrial sludge, either a value of 9% (% wet sludge) shall may be used as a default, assuming an organic dry matter content of 35 percent, or alternatively, if the percentage of organic dry matter content is known, then the DOC value may be calculated as follows: DOCj (% wet sludge) = 9 * (% organic dry matter content/35).- For domestic sludge, either a value of 5% (% wet sludge) may be used as a default, assuming an organic dry matter content of 10 percent, or alternatively, if the percentage of organic dry matter content is known, then the DOC value may be calculated as follows: DOCj (% wet sludge) = 5 * (% organic dry matter content/10). <p>If a waste type is not comparable to MSW and cannot clearly be described as a combination of waste types in the table above or if a default value is not available or if the project participants wish to measure DOCj, then, project participants should measure DOCj in an ignition loss test according to the procedure in EN 15169 or similar national or international standards. This measurement is only required once for each waste type j and the value determined for DOCj remains valid during the crediting period.</p>				

k_j	To be determined at CPA level based on the type of waste.	Apply the following default values for the different waste types j						Confirmed in accordance with AMS-III.F requirements
		Waste type j		Boreal and Temperate (MAT≤20°C)		Tropical (MAT>20°C)		
				Dry (MAP/PT <1)	Wet (MAP/PET >1)	Dry (MAP < 1000 mm)	Wet (MAP > 1000 mm)	
		Slowly degrading	Pulp, paper, Card board (other than sludge), textiles	0.04	0.06	0.045	0.07	
			Wood, wood products and straw	0.02	0.03	0.025	0.035	
		Moderately degrading	Other (non food) organic putrescible garden and park waste	0.05	0.10	0.065	0.17	
		Rapidly degrading	Food, food waste, sewage sludge, beverages and tobacco	0.06	0.185	0.085	0.40	
		NB: MAT- mean annual temperature, MAP- Mean annual precipitation, PET- potential evapotranspiration. MAP/PET is the ratio between the mean annual precipitation and the potential evapotranspiration						
		If a waste type disposed in a SWDS cannot clearly be attributed to one of the waste types in the table above, project participants should choose, among the waste types that have similar characteristics, the waste type where the values of DOC_j and k_j result in a conservative estimate (lowest emissions), or request a revision of/deviation from this methodology.						
		In the case of EFB, as their characteristics are similar to garden waste, the parameter values correspondent of garden waste shall be used. In case of sludge from pulp and paper industry, a conservative value of 0.03 shall be used for all precipitation and temperature combinations.						

$MCF_{ww,treatment, BL,i}$	To be determined at CPA level based on the characteristics of the baseline wastewater treatment system i	Type of wastewater treatment system	MCF value	Confirmed in accordance with AMS-III.F requirements
		Discharge of wastewater to sea, river or lake	0.1	
		Aerobic treatment, well managed	0.0	
		Aerobic treatment, poorly managed or overloaded	0.3	
		Anaerobic digester for sludge without methane recovery	0.8	
		Anaerobic reactor without methane recovery	0.8	
		Anaerobic shallow lagoon (depth less than 2 metres)	0.2	
		Anaerobic deep lagoon (depth more than 2 metres)	0.8	
		Septic system	0.5	
$\eta_{COD, BL,i}$	To be determined at CPA level	According to AMS-III.H (version 16.0), COD removal efficiency shall be determined as per paragraph 26, 27 or 28 of AMS-III.H.		Confirmed in accordance with AMS-III.F requirements
UF_{BL}	0.89	FCCC/SBSTA/2003/10/Add.2, page 25.		Confirmed in accordance with AMS-III.F requirements
B_o, ww	0.25	-		Confirmed in accordance with AMS-III.F requirements
EF_{CO2}	To be determined at CPA level based on the fuel type use for transportation	-		Confirmed in accordance with AMS-III.F requirements
$EF_{EL,i,y}$	To be determined at CPA level based on the most recent publication	-		Confirmed in accordance with AMS-III.F requirements
$EF_{FF,i,y}$	To be determined at CPA level based on the most recent publication	-		Confirmed in accordance with AMS-III.F requirements

The validation team has verified the value used against the sources & conclude that all relevant parameters to calculate the GHG emissions reductions of the project have been sufficiently considered, real, measurable & conservative.

3.10.2 Parameters monitored ex-post

Validation Opinion:

VVM paragraph 122

The baseline and project emission parameters that are monitored ex-post are indicated in Section E.7.1 of the PoA-PDD are as follows:

1. Fraction of methane captured at the SWDS and flared, combusted or used in another manner that prevents the emissions of methane to the atmosphere in year y , f_y
2. Total amount of waste type j disposed in a SWDS in year x , $W_{j,x}$
3. Global Warming Potential of methane, GWP_{CH_4}
4. The flow of wastewater, $Q_{ww,i,y}$
5. Chemical oxygen demand of the wastewater before the treatment system affected by the project activity, $COD_{ww,untreated,y}$
6. Quantity of raw waste/manure treated and/or wastewater cotreated in the year y , Q_y
7. Average truck capacity for transportation, CT_y
8. Quantity of compost produced in the year y , $Q_{y,treatment}$
9. Average truck capacity for compost transportation, $CT_{y,treatment}$
10. Average incremental distance for raw solid waste/manure and/or wastewater transportation, DAF_w
11. Average distance for compost transportation, $DAF_{w,treatment}$
12. Quantity of electricity consumed by the project electricity consumption in year y , $EC_{PJ,y}$
13. Amount of fossil fuel consumed by the project activity in year y , $FC_{PJ,y}$
14. Emission factor for composting of organic waste and/or manure, $EF_{composting}$
15. Check of aerobic conditions of the composting process
16. The runoff wastewater from composting yard, $Q_{y,ww,runoff}$
17. The chemical oxygen demand of the runoff wastewater from composting yard, $COD_{y,ww,runoff}$
18. Soil application of the compost

All relevant parameters are monitored closely as required by methodology throughout the project activity implementation.

All parameters required by the methodology including the accuracy of the measurement have been included in the PoA-PDD Section E.7.1.

All monitoring data will be electronically archived for a period of 2 years after crediting period.

If the project technology is the equipment transferred from another activity or if the existing equipment is transferred to another activity, leakage effects will be considered.

It is explained in the POA-DD that for each CPA, biomass wastes are collected and used, according to the "General guidance on leakage in biomass project activities (version 03)" (attachment C to Appendix B), the biomass type of each CPA is "biomass residues or wastes", and the emission source that is potentially significant and attributable to the CPAs is "competing uses of biomass". Assessment on whether the quantity of available biomass in region of CPA, is larger than the quantity of biomass that is utilised, including the CPA, is to be conducted as per the annex of the specific CPA-DD.

3.10.3 Management system and quality assurance

Validation Opinion:

VVM paragraph 123

The DOE validation team has assessed the proposed management system and how does the quality will be assured in the proposed project activity. The outline of the operational procedure was briefly described in the PoA-PDD. The operational procedure will be updated by the project participant as required during the operation of the project activity. The monitoring and recording of the required parameters will be carried out by trained personnel who will be managed by the operator of the composting plant

The aspects related to the monitoring plan are addressed as the following:

- i) Operation & Management Structure for monitoring
- ii) Quality Assurance & Quality Control (QA/QC) which includes also requirements for calibration
- iii) Reporting, archiving & preparation for periodic verification
- iv) Procedures in case of damaged metering equipment / emergencies

All measurements will use calibrated measurement equipment that will be maintained regularly and checked for its functioning.

Hence, all indicators of importance for controlling and reporting of projects performance have been incorporated in the monitoring plan as well as indicated in the planned formal set of monitoring protocol and work instructions.

The validation team has also reviewed the process to monitor emission reductions as described in the PoA-PDD Section E.7.2 & confirmed that the designated personnel & their responsibility have been defined clearly with respect to key monitoring features.

The application of the monitoring methodology is transparent and the validation team considers the project participants able to implement the monitoring plan.

3.11 Sustainable Development

Validation Opinion:

VVM paragraph 125 to 127

The host country DNA requires the project activity to be developed in sustainable development manner. The validation team has reviewed the letter of approval issued by the DNA of Malaysia /P03/ & confirmed that the project activity will contribute to sustainable development.

3.12 Environmental Impacts

Validation Opinion:

VVM paragraph 131 to 133

According to the PoA-DD, the environmental impact analysis will be conducted at CPA-level.

As stated also in the PoA-DD Section C.3, composting industrial waste is not listed as activities prescribed under Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987 /B03/, confirmed to be correct upon checking the applicable legal requirement as published in the Department of Environment Malaysia website /B03/, thus, an environmental impact assessment (EIA) for a typical CPA is not required by the host country. An EIA exemption letter will be obtained for each individual CPA from the Department of Environment Malaysia, issued by the state.

Hence, it is deemed appropriate for the environmental impacts analysis to be conducted at CPA level.

Hence, the validation team has assessed the specific case AeroPod Co-composting Programme for Silimpopon Mill in Sabah & the summary of the validation opinions are listed in the separate validation report. See validation report for specific case AeroPod Co-composting Programme for Silimpopon Mill in Sabah.

3.13 Local Stakeholder Consultation

Validation Opinion:

VVM paragraph 128 to 130

According to the PoA-DD, the local stakeholder consultation will be conducted at CPA-level. This is accepted by the validation team since each co-composting project would have specific issues raised by the local stakeholder community & also agreed by local expert.

Hence, the validation team has assessed the specific case AeroPod Co-composting Programme for Silimpon Mill in Sabah & the summary of the validation opinions are listed in the separate validation report. See validation report for specific case AeroPod Co-composting Programme for Silimpon Mill in Sabah.

3.14 Comments by Parties, Stakeholders and NGOs

Validation Opinion:

The PoA-PDD [initially published version], Version 01, Date: 12-04-2012, Generic CPA-DD [initially published version], without version and effective date & the Specific CPA-DD [initially published version], Version 01, Date: 12-04-2012 were made publicly available on UNFCCC CDM website:

<http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/8HR26510NZ6W16Q6TGFWG87ZK44K7N/view.html>

from 20 April 12 - 19 May 12 in order to invite comments from public stakeholders.

No public comments have been received during that period.

Appendix A

THE VALIDATION PROTOCOL FOR CDM PROGRAMME OF ACTIVITIES

based on CDM Validation and Verification Manual, Annex 1 of EB 55 report

AeroPod Composting and Co-composting Programme in Malaysia

Report No. 01 997 9105069746-1/2

Version No. 2.0

Table 1: CDM-SSC-POA-DD Requirements Checklist ((based on § 37 of the CDM Modalities and Procedures and on VVM ver 01.2, Annex 1 of EB55 Ref and EB 55 Annex 38 - PoA specific)

Checklist	Comment	Ref.	Draft Concl.	Final Conc.
A. General Description of the Programme of Activities				
A.1. Title of the PoA				
A.1.1.Are title, version number and the date of completion of PoA DD given in section A.1 of the PoA-DD?	Yes, title, current version number and the date of document completion has been provided in section A.1 of the PoA DD.	PoA DD	OK	OK
A.2. Description of the PoA				
A.2.1.Has PoA DD in section A.2 contains a sufficient description of general operating and implementing framework of the proposed PoA? (Ref: § 6 of EB 55 Annex 38)	Yes, this has been sufficiently explained in Section A.2	PoA DD	OK	OK
A.2.2. Has PoA DD in section A.2 contains the description of the policy/measure or stated goal that the PoA seeks to promote in a transparent manner with sufficient reference of the policy/measure/stated goal if any? (Ref : §6 (c)of EB 55 Annex 38)	The CME has provided the description of the policy/measure or stated goal of the PoA in section A.2 of the PoA DD.	PoA DD	OK	OK
A.2.3.Has a confirmation had been given that the proposed PoA is a voluntary action by the coordinating/managing entity? (EB 55 Annex 38, §6(d))	Yes, the CME has provided confirmation that proposed PoA is a voluntary measure by the CME; however the same is not supported by nay reference. In this context CAR-03 has been raised.	PoA DD	OK	OK
A.2.4. Will the PoA create other environmental or social benefits than GHG emission reductions? (EB 55 Annex 1, §§ 125 – 127)	Yes	PoA DD	OK	OK
A.2.5.Does the project qualify as a small scale CDM project activity as defined in decision 4 / CMP.1 annex II? (EB 55 Annex 1, § 136 (a))	Yes, the CPA of the PoA quantifies under small scale project activity.	PoA DD	OK	OK
A.2.6. Has the latest version of the CDM-POA DD form been applied?	Yes latest version of PoA DD template has been used	PoA DD	OK	OK

(EB 55 Annex 1, § 55)				
A.2.7. Has the CDM-POA-DD been duly filled in accordance with the latest guidance(s) and procedures and all information are consistently described?	Yes, the PoA DD has been completed in accordance with the latest available guidelines	PoA DD	OK	OK
A.3. CME and Participants of PoA				
<p>A.3.1. Has the coordinating/managing entity obtained letters of approval for the implementation of the PoA from each Host Party and Annex I Party involved in the PoA?</p> <p><i>Note: Letters of approval shall be issued in accordance with the guidance provided by the CDM Executive Board (EB16, Annex 6)</i></p>	<p>The letters of approval has been obtained by the CMEs from the host party, Malaysia /P03/ & Annex 1 Party, Netherlands /P04/</p> <p>See CAR 01, CAR 02</p>	--	CAR-01 CAR-02	OK
A.3.2. Do the written approvals confirm that the corresponding party is a Party to the Kyoto Protocol?	<p>Yes, the written approvals confirmed that both Malaysia & Netherlands are parties to the Kyoto Protocol</p> <p>See CAR 01, CAR 02</p>	--	CAR-01 CAR-02	OK
<p>A.3.3. Are the approvals issued from organizations listed as DNAs on the UNFCCC CDM website?</p> <p>Indicate the means of validation employed to assess the authenticity, i.e. in case of doubt whether LoA has been verified with the DNA. Further describe which entity submitted the LoA for validation.</p>	<p>Yes, the approvals are issued from the DNAs as listed in the UNFCCC website</p> <p>The received original copy of the host LoA from the project participant was compared with LoA of those registered CDM projects which have the same DNA. The LoA were compared on the alignment, the standard format and signatory of the person who issued the letter & confirmed to be same. The validation team has confirmed the LoA are authentic. The letter(s) of approval was also found to be unconditional with respect to paragraph 45 (a) to (d) of Validation and Verification Manual Version 01.2 EB 55 Annex 1 /B01/. The validation team concluded that these letter(s) are in accordance with paragraphs 45 - 48 of Validation and Verification Manual Version 01.2 EB 55 Annex 1 /B01/.</p> <p>The received original copy of the Annex 1 party LoA from the</p>	--	CAR-01 CAR-02	OK

	<p>project participant was compared with LoA of those registered CDM projects which have the same DNA. The LoA were compared on the alignment, the standard format and signatory of the person who issued the letter & confirmed to be same. The validation team has confirmed these LoAs are authentic.</p> <p>The authenticity of the letter of approval issued by The Netherlands DNA /P01/ have been confirmed its authenticity through email notification sent on which the CDM projects approved by NL Agency – Ministry of Infrastructure and the Environment.</p> <p>The letter(s) of approval was also found to be unconditional with respect to paragraph 45 (a) to (d) of Validation and Verification Manual Version 01.2 EB 55 Annex 1 /B01/. The validation team concluded that these letter(s) are in accordance with paragraphs 45 - 48 of Validation and Verification Manual Version 01.2 EB 55 Annex 1 /B01/.</p> <p>See CAR 01, CAR 02</p>			
A.3.4. Do the written approvals confirm that the participation is voluntary?	<p>Yes, the written approvals confirmed that the participation is voluntary</p> <p>See CAR 01, CAR 02</p>	--	CAR-01 CAR-02	OK
A.3.5. Does the written approval from the host country confirm that the project contributes to the sustainable development in the country?	<p>Yes, the host country LoA from Malaysia confirmed that the project will contribute to sustainable development in Malaysia</p> <p>See CAR 01, CAR 02</p>	--	CAR-01 CAR-02	OK
A.3.6. Do the written approvals refer to the precise project title in the PoA-DD submitted for registration or an additional specification of the project activity, e.g. PoA-DD version number?	<p>Yes, the specific PoA project title has been specified clearly in the written approvals & are consistent</p> <p>See CAR 01, CAR 02</p>	--	CAR-01 CAR-02	OK
A.3.7. Are the written approvals unconditional with regard to A.3.2, A.3.4 to A.3.6?	<p>Yes, the written approvals are issued unconditionally</p> <p>See CAR 01, CAR 02</p>	--	CAR-01 CAR-02	OK
A.3.8. Has the coordinating/managing entity obtained letters of authorization of its coordination of the PoA from	<p>Yes, the letters of authorization are obtained from each host party & are in the form of letter of approvals</p>	--	CAR-01 CAR-02	OK

each Host Party? <i>The authorizations for the coordination of the PoA can be granted vide the letters of approval from each Host Party.</i>	See CAR 01, CAR 02			
A.3.9. Is the information regarding the project participants listed in section A3 and in Annex 1 of the PoA-DD internally consistent to each other?	Yes, the information regarding the project participants listed in section A3 and in Annex 1 of the PoA-DD are internally consistent to each other See CAR 01, CAR 02	--	CAR-01 CAR-02	OK
A.3.10. Has the participation to the PoA of each project participant listed in the PoA-DD been approved by at least one Party involved? <i>Indicate whether the participation of the project participant(s) has been approved by a Party to the Kyoto Protocol. Describe the means of validation employed to draw this conclusion.</i>	Yes, both project participants have been approved by the DNAs of the respective country – see details in report Section 3.1 See CAR 01, CAR 02	--	CAR-01 CAR-02	OK
A.3.11. Are there any other project participants approved but not listed in the PoA DD?	All project participants are approved & listed in the PoA-DD See CAR 01, CAR 02	--	CAR-01 CAR-02	OK
A.4. Technical description of the PoA				
A.4.1. Location of PoA				
A.4.1.1. Has the location of the PoA been correctly described?	Yes, the location has described correctly	PoA DD	OK	OK
A.4.1.2. Host parties				
A.4.1.2.1. Have all host countries been correctly listed?	Yes, the host country is Malaysia	PoA DD	OK	OK
A.4.1.2.2. Is there any Party directly involved as project participant, and if yes, is that Party's contact details included in annex 1 of the PoA-DD?	Yes, Annex 1 party involved & the contact details have been added in Annex 1 of the PoA-DD i.e. Netherlands	PoA DD	OK	OK
A.4.1.3. Physical / Geographical properties				

A.4.1.3.1. Does the CDM-POA-DD include a definition of the boundary for the PoA in terms of a geographical area (e.g., municipality, region within a country, country or several countries) within which all CPAs included in the PoA will be implemented? (Ref : §6(b)of EB 55 Annex 38)	Yes, the PoA DD mentions definition of project boundary in terms of geographical as Malaysia in PoA DD.	PoA DD	OK	OK
A.4.1.3.2. Are all applicable national and/or sectoral policies and regulations within that chosen boundary reflected in the determination of the baseline? (Ref : §6(b)of EB 55 Annex 38)	Yes, this has been included clearly in the PoA DD	PoA DD	OK	OK
A.4.2. Description of a typical CPA				
A.4.2.1. Description/ Technology or measures to be employed by the CPA				
A.4.2.1.1. Does the PoA-DD contain a clear, accurate and complete description of the CPAs with regard to the technology / measures to be used? ((Ref : §6(f)of EB 55 Annex 38)	Yes, the PoA-DD has described clearly, accurately & complete descriptions of the CPAs for the technology / measures See CAR 10	PoA DD	CAR-10	OK
A.4.2.1.2. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	For the technology or measures to be employed by each CPA, the validation team had found that the PoA-DD had mentioned that the process technology to be applied in the CPA is a high-tech organic composting system called AeroPod®, a new invention under patents over the decades-old tunnel composting system. The unique composting apparatus has since 2008 been customized for palm oil mill waste, and its operational parameters configured for the specific characteristics of palm oil mill waste materials. The process will convert the mixture of solid bio-wastes and POME into high-value bio-organic fertilizers. See CAR 10	PoA DD	CAR-10	OK
A.4.2.2. Eligibility criteria for inclusion of a CPA				
A.4.2.2.1. Has the definition of eligibility criteria for inclusion of a CPA under the PoA included the following information: <ul style="list-style-type: none"> <input type="checkbox"/> appropriate criteria for demonstration of 	See Section 3.4 of the validation report Yes, the eligibility criteria has been determined in line with the Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for	PoA DD	CAR-03 CAR-05 CAR-g03	OK

additionality of the CPA, and <ul style="list-style-type: none"> all type and/or extent of information (e.g. criteria, indicators, variables, parameters or measurements) that shall be provided by each CPA in order to ensure its eligibility? (Ref : §6(g)of EB 55 Annex 38 and § 167 of VVM ver 01.2)	programme of activities Version 02.0, EB 70 /B23/ See CAR-03, CAR-05, CAR-g03			
A.4.3. Assessment and Demonstration of Additionality				
A.4.3.1.Has the PoA demonstrated that in the absence of the CDM one of the following would have occurred: <ul style="list-style-type: none"> <input type="checkbox"/> the proposed voluntary measure would not be implemented, or the mandatory policy/regulation would be systematically not enforced and that non-compliance with those requirements is widespread in the country / region, or that the PoA will lead to a greater level of enforcement of the existing mandatory policy /regulation. (Ref : §6(e)of EB 55 Annex 38)	Yes, POA DD contains information on the demonstration of additionality on PoA level, however the same is not in line with the requirements of §6(e) of EB 55 annex 38	PoA DD	OK	OK
A.4.4. Operational, management and monitoring plan				
A.4.4.1. Operational and management plan				
A.4.4.1.1. Has the coordinating/managing entity established the operational and management arrangements for the implementation of the PoA, which includes a record keeping system for each CPA under the PoA? (Ref : §6(i)of EB 55 Annex 38 and § 166 of VVM ver 01.2)	Yes, the CME has established the operational and management structures for the implementation of the PoA in section A.4.4.1 of the PoA DD	PoA DD	OK	OK
A.4.4.1.2. Are procedures identified for data management?	Yes procedures for has been identified for data management.	PoA DD	OK	OK
A.4.4.1.3. Has the arrangements included a system/procedure to avoid double accounting, e.g.,	Yes, the PoA DD in section A.4.4.1 provides information to avoid double check	PoA DD	OK	OK

provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA? (Ref : §6(i) of EB 55 Annex 38)				
A.4.4.1.4. Is the small scale project activity not a debundled component of a larger project activity? (Ref: EB 55 Annex 1, § 136 (c))	The CME had defined the requirements for debundling assessment to ensure that the proposed CPA is not a debundled component of a large scale activity in the PoA-DD Section A.4.4.1, according to the Guidance for determining the occurrence of de-bundling under a Programme of Activity (Version 03, EB 54, Annex 13)	PoA DD	OK	OK
A.4.4.1.5. Has the CME made provisions to ensure that the CPA operators are aware of and have agreed that their activity is being subscribed to the PoA?	Yes, this is defined at the PoA-DD Section A.4.4.1	PoA DD	OK	OK
A.4.4.2. Monitoring plan				
A.4.4.2.1. If the coordinating /managing entity does not wish to have all CPAs verified, has a description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the CPA GHG emission reductions been provided? (Ref: § 6(k) EB 55 Annex 38)	The CME has opted only for verification on an individual basis	PoA DD	OK	OK
A.4.4.2.2. In case each CPA shall be verified, is there a transparent system in place that a) the verification status can be determined any time for each CPA and b) no double-accounting of ER occurs?	Yes, this has been defined in PoA-DD Section A.4.4.1	PoA DD	OK	OK
A.4.5. Public funding of the PoA				
A.4.5.1. Is there a confirmation that official development assistance has not been diverted to the implementation of the PoA in case public funding is used? (Ref: § 6(n) EB 55 Annex 38)	Yes, this has been obtained from the CME via letter of declaration	PoA DD	OK	OK
B. Duration of the PoA				
B.1. Starting Date of the PoA				
B.1.1. What is the starting date of the PoA? Is it Reasonable?	20/04/2012 The start date of the PoA was determined based on the date of publication of the PoA-DD for global stakeholder consultation.	PoA DD	CL-10	OK

B.2. Length of the PoA				
<i>The length of the PoA shall be assessed</i>				
B.2.1. What is the length/lifetime of the PoA? Is it reasonable? <i>PoA duration should not exceeding 28 years (60 years for A/R) (Ref: § 6(h)EB 55 Annex 38)</i>	Yes the length of the PoA has been considered as 28 years which is reasonable and in line with §6(h) of EB 55 annex 38.	PoA DD	OK	OK
C. Environmental Analysis				
C.1. Level of Analysis <i>The analysis shall be carried out either on PoA or CPA level</i>				
C.1.1. Has it been clearly indicated on which level i.e. PoA or CPA an environmental Analysis has been carried out or will be carried out? (Ref §(l)of EB 55 Annex 38)	Yes, it has been indicated that the environmental analysis will be done on CPA level	PoA DD	OK	OK
C.2. Documentation on the analysis of the environmental impacts <i>The analysis shall be assessed</i>				
C.2.1. Has an environmental analysis of the PoA as per requirements of the CDM modalities and procedures been undertaken and described in the CDM-POA-DD? (Ref: §6(l)EB 55 Annex 38)	Not applicable, see comment above.	PoA DD	OK	OK
C.3. Environmental impact Analysis Requirements				
C.3.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA)?	Yes, related applicable local regulation (which has been described in detail in the PoA-DD) has been assessed with the participation of Malaysia local expert & confirmed the information presented in the PDD is valid	PoA DD	OK	OK
C.3.2. In case an Environmental Impact Assessment (EIA) is requested by the host party, has it been carried out and if applicable duly approved?	Not applicable, see comment above in C.2.	PoA DD	OK	OK
C.3.3. Are trans boundary environmental impacts considered in the analysis?	Not applicable, see comment above in C.2.	PoA DD	OK	OK
D. Stakeholders' comments				
D.1. Level of Analysis				

D.1.1. Has it been clearly indicated on which level i.e. PoA or CPA stakeholder comments have been or will be invited?	Yes, according to the PoA DD, stakeholder's consultation will be done at CPA level.	PoA DD	OK	OK
D.2. Brief description how comments by local stakeholders have been invited and compiled.				
D.2.1. With regard to the PoA, how have local stakeholders' comments been invited prior to the publication of the DDs and summarized? If applicable, was due account taken of the comments received? (Ref: § 6(m)EB 55 Annex 38)	Not applicable, see comment above in D.1.1	PoA DD	OK	OK
D.3. Summary of the comments received				
D.3.1. With regard to the PoA, can the summary provided assessed as adequate?	Not applicable, see comment above in D.1.1	PoA DD	OK	OK
D.4. Report on how due account was taken of comments received				
D.4.1. With regard to the PoA, can the report provided assessed as adequate?	Not applicable, see comment above in D.1.1	PoA DD	OK	OK
D.4.2. With regard to the PoA, can the local stakeholder consultation process in general be assessed as adequate?	Not applicable, see comment above in D.1.1	PoA DD	OK	OK
E. Application of baseline and monitoring Methodology				
E.1. Title and reference of the methodology				
E.1.1. Does the PoA apply an approved and applicable CDM methodology and a valid version thereof?	Yes, the proposed PoA applied AMS-III.F Version 10	PoA DD	OK	OK
E.2. Justification of the choice of the methodology				
E.2.1. Is the justification of the choice of an approved baseline and monitoring methodology for the typical CPA sufficient? (Ref: § 6(f) EB 55 Annex 38)	Justification of the methodology choice has been justified in PoA-DD Section E.2, and this will be further demonstrated with the relevant evidences at CPA level	PoA DD	OK	OK
E.2.2. Does a typical CPA apply a combination of approved methodologies? If so, has such combination been approved only once in accordance with "Procedures for approval of the application of multiple methodologies to a programme of activities"?	Not applicable, since a typical CPA under this PoA will apply only one methodology i.e. AMS-III.F	PoA DD	OK	OK

(Ref: § 6(f)EB 55 Annex 38)				
E.2.3. Does the typical CPA apply one of the approved small scale categories and any methodology and tool referred therein?	Yes the typical CPA of the PoA would apply AMS-III.F and the corresponding tools as referred in the methodology	PoA DD	OK	OK
E.2.4. Are all applicability criteria in the methodology, the applied tools or any other methodology component referred to therein fulfilled?	Yes, this are being fulfilled & would be evidenced via CPA level	PoA DD	OK	OK
E.3. Description of the sources and gases included in the boundary				
E.3.1. Are the CPA's spatial boundaries (geographical) of the CPAs to be included are clearly defined?	Yes, this has been defined clearly according to the methodology requirements	PoA DD	OK	OK
E.3.2. Are all sources and GHGs included in the project boundary as required in the applied methodology?	Yes, all sources and GHGs are identified in the project boundary.	PoA DD	OK	OK
E.3.3. In case the methodology allows choosing whether a source and/or gas are to be included, is the choice sufficiently explained and justified?	Not applicable, methodology does not call to choose the choice of sources and gases to be included or excluded.	PoA DD	OK	OK
E.4. Description of how the baseline scenario is identified and description of baseline scenario <i>The description shall be assessed</i>				
E.4.1. Does the PoA-DD make provisions to identify possible baseline scenarios to be been considered for CPAs? (Ref: §6(b)EB 55 Annex 38)	PoA-DD Section E.4 has clearly stated that the baseline scenario is in accordance with the prescribed baseline scenario in the methodology, AMS-III.F	PoA DD	OK	OK
E.4.2. Does the PoA-DD make provisions to identify the list of all the alternatives? Is the list of alternatives complete?	Identification of alternatives are not required	PoA DD	OK	OK
E.4.3. Does the PoA-DD make provisions to identify the baseline scenario for each CPA?	Yes, in accordance with the procedure	PoA DD	OK	OK

(Ref: §6(b)EB 55 Annex 38)				
E.4.4. Does the PoA-DD make provisions to identify the baseline scenario according to the methodology for each CPA?	Yes, in accordance to AMS-III.F methodology	PoA DD	OK	OK
E.4.5. Does the PoA-DD make provisions that any plausible alternative scenario is not excluded?	Identification of alternatives are not required	PoA DD	OK	OK
E.4.6. Does the baseline alternatives sufficiently take into account relevant national and/or sectoral policies?	Identification of alternatives are not required	PoA DD	OK	OK
(Ref: §6(b)EB 55 Annex 38)				
E.4.7. Are the provisions for the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced?	Identification of alternatives are not required	PoA DD	OK	OK
E.5. CPA additionality				
E.5.1. Assessment and demonstration of CPA additionality				
E.5.1.1. Does the PoA-DD makes provisions to describe the additionality justification, which follows the requirements of the applied methodology and/or other methodological tools?	Yes, additionality justifications are provided & described clearly in the PoA-DD Section A.4.3 & E.5.1 See CAR-03	PoA DD	CAR-03	OK
E.5.2. Key criteria for assessment and demonstration of CPA additionality				
E.5.2.1. Which criteria have been established to assess the additionality of CPA under this PoA?	See CAR-03	PoA DD	CAR-03	OK
E.5.2.2. Does the PoA-DD provide criteria to assess that the proposed CPA of the PoA would not be the most economically or financially attractive alternative or economically / financially feasible without the revenues from the sale of CERs?	Yes, this is demonstrated via the use of investment analysis guidelines & the PoA-DD has defined clearly the criteria in PoA-DD Section E.5.1	PoA DD	OK	OK
E.5.2.3. Is the type of investment analysis selected correctly?	Yes, the type of investment analysis has been correctly selected & defined in PoA-DD Section E.5.1	PoA DD	OK	OK
E.5.2.4. Is the selected financial indicator chosen and applied correctly, if applicable?	Equity IRR has been selected to be the financial indicator & defined clearly in the PoA-DD	PoA DD	OK	OK

E.5.2.5. If applicable, were the input values used in the investment analysis valid and applicable at the time of the investment decision and justified?	This will be evaluated at the CPA level	PoA DD	OK	OK
E.5.2.6. In CME proposes to use values from Feasibility Study Reports (FSR) is it possible to verify that the period between the FSR date and investment decision was reasonably short and FSR values did not change materially?	This will be evaluated at the CPA level	PoA DD	OK	OK
E.5.2.7. Is it reasonable to assume that no investment would be made at a rate of return lower than the benchmark by, for example, assessing previous investment decisions by the project participants or some verifiable circumstances that have led to a change in the benchmark??	This will be evaluated at the CPA level	PoA DD	OK	OK
E.5.2.8. Is the Investment Analysis prepared in compliance with the latest version of the "Guidance on the Assessment of Investment Analysis" as provided by the CDM EB?	This will be evaluated at the CPA level	PoA DD	OK	OK
E.5.2.9. If applicable, Are there any issues addressed in the barrier analysis that have a clear impact on the financial viability of the project activity and that shall be assessed by an investment analysis?	Barrier analysis is selected to demonstrate the additionality at CPA level See CAR-04	PoA DD	CAR-04	OK
E.5.2.10. If applicable, Do the listed barriers exist and is their existence substantiated? Note: (a) by independent sources of data such as relevant national legislation, surveys of local conditions and national or international statistics and/or (b) by interviews with relevant individuals: including members of industry associations, government officials or local experts if necessary?	Barrier analysis is not selected to demonstrate the additionality at CPA level See CAR-04	PoA DD	CAR-04	OK
E.5.2.11 Would any of the identified barriers prevent the implementation of the project activity but not equally prevent the implementation of the possible alternatives, in particular the implementation of the identified baseline scenario?	Barrier analysis is not selected to demonstrate the additionality at CPA level See CAR-04	PoA DD	CAR-04	OK
E.5.2.12. Are the geographical boundaries for the common practice analysis identified correctly?	Since the CPA of the PA is a small scale project activity, common practice analysis is not required and not demonstrated	PoA DD	OK	OK

	in the PoA DD.			
E.5.2.13. Does the PoA DD provides an explanation why this region was selected and deemed more appropriate and is this explanation traceable and reliable?	Since the CPA of the PA is a small scale project activity, common practice analysis is not required and not demonstrated in the PoA DD.	PoA DD	OK	OK
E.5.2.14 Are there similar operational project activities, other than CDM activities, “widely observed and commonly carried out” in the defined region? Note: Use official sources and local and industry expertise?	Since the CPA of the PA is a small scale project activity, common practice analysis is not required and not demonstrated in the PoA DD.	PoA DD	OK	OK
E.5.2.15. In case there are similar commercially operated project activities, other than CDM activities, already “widely observed and commonly carried out” in the defined region, are there essential distinctions between the CDM project activity and the other similar activities?	Since the CPA of the PA is a small scale project activity, common practice analysis is not required and not demonstrated in the PoA DD.	PoA DD	OK	OK
E.6. Estimation of Emission Reductions of CPA				
E.6.1. Explanation of methodological choices				
E.6.1.1. In case the methodology allows for different methodological choices, are the equations applied properly justified and have they been used reflecting the other methodological choices (i.e. baseline identification)?	<p>The CDM programme activities under the PoA had applied correctly the approved methodology AMS-III.F “Avoidance of methane emissions through composting”, Version 10 /B04/ and the following methodology tools were applied:</p> <ol style="list-style-type: none"> 1. “Tool to calculate baseline, project and/or leakage emissions from electricity consumption”, Version 01, EB 39, Annex 7 /B05/ 2. “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion”, Version 02, EB 41, Annex 11 /B06/ 3. “Emission from solid waste disposal sites”, Version 06.0.0, EB65, Annex 19 /B10/ <p>See CAR-07</p>	PoA DD	CAR-07	OK
E.6.2. Equations, including fixed parametric values used for ER calculation				
E.6.2.1. Are the equations applied correctly according to the applied approved methodology?	Yes, the equations are applied correctly according to AMS-III.F Version 10	PoA DD	CAR-11	OK

	See CAR-11			
E.6.2.2. Have conservative assumptions been used when calculating the project emissions?	Yes, it is conservative	PoA DD	OK	OK
E.6.3. Data and parameters to be reported in the CPA-DD form				
E.6.3.1. Are provisions made to identify all data and parameters which remain fixed throughout the crediting period correct, applicable to the project and will lead to a conservative estimation of emission reductions?	Yes, PoA DD under section E.6.3 provides provisions of all data and parameters which remain fixed See CAR-11	PoA DD	CAR-11	OK
E.6.3.2. Does the PoA-DD mention reasonable values for all ex-ante calculation / monitoring parameters?	See CAR-11	PoA DD	CAR-11	OK
E.7. Application of the monitoring methodology and description of the monitoring plan				
E.7.1. Data and parameters to be monitored by each CPA				
E.7.1.1. Has the PoA DD contains monitoring parameters for the CPAs? Are the means of monitoring of all parameters contained in the monitoring plan feasible and in accordance with the requirements of the applied methodology?	Yes, PoA DD in section E.7.1 provides list of parameters to be monitored by the CPAs of the PoA, See CAR-13	PoA DD	CAR-13	OK
E.7.1.2. Has the PoA DD provides all monitoring parameters as required by the applied methodology required to be implemented by CPA monitoring plan?	See CAR-13	PoA DD	CAR-13	OK
E.7.2. Description of the monitoring plan for a SSC-CPA:				
E.7.2.1 Has PoA DD contains monitoring plan for a CPA in accordance with the approved monitoring methodology, and identified the monitoring provisions and data parameters a CPA has to apply/monitor?	Yes the PoA DD contains monitoring plan to be employed by any CPA of the PoA See CAR-14.	PoA DD	CAR-14	OK
E.7.2.2. Are the QA/QC procedures described under monitoring appropriate sufficient to ensure the emission reductions achieved from the project activity can be reported ex-post and verified?	Yes the PoA DD contains QA / QC procedures & these are sufficiently described See CAR-14.	PoA DD	CAR-14	OK

E.7.2.3. Have all means of implementing the monitoring plan, e.g. equations necessary for ex-post emission reduction calculation, been described clearly and in line with the methodology?	Equations to be used for ex-post emission reduction calculation has been described clearly in the PoA-DD Section E.6.2 See CAR-14	PoA DD	CAR-14	OK
E.8. Date of completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/ entity(ies)				
E.8.1. Have the dates of the completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/ entity (ies) appropriately mentioned?	Yes, the dates of the completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/ entity(ies) have been indicated clearly	PoA DD	OK	OK

Table 2: CDM-SSC-gCPA-DD Requirements Checklist (based on § 37 of the CDM Modalities and Procedures and on VVM ver 01.2, Annex 2 of EB 55 Ref and EB 55 annex 37- PoA specific)

CHECKLIST QUESTION	Ref.	MoV	Findings and comments	Draft Concl.	Final Concl.
A. General Description of small scale CDM project activity (CPA)					
A.1. Are title, current version number and the date of document completion given in section A.1 of the generic CPA-DD?	gCPA DD	DR	The version number & the date of the document is allotted as a space in the generic CPA-DD	OK	OK
A.2. Has the latest version of the CDM-SSC-CPA-DD form been used? Has g CPA DD includes information as required by the g CPA DD template? Note: Refer UNFCCC website for latest template.	gCPA DD	DR	Yes, the latest version form has been used	OK	OK
A.3. Does the generic CPA-DD provides unique identification of a CPA? Has general description of the small-scale CPA been provided in the g CPA DD? (Ref : §7(a)of EB 55 Annex 38,)	gCPA DD	DR	Yes the generic CPA DD provides the information on the unique identification.	OK	OK
A.4 Has it been established that the CPA is within the geographical borders of the proposed PoA? (Ref: § 7(a)EB 55 Annex 38) Note: Geographical Boundary of CPA can be in more than one DNA.	gCPA DD	DR	Yes it has been demonstrated that the geographical borders of any CPA in this PoA will be within Malaysia	OK	OK
A.5. Whether information on the Parties and CPA implementers which are participating in the CPA has been provided in the CPA DD? Are all host parties specified in the generic CPA-DD? (Ref: §7(b)EB 55 Annex 38,)	gCPA DD	DR	Yes, this has been specified clearly in the generic CPA-DD	OK	OK
A.6. Does the generic CPA-DD provided the name and contact details of the entity responsible for the operation of the CPA? (Ref: §7 (a)of EB 55 Annex 38,)	gCPA DD	DR	The generic CDM-SSC-CPA-DD has provision in section A.3 and annex 1 to identify the Name of the Company/ Organization and address, etc. of where the project activity is to be implemented.	OK	OK

CHECKLIST QUESTION	Ref.	MoV	Findings and comments	Draft Concl.	Final Concl.
A.7. Has the Generic CPA-DD using the provisions provided under proposed PoA-DD? (Ref: §7 of EB 55 Annex 38)	gCPA DD	DR	Yes the g-CPA DD has used provision provided under proposed PoA DD	OK	OK
A.8. Does the gCPA provides information in order to define the start date and with reference of appropriate evidence? Note: Definition of SD of CPA has been provided in "Glossary of CDM terms".	gCPA DD	DR	Yes, the start date of the CPA in the g-CPA DD has been indicated as not before the date of commencement of PoA validation	OK	OK
A.9. Does the generic CDM-CPA-DD provides a confirmation that the start date of any CPA is not/or will not be, prior to the PoA validation? (i.e. the date on which the CDM POA- DD is first published for GSC) (Ref: §7(d)of EB 55 Annex 38) Note: EB 47 Report Para72. Exemption according to EB 47 report para 72 can be provided if applicable.	gCPA DD	DR	See A.8	OK	OK
A.10. Does the gCPA provide information that ensures the operational lifetime of the CPA and reference of the evidence? (Ref: para7(d)of EB55 Annex 38)	gCPA DD	DR	Yes, the g-CPA DD has indicated that the evidence of project lifetime are to be indicated as reference footnote for each CPA	OK	OK
A.11. Does the generic CDM-CPA-DD provides information on the SD of the crediting period of the proposed CPA? (Ref: §7(c)of EB 55 Annex 38,)	gCPA DD	DR	Yes, it is stated that the years of crediting period of each CPA is limited to the end date of the registered PoA	OK	OK
A.12. Does the generic CDM-CPA-DD include information on the options to choose the type of CP (either fixed or renewable) and duration of the chosen crediting period of	gCPA DD	DR	Yes, options for fixed / renewable crediting period has been included in the g-CPA DD	OK	OK

CHECKLIST QUESTION	Ref.	MoV	Findings and comments	Draft Concl.	Final Concl.
<p>the CPA?</p> <p>(Ref: §7(c)of EB 55 Annex 38)</p> <p>Note: The duration of the CP of the CPA shall not exceed the end date of the PoA (i.e. 28 years).</p>					
<p>A.13. Does the generic CPA-DD provides information to confirm that the proposed small-scale CPA is not a de-bundled component?</p> <p><i>Ref: EB 54, Annex 13, please refer to the PoA specific de-bundling check.</i></p>	gCPA DD	DR	Yes, the confirmation template has been provided in the g-CPA DD	OK	OK
<p>A.14. Does the generic CPA-DD provides information for the confirmation of the requirement that the CPA is neither registered as a CDM project activity nor included in another registered PoA?</p> <p>(Ref: §7(h)of EB 55 Annex 38)</p>	gCPA DD	DR	Yes section A.4.7. of the g CPA DD provides information for the confirmation of the requirement that the CPA is neither registered as a CDM project activity nor included in another registered PoA.	OK	OK
<p>A.15. Have CPA DD provides information on the provisions which ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA?</p> <p>(Ref: §6(i)of EB 55 Annex 38)</p>	gCPA DD	DR	Yes, this is provided via declaration letter	OK	OK
<p>A.16. Is all necessary information is mutually consistent between POA-DD and the Generic CPA-DD? In case of any corrective action on the PoA DD, ensure the synchronisation of the PoA DD and g-CPA DD at the closure of corrective action.</p> <p>(Ref: §15(d) of EB 55 Annex 38,)</p>	gCPA DD	DR	The validation team has cross checked information contained in the PoA-DD versus Generic CPA-DD & confirmed all are consistently reflected & all corrective actions raised have been synchronised in parallel. All CAR / CL raised related to inconsistency between PoA D & generic CPA-DD have been resolved & closed	OK	OK

CHECKLIST QUESTION	Ref.	MoV	Findings and comments	Draft Concl.	Final Concl.
B.1. Eligibility of CPA and Additionality					
Assessment of CPA with the eligibility criteria for inclusion in the programme of activity.					
Ref: para6(g)of EB55 Annex 38					
B.1.1. Does the information (how each CPA will fulfil the eligibility criteria) as specified in the PoA DD provided in the generic CPA-DD?	gCPA DD	DR	Yes information on the eligibility criteria has been provided in section B.2 of the g CPA DD.	OK	OK
(Ref: §7(e)EB 55 Annex 38and § 168 of VVM ver 01.2)					
B.1.2. Does the gCPA includes information on the applicability of the applied baseline and monitoring methodology as described in the most updated PoA-DD?	gCPA DD	DR	Yes, this has been defined clearly in g CPA DD, each applicability methodology requirements	OK	OK
(Ref: § 7(e)EB55 Annex 38)					
B.1.3. Does the gCPA include information on the financial analysis of the CPA to demonstrate that without CDM revenue the CPA is not a financially attractive option?	gCPA DD	DR	CME has opted for barrier analysis to demonstrate additionality in PoA DD and g CPA DD.	OK	OK
Note: This is PoA specific, if CME has opted the demonstration of financial analysis in the PoA DD, then it is required in the generic CPA DD otherwise not required.					
B.1.4. Does the gCPA information on the barrier analysis to demonstrate that the project activity faces significant/prohibitive barriers that are overcome through the CDM?	gCPA DD	DR	Barrier analysis is selected to demonstrate the additionality at CPA level	OK	OK
B.2.1. Does the generic CPA-DD provides information on the calculations of baseline emissions and estimated emission reductions according to information delineated in the POA-DD?					
(Ref: §7(e)of EB 55 Annex 38,)					
B.2.2. Does the CPA-DD ensure that the information and approach of leakage calculation, additionality	gCPA DD	DR	Yes the information on the information and approach of leakage calculation, and baseline are defined in	OK	OK

CHECKLIST QUESTION	Ref.	MoV	Findings and comments	Draft Concl.	Final Concl.
demonstration, baseline scenario selection and baseline are explicitly defined? (Ref: §7 (e)EB55 Annex 38)			the g-CPA DD.		
B.2.3. Is the g CPA DD provides calculation (approach only) of baseline emissions, project emissions and leakage emissions of the typical CPAs (to be included in the PoA) established in accordance with the procedure described in the PoA-DD? (Ref: 7(e(ii)of EB55 Annex 38)	gCPA DD	DR	Yes, calculation approach has been included according to the PoA-DD	OK	OK
B.2.4. Are information on emission reduction calculation includes required information on any (if required) conservative assumptions used and uncertainties to be addressed when calculating the baseline emissions, project emissions and leakage emissions? (Ref: § 7(e(ii)of EB55 Annex 38)	gCPA DD	DR	Yes, this has been specified clearly the g-CPA DD	OK	OK
B.2.5. Does the gCPA information on the demonstration that emission reductions of the CPA will be real, measurable and give long term benefits related to the mitigation of climate change?	gCPA DD	DR	Yes, this has been specified clearly the g-CPA DD	OK	OK
B.3.1. Is the information (in a complete and transparent manner) on the monitoring plan (to be employed by a typical CPA of the PoA) provided in the gCPA DD and does it comply with the applied methodology, in accordance with the information provided in the PoA DD? (Ref: § 6(g) & 7(e(ii)EB55 Annex38)	gCPA DD	DR	Yes, this has been specified clearly the g-CPA DD	OK	OK
B.3.2. Does the gCPA-DD provides confirmation that all monitored data required for verification and issuance be kept for two years after the end of the crediting period or the last issuance of CERs, for this programme, whichever occurs later?	gCPA DD	DR	Yes, this confirmation has been provided in g-CPA DD Section B.6.1	OK	OK

CHECKLIST QUESTION	Ref.	MoV	Findings and comments	Draft Concl.	Final Concl.
B.3.3. Are the measurement methods clearly stated for each monitored parameters to be monitored for ER calculations and deemed appropriate? (Ref: § 6(g) & 7(e(ii))of EB55 Annex 38)	gCPA DD	DR	Yes, this has been specified according to the methodology requirements for monitoring	OK	OK
B.3.4. Are the information on the measurement equipment and calibration procedures described and deemed appropriate? (Ref: § 6(g) & 7(e(ii))of EB55 Annex 38)	gCPA DD	DR	Yes, this has been specified clearly for each parameters in the g-CPA DD	OK	OK
B.3.5. Is the information on the authority and responsibility of overall CPA management clearly described in the g CPA DD? (Ref: § 6(i)of EB55 Annex38)	gCPA DD	DR	Yes, responsibility & authority for overall CPA management has been described in g-CPA DD Section B.6.1	OK	OK
B.3.6. Are procedures identified for training of monitoring personnel? (Ref: § 6(i)of EB55 Annex38)	gCPA DD	DR	Yes, procedures have been identified for training of monitoring personnel.	OK	OK
B.3.7. Are information on procedures to identify emergency preparedness for cases where emergencies can cause unintended emissions described in the gCPA DD? (Ref: § 6(i)of EB55 Annex 38)	gCPA DD	DR	Yes, this has been defined clearly in the g-CPA DD Section B.6.1	OK	OK
B.3.8. Are information on procedures for review of reported results/data summarised in the g CPA DD?	gCPA DD	DR	Yes, this has been defined clearly in the g-CPA DD Section B.6.1	OK	OK
C. Environmental Impacts					
C.1. Does the generic CPA-DD provides information on the environmental analysis as per requirements of the CDM modalities and procedures and PoA specific guidelines? (Ref: §7(f)EB 55 Annex 38,)	gCPA DD	DR	Yes, the generic CPA-DD provides information on the environmental analysis as per requirements of the CDM modalities and procedures and PoA specific guideline i.e. as identified in the PoA DD that environmental analysis will be conducted on CPA level.	OK	OK
D. Stakeholders' Comments					

CHECKLIST QUESTION	Ref.	MoV	Findings and comments	Draft Concl.	Final Concl.
D.1. Does the generic CPA-DD provides information on how comments by local stakeholders shall be invited, a summary of the comments shall be received and how due account shall be taken of any comments to be received, as applicable? And whether stakeholders consultation process has/will be/ done on PoA level or each CPA level (as described in the PoA DD)? (Ref: §7(g)of EB 55 Annex 38)	gCPA DD	DR	Yes, the generic CPA-DD provides information on how comments by local stakeholders shall be invited, a summary of the comments shall be received and how due account shall be taken of any comments to be received, as applicable, furthermore it is also confirmed in the g-CPA DD that LSC will be conducted on CPA level.	OK	OK

Table 2: CDM-SSC-gCPA-DD Requirements Checklist ((based on § 37 of the CDM Modalities and Procedures and on VVM ver 01.2, Annex 2 of EB 55 Ref and EB 55 annex 37- PoA specific)

CL / CAR No	Observations	Reference to PoA DD.	Summary of project owner response	Revised section (s) of the PoA DD	Validation team conclusion
CAR-01	PoA DD Section A.3 LoA of the host DNA Malaysia & Netherlands which is a pre-requisite for the RFR submission are not yet available during the on-site validation	A.3	<p>Response No. 1 Host country LoA: Discussed in the 2.2012 NCCDM meeting on 21/06/2012. It is expected to receive the LoA in 1 – 2 months.</p> <p>Netherlands LoA: Submission to be made after NCCDM meeting as the Netherlands DNA requires a host country LoA for the application.</p> <p>PP response 2: Host country LoA: Obtained on 14/08/2012.</p> <p>Netherlands LoA: Application submitted.</p> <p>PP response 3: Netherlands LoA: Obtained on 26/09/2012.</p>	-	<p>Response No. 1 CAR will be closed once the LoAs are received & accepted by the validation team</p> <p>Response No. 2 OK, host country LoA dated 14-8-2012 has been received & confirmed this is consistent for the PoA project</p> <p>Pending – LoA from Netherlands</p> <p>Response No. 3 Yes, the LoA from Netherlands has been received & consistent with the PoA project</p> <p>CAR-01 is resolved & closed</p>
CAR-02	PoA DD Section A.3 MoC checked & found the following findings: 2.1) MoC – handwritten date etc. are not accepted by the EB	A.3	<p>Response No. 1 The date will be typed in and the MoC will be re-signed.</p> <p>PP response 2: The MoC has been re-signed. Please see attached document CAR-02.</p>	-	<p>Response No. 1 CAR will be closed once the MoC is received & accepted by the validation team</p> <p>Response No. 2 OK, this has been corrected CAR 2.1 is resolved & closed</p>

	2.2) The name of CME stated in the MoC is inconsistent with the PoA-DD Annex 1 & A.3	A.3	<p>Response No. 1 The name of CME in MoC will be amended.</p>	-	<p>Response No. 1 CAR will be closed once the MoC is received & accepted by the validation team</p> <p>Response No. 2 OK, the name of CME is consistent with the MoC & PoA-DD Annex 1</p> <p>CAR-2.2 is resolved & closed</p>
	2.3) Phone number in MoC page 2 & 4 is inconsistent with PoA-DD Annex 1	A.3	<p>Response No. 1 After checking the MoC and PoA-DD Annex 1, the phone number is found to be consistent, please clarify which part is not consistent.</p> <p>PP response 2: Thank you. The phone number has been revised. Please refer to CAR-02.</p>	-	<p>Response No. 1 Please check again – it is not consistent</p> <p>Response No. 2 OK, this is consistent with the PoA-DD Annex 1</p> <p>CAR-2.3 is resolved & closed</p>
	2.4) Consistency check of MoC versus PDD Annex 1 & LoA will be conducted again after LoA is received	A.3	<p>Response No. 1 The MoC will be resigned after obtaining the LoA to ensure the consistency.</p> <p>PP response 3: To be provided once signed.</p>	-	<p>Response No. 1 CAR will be closed once the MoC is received & accepted by the validation team</p> <p>Response No. 2 Handwritten dates in page 3 are not acceptable The MoC pages are also missing – please check versus MoC template published in the UNFCCC website</p>

					<p>Response No. 3 OK, this has been corrected</p> <p>CAR 2.4 is resolved & closed</p>
	2.5) Please submit business license for CME – Natural Objective Sdn Bhd	A.3	<p>Response No. 1 The business license for NOSB is submitted.</p>	-	<p>Response No. 1 OK, the company business licence reference number 960685 is received & confirmed it is registered with the Companies Commission of Malaysia</p> <p>CAR 2.5 is resolved & closed</p>
	2.6) At the time of on-site validation, the CME has not obtained letters of authorization of its coordination of the PoA from each host party as required according to paragraph 10, EB 55, Annex 38 Procedures For Registration of A Programme of Activities As A Single CDM Project Activity And Issuance of Certified Emission Reductions For A Programme of Activities, Version 04.1	A.3	<p>Response No. 1 The letter of authorization will be obtained together with the LoA.</p> <p>PP response 2: The Malaysian LoA confirmed that NOSB is authorized as the CME of the PoA.</p> <p>PP response 3: The Dutch LoA confirmed Asiatica as the participant of the PoA.</p>	-	<p>Response No. 1 CAR will be closed once the LoAs are received & accepted by the validation team</p> <p>Response No. 2 OK, host country LoA dated 14-8-2012 has been received & confirmed this is consistent for the PoA project Pending – LoA from Netherlands</p> <p>Response No. 3 Letters of authorization from Netherlands has been received as in the form of LoA This confirmed the participation of Carbon Asiatica as the participant of the PoA CAR 2.6 is resolved & closed</p>

CAR-03	<p>PoA DD Section A.4.2.2</p> <p>Eligibility criterias for SSC-CPA inclusion in the PoA have been defined in line with the EB 65 Annex 3 Standard for Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies for Programme of Activities Version 01.0</p> <p>However, it is not clear what would be the objective evidence expected / required in order demonstrate compliance to each of the eligibility criteria during the SSC-CPA inclusion?</p>	A.4.2.2	<p>Response No. 1</p> <p>Objective evidences are included to demonstrate the compliance of the eligibility criteria.</p> <p>PP response 2:</p> <p>The documentary evidence for the specifications of technology/measure has been revised as follows:</p> <p><i>“Proposal / technical specification, including the level and type of service, performance specifications including compliance with testing/certification, from the technology provider”</i></p>	A.4.2.2	<p>Response No. 1</p> <p>3.1) Eligibility criteria paragraph 14 (c) is not consistently reflected in the PoA-DD Table 1 –</p> <p><i>“The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;</i></p> <p>Response No. 2</p> <p>OK, this is reflected clearly in Table 1 : Eligibility criteria for the PoA</p> <p>Remarks: At the time of registration submission, the guideline has been updated according to EB 70 i.e. “Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70”. Cross checked the eligibility criteria & found to be still consistent</p> <p>CAR-03 is resolved & closed</p>
CAR-04	<p>PoA DD Section A.4.3</p> <p>Descriptions provided to justify <i>“(ii) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA;”</i></p> <p>Justifications provided for investment and institutional barrier, technological barrier & prevailing barrier are not supported with</p>	A.4.3	<p>Response No. 1</p> <p>This section has been revised with relevant supporting sources.</p>	A.4.3	<p>Response No. 1</p> <p>The validation team reviewed the following documents which supports the justifications provided for all the barriers:</p> <p>a) CDM/JI Research Project for the Year 2007: Research Project on Methane Emissions</p>

	any reference source / substantiated				<p>Reduction by Composting Wastes from Palm Mill in Malaysia, published by Daiwa Institute of Research Ltd, March 2008 – substantiated the investment & institutional barrier</p> <p>b) Study on Clean Development Mechanism Potential in the Waste Sectors in Malaysia” published by the Ministry of Energy, Water and Communications (MEWC), PTM, Danish International Development Assistance (DANIDA) in December 2004 – substantiated the prevailing practice barrier.</p> <p>c) Industrial Processes & The Environment (Handbook No.3) Crude Palm Oil Industry, published by the Department of Environment – substantiated the technological barrier</p> <p>CAR-04 is resolved & closed</p>
--	--------------------------------------	--	--	--	--

CAR-05	<p>PoA DD Section A.4.4.1</p> <p>5.1) Complete evidences (templates) to substantiate the operation and management plan descriptions are not available for review by the validation team at the time of on-site validation discussion</p>	A.4.4.1	<p>Response No. 1</p> <p>Operation and management plan prepared by NOSB was provided on 23 May 2012 (Item 13).</p> <p>PP response 2:</p> <p>Please see the attached template CAR-05.</p>	<p>Response No. 1</p> <p>Yes, the operational and management plan dated 22 May 2012 (Item 13) document has been received & reviewed by the validation team during the desk review</p> <p>However, this is only the operational and management plan document</p> <p>The CAR is issued by requesting for “Complete evidences (templates) to substantiate the operation and management plan descriptions”</p> <p>Response No. 2</p> <p>OK, the templates have been provided, reviewed & accepted by the validation team</p> <p>CAR-05 is resolved & closed</p>
	<p>5.2) Compliance to paragraph 17 (a) to 17 (g) & the corresponding supporting evidences according to EB 65 Annex 3, Standard for Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies for Programme of Activities Version 01.0 are not yet demonstrated in the PoA DD.</p>	A.4.4.1	<p>Response No. 1</p> <p>Operation and management plan prepared by NOSB was provided on 23 May 2012 (Item 13).</p> <p>PP response 2:</p> <p>The responsibilities for each</p>	<p>Response No. 1</p> <p>Reviewed the Operational & management plan dated 22 May 2012</p> <p>Roles have been defined but however, responsibilities are not clearly defined yet within the management system</p> <p>Response No. 2</p> <p>OK, the responsibilities have been defined in the revised Operational & management plan document &</p>

			<p>personnel have been included in the latest version of OMP. Please see attached document CAR-05.2.</p>	<p>are accepted by the validation team</p> <p>Remarks: At the time of registration submission, the guideline has been updated according to EB 70 i.e. “Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70”. Paragraph 17 a) to 17 g) are now replaced with Paragraph 19 a) to 19 g)</p> <p>CAR-5.2 is resolved & closed</p>
	<p>5.3) Reviewed the “Operational & Management Plan” procedure, issued on 4 May 2012 & found the following inadequacies: 5.2.1) Procedures for Technical Review of inclusion of CPA – it does not define clearly who shall conduct the technical review & the criteria for technical review. The criteria defined are related to pre-qualification which are not specifically related to CPA inclusion criteria such as eligibility criteria etc.</p>	A.4.4.1	<p>Response No. 1 The Operation and management plan has been updated and provided on 23 May 2012 (Item 13).</p> <p>PP response 2: PP wishes to clarify that the technical review will be conducted by the CME. Please refer to the attached document CAR-05.2.</p>	<p>Response No. 1 Technical review procedure defined in the Operation & management plan dated 22 May 2012 still does not define clearly who shall conduct the technical review Besides, the technical review process defined are not fully related to CPA inclusion criteria as defined in the PoA-DD</p> <p>Response No. 2 OK, CME = Coordinating Managing Entity, however this is general & does not refers to specific function who will perform the technical review process. This is also not linked to the roles & responsibilities defined in the OMP</p>

		<p>PP wishes to clarify the second part of the question: what 'CPA inclusion criteria' is TÜV-R referring to? The CDM criteria are included in the OMP.</p> <p>PP response 3: Please kindly refer to the revised OMP, which specified the person who will perform the technical process.</p>	<p>The procedure for technical review process does not consider technical review for CPA inclusion</p> <p>Response No. 3 OK, technical review will be conducted by Mr. Khai Yip Mun as stated in the revised OMP document</p> <p>CAR 5.3 is resolved & closed</p>
--	--	--	---

	<p>5.2.2) Process for Training and Capacity Development for Personnel, as stated in the “Operational & Management Plan” procedure, issued on 4 May 2012</p> <p>However, the records of arrangements for training and capacity development for personnel are not yet available to demonstrate the compliance to this requirement</p>	<p>Response No. 1</p> <p>The records of arrangements are unavailable at this early stage of the PoA development.</p> <p>PP response 2:</p> <p>Please see attached the draft SOP for the PoA (CAR-05.3), which includes the trainings to be carried out later. Please be noted that the construction of the first CPA has not been started yet, therefore, training is not NOSB’s priority,</p> <p>PP response 3:</p> <p>The draft SOP has already demonstrated that NOSB will develop and implement the trainings for each CPA. It does not make sense for the CME to develop and implement a training arrangement for the CME</p>	<p>A.4.4.1</p>	<p>Response No. 1</p> <p>The CAR will be closed once the records of arrangements for training & capacity development for personnel are available</p> <p>Response No. 2</p> <p>According to the Standard For Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies For Programme of Activities, Version 01.0, EB 65, Annex 3, paragraph 17:</p> <p><i>“The CME shall develop and implement a management system that includes the following made available to the DOE at the time of validation of the PoA:</i></p> <p><i>(b) Records of arrangements for training and capacity development for personnel; “</i></p> <p>The requirement clearly require the records to be made available to the DOE at the time of validation of the PoA</p> <p>Response No. 3</p> <p>As stated clearly according to the requirements in Response No. 2 above, please submit “Records of arrangements for training and capacity development for personnel”</p>
--	---	--	----------------	--

			<p>themselves.</p> <p>PP response 4: Draft training plan is being submitted</p>		<p>The statement "...NOSB will develop and implement the trainings for each CPA" is not the record of arrangements for training and capacity development for personnel Please clarify if any training plan (draft training plan?) is already available? Please submit</p> <p>Response No. 4 OK, the draft training plan has been received, reviewed & accepted by the validation team</p> <p>Remarks: At the time of registration submission, the guideline has been updated according to EB 70 i.e. "Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities Version 02.0, EB 70". Paragraph 17 a) to 17 g) are now replaced with Paragraph 19 a) to 19 g)</p> <p>CAR 5.2.2 is resolved & closed</p>
	<p>5.4) "(iii) The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity....."</p> <p>The paragraph descriptions in the PoA DD for the item above not include clearly who is responsible to perform debundling check?</p>	A.4.4.1	<p>Response No. 1 The CME is responsible to perform the debundling check. The PoA-DD has been revised accordingly.</p>	A.4.4.1	<p>Response No. 1 OK, this is now stated clearly in the PoA-DD & accepted by the validation team</p> <p>CAR 5.4 is resolved & closed</p>

	5.5) Furthermore, the assessment criteria included only for paragraph 8 of the <i>“Guidelines on Assessment of Debundling for SSC Project Activity (version 03)”</i> , but paragraph 9 & 10 of the same guideline are missing & not yet included in the PoA DD	A.4.4.1	Response No. 1 Paragraph 9 & 10 of the Guideline are included in the revised PoA-DD.	A.4.4.1	Response No. 1 OK, this has been updated & added into the PoA-DD Section A.4.4.1 & consistent with the guideline CAR 5.5 is resolved & closed
CAR-06	Leakage assessment due to the general guidance for biomass project activities (Attachment C to Appendix B), with attention to Section C on competing use for the biomass not yet conducted	E.1	Response No. 1 The leakage assessment has been included in the PoA-DD. “For each CPA, biomass wastes are collected and used, according to the <i>“General guidance on leakage in biomass project activities (version 03)”</i> (attachment C to Appendix B), the biomass type of each CPA is “biomass residues or wastes”, the emission source that is potentially significant and attributable to the CPAs is “competing uses of biomass”. Demonstration on whether the quantity of available biomass in the CPA region, is 25% larger than the quantity of biomass that is utilised including the CPA will be done ex-ante at CPA level.”	E.6.1 E.6.2	Response No. 1 The validation team reviewed the updated PoA-DD Section E.6.1 & E.6.2 & accepted the justifications where the detailed assessment of the leakage will be conducted at CPA level CAR-06 is resolved & closed
CAR-07	PoA DD Section E.2 The following are the findings for the applicability conditions assessment according to the methodology AMS-III.F 7.1) Applicability condition paragraph 1: It is not clearly justified yet whether	E.2	Response No. 1 A sentence <i>“A controlled aerobic treatment by composting of biomass will be introduced for each CPA”</i> has been included in the PoA-DD.	E.2	Response No. 1 OK, the PoA-DD has been revised & accepted that the type of SWDS & WWTS will not be specified in PoA-DD. However, the PoA-DD Section E.3 has clearly stated that only fresh EFB will be used for

	controlled aerobic treatment by composting of biomass is introduced It is also not specifically stated which type of applicable SWDS & WWTS applied for the project activity		PP believes that it is not necessary to specify the type of SWDS & WWTS at the PoA-DD level.		composting & Figure 2 has been updated The types have been specified in the generic CPA-DD CAR-7.1 is resolved & closed
	7.2) Applicability condition paragraph 5: It is not clearly stated in the PoA DD whether the project activity involves new or existing facility? During the interview with the CME, it has been confirmed that the project activity will involve only construction of new treatment facility	E.2	Response No. 1 The POA-DD has been revised accordingly.	E.2	Response No. 1 OK, Expansion and increase capacity utilization at existing co-composting facility will not be involved & this has been also updated in the PoA-DD CAR-7.2 is resolved & closed
	7.3) Applicability condition paragraph 8 It is not clearly stated which type of waste considered for this applicability condition	E.2	Response No. 1 It was clearly stated that only biomass and wastewater are considered.	E.2	Response No. 1 OK, only biomass & wastewater will be considered CAR-7.3 is resolved & closed
	7.4) Applicability condition paragraph 26 (specific for PoA) is not yet included & evaluated	E.2	Response No. 1 Applicability condition paragraph 26 has been included in the revised POA-DD.	E.2	Response No. 1 Paragraph 26 has been added & confirmed that it is not applicable. The CPA involves the construction of new co-composting facility. CAR-7.4 is resolved & closed
CAR-08	PoA DD Section E.3 8.1) Figure 2 : Baseline and project boundary It is not clear whether only fresh EFB or EFB from landfill will be used for the project activity	E.3	Response No. 1 Only fresh EFB will be used for the project activity. The figure has been modified for clarity.	E.2	Response No. 1 OK, only fresh EFB will be used for composting & Figure 2 has been updated to reflect this CAR-8.1 is resolved & closed

	8.2) Please clarify what is the mode of transportation for EFB & POME to the composting site?	E.2	Response No. 1 The mode of transportation will be determined at CPA level.		Response No. 1 This is accepted & will be specified in the CPA level CAR-8.2 is resolved & closed
	8.3) Why project emission from runoff water is excluded from the assessment in Table 2: Overview on emission sources included in or excluded from the project boundary?	E.2	Response No. 1 Project emission assessment from runoff water is included. However, there is no project emission from runoff water.	E.3	Response No. 1 OK, project emission from run off has been added in the Table 2, assessed & no project emission is expected from the project activity
CAR-09	PoA DD Section E.4 Determination of the baseline scenario is not in line with AMS-III.F Version 10 methodology paragraph 14 requirement	E.4	Response No. 1 Determination of baseline scenario has been revised.	E.4	Response No. 1 The corrected baseline scenario in the updated PoA-DD is in line with AMS-III.F Version 10 methodology requirement, paragraph 14 CAR-09 is resolved & closed
CAR-10	PoA DD Section E.5.1 In earlier sections of the PoA DD (Section A.2), it was mentioned that there will reduction in the use of chemical fertilisers It was clarified during on-site desk review discussion, the bioorganic fertilisers will displace the use of the chemical fertilisers, however this will not result in "cost saving" of chemical fertiliser displacement Please clarify clearly in the PoA DD why cost saving from chemical fertiliser displacement is not expected	E.5.1	Response No. 1 Cost saving is not expected as: 1. The plantations will not reduce the amount of nutrients applied. It is only replacing chemical fertiliser with bio-fertilizer. 2. The price of bio-fertilizer is determined through price benchmarking where the price is proportional to the market price of the nutrients (NPK) per unit weight found in inorganic fertiliser. For the purpose of the investment analysis, the bio-fertiliser price	E.5.1	Response No. 1 Justifications provided for the cost saving from chemical fertiliser displacement which is not expected have been provided in PoA-DD Section E.5.1 & this is accepted by the validation team The validation team verified at the specific CPA-DD level & found that the price of bio-fertilizer will be determined through price benchmarking where the price is proportional to the market price of the nutrients (NPK) per unit weight found in inorganic fertiliser Sample calculation & cross

			<p>is assumed to be equal to chemical fertiliser per unit NPK.</p> <p>It is noted that in reality, the bio-fertilizer will likely need to be sold at a discount in order to incentivise users of chemical fertilisers to use bio-fertilisers. If the PP were to sell at, say, a 20% discount to the plantations, there will indeed be a price saving for the plantation owner. It would then in fact be incorrect to put this cost saving back into the PP's cash flow.</p> <p>By assuming that the CPA owner can sell the bio-fertilizer at 100% of market price, the PoA DD has taken the most conservative approach possible.</p>		<p>checking with the individual market prices for the nutrients per unit weight found in the inorganic fertiliser has been provided to the validation team & is accepted</p> <p>CAR-10 is resolved & closed</p>
CAR-11	<p>PoA DD Section E.6.2</p> <p>11.1) Equations symbols & descriptions for parameters stated in the PoA DD for baseline emission, project emission determination are inconsistent with AMS-III.F Version 10 methodology / AMS-III.H (for BE_{ww, y})</p>	E.6.2	<p>Response No. 1</p> <p>The PDD has been revised accordingly.</p> <p>PP response 2:</p> <p>The description of EF_{composting} has been revised. Please also refer to D.7.1 for the details.</p>	E.6.2	<p>Response No. 1</p> <p>11.1.1) PoA-DD page 25 EF_{composting} descriptions is incomplete</p> <p>Response No. 2</p> <p>OK, this has been revised & updated in the PoA-DD</p> <p>CAR-11 is resolved & closed</p>

	11.2) BE _{CH4,SWDS,y} The PoA DD does not state clearly which Application A or B selected in accordance with the latest tool “EB 66, Annex 4, Emissions from solid waste disposal sites, (Version 06.0.1)”, page 1	E.6.2	Response No. 1 Application B was chosen. The PoA-DD has been updated.	E.6.2	Response No. 1 OK, Application B is selected & confirmed to be valid according to the project technical descriptions reviewed by the validation team CAR-11.2 is resolved & closed
	11.3) Page 25 “Emissions from electricity or fossil fuel consumption in the year y (PE _{y,transp})” – this is incorrect title	E.6.2	Response No. 1 The title has been revised.	E.6.2	Response No. 1 The corrected title is now consistent with the methodology CAR-11.3 is resolved & closed
	11.4) Why PE _{FC,i,y} is not included?	E.6.2	Response No. 1 Both project emission from electricity consumption and fossil fuel consumption have been included in the revised PoA-DD.	E.6.2	Response No. 1 OK, this has been included in the PoA-DD, for PE _{y,power} determination CAR-11.4 is resolved & closed
CAR-12	PoA DD Section E.6.3 12.1) Parameter φ_y Option 1 was selected but this is not stated clearly in the PoA DD	E.6.3	Response No. 1 Option 1 is included in the revised PoA-DD.	E.6.3	Response No. 1 Option 1 is now stated clearly & accepted by the validation team CAR-12.1 is resolved & closed
	12.2) Parameter $DOC_{f,y}$ Application B selected is not stated clearly in the PoA DD	E.6.3	Response No. 1 Application B is included in the revised PoA-DD.	E.6.3	Response No. 1 Application B is now stated clearly & accepted by the validation team CAR-12.2 is resolved & closed
	12.3) Parameter $MCF_{ww,treatment,BL,i}$ Discharge of wastewater to the sea, river or lake, MCF value – 0.1 is missing from the table	E.6.3	Response No. 1 MCF value – 0.1 has been included in the PoA-DD.	E.6.3	Response No. 1 This is now corrected & added already in the POA-DD CAR-12.3 is resolved & closed

	12.4) Parameter B_o, ww Source of data used: "Default value from AMS-III.H, version 16" is incorrect	E.6.3	Response No. 1 The source of "2006 IPCC Guidelines" is employed in the revised PoA-DD.	E.6.3	Response No. 1 This is now corrected & added already in the POA-DD CAR-12.4 is resolved & closed
CAR-13	PoA DD Section D.7.1 13.1) Parameters $f_y, W_{j,x}$, Application B selected is not stated clearly in the PoA DD	E.7.1	Response No. 1 Application B is included in the revised PoA-DD.	E.7.1	Response No. 1 This is now corrected & added already in the POA-DD CAR-13.1 is resolved & closed
	13.2) Parameters $Q_{ww,in,y}$, $COD_{ww,untreated,y}$ The data unit stated in the PoA DD is inconsistent with the methodology	E.7.1	Response No. 1 The unit of the following parameters has been revised as below: $Q_{ww,in,y}$: m ³ / month $COD_{inflow,y}$: t COD/m ³	E.7.1	Response No. 1 This is now corrected & added already in the POA-DD CAR-13.2 is resolved & closed
	13.3) Monitoring parameters are missing from the PoA DD Section D.7.1 = $COD_y, Q_{y,ww,runoff}$	E.7.1	Response No. 1 The two monitoring parameters have been included in the PoA-DD.	E.7.1	Response No. 1 This is now corrected & added already in the POA-DD CAR-13.3 is resolved & closed
	13.4) Check of aerobic conditions of the composting process This parameter is missing	E.7.1	Response No. 1 The aerobic condition is checked, as stated in the monitoring parameter $EF_{composting}$. PP response 2: The parameter 'check of aerobic conditions of the composting process' is included in the PoA-	E.7.1	Response No. 1 Since this parameter is prescribed specifically in the monitoring methodology, this is currently not yet included in the PoA-DD. Response No. 2 Yes, this parameter has been included in PoA-DD Section E.7.1 However, the description of the

			<p>DD,</p> <p>PP response 3: A footnote is included to clarify the situation:</p> <p><i>"It is clarified that the methodology AMS-III. F provided a method for windrow composting. It is not applicable to the PoA which in-vessel composting technology will be employed. Thus, the relevant measurement methods and procedures were developed."</i></p>		<p>sampling plan not in line with the methodology requirement</p> <p>Response No. 3 OK, this is accepted & fully clarified</p> <p>CAR 13.4 is resolved & closed</p>
	13.5) Template table used is not consistent with the standard template published by UNFCCC (Value of data - inconsistent with the published template)	E.7.1	<p>Response No. 1 The template table has been modified to be consistent with the standard template.</p>	E.7.1	<p>Response No. 1 The PoA-DD has been updated & now consistent with the published template</p> <p>CAR-13.5 is resolved & closed</p>
CAR-14	<p>PoA DD Section E.7.2 It is not clear what are the procedure in place to address the emergency event for unintended emission mitigation, calibration lapsed, equipment breakdown, plant shut down etc. which will affect the composting project activity?</p>	E.7.2	<p>Response No. 1 A standard operating procedure (SOP), which describes the operation of the composting facility, will be prepared. Emergency procedures are defined in the SOP. In case of the monitoring equipment fails, backup equipments will be in place.</p> <p>PP response 2:</p>	E.7.2	<p>Response No. 1 Please submit the SOP (can be in draft procedure?) for review</p>

			<p>Please refer to CAR-05.3. The draft SOP shows that the emergency procedures will be clearly defined.</p> <p>PP response 3: Please refer to the revised SOP.</p>	<p>Response No. 2 The emergency procedures defined still do not address “<i>event for unintended emission mitigation, calibration lapsed, equipment breakdown, plant shut down etc. which will affect the composting project activity?</i>” Although the “CDM Related” emergency have been identified, but if does not explained how to mitigate unintended emission mitigation, calibration lapsed, equipment breakdown, plant shut down etc. What about impact assessment to the ER calculation?</p> <p>Response No.3 OK, this has been described & updated in the revised SOP</p> <p>CAR 14 is resolved & closed</p>
--	--	--	--	---

CL-01	Inconsistent terms used throughout PoA DD e.g. CPA implementer? CPA owner? CPA....? (incomplete) etc.	General	Response No. 1 CPA implementer is used throughout the PoA-DD.	-	Response No. 1 CPA Implementer term is now used consistently in the PoA-DD CL-01 is resolved & closed
CL-02	PoA DD Section A.2 Please clarify why mulching & incineration of EFB are not included as part of common practice (based on the validation team local experience)?	A.2	Response No. 1 Incineration has been prohibited in Malaysia, while mulching attracts beetles which destroy crops. The clarification is included in the revised PoA-DD.	A.2	Response No. 1 OK, the justifications & also the supporting references have been reviewed by the validation team. The justifications are substantiated & accepted by the validation team CL-02 is resolved & closed
CL-03	Please clarify the background about NOSB & business relationship with Abedon Enviro, SOM & SKM?	A.3	Response No. 1 NOSB is a wholly owned subsidiary of Abedon Enviro. Abedon Enviro and SKM (which owns SOM) are subsidiaries of Kretam Holdings Bhd. The relationship is clearly described in the Operation and management plan submitted on 23 May 2012.	-	Response No. 1 This is now clarified clearly in the Operational and Management Plan dated 22 May 2012 & accepted by the validation team CL-03 is resolved & closed
CL-04	PoA DD Section A.3 It is not clearly specified whether the PPs listed in the table is private or public entity for NOSB, Carbon Asiatica? Besides that, the host party name is	A.3	Response No. 1 Both NOSB and Carbon Partners Asiatica are private company. The name of the host party	A.3	Response No. 1 This is now clarified & accepted by the validation team CL-04 is resolved & closed

	incorrect "Natural Objective Shn Bhd "?		project participant has been changed.		
CL-05	<p>At the time of PoA DD & CPA-DD webhosting (before 1 May 2012), the documents have been prepared based on VVM track</p> <p>However, at the time of on-site validation, the project participants had decided to continue validation under VVS track, due to the high potential delay to get LoA from host country before 30 September 2012</p> <p>PoA DD & CPA-DD documents are currently prepared using VVM track template, not using VVS track template</p> <p>Please clarify – since in the PoA-DD, at various sections, the VVS standard was stated, however at the time of PoA DD & CPA DD webhosting, VVM is applicable instead of VVS standard</p> <p>- e.g. PoA DD Section A.4.2.2</p>	-	<p>Response No. 1</p> <p>To confirm, the PP decided to continue validation under the VVM track. The PoA-DD has been revised without referring the VVS standard.</p>	-	<p>Response No. 1</p> <p>OK, the decision to maintain under VVM track is accepted by the validation team</p> <p>CL-05 is resolved & closed</p>
CL-06	<p>PoA DD Section A.4.2.1 page 5</p> <p>Please clarify the following statement</p> <p>"Each CPA will produce bio-organic fertiliser in an aerobic environment"</p>	A.4.2.1	<p>Response No. 1</p> <p>It is clarified that the statement means that for each CPA, palm oil wastes will be composted under aerobic condition.</p>	-	<p>Response No. 1</p> <p>This clarified & accepted by the validation team</p> <p>CL-06 is resolved & closed</p>
CL-07	<p>PoA DD Section A.4.2.1</p> <p>Please clarify whether the bioorganic fertiliser will be sold? (revenues from sales)</p> <p>What about revenue from chemical</p>	A.4.2.1	<p>Response No. 1</p> <p>Please refer to response in CAR-10.</p>	A.4.2.1	<p>Response No. 1</p> <p>This is clarified in CAR-10 & accepted by the validation team</p> <p>CL-07 is resolved & closed</p>

	fertiliser savings? These are not clarified clearly in the PoA DD				
CL-08	<p>PoA DD Section A.4.2.2</p> <p>According to PoA DD, page 6</p> <p>Item 7</p> <p>7. The PoA-specific requirements stipulated by the CME.....”(b) As at current, an environmental impact analysis (EIA) is not required for co-composting projects. Please refer to section C.3 for details.”</p> <p>However, please clarify in case in future the regulations changes, how would the requirements for EIA analysis can be fulfilled?</p>	A.4.2.2	<p>Response No. 1</p> <p>In case of EIA related regulation changes in the future, the CPA will follow the latest regulation.</p>	A.4.2.2	<p>Response No. 1</p> <p>This is accepted & has been included in the Table 1 : Eligibility criteria, accepted by the validation team</p> <p>CL-08 is resolved & closed</p>
CL-09	<p>PoA DD Section A.4.4.1</p> <p>Abbreviations used such as SQL is not clarified clearly in the PoA DD</p>	A.4.4.1	<p>Response No. 1</p> <p>SQL stands for Structured Query Language, this is included in the revised PDD.</p>	A.4.4.1	<p>Response No. 1</p> <p>This is clarified now in the revised PoA-DD & accepted by the validation team</p> <p>CL-09 is resolved & closed</p>
CL-10	<p>PoA DD Section B.1</p> <p>Please clarify how is the starting date of the PoA being determined? The justification has not been included in the PoA DD</p>	B.1	<p>Response No. 1</p> <p>The starting date of the PoA was determined based on the incorporation date of NOSB, which is 19 September 2011 (Item 05).</p>	B.1	<p>Response No. 1</p> <p>Reviewed the company business licence reference number 960685 & confirmed it is registered with the Companies Commission of Malaysia & effective date is 19 September 2011</p> <p>This is accepted by the validation</p>

					<p>team to be the start date of the PoA</p> <p>Response No. 2 According to the PoA-DD, the starting date of the PoA has been revised as 20 April 2012. The start date of the PoA was determined based on the date of publication of the PoA-DD for global stakeholder consultation. This is in line with the latest published Glossary of CDM Terms Version 07.0 /B07/</p> <p>CL-10 is resolved & closed</p>
--	--	--	--	--	--

CL-11	PoA DD Section E.5.1 11.1) It is not clear whether pre-tax or post tax benchmark would be considered in the investment analysis?	E.5.1	Response No. 1 Post-tax benchmark is used in the investment analysis.	E.5.1	Response No. 1 OK, this is clarified & stated clearly now in the PoA-DD CL-11.1 is resolved & closed
	11.2) It is not clear whether technical lifetime will be considered for project IRR determination assessment period? The basic parameters for investment analysis (Table 6) has not considered technical lifetime?	E.5.1	Response No. 1 PP wishes to confirm that the determination of IRR assessment period will follow the <i>“Guideline on the Assessment of Investment Analysis (Version 05)”</i> . The technical lifetime has been included in the table “Basic parameters for investment analysis”.	E.5.1	Response No. 1 OK, technical lifetime criteria has been considered & included in the Table 6 of the PoA-DD Section E.5.2 CL-11.2 is resolved & closed

Table 4: Resolution of Corrective Action and Clarification Requests raised on g-CPA DD

CL/CAR No	Observations	Reference of table 2 specific to g-CPA DD	Summary of project owner response	Revised section (s) of the g CPA DD	Validation team conclusion
CAR-g01	Generic CPA DD Section A.4.6 See CAR-05, 5.5) for PoA DD above – regarding the assessment criteria included only for paragraph 8 of the <i>“Guidelines on Assessment of Debundling for SSC Project Activity (version 03)”</i> , but paragraph 9 & 10 of the same guideline are missing & not yet included in the PoA DD	A.4.6	Response No. 1 Paragraph 9 & 10 of the Guideline are included in the revised generic CPA-DD.	A.4.6	Response No. 1 OK, this has been added & updated in the revised Generic CPA-DD CAR-g01 is resolved & closed

CAR-g02	<p>Generic CPA DD Section B.2</p> <p>See CAR-03 for PoA DD above – regarding eligibility criteria according to the “Standard for the development of eligibility criteria for the inclusion of a project activity as a CPA under the POA (version 01.0) (Annex 03, EB 63 meeting report)” & the objective evidence expected / required in order demonstrate compliance to each of the eligibility criteria during the SSC-CPA inclusion?</p>	B.2	<p>Response No. 1 The objective evidences expected/ required have been included in the generic CPA-DD.</p> <p>PP response 2: The justification has been revised to include the confirmation from CPA implementer.</p>	B.2	<p>Response No. 1 See CAR-03 for PoA DD</p> <p>For eligibility criteria number 2 in Table 1: Eligibility criteria for the PoA – the justifications provided under project case is inconsistent with PoA-DD</p> <p>Response No. 2 OK, the eligibility criteria number 2 – justifications provided are now consistent with the PoA-DD and also in specific CPA-DD</p> <p>CAR-g02 is resolved & closed</p>
CAR-g03	<p>Generic CPA DD Section B.2</p> <p>See CAR-07 for PoA DD above – regarding the findings for the applicability conditions assessment according to the methodology AMS-III.F & make corrections in Generic CPA DD</p>	B.2	<p>Response No. 1 The applicability conditions assessment is included in the revised generic CPA-DD.</p>	B.2	<p>Response No. 1 Findings raised in CAR-07 have been also updated in the Generic CPA DD & consistent</p> <p>CAR-g03 is resolved & closed</p>
CAR-g04	<p>Generic CPA DD Section B.3</p> <p>g4.1) Assumptions / basis used for conducting the investment analysis calculation is not clearly defined in the generic CPA-DD</p> <p>What about basis for making investment decision?</p>	B.3	<p>Response No. 1 The basis for making investment decision has been included in the generic CPA-DD and will be determined at each specific CPA.</p>	B.3	<p>Response No. 1 OK, basis for making investment decision has been added in the revised Generic CPA-DD & is accepted by the validation team</p> <p>CAR-g4.1 is resolved & closed</p>
	<p>g4.2) Sensitivity analysis</p> <p>Assessment at what % of variation for</p>	B.3	<p>Response No. 1 The assessment has been</p>	B.3	<p>Response No. 1 This has been also added already in the revised Generic CPA-DD &</p>

	each parameter, the project IRR would cross the benchmark has not been specified. According to Guidelines On The Assessment Of Investment Analysis Version 05, EB 62, Annex 5, paragraph 20 & 21		included.		is accepted by the validation team CAR-g4.2 is resolved & closed
CAR-g05	Generic CPA DD Section B.4 See CAR-08 for PoA DD above – regarding Figure 2 : Baseline and project boundary & make corrections in Generic CPA DD	B.4	Response No. 1 The diagram has been modified.	B.4	Response No. 1 OK, the specific diagram will be stated at specific CPA-DD level & is accepted by the validation team, as long it is in line with the defined diagram in the PoA-DD CAR-g05 is resolved & closed
CAR-g06	Generic CPA DD Section B.5.1 See CAR-12 (12.1 to 12.4) for PoA DD above & make corrections in Generic CPA DD	B.5.1	Response No. 1 The generic CPA-DD has been corrected.	B.5.1	Response No. 1 OK, the findings raised in CAR-12 have been also addressed in the Generic CPA-DD & accepted by the validation team CAR-g06 is resolved & closed
CAR-g07	Generic CPA DD Section B.5.2 g7.1) See CAR-11 (11.1 to 11.4) for PoA DD above & make corrections in Generic CPA DD	B.5.2	Response No. 1 The generic CPA-DD has been updated accordingly. PP response 2: The description of EF _{composting} has been revised.	B.5.2	Response No. 1 See CAR-11 (Item 11.1) Response No. 2 OK, this is also reflected consistently in Generic CPA-DD CAR-g07 is resolved & closed
	g7.2) Parameter k _i <i>“According to World Weather Information</i>	B.5.1	Response No. 1 Thanks for pointing this out. The	B.5.2	Response No. 1 OK, this has been corrected &

	<i>Service, the mean annual minimum temperature of Sandakan is [XX]°C, and the mean annual precipitation is [XX]mm. [source]“</i> Please clarify if this is appropriate?		generic CPA-DD has been revised to “ <i>the mean temperature of [XX]</i> ”, instead of mentioning Sandakan.		accepted by the validation team CAR-g07 is resolved & closed
--	---	--	---	--	---

CAR-g08	Generic CPA DD Section B.6.1 See CAR-13 (13.1 to 13.5) for PoA DD above & make corrections in Generic CPA DD	B.6.1	<p>Response No. 1 The generic CPA-DD has been updated accordingly.</p> <p>PP response 2: The parameter 'check of aerobic conditions of the composting process' is included in the PoA-DD,</p> <p>PP response 3: Please refer to CAR-13, same footnote has been included in the generic CPA-DD.</p>	B.6.1	<p>Response No. 1 See CAR-13 (Item 13.4)</p> <p>Response No. 2 Yes, this has been included in Generic CPA-DD Section B.6.1 However, please refer to CAR-13 (Item 13.4)</p> <p>Response No. 3 OK, the footnote added is accepted & this is now clarified</p>
CAR-g09	Generic CPA DD Section B.6.1 See CAR-14 for PoA DD above & make corrections in Generic CPA DD	B.6.1	<p>Response No. 1 Emergency procedures are included in the revised PDD.</p> <p>PP response 2: Please refer to CAR-14.</p>	B.6.1	<p>Response No. 1 See CAR-14</p> <p>Response No. 2 See CAR-14</p> <p>Response No. 3 OK, the draft SOP has been revised & updated according to comments as stated in CAR-14</p> <p>CAR-g09 is resolved & closed</p>
CAR-g10	Generic CPA DD Section B.5.2 See CAR-06 for PoA DD above & make corrections in Generic CPA DD	B.5.2	<p>Response No. 1 The leakage assessment is included in the generic CPA-DD.</p>	B.2	<p>Response No. 1 This is now already added in the Generic CPA-DD & will be assessed specifically at Specific CPA DD level</p> <p>CAR-g10 is resolved & closed</p>

CL-g01	Generic CPA DD Section B.3 See CL-11 for PoA DD above & make corrections in Generic CPA DD	B.3	Response No. 1 Post-tax benchmark is used for the investment analysis. PP wishes to confirm that the determination of IRR assessment period will follow the " <i>Guideline on the Assessment of Investment Analysis (Version 05)</i> ", and the technical lifetime has been included in the generic CPA-DD.	B.3	Response No. 1 The post-tax benchmark selected has been defined now in the revised Generic CPA-DD & is accepted by the validation team CL-g01 is resolved & closed
--------	---	-----	---	-----	--

Appendix B

CERTIFICATES OF COMPETENCE

Qualification

Yong, Tau Lan (Nelly) /

Emission Trading

United Nations Framework Convention on Climate Change

Auditor No.:
(AuditorenRegNr)Appointed:
(Zugelassen)☒ jaQualification Level:
(Qualifikationsstufe)

Lead Auditor

External:
(Externer)☐ jaAdd. reviewer:
(Zusätzlicher Prüfer)☐ yesEAC Scopes:
(EAC Branchen)

CDM 01 - Energy industries (renewable - / non-renewable sources)
 CDM 05 - Chemical industry
 CDM 11 - Fugitive emissions from production and consumption of
 halocarbons and sulphur hexafluoride
 CDM 12 - Solvents use
 CDM 13 - Waste handling and disposal

Add. qualification:
(zus. Qualifikation)First Appointment:
(Erstberufung)

10/28/2010

Valid to:
(Gültig bis)

10/27/2013

Remarks:

TA 1.2 - renewable energies
 TA 5.1 / 11.1 / 12.1 - Chemical Industries
 TA 13.1 - Waste handling and disposal

Languages:

English
 malay
 Indonesian
 Mandarin

Experience Exchange

Date

Location

Remarks

Accreditation(s)

Monitoring

Latest Monitoring:
(letzte Beurteilung)Next Monitoring:
(nächste Beurteilung)

Remarks:

[View / Edit Monitoring](#)

History of scope allocation

Date:
Change:
By:
Reason:

Date:
Change:
By:
Reason:

Date: 2010-10-31
Change: EAC CDM, CDM, CDM, CDM added
By: Manfred Brinkmann
Reason: TA 1.2 - renewable energies

History

Created:	10/26/2007 10:43:44 PM	Nelly Yong/MY/TUV
Modified:	04/27/2011 11:52:48 AM	Nelly Yong/MY/TUV
	11/23/2010 03:40:13 PM ZE9	Manfred Brinkmann/Jpn/TUV
	11/16/2010 02:20:46 PM ZE9	Manfred Brinkmann/Jpn/TUV
	11/04/2010 08:57:58 AM ZE9	Manfred Brinkmann/Jpn/TUV
	10/31/2010 09:23:50 PM ZE9	Manfred Brinkmann/Jpn/TUV
	10/31/2010 09:23:41 PM ZE9	Manfred Brinkmann/Jpn/TUV
	10/26/2007 10:44:04 PM	Nelly Yong/MY/TUV

Qualification

Zakaria, Azizan /

Emission Trading

United Nations Framework Convention on Climate Change

Auditor No.:
(AuditorenRegNr)Appointed:
(Zugelassen)☒ jaQualification Level:
(Qualifikationsstufe)

Lead Auditor

External:
(Externer)☐ jaAdd. reviewer:
(Zusätzlicher Prüfer)☐ yesEAC Scopes:
(EAC Branchen)

CDM 05 - Chemical industry
 CDM 11 - Fugitive emissions from production and consumption of
 halocarbons and sulphur hexafluoride
 CDM 12 - Solvents use
 CDM 13 - Waste handling and disposal

Add. qualification:
(zus. Qualifikation)First Appointment:
(Erstberufung)

25/09/2011

Valid to:
(Gültig bis)

24/09/2014

Remarks:

Valid for TA 5.1/11.1/12.1
 TA 13.1

Languages:

Experience Exchange

Date

Location

Remarks

Accreditation(s)

Monitoring

Latest Monitoring:
(letzte Beurteilung)Next Monitoring:
(nächste Beurteilung)

Remarks:

History of scope allocation

Date:
Change:

2012-03-29
 EAC CDM added

Validation Report



By: Praveen Urs
Reason:

Date: 2011-09-26
Change: EAC CDM, CDM, CDM added
By: Manfred Brinkmann
Reason: Valid for TA 5.1/11.1/12.1

History

Created:	24/08/2011 11:42:34 AM	Azizan bin Zakaria/MY/TUV
Modified:	29/03/2012 07:50:57 PM	Praveen Urs/Chn/TUV
	26/09/2011 11:50:36 AM ZE9	Manfred Brinkmann/Jpn/TUV
	24/08/2011 11:42:54 AM	Azizan bin Zakaria/MY/TUV

Qualification

Ng, Siew Theng /

Emission Trading**United Nations Framework Convention on Climate Change**Auditor No.:
(AuditorenRegNr)Appointed:
(Zugelassen)☒ jaQualification Level:
(Qualifikationsstufe)

Auditor

External:
(Externer)☐ jaAdd. reviewer:
(Zusätzlicher Prüfer)☐ yesEAC Scopes:
(EAC Branchen)

CDM 15 - Agriculture

Add. qualification:
(zus. Qualifikation)First Appointment:
(Erstberufung)

11/01/2011

Valid to:
(Gültig bis)

31/10/2014

Remarks:

TA 15.1

Languages:

English
malay
Indonesian**Experience Exchange**

Date

Location

Remarks

Accreditation(s)

MonitoringLatest Monitoring:
(letzte Beurteilung)Next Monitoring:
(nächste Beurteilung)

Remarks:

[View / Edit Monitoring](#)**History of scope allocation**Date: 2012-09-04
Change: EAC CDM added
By: Praveen Urs
Reason:

History

Created:	27/08/2012 04:55:55 PM	Carol Ng/MY/TUV
Modified:	04/09/2012 12:28:26 AM	Praveen Urs/Chr/TUV
	27/08/2012 04:56:06 PM	Carol Ng/MY/TUV

Export to ICMS

Last Export:

Qualification

Muniandy, Kamala Devi /

Emission Trading

United Nations Framework Convention on Climate Change

Auditor No.:
(AuditorenRegNr)

Appointed:
(Zugelassen)

☒ ja

Qualification Level:
(Qualifikationsstufe)

Lead Auditor

External:
(Externer)

☐ ja

Add. reviewer:
(Zusätzlicher Prüfer)

☒ yes

EAC Scopes:
(EAC Branchen)

CDM 05 - Chemical industry
CDM 12 - Solvents use
CDM 13 - Waste handling and disposal
CDM 11 - Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride

Add. qualification:
(zus. Qualifikation)

First Appointment:
(Erstberufung)

09/02/2012

Valid to:
(Gültig bis)

09/01/2015

Remarks:

TA 5.1/11.1/12.1
TA 13.1

Languages:

English
Indonesian
malay
Cantonese
Mandarin

Experience Exchange

Date

Location

Remarks

Accreditation(s)

Monitoring

Latest Monitoring:
(letzte Beurteilung)

Next Monitoring:
(nächste Beurteilung)

Remarks:

History of scope allocation

Validation Report



Date: 2012-10-15
Change: EAC CDM, CDM, CDM, CDM added
By: Praveen Urs
Reason:

History

Created:	09/24/2012 10:51:19 AM ZE8	KamalaDevi Muniandy/Chn/TUV
Modified:	10/15/2012 05:10:44 PM ZE8	Praveen Urs/Chn/TUV
	09/24/2012 10:51:37 AM ZE8	KamalaDevi Muniandy/Chn/TUV

Export to ICMS

Last Export: