



VALIDATION REPORT

BLUE WORLD CARBON SEA PTE LTD

PoA: BWC Sustainable Landfill Gas
Recovery Programme of Activities in
Indonesia

CPA: CPA B11001- Bagendung Landfill Gas
Recovery

REPORT No.
CDM.11.VAL.0208



Date of this issue: 31/12/2012		KBS Ref. No.: CDM.11.VAL.208	
Organisational Unit:		Client:	
Climate Change Division, KBS		Blue World Carbon SEA Pte Ltd	
First PoA DD:		Final PoA DD:	
Version 01, Dated: 06/12/2011		Version 06, Dated: 04/12/2012	
First CPA DD:		Final CPA DD:	
Version 01 dated 06/12/2011		Version 06 dated 04/12/2012	
Summary of validation:			
Blue World Carbon SEA Pte Ltd has commissioned KBS to perform the validation of the proposed CDM programme of activities:			
PoA Title:		BWC Sustainable Landfill Gas Recovery Programme of Activities in Indonesia	
CPA Title:		CPA B11001- Bagendung Landfill Gas Recovery	
Methodology Applied:		ACM0001 Version 12	
Sectoral Scopes:		13	
Validity of methodology/ies (for RfR):		Valid upto 10/05/2012 (Request for Registration is valid until 11 Jan 2013 23:59:59 GMT)	
<p>The scope of the validation is defined as an independent and objective review of the PoA DD, generic CPA DD & specific CPA DD, the PoA's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against the latest version of CDM Validation and Verification Manual, Kyoto Protocol requirements and UNFCCC rules.</p> <p>The report is based on the assessment of the PoA DD and CPA DD undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to desk review, follow up actions (e.g., on site visit, electronic (telephone or e-mail) interviews) and also the review of the applicable approved methodological and relevant tools, guidance and relevant CDM decisions.</p> <p>The review of the PoA and CPA documentation and the subsequent follow-up interviews has provided KBS with sufficient evidence to determine the PoA's fulfilment of all the stated criteria. In our opinion, the PoA meets all applicable UNFCCC requirements for the CDM.</p>			
<input checked="" type="checkbox"/> Will be recommended to the CDM Executive Board with a request for registration			
Validation Status:		<input type="checkbox"/> Findings not closed	
PoA type:	Large scale	<input type="checkbox"/> Draft validation report	
Subject: CDM PoA Validation (VVM Track)		<input checked="" type="checkbox"/> Final validation report	
Validation Team:		Document Distribution	
Team Leader: Abhishek Mahawar Validator: Gagandeep Kakkar Local Expert: Yenni Sembiring Technical Expert (TA 13.1): Ashok Kumar Gautam Financial Expert: Abhishek Mahawar		<input checked="" type="checkbox"/> No Distribution without permission from the Client	
Technical Review Team:	Manager T&C		
Technical Reviewer: Madhuri Nanda Date: 31/12/2012 Technical Expert: Mayank Kumar Jain		Name: Kaviraj Singh Date: 31/12/2012 <input type="checkbox"/> Limited Distribution	
Authorized by:		<input type="checkbox"/> Unrestricted Distribution	
Name: Kaushal Goyal, Managing Director Date: 31/12/2012			
Rev Number:	Date:		



0	12/11/2012	
1	06/12/2012	
2	31/12/2012	

Abbreviations

ACM	Approved Consolidated Methodology
AM	Approved Methodology
BE	Baseline Emissions
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CM	Combined Margin
CER	Certified Emission Reduction
CL	Clarification request
COP	Conference of Parties
CPA	CDM Programme Activity
CME	Coordinating/Managing Entity
DOE	Designated Operational Entity
DNA	Designated National Authority
DPR	Detailed Project Report
DR	Document Review
DD	Design Document
EB	Executive Board
EF	Emission Factor
ERs	Emission Reductions
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	Greenhouse gas(es)
GSC	Global Stakeholder Consultation
HCA	Host Country Approval
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
LSC	Local Stakeholder Consultation
LE	Leakage Emissions
LoA	Letter of Approval/Authorization
ISO	International Organization for Standardization
MOP	Meeting of Parties
MoC	Modalities of Communication
MoV	Means of Verification
MP	Monitoring Plan
OM	Operating Margin
PoA	Programme of Activities
PE	PoA Emissions
PLF	Plant Load Factor
PPA	Power Purchase Agreement
PO	Purchase Order
QA/QC	Quality Assurance/Quality Control
RfR	Request for Registration
SD	Sustainable Development
T&C	Technical & Certification
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation & Verification Manual

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1. Validation Opinion

KBS Certification Services Pvt. Ltd. has been contracted by 'Blue World Carbon SEA Pte Ltd' to perform a validation of the PoA and CPA:

PoA Title: BWC Sustainable Landfill Gas Recovery Programme of Activities in Indonesia

CPA Title: CPA B11001- Bagendung Landfill Gas Recovery

Host Party(ies): Indonesia

The validation was performed in accordance with the UNFCCC criteria for the Clean Development Mechanism, PoAs, Validation and Verification Manual Version 1.2 and host country criteria, as well as criteria given to provide for consistent PoA operations, monitoring and reporting.

The proposed Programme of Activities will result in reductions of greenhouse gas (GHG) emissions that are real, measurable and give long-term benefits to the mitigation of climate change. In our opinion, the PoA meets all relevant UNFCCC, CDM criteria and all relevant host country criteria.

The PoA correctly applies methodology ACM0001 version 12. It is demonstrated that the PoA is not a likely baseline scenario. The emission reductions attributable to the PoA are hence additional to any that would occur in the absence of the programme of activities.

The total emission reductions from the CPA B11001- Bagendung Landfill Gas Recovery are estimated to be 115,910 tCO₂e over a 10-year crediting period during 01/03/2013 to 28/02/2023, averaging 11,591 tCO₂e annually. The emission reduction forecast has been checked and it is deemed likely that the stated amount is achievable given the underlying assumptions do not change.

The PoA will hence be recommended by KBS for request for registration with the UNFCCC.

Authorized Signatory

Name: Kaushal Goyal

Place: Faridabad

Date: 31/12/2012

2. Introduction

2.1 Objective

Blue World Carbon SEA Pte Ltd has commissioned KBS to perform the validation of the PoA: BWC Sustainable Landfill Gas Recovery Programme of Activities in Indonesia with regard to the relevant requirements for Clean Development Mechanism (CDM) PoA activities.

The purpose of validation is to ensure a thorough, independent assessment of proposed CDM PoA activities submitted for registration as a proposed CDM programme of activities against the applicable CDM requirements.

In particular, the PoA's baseline, the monitoring plan (MP) and the PoA's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the PoA design as documented is sound and reasonable and meets the stated requirements and identified criteria. The validation is seen as necessary to provide assurance to stakeholders of the quality of the PoA and its intended generation of certified emission reduction (CER).

UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities and related decisions by the COP/MOP and the CDM Executive Board.

2.2 Scope

The scope of the validation is defined as an independent and objective review of the PoA DD, the PoA's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. KBS has employed a rule-based approach in the validation, focusing on the identification of significant risks for PoA implementation and the generation of CERs.

3. Methodology

3.1 Review of CDM-POA DD and Additional Documentation

The validation is performed primarily as a document review of the publicly available PoA document version 01 dated 06/12/2011 and the intermediate versions upto final version 06 dated 04/12/2012. The document review of the publicly available CPA document version 01 dated 06/12/2011 and the intermediate versions up to final version 06 dated 04/12/2012 (final version) was also undertaken during the validation process. The assessment is performed by a validation team using a validation protocol (PoA & CPA) attached as Annex 1 & 2 respectively. The cross checks between information provided in the PoA/CPA DD and information from sources other than those used, if available, the validation team's sectoral or local expertise and, if necessary, independent background investigations.

3.2 Site Visit

The site visit was undertaken by Dinesh Mane (Previous Team Leader), Shilpy Gupta (Previous validator) and Ashok Kumar Gautam (Technical Expert) and details are mentioned below;

Location:	City of Cilegon, Bagendung, Province of Banten, Indonesia (6.0760 S, 106.0223 E)	
Dates:	09/01/2012 to 12/01/2012	
Key points discussed:	Name of person, interviewed	Designation, Organization
<ul style="list-style-type: none"> Policy, measure, goal and implementation of PoA Eligibility Criteria for Inclusion of a CPA in the PoA Role and responsibilities of CME Competence of CME to evaluate the inclusion of a CPA Operation and Management of PoA Technology/measure employed in specific CPA; Baseline identification and Additionality demonstration of the CPA	Kyle Moyle	PT. ERC Austrindo
<ul style="list-style-type: none"> Emission reductions calculations Monitoring plan	Ywert Visser	Program Manager, BWC
<ul style="list-style-type: none"> Implementation, Operation and Management of specific CPA; Training of personnel Local laws and regulations in Vietnam applicable to the project activity Local Stakeholder Consultation Process	Willem Christiaens	Head of Organization, BWC
<ul style="list-style-type: none"> Policy, measure, goal and implementation of PoA Eligibility Criteria for Inclusion of a CPA in the PoA Role and responsibilities of 	Nicholas Simanjuntak	Project Manager, BWC

CME <ul style="list-style-type: none"> Competence of CME to evaluate the inclusion of a CPA Operation and Management of PoA Technology/measure employed in specific CPA; Baseline identification and Additionality demonstration of the CPA		
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3.3 Major Milestones in validation

Validation Contract	06/12/2011
Publication of Design Documents	15/12/2011
On site validation	09/01/2012 to 12/01/2012
Draft Validation Report	12/11/2012
Final Validation Report	31/12/2012

3.4 Use of the Validation Protocol

The validation protocol used for the assessment is designed in accordance with the latest version of Validation and Verification Manual. It serves the following purposes:

- Reference to available information relating to PoA/CPAs or technologies similar to the proposed programme of activities under validation;
- Review, based on the approved methodology being applied, of the appropriateness of formulae and accuracy of calculations.
- Organises, details and clarifies the requirements the PoA/CPAs is expected to meet; and
- Documents both how a particular requirement has been validated and the result of the validation (reporting).

The validation protocol consists of several tables. The different columns in these tables are described below.

Checklist Question	Ref ID	Means of Verification (MoV)	Validation Assessment	Draft and/or Final Conclusion
The various requirements are linked to checklist questions the PoA should meet.	Lists any references and sources used in the validation process. Full details are provided in the table at the bottom of the checklist.	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 (Y), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CL) is used when the validation team has identified a need for further clarification.

The completed validation protocol for this PoA and CPA is attached as Annex 1 & 2 to this report

3.5 Findings

As an outcome of the validation process, the validation team can raise different types of findings

A Clarification Request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met

Where a non-conformance arises the validator shall raise a **Corrective Action Request (CAR)**. A CAR is issued, where:

- The PoA participants have made mistakes that will influence the ability of the programme of activities to achieve real, measurable additional emission reductions;
- The CDM requirements have not been met;
- There is a risk that emission reductions cannot be monitored or calculated.

A Forward Action Request (FAR) is raised during validation to highlight issues related to PoA implementation that require review during the first verification of the programme of activities. FARs shall not relate to the CDM requirements for registration.

Corrective Action Requests and Clarification Requests are raised in the draft validation protocol and detailed in a separate finding document (Annex 3). In this document, the PoA participant is given the opportunity to “resolve” the outstanding CARs and respond to CLs and FARs.

3.6 Internal Quality Control

Following the completion of the assessment process and a recommendation by the validation team, the validation opinion prepared by Team Leader is independently reviewed by internal Technical Reviewer. TR reviews if all the KBS procedures have been followed and all conclusions are justified in accordance with applicable standards, procedures, guidance and CDM decisions. The TR either is qualified for the technical area within the CDM sectoral scope(s) applicable to programme of activities or is supported by qualified independent technical expert at this stage.

The Technical Reviewer will either accept or reject the recommendation made by the validation team. The findings can be raised at this stage and PP must resolve them within agreed timeline.

The opinion recommended by Technical Reviewer will be confirmed by Manager Technical & Certification and finally authorized by the Managing Director on behalf of KBS as final validation opinion. The Technical Reviewer and Manager T&C maybe be same person.

4. Validation Findings

4.1 Approval

Discussion:

A CDM Program of Activities shall be approved by the Parties involved. In accordance with Annex 48 to the report of 50th meeting of the CDM-EB, KBS confirms that it has entered into a contractual agreement with Blue World Carbon SEA Pte Ltd, which is one of the project participants, for performing the CDM validation of proposed PoA. The PoA DD^{/1.2/} indicates that the project activity is a bilateral CDM PoA.

The host party of the project activity is Indonesia. Indonesia has ratified the Kyoto Protocol on 28th July 2004. The Designated National Authority (DNA) is the National Committee on Clean Development Mechanism^{/6.1/}.

The Annex 1 Party participating in the project activity is Netherlands. Netherlands has ratified the Kyoto Protocol on 31st May 2002. Ministry of Infrastructure and the Environment is the DNA of Netherlands^{/6.2/}.

The validation team confirms that the project participants are listed in tabular form in section A.3 of the PoA DD and this information is consistent with the contact details provided in Annex 1 of the PoA DD. The below table summarizes the project participants and parties involved.

Project participants	PT Blue World Indonesia	Blue World Carbon SEA Pte Ltd
Parties involved	Indonesia	Netherlands
Approval	Yes	Yes
LoA received	Yes	Yes
Date of LoA	14 May 2012	17 July 2012
Reference Number	B081/KNMPB/05/2012	2012ANL642
LoA issued by	National Committee on Clean Development Mechanism	Ministry of Infrastructure and the Environment
LoA received from	CME	CME
Validation of authenticity	Validation team does not doubt on the authenticity of LoA. So no further cross checks has been performed.	Validation team does not doubt on the authenticity of LoA. So no further cross checks has been performed.

Findings:

CAR # 19 was raised and closed successfully. Refer Annex 3 of this report where it is discussed in detail

Opinion:

The validation team confirms following;

- The LoAs were received as referenced above;
- The LoAs were received from the PP directly;
- The provided LoAs are in accordance with paragraphs 45 to 48 of VVM V1.2.
- The provided LoAs are unconditional with respect to sections (a) to (d) of paragraph 45 of VVM version 01.2.

4.2 Participation

Discussion:

The host country for the PoA is Indonesia and has ratified the Kyoto Protocol on 3rd December 2004. This has been confirmed from the link (http://unfccc.int/parties_and_observers/parties/items/2352.php).

The Annex 1 Party participating in the project activity is Netherlands. Netherlands has ratified the Kyoto Protocol 31st May 2002. Ministry of Infrastructure and the Environment, is the DNA of Netherlands. This has been confirmed from the link (http://unfccc.int/parties_and_observers/parties/items/2352.php)

The project participants listed in the section A.3 of the PoA DD are:

1) PT Blue World Indonesia 2) Blue World Carbon SEA Pte Ltd.

Opinion:

The validation team confirms that

- The participation of project participants has been approved/authorized by the DNAs of relevant Parties
- The participation has been confirmed in the LoAs^{/6/}itself, which contains the name of the respective PP to which it is issued.
- The authenticity of the LoAs is confirmed as described in section 4.1 above.
- The information is consistent in the project documentation (consistency within the PoA DD, LoA & MoC)

4.3 Design Document templates/forms

Discussion:

The PoA DD^{/1.2/} and Specific CPA DD^{/2.2/} applies the Programme of activities Design Document Form and Guidelines (CDM-PoA -DD), version 01^{/9/} and CDM Programme activity Design Document Form and Guidelines (CDM-CPA-DD), version 1^{/10/} respectively, which are the valid forms available on UNFCCC/CDM website <http://cdm.unfccc.int/Reference/Guidclarif/index.html#pdd>

Findings:

CAR 01 and CAR 02 were raised and successfully closed. Please Refer Annex 3.

Opinion:

Based on discussion above, the validation team is of opinion that the PoA DD and CPA DD is being prepared in accordance with the valid template and guidance from the CDM Executive Board available on the UNFCCC CDM website and complies with para 55 of VVM 1.2.

Key revisions between the Webhosted PoA DD against the final version of PoA DD	
POA DD Section no.	Brief description of the changes
Section A.2	Inclusion of sustainable indicators as defined by the host country
Section A.4.2	Revision in eligibility criteria to make it inline with EB65 Annex 3
Section E.5.1	Common practice analysis
Section E.7.2	Authority and responsibility of the coordinating/managing entity (CME)

Key revisions between the Webhosted CPA DD against the final version of CPA DD	
POA DD Section no.	Brief description of the changes
Section A.2	Additional information on technology used and equipment to be installed included. No of Gas engines for Power generation changed from 2 to 1.
Section A.4.4	Annual average of the estimated reductions over the crediting period changed from 15,511 tCO ₂ e to 11,591 tCO ₂ e
Section B.2	Explanation along with appropriate evidences for justification of eligibility of CPA to be included in the Registered PoA is included in section B.2 of the CPA DD
Section B.3	Justification on chosen parameter for Sensitivity analysis is included
Section B.5.1	CPA specific values are included in section B.5.1
Section B.5.2	Values along with their sources used for determination of methane mass flow rate in the residual gas on a dry basis and project specific determination of the hourly flare efficiency is provided in section B.5.2
Section E.7.2	Emergency preparedness plan, role and responsibility for project implementation, operation and maintenance, collection, storage and monitoring of the data in included in section E.7.2

4.4 PoA and CPA Description

Discussion on PoA:

The process undertaken to validate the accuracy and completeness of project description was carried out by means of the desk review of webhosted PoA DD, CPA DD, interviews of the personnel involved in implementation of the PoA and associated CPA being submitted to the validation team. The validation team also carried out the physical site inspection of the associated CPA on 09th to 12th January 2012 and also reviewed the supporting documents related to the PoA DD and CPA DD during validation site visit and desk review.

The PoA, titled as “BWC Sustainable Landfill Gas Recovery Programme of Activities in Indonesia” has been developed by the PT Blue World Indonesia. The goal of this PoA is to intensify investment in the MSW management sector by promoting sustainable landfill gas recovery practices in Indonesia for existing landfills that fall within the boundaries of the programme of activities. The PoA is a voluntary action being coordinated and managed by the Coordinating and Managing Entity (CME) named PT Blue World Indonesia (hereinafter referred to as BWC). The project boundary of the proposed PoA has been considered as entire host country of Indonesia (host country). This PoA will include:

- (i) Landfill gas capture and flaring projects
- (ii) Landfill gas capture and utilization projects

Thus, the CPAs under the proposed PoA will lead to the emission reductions by capturing of LFG, flaring and/or use for electricity production that would have otherwise been liberated in the atmosphere. A typical CPA included in this PoA contribute to improving health conditions and reducing the environmental impact of the landfill site by incinerating landfill gas, which contains local air pollutants and odours.

Discussion on CPA:

The specific CPA “CPA B11001- Bagendung Landfill Gas Recovery” involves development of a landfill recovery project within the city of Cilegon landfill, Bagendung district and province of Banten. The geographical coordinates of the landfill site were verified by the assessment team from GPS device and found to be 6.0760 S, 106.0223 E which consistent with the CPA DD. The project activity will involve

installation of a LFG collection system and an enclosed LFG flaring facility which will destroy the methane gas that is being generated within the City of Cilegon landfill, Bagendung in the first stage. In the second stage, the project will utilize collected LFG for the generation of electricity (Gas engine of 370 KW ^{/28/}) that will be supplied to the JAMALI electricity grid of Indonesia. PT ERC Austrindo is the CPA implementer. The technical specifications of the proposed project activity are verified by the assessment team from the Feasibility Study Report ^{/23/} prepared by PT ERC Austrindo and the interviews during site visit of the CPA and are found to be consistently reported in the CPA DD.

Findings:

CAR 03 and CL 04 were raised and closed successfully. Please refer Annex 3.

Opinion:

Assessment team confirms that description of the project activity in the PoA DD sufficiently incorporates all relevant elements accurately and transparently. The process undertaken to validate the accuracy and completeness of project description was carried out by means of the desk review of webhosted PoA DD, CPA DD, interviews of the personnel involved in implementation of the PoA and associated CPA being submitted to the validation team. The validation team also carried out the physical site inspection of the associated CPA on 09th to 12th January 2012 and also reviewed the supporting documents related to the PoA DD and CPA DD during validation site visit and desk review.

4.5 Baseline and monitoring methodology

4.5.1 General requirement

Discussion:

The validation team confirms that selected baseline and monitoring methodology is approved methodology and PP has correctly used it, ACM0001, version 12 ^{/11/}, titled "Flaring or use of landfill gas". In addition to that valid version of following tools is also used:

- "Combined tool to identify the baseline scenario and demonstrate additionality"; Version 4.0.0
- "Tool to calculate baseline, project and/or leakage emissions from electricity consumption" Version 01;
- "Methodological tool "Emissions from solid waste disposal sites"; Version 6.0.1
- "Tool to calculate the emission factor for an electricity system" Version 02.2.1

Opinion:

Thus the validation team considers that the project participant correctly applied the approved methodology ACM0001, version 12 and applicable version of tools for the project activity thereby satisfying paragraphs 71 and 76 of VVM ^{/8/} 1.2. The applicability of methodology is discussed in detail in the below section.

4.5.2 Applicability of selected methodology to the programme of activities

Discussion:

The steps taken to assess the relevant information contained in the PoA DD against each applicability condition are described below. The CME has applied the Approved Consolidated Methodology ACM0001 Version 12 for the proposed PoA. The validation team assessed each of the applicability condition of the methodology ACM0001 Version 12 as discussed below:

Applicability condition of the methodology	Validation team's analysis of each applicability condition for the PoA
(a) Install a new LFG capture system in a new or existing SWDS	From eligibility criteria of CPA inclusion and interview during site visit it has been confirmed that each CPA will install a new LFG capture system in an existing SWDS. Therefore, this

	condition is fulfilled.
<p>(b) Make an investment into an existing LFG capture system to increase the recovery rate or change the use of the captured LFG, provided that:</p> <ul style="list-style-type: none"> (i) The captured LFG was only vented or flared and not used prior to the implementation of the project activity; and (ii) In the case of an existing active LFG capture system for which the amount of LFG cannot be collected separately from the project system after the implementation of the project activity and its efficiency is not impacted on by the project system: historical data on the amount of LFG capture and flared is available. 	<p>Not applicable as each CPA implementer will make investment into a new LFG capture system, not an existing one. This will be checked during validation site visit for each CPA that there is no existing LFG capture system.</p> <p>This was also checked during the site visit of CPA "B11001" and validation team confirmed that there was no existing system for recovery of LFG and it was being emitted in the atmosphere.</p>
<p>(c) Flare the LFG and/or use the captured LFG in any (combination) of the following ways:</p> <ul style="list-style-type: none"> (i) Generating electricity; (ii) Generating heat in a boiler, air heater or kiln (brick firing only); and/or (iii) Supplying the LFG to consumers through a natural gas distribution network. 	<p>As per eligibility criteria CPA inclusion, CPAs under this PoA will involve flaring and/or use of LFG for electricity generation. Therefore, this condition is fulfilled.</p> <p>For specific CPA 'B11001' it is checked from feasibility study report^{/23/} and interview during site visit that the captured LFG will be used for Generating electricity.</p>
<p>(d) Do not reduce the amount of organic waste that would be recycled in the absence of the project activity.</p>	<p>CPAs do not modify the waste collection/recycling patterns/rules upstream, as they simply act downstream on the landfills. So the amount of recycled organic waste, if any, is not reduced compared to what would be done in the absence of each CPA. Therefore, this condition is fulfilled. For specific CPA "B11001" it has been checked during site visit that waste collection and disposal is in the scope of Municipality Corporation and CPA implementer is responsible for only LFG capturing and there is no waste recycling facility onsite.</p>
<p>ACM0001 is only applicable if the application of the procedure to identify the baseline scenario confirms that the most plausible baseline scenario is:</p>	
<p>(a) Partial or total release of the LFG from the SWDS</p>	<p>It has been observed during site visit that there is no arrangement of flaring and LFG from the SWDS is totally released into the atmosphere for CPA "B11001". Only total release of LFG to atmosphere is eligible under this PoA. Therefore, this condition is fulfilled.</p>
<p>(b) In the case that the LFG is used in the project activity for generating electricity and/or generating heat in a boiler, air heat or kiln;</p>	<p>The LFG would be used in all CPAs only for generating electricity and/or flaring. The net electricity generated will be exported to grid. In absence of the CPA, the equivalent electricity</p>

<p>(i) For electricity generation: that electricity would be generated in the grid or in captive fossil fuel fired power plants; and/or</p> <p>(ii) For heat generation: that heat would be generated using fossil fuels in on-site equipment.</p>	<p>would have been generated in the grid. There is no heat generation component in the eligible CPAs. This will be checked using the feasibility report document.</p> <p>For the specific CPA "B11001", this has been checked from the feasibility report that there will be no heat generation.</p>
ACM0001 is not applicable:	
<p>(a) In combination with other approved methodologies. For instance.</p> <p>ACM0001 cannot be used to claim emission reductions for the displacement of fossil fuels in a kiln, where that purpose of the CDM project activity is to implement energy efficiency measures at the kiln.</p>	<p>Not applicable. Each CPA applies the methodology ACM0001 without combining it with other approved methodologies. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA.</p>
<p>(b) If the management of the SWDS in the project activity is deliberately changed in order to increase methane generation compared to the situation prior to the implementation of the project activity (e.g. other to meet a technical or regulator requirement). For example, this may apply to the addition of liquids to a SWDS, pre- treating waste to seed it with bacteria for the purpose of increasing the anaerobic degradation environment of the SWDS or changing the shape of the SWDS to increase that methane Correction Factor.</p>	<p>The management of the SWDS in each CPA shall not deliberately be changed before and after implementation of each CPA and this shall be confirmed by review of the design documentation and during the site visit of the validation team at time of inclusion of the CPA.</p> <p>For specific CPA "B11001" it has been confirmed that the management of SWDS is under Municipality Corporation and project proponent is only responsible for LFG capturing system. Hence CPA implementer has no role in the management of SWDS.</p>

Findings:

CAR# 06 was raised and closed successfully. Refer Annex 3 for detail.

Opinion:

Based on the above-specified assessment, the validation team confirms that applied methodology ACM0001 version 12 is applicable to the PoA and CPAs to be included under the PoA. It is further confirmed by the validation team that eligibility criteria defined by the CME for the inclusion of the CPAs under the PoA sufficiently covers the applicability of the methodology ACM0001 version 12.

In addition the applied methodology ACM0001 version 12^{11/}, the validation team confirms that CME has correctly applied the "Tool to calculate the emission factor for an electricity system" Version 2.2.1, "Methodological tool "Emissions from solid waste disposal sites"; Version 6.0.1 & "Tool to calculate baseline, project and/or leakage emissions from electricity consumption" Version 01. Thus, the DOE hereby confirms that the selected baseline and monitoring methodology ACM0001 version 12 and Tools are approved by the CDM Executive Board, and applicable to the PoA, which complies with all relevant applicability conditions therein.

The validation team confirms that in accordance with Para 77 of Validation and Verification Manual version 1.2, as a result of the implementation of the proposed CDM PoA, project emissions occurring during the

operation of the proposed CPAs (for specific cases of hybrid plants) based on consumption of electricity from grid have also been addressed by the CME and the monitoring and accounting procedures for electricity consumption have also been provided. The CME has incorporated the details of the project emission calculation approach from the electricity consumption. Hence, the validation team confirms that potential greenhouse gas emissions occurring within the proposed PoA boundary as a result of the implementation of the CPAs which are expected to contribute more than 1% of the overall expected average annual emissions reductions, have been considered by the CME. The details of the same have been explained under section 4.5.5 of the validation report.

4.5.3 PoA and CPA boundary

Discussion:

The political boundary of Indonesia is chosen as the country/ geographical boundary of the PoA. This is also confirmed from the LoA^{6/} that CME is eligible to include project in Indonesia (Host country). The CPAs that will be included under the PoA will be within the defined geographical location of the PoA area and follow applicable national and / or sectoral policies and regulations.

As per ACM0001, The project boundary of the project activity shall include the site where the LFG is captured and, as applicable.

- Sites where the LFG is flared or used (e.g. flare, power plant);
- Captive power plant(s) or power generation sources connected to the grid, which are supplying electricity to the project activity.
- Captive power plant(s) or power generation sources connected to the grid, which are supplying electricity in the baseline that is displaced by electricity generated by captured LFG in the project activity.

Therefore, in line with the ACM0001, PP has identified the project boundary as the site of the project activity where the gas is captured and destroyed/used and power generation sources connected to the grid, which are supplying electricity in the baseline that is displaced by electricity generated by captured LFG in the project activity. The geographical coordinates of CPA has been checked and it is confirmed that proposed CPA is located within the geographical boundaries of Indonesia. Same has been confirmed during the site visit as well. The CPA boundary includes landfill, LFG production, collection facility, LFG flaring and electricity generation facility and power generation facility supplying power to grid in baseline which are displaced by the project activity. Therefore, it is concluded that the project boundary in CPA DD is in line with applied methodology and applicable PoA eligibility condition.

Opinion:

The validation team considers the criteria for project boundary appropriate for the PoA scale activity. The validation team confirms that, in accordance with Para 78 of Validation and Verification Manual version 1.2, identified boundary and the selected sources and gases are justified for the project activity. The validation of the project activity did not reveal other greenhouse gas emissions occurring within the proposed CDM project activity boundary as a result of the implementation of the proposed project activity which are expected to contribute more than 1% of the overall expected average annual emission reduction, which are not addressed by ACM0001 (version 12.0.)

4.5.4 Baseline identification

Discussion:

The applied methodology ACM0001 requires the additionality of the CPA to be demonstrated as per the latest valid version of the "Combined Tool to identify the baseline scenario and demonstrate additionality". The proposed PoA will include project activities which aim at landfill gas recovery and its subsequent destruction/utilization for existing landfills. The eligible project activities under the PoA are classified in 2 types:

- 1) Technology Scenario 1 – Landfill Gas Capture and flaring

2) Technology Scenario 2 - Landfill gas capture and utilization for electricity generation

The alternatives for the treatment of landfill gas in the absence of a typical CPA implemented under technology scenario 1 will include:

LFG1.	The project activity implemented without being registered as a CPA (i.e. capture and flaring or use of LFG);
LFG2.	Atmospheric release of the LFG

The baseline alternative scenarios for technology scenario 2 will be identified with the combination of alternative scenario for LFG (LFG 1 and LFG 2) and the alternative scenario for electricity generation in absence of the project activity. Therefore, in addition to the alternative baseline scenarios identified for the treatment of LFG in technology scenario 1, the following alternatives were identified for power generation in absence of the project activity implemented under technology scenario 2:

Scenario	Description
E1	Power generated from landfill gas undertaken without being registered as CDM project activity;
E2	Existing or construction of a new on-site or off-site renewable based captive power plant;
E3	Existing and/or new grid-connected power plants.

It was validated by the assessment team that all real and credible scenarios have been identified as alternatives to the project activity.

As per the identified baseline alternatives in the PoA DD, the baseline for the specific CPA is identified as:

LFG 2 – Atmospheric Release of the LFG

E3 – Existing or/new Grid Connected Power Plants

The detailed validation process of baseline determination is discussed along with validation of additionality of the project activity in section 4.6 below.

Findings:

CAR 11 was raised and closed successfully. Please refer Annex 3 for details.

Opinion:

The national/sectoral regulations relevant to project activity has been considered, which establishes that no existing regulation impairs the baseline scenario identified in PoA DD.

The approved baseline methodology has been correctly applied and the baseline scenario has been identified in line with the requirement of applied version of the methodology ACM0001 (version 12) and the identified baseline scenario most reasonably represents what would occur in the absence of the proposed CDM project activity.

The validation team confirms that all the assumption and data used by the project participants are listed in the PoA DD and/or supporting documents. All documentation relevant for establishing the baseline scenario are correctly quoted and interpreted in the PoA DD. Assumptions and data used in the identification of the baseline scenario are appropriately supported by relevant evidences and can be deemed reasonable. Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA DD.

The validation team is with opinion that the baseline determination is presented in PoA DD is transparent and reasonable and complies with paragraphs 81 and 82 of VVM version 1.2^{/25/}.

4.5.5 Algorithms and/or formulae used to determine emission reductions

Discussion:

The steps taken to assess the requirement outlined in paragraph 89 of the VVM are described below:

The PoA DD has used the algorithms and formulae in accordance with the methodology applied viz. ACM0001 Version 12 and the following tools

1. Tool to calculate baseline, project and/or leakage emissions from electricity consumption, Version 01.
2. Methodological tool "Emissions from solid waste disposal sites, Version 6.0.1
3. Tool to calculate the emission factor for an electricity system, Version 02.2.1 (valid till 23/07/2013)
4. Tool to determine project emissions from flaring gases containing methane, version 01 (valid till 20/03/2013)
5. Tool to determine the mass flow of a greenhouse gas in a gaseous stream, version 2.0.0

The assessment team confirms that steps taken and the equations and parameters applied in the PoA DD to calculate PoA emissions, baseline emissions, leakage and emission reductions comply with the requirements of the applied baseline methodology ACM0001 version 12.0.0 and applicable tools to determine baseline and project emissions.

Baseline Emissions

In accordance with ACM0001 (Version 12.0.0), the project where the baseline scenario is the total atmospheric release of the landfill gas will be eligible to be a part of this PoA. This condition is listed as one of the inclusion criteria for new CPA.

In the CPA-DD, the baseline emissions are calculated taking into account the amount of methane generated from the landfill, which are determined as per the Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site (Version 6.0.1), and the displacement of electricity due to project activity which would have generated in the connected grid.

Baseline emissions of methane from the SWDS

The emissions due to the methane released into the atmosphere in the baseline scenario are calculated in accordance with the tool "Emissions from solid waste disposal sites" version 6.0.1

The emissions from methane release is calculated by ex post monitoring of the amount of methane in the LFG which is destroyed and the amount of methane in the LFG which is used for electricity generation. The assessment team confirms that the equations used and the associated calculations are accurately and transparently demonstrated in the CPA-DD and associated emission reduction spreadsheet.

During the crediting period, LFG that is destroyed or utilized ($F_{CH_4,PJ,y}$) is determined as the sum of the quantities of methane flared and used in power plant(s), as follows:

$$F_{CH_4,PJ,y} = F_{CH_4,flared,y} + F_{CH_4,EL,y} + F_{CH_4,HG,y} + F_{CH_4,NG,y}$$

Where:

$F_{CH_4,PJ,y}$ = Amount of methane in the LFG which is flared and/or used in the project activity in year y (t CH₄/yr)

$F_{CH_4,flared,y}$ = Amount of methane in the LFG which is destroyed by flaring in year y (t CH₄/yr)

$F_{CH_4,EL,y}$ = Amount of methane in the LFG which is used for electricity generation in year y (t CH₄/yr)

$F_{CH_4,HG,y}$ = Amount of methane in the LFG which is used for heat generation in year y (t CH₄/yr)

$F_{CH_4,NG,y}$ = Amount of methane in the LFG which is sent to the natural gas distribution network in

year y (t CH₄/yr)

$F_{CH_4,HG,y}$ and $F_{CH_4,NG,y}$ will not be considered in ex-post determination of $F_{CH_4,PJ,y}$ since the PoA does not include project activities where heat generation and/or use of LFG into natural gas distribution network is planned or practised.

$F_{CH_4,EL,y}$ is determined using the “Tool to determine the mass flow of a greenhouse gas in a gaseous stream”. It is confirmed by the assessment team that the calculations and monitoring procedures were correctly performed in accordance with the applied tool.

Baseline emissions associated with electricity generation ($BE_{EC,y}$)

The baseline emissions associated with electricity generation in year y ($BE_{EC,y}$) are calculated using the “Tool to calculate baseline, project and/or leakage emissions from electricity consumption”. The assessment team confirms that the equations used and the associated calculations are in accordance with the referred tool and are accurately and transparently demonstrated in the CPA-DD and associated emission reduction spreadsheet.

Project emissions

Project emissions may occur due to consumption of electricity from the grid or due to the usage of fossil fuels (for example, in order to operate electricity generators due to grid power outages). These are accounted as project emissions by using the “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion” (Version 02).

In case of flaring of LFG the project emissions related to flaring will be determined ex-post using the Tool to determine project emissions from flaring gases containing methane (Version 01).

Leakage

With reference to the methodology ACM0001 (Version 12.0.0) no leakage effects need to be accounted for each of the CPAs.

The detailed algorithms and/or formulae used in the calculations of baseline emissions and emission reductions are explained in section E.6.1 of the PoA DD. The equations including the fixed parametric values are used for calculation of CPA emission reduction has been detailed under section E.6.2 of the PoA DD being submitted for the registration. The assessment team confirmed that the ex-ante parameters, equations and calculations are performed in accordance with the referred tools.

Findings:

CAR 12 and CAR 13 were raised and closed successfully. Please refer to Annex 3 for details.

Opinion:

All assumptions and data used by the project participants are listed in the POA DD AND CPA DD and/or supporting documents, including their references and sources. All documentation used by the project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the POA DD AND CPA DD. All values used in the POA DD AND CPA DD are considered reasonable in the context of the proposed CDM project activity. The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions. All estimates of the baseline, project and leakage emissions can be replicated using the data and parameter values provided in the POA DD AND CPA DD.

The validation team is with opinion that the POA-DD and CPA-DD has correctly applied the formula to calculate the emission reduction and complies with paragraphs 67 of VVM version 1.2.

4.6 Additionality of PoA

The PoA aims to promote gas recovery system at landfill sites in Indonesia. There are currently no laws or regulations in place in Indonesia that mandate landfill sites to implement gas recovery projects. This was checked by the validation team from the Act No. 18 of the Republic of Indonesia published in the year 2008^{/35/} which is the latest available regulation on Ministry of environment website (<http://www.menlh.go.id>)

According to paragraph 07, Annex 3, EB 65 “Standard for Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies for Programme of Activities”^{/21/}, additionality shall be demonstrated by establishing that in the absence of the CDM, none of the implemented CPAs would occur. The applied methodology ACM0001 requires the additionality of the project to be demonstrated as per the latest valid version of the “Combined Tool to identify the baseline scenario and demonstrate additionality”^{/12/} and the “Guidelines on the Assessment of Investment Analysis”^{/20/}.

As per the PoA-DD, the additionality of a CPA will be demonstrated in the CPA-DD. The PoA-DD includes assessment of additionality by the CME in the eligibility criteria. Each CPA-DD is required to demonstrate additionality of the CPA in accordance with the “Combined Tool to identify the baseline and demonstrate additionality”. The validation team confirmed that the PoA-DD includes adequate guidelines to assess the additionality of each CPA.

Additionality of a typical CPA

The investment analysis for a typical CPA may vary depending on the technology/measure employed by the CPA implementer. As per the PoA DD, the investment analysis for a CPA implemented under technology scenario 1 will be performed using simple cost analysis. This is in compliance with the “Guidelines on the Assessment of Investment Analysis” since the CPA implemented under technology scenario 1 will not generate any other economic benefit apart from CDM revenues. For technology scenario 2, the CPAs where electricity generation system will also be implemented, the investment analysis will be performed using benchmark analysis. This is in compliance with the “Guidelines on the Assessment of Investment Analysis” since the baseline alternative to the CPA represents a scenario where no investment would be required by the project implementer.

The specific CPA B11001 has used benchmark analysis approach to perform investment analysis. It is validated by the assessment team that CPA B11001 has been appropriately assessed for additionality by the CME on the same eligibility criteria and was found to be additional.

4.6.1 Start date of PoA and CPA

Discussion:

In accordance with the Para 3 of Annex 26 of EB 60, “Guidelines for the demonstration and assessment of prior consideration of the CDM” is not applicable to the PoA considering the fact that no component of the programme will commence prior to the start date of validation. However, the CME has ensured through the eligibility criteria of the inclusion of the CPAs under the proposed PoA that no project activity shall be included as a CPA in the proposed PoA having start date prior to the date of publication of the PoA for global stakeholder comments i.e. 15/12/2011. Thus, in light of the above-specified clarification from the CDM Executive Board and the above-specified eligibility condition included by the CME, no further analysis on prior consideration is required under “Guidelines for the demonstration and assessment of prior consideration of the CDM”.

The start date of Specific CPA “B11001” is considered as 12/02/2012 the date of signing Memorandum of understanding^{/34/} between PT. ERC Austrindo and PT. Energy provider Indonesia for project implementation. It has been confirmed that no real action has been taken by CPA implementer before the start date of PoA. Therefore, the chosen starting date of project (12/02/2012) has been found appropriate.

4.6.2 Additionality of Specific CPA

Discussion:

The applied methodology ACM0001 version 12 requires the additionality of the CPA to be demonstrated as per the latest valid version of the “Combined Tool to identify the baseline scenario and demonstrate additionality”^{12/} and the “Guidelines on the Assessment of Investment Analysis”^{20/}. The step-wise assessment of the CPA B11001 as per the guidelines of “Combined Tool to identify the baseline scenario and demonstrate additionality” is as follows:

Sub-step 1a: Define alternatives to the project activity:

According to the “Combined tool to identify the baseline scenario and demonstrate additionality – Version 4.0.0” alternatives must be realistic and credible alternative(s) available to the project participants that provide outputs or services comparable with the proposed CDM project activity.

Baseline Alternatives for Technology Scenario 1:

The alternatives for the treatment of landfill gas in the absence of a typical CPA implemented under technology scenario 1 will include:

LFG1.	The project activity implemented without being registered as a CPA (i.e. capture and flaring or use of LFG);
LFG2.	Atmospheric release of the LFG

The other alternatives provided in the applied methodology are not discussed because the projects with partial recovery of LFG are excluded from the PoA. Hence, alternatives LFG 3, LFG 4 and LFG 5 of the methodology are excluded from the analysis. The assessment team confirms that the identified alternatives are real and plausible

Baseline Alternatives for Technology Scenario 2:

The baseline alternative scenarios for technology scenario 2 will be identified with the combination of alternative scenario for LFG (LFG 1 and LFG 2) and the alternative scenario for electricity generation in absence of the project activity. Therefore, in addition to the alternative baseline scenarios identified for the treatment of LFG in technology scenario 1, the following alternatives were identified for power generation in absence of the project activity implemented under technology scenario 2:

Scenario	Description
E1	Power generated from landfill gas undertaken without being registered as CDM project activity;
E2	Existing or construction of a new on-site or off-site renewable based captive power plant;
E3	Existing and/or new grid-connected power plants.

It was validated by the assessment team that all real and credible scenarios have been identified as alternatives to the project activity.

Discussion on Alternatives for CPA B11001

Alternative LFG 1

This alternative is the implementation of a typical CPA without CDM revenue. This is a credible alternative.

Alternative LFG 2

This alternative is release of LFG to the atmosphere without recovery or flaring. This scenario corresponds to the continuation of the current practice observed on the landfill site of CPA B11001. This was checked during the site visit that there was no gas recovery system installed on the landfill site. It was also observed on site that there were no provisions for flaring of LFG and the gas was being vented into the atmosphere directly. Hence, it has been validated by the assessment team that this alternative is real and credible and faces no barrier in implementation.

Alternative E1

This alternative is the implementation of a typical CPA without CDM revenue. This is a credible alternative.

Alternative E2

This alternative is included to represent the scenario where an existing or new identified renewable or fossil fuel based power plant is determined for the generation of electricity at the landfill site. If existing/ new renewable source based power plants were used to provide the same quantity of electricity provided by the CPA, these would need to be connected to the grid, and therefore, their baseline emissions would be reflected in the grid electricity emissions. Therefore, it is considered same as the alternative E3, and hence is excluded from the analysis.

Alternative E3

This scenario corresponds to the consumption of grid electricity for captive consumption on the landfill site. This was checked during the site visit that there was no existing power generation system installed on the landfill site and the captive power consumption was being met through grid import. Hence, it has been validated by the assessment team that this alternative is real and credible and faces no barrier in implementation.

Sub-step 1b: Consistency with mandatory laws and regulations:

The following regulations and guidelines were checked by the assessment team that are relevant to Landfill sites and waste handling:

- The National Energy Policy 2003-2020: KEN (March 2004)
- A Policy on Renewable Energy Development and Energy Conservation (Green Energy Development) (December 2003)
- The Environmental Management Law (1997 Law No. 23)
- The Ordinance on Environmental Impact Assessment (2006 Law No. 11)
- The Ordinance on Water Pollution Prevention and Water Quality Management (2001 Law No. 82)
- The Ordinance on Air Pollution Prevention (1999 Law No. 41)
- The Waste Management Law (2008 Law No. 18)

By assessing the above documents, it was validated by the assessment team that currently there is no legislation in Indonesia that mandates the collection of LFG or restricts the direct release of LFG in the atmosphere. Thus, alternatives LFG1 and LFG2 comply with mandatory laws and regulations.

Since none of the power generation scenario is restricted by the legislation of Indonesia, alternative E1 and E3 are in compliance with mandatory laws and regulations.

Outcome of Sub-step 1b): the alternatives to be taken into consideration are LFG1, LFG2, E1 and E3.

Therefore, the following combinations of alternative scenarios are considered plausible baseline alternatives:

Baseline Alternative 1: LFG1+ E1

Baseline Alternative 2: LFG2 + E3

Step 2: Barrier Analysis

There are no realistic and credible barriers (other than insufficient financial returns) that prevent the alternative scenarios to occur (including the proposed project activity undertaken without being registered as a CDM project activity).

None of the scenarios is eliminated as there are no realistic and credible barriers (other than insufficient financial returns) that prevent the alternative scenarios to occur.

Outcome of Step 2: the alternatives to be taken into considerations for the CPA B11001 are LFG1+E1, LFG2 + E3.

Step 3: Investment Analysis

The baseline alternative 2 (LFG2 + E3) does not require any investment nor does it generate any financial benefit. The CPA implementer does not have alternative and comparable investment choices. Therefore, the benchmark analysis (Option III) is more appropriate than investment comparison analysis (Option II) for assessing the financial attractiveness of the CPA. Hence, the benchmark analysis (Option III) is selected. Net Present Value (NPV) is used as the financial indicator for performing investment analysis which is in accordance with the “Guidelines on the assessment of investment analysis” version 5.

NPV is widely used in capital budgeting to analyze the profitability of an investment or project. NPV can be described as the “difference amount” between the sums of discounted cash inflows and cash outflows. If the NPV of a prospective project is positive, it represents a positive net cash flow in terms of present value of all future cash flows generated from the project. However, if NPV is negative, it represents a negative new cash flow. NPV is a type of benchmark analysis where the discount rate or hurdle rate behaves as the benchmark for the overall cash flows of the project.

Investment Analysis of the CPA

The supporting documents for the parameters used in the NPV calculation have been reviewed and relevant background information such as publicly available sources are taken into account by the assessment team. The calculation of the financial indicator (Project NPV) reflects the project’s financial infeasibility since it is lower than 0.

Moreover, the sensitivity analysis revealed that the variation of key financial parameters substantiate project’s additionality as the NPV does not become positive in any reasonable variations.

Investment Cost

The total investment cost for the project activity was estimated to be 942,000 AUD (Australian Dollar). The same was validated from the Feasibility Study prepared by ERC. The break-up of total project cost is tabulated below:

Cost Components	Amount (AUD)
Engineering design	53,000
Construction materials	24,000
Waste removal and wall construction	2,000
Environmental controls	6,000
Lining / Cover materials	652,000
Flaring Plant	75,000

Generator gas supply	130,000
Total Investment Cost	942,000

Since the purchase orders were not released by the time of completion of validation, the total investment cost could not be cross checked with the actual cost incurred. Therefore, the investment cost was cross-checked with other CDM registered projects (below Table – “Investment and Operational Cost Comparison”). The analysis shows that there is high variability in the parameter “investment cost per MW” in Indonesia. The investment cost for small projects is very high while high economies of scale are achieved at higher capacities. The assessment team confirmed from the analysis that the proposed project is a small project with a capacity of 370 KW and the values applied in the feasibility study report of the CPA are conservative than the values observed in the other registered projects with similar capacity. Therefore, the total investment cost was accepted by the assessment team. The comparison of all registered projects in the region is given below in the table. The comparison analysis is performed by dividing the total investment cost of the project with the installed electrical capacity of the project activity. The assessment team observed that there may be site specific and technology specific factors which may affect the accuracy of this comparison analysis but the team considered that this was the best possible analysis to compare the registered projects with the proposed project activity on the basis of available data. Hence, the analysis was found to be reasonable.

Operating Cost

The Average Operating Cost for the project activity is estimated to be 65,500 AUD (Australian Dollars). Operating Cost was validated from the Feasibility Study prepared by ERC. The operating cost was cross-checked with other CDM registered projects. The assessment team confirmed from the analysis that the proposed project is a small project with a capacity of 370 KW and the values applied in the feasibility study report of the CPA are conservative than the values observed in the other registered projects with similar capacity. Therefore, the operating cost was accepted by the assessment team. The comparison of all registered projects in the region is given below. The comparison analysis is performed by dividing the annual operating cost estimated for the project with the installed electrical capacity of the project activity. The assessment team observed that there may be site specific and technology specific factors which may affect the accuracy of this comparison analysis but the team considered that this was the best possible analysis to compare the registered projects with the proposed project activity on the basis of available data. Hence, the analysis was found to be reasonable.

CDM ref nr	Project	Capacity (kW)	Investment cost	O&M cost	Investment cost (AUD/kW)	Operating Cost (AUD/kW)
--	CPA B11001- Bagendung Landfill Gas Recovery	740	942,000 USD	60,000	1,188	76
938	938_PT Navigat Organic Energy Indonesia Integrated Solid Waste Management (GALFAD) Project in Bali, Indonesia	9600	20,000,000	1,000,000	2,784	139
1582	1582_Pontianak - GHG emission reduction through improved MSW management – LFG Capture, Flaring and Electricity Generation	200	1,657,750	70,465	7,738	329
2509	2509_Gikoko-Bekasi-LFG Flaring Project	200	3,101,250	123,529	14,475	577
2518	2518_Gikoko-Makassar - LFG Flaring Project	200	3,037,000	111,237	14,175	519
2525	2525_Gikoko Palembang – LFG Flaring Project	200	2,779,000	111,423	12,971	520
2751	2751_Piyungan Landfill Gas Capture Project in Yogyakarta	620	3,512,552	97,956	5,289	147
4077	4077_Bionersis LFG Project Indonesia 2: Batam	2126	2,073,550	159,371	1,304	100
4566	Bundled Landfill Gas Recovery Project in Indonesia	2500				
	Pinang Kalimantan (no.1)	500	1,105,648	78,388	2,955	210
	Mataram Lombok (no.2)	1000	1,431,180	123,702	1,913	165
	Palu Sulawesi (no.3)	1000	1,422,150	155,661	1,901	208

Other Parameters

All the input values taken for the financial analysis are as per the actual value determined during investment decision. All input parameters for the determination of project returns are based on information that was available prior to the investment decision date. The main assumptions used in the investment analysis are given below:

Financial assumption	Value	Validation Remarks
Installed Capacity of Generators	370 KW	The capacity of generator was checked from the Contract Agreement signed between PT. ERC Austrindo and PT. Energy provider Indonesia for Biogas generator rental services ^{/34/} .
Power tariff	656 IDR/kWh (equivalent to 68.29 AUD/MWh)	The tariff has been considered on the basis of Ministry of Energy and Mineral Resources Regulation Number 31, 2009, "Feed In Tariff for Java and Bali". As per the regulation, there is no provision for annual escalation in the tariff. Hence, constant tariff is taken over the assessment period.
Initial investment	942,000 AUD	The total investment cost is validated from the Feasibility Study Report ^{/23/} prepared by ERC (Emission Reduction Company). It was further cross checked with the other registered CDM projects on per kW capacity comparison. It was confirmed by the assessment team that the costs were conservatively considered in the feasibility study report.
Net Annual Generation	2539.19 MWh/year	The gross power generation is calculated by assuming 100% PLF for 365 days. The net power generations is calculated by deducting auxiliary power from the gross power. The estimate value represents the maximum power generation possible from the project activity and hence conservative.
Auxiliary Consumption	331.05 MWh/year	The auxiliary power is calculated from the base power of the engines which is validated from the technical specifications of the engine. ^{/28/}
Project lifetime	12 years	The project lifetime has been validated from the ERC feasibility study report ^{/23/} .
O&M expenditure	65,500 AUD/year	The operating cost is validated from the Feasibility Study Report ^{/23/} prepared by ERC. It was further cross checked with the other registered CDM projects on per kW capacity comparison. It was confirmed by the assessment team that the operating cost were conservatively considered in the feasibility study report.

Lease Price for Generators	410 IDR/kWh (Equivalent to 42.68 AUD/MWh)	The rental charges for electricity generators were checked from the Contract Agreement signed between PT. ERC Austrindo and PT. Energy provider Indonesia for Biogas generator rental services ^{/34/} . It is observed that the rental charges will be payable on the basis of electricity produced by the generators. The generator supplier will be obligated to ensure sufficient generation capacity for complete utilization of biogas.
Discount rate	13.80%	The discount rate is validated on the basis of lending rate observed in Indonesia for last 3 years. The data for lending rate is taken from World Bank database ^{/38/} . The data was duly checked by the assessment team.

Based on the assumptions provided in table B.3.4 and in the financial model we conclude that the project activity has an NPV of -625,230 AUD without considering the carbon revenues of the project. Since the NPV of the project is negative, the assessment team concluded that the project is additional and would not have been implemented without CDM benefits. The baseline alternative 2 will have a NPV value of 0 since no investment or benefit is obtained from it. This demonstrates that the proposed project activity is not a commercially attractive option without the support of CDM.

Findings:

CAR 18 and CAR 20 were raised and closed successfully. Please refer to Annex 3 for detail.

Opinion:

The assessment of additionality demonstration was performed in conformity to the latest version of the Guidance issued by EB on the assessment of investment analysis, plausibility and appropriateness of parameters used and correctness of financial calculations. Validation Team concludes that the project scenario is not economically feasible without CDM benefits.

The project activity complies with guidance 18 of Annex 05 of EB62 and para 111 (e) of VVM, version-01.2.

4.7 Application of Monitoring Methodology and Monitoring Plan

Discussion:

The validation team confirms that the monitoring plan complies with the requirements of the methodology. In order to assess the monitoring plan's compliance with applied monitoring methodology, the validation team carried out the desk review of the web-hosted PoA DD and the subsequently revised PoA DD submitted for registration. The validation team confirms based on the desk review of the monitoring plan of the PoA DD being submitted for registration that it complies with the applied monitoring methodology ACM0001 Version 12 and the associated applicable tools. . Since, the PoA is a general framework so all the parameters to be monitored defined in methodology and associated tools are included in section E.7.1 of PoA DD.

In addition, the validation team also carried out site visit of the CPA being submitted for the validation along with the PoA on 09th to 12th Jan 2012 and confirmed by means of interview and document review that the monitoring requirements presented in the applied methodology ACM0001 Version 12 is mainly based on the metering instruments (Flow meters, Energy meters & gas analyzers etc.) and hence feasible within the project design. The validation team has assessed the parameters defined in Specific CPA as described below.

S. No.	Parameter	Assessment by Validation Team
1	Total amount of landfill gas captured at Normal Temperature and Pressure, $LFG_{total,y}$	The CPA implementer has correctly identified the monitoring parameter which is Total amount of landfill gas captured at Normal Temperature and Pressure. In accordance with the monitoring methodology requirement, the CPA implementer has ensured that at least continuous monitoring using a flow meter and monthly recording will be carried out. Further, as per the requirement of the methodology, electronic data archiving and provisions to retain the monitored data for a minimum of two years after the end of the crediting period of CPA, data crosschecking provisions from the records of the sold electricity have been incorporated in the monitoring plan.
2	Amount of landfill gas flared at Normal Temperature and Pressure, $LFG_{flare,y}$	The parameter will be used to measure the Amount of landfill gas flared. In accordance with the monitoring methodology requirement, the CPA implementer has ensured that at least continuous monitoring using a flow meter and monthly recording will be carried out. Further, as per the requirement of the methodology, electronic data archiving and provisions to retain the monitored data for a minimum of two years after the end of the crediting period of each CPA.
3	Amount of landfill gas combusted in power plant at Normal Temperature and Pressure $LFG_{electricity,y}$	The parameter will be used to measure the Amount of landfill gas combusted in power plant. In accordance with the monitoring methodology requirement, the CPA implementer has ensured that at least continuous monitoring using a flow meter and monthly recording will be carried out. Further, as per the requirement of the methodology, electronic data archiving and provisions to retain the monitored data for a minimum of two years after the end of the crediting period of each CPA.
4	Methane fraction in the landfill gas, w_{CH4}	The parameter will be used to measure Methane fraction in the landfill gas. The parameter will be monitored continuous using equipment that can directly measure methane content in the landfill gas.
5	Temperature of the landfill gas, T_t	The parameter will be used to determine the density of methane D_{CH4} . The Temperature of the landfill gas will be monitored continuously. No separate monitoring of temperature will be done This will be done by using flow meters that automatically measure temperature and pressure, expressing LFG volumes in normalized cubic meters
6	Pressure of the landfill gas, P_t	The parameter will be used to determine the density of methane D_{CH4} . The pressure of the landfill gas will be monitored continuously. No separate monitoring of pressure will be done This will be done by using flow meters that automatically measure pressure & temperature expressing LFG volumes in normalized cubic meters
7	Net amount of electricity generated using LFG, EL_{LFG}	The parameter will be used to measure the Net amount of electricity generated using LFG. In accordance with the monitoring methodology requirement, the CPA implementer has ensured that at least continuous monitoring, hourly measurement and monthly recording will be carried out. In addition to this the CPA implementer has also introduced that calibration of the energy meters will be carried out according to National standard. Further, as per the requirement of the methodology, electronic data archiving and provisions to retain the monitored data for a minimum of two years

S. No.	Parameter	Assessment by Validation Team
		after the end of the crediting period of each CPA,
8	Operation of the energy plant	The parameter will be used to measure the no. of hours for which the plant is operated. The parameter will be monitored to ensure methane destruction is claimed for methane used in electricity plant when it is operational.
9	Net amount of electricity generated using LFG in year y , $EC_{BL,k,y}$	As per ACM001 version 12, The parameter Net amount of electricity generated using LFG in year $EC_{BL,k,y}$ in the tool is equivalent to the net amount of electricity generated using LFG in year y .
10	Quantity of electricity consumed by the project activity from the grid in year y , $EC_{PJ,j,y}$	The parameter will be used to calculate the project emission. This will be monitored continuously using energy meters and will be aggregated at least annually.
11	Volumetric flow rate of the residual gas in dry basis at normal conditions in the hour h , $Fv_{RG,h}$	The parameter will be used to measure the Flow rate of the biogas entering the flare. Parameter will be Measured continuously by using a flow meter. For estimation of emission reduction the value of gas flared is considered as zero.
12	Concentration of methane in the exhaust gas of the flare in dry basis at normal conditions in the hour h , $Fv_{CH_4,RG,h}$	Monitoring of this parameter is only applicable in case of enclosed flares and continuous monitoring of the flare efficiency. Measurement instruments may read ppmv or % values. To convert from ppmv to mg/m^3 simply multiply by 0.716. 1% equals 10 000 ppmv.

Data parameters monitored in accordance with the "Tool to determine the mass flow of a greenhouse gas in a gaseous stream"^{17/n}:

S. No.	Parameter	Assessment by Validation Team
1.	Volumetric flow of the gaseous stream in hour h (time interval t), $V_{t,db} / V_{t,wb} / FV_{RG,h}$ ($F_{CH_4,EL,y}$, $F_{CH_4,HG,y}$ and $F_{CH_4,sent flare,y}$)	This parameter will be continuously monitored by flow meters that automatically normalize the data to Nm^3 taking into account the actual pressure and temperature of the LFG. The installed equipment shall be calibrated against a primary device by an independent accredited laboratory according to manufacturer's specifications.
2.	Volumetric fraction of CH_4 in the LFG in hour h (time interval t) on a dry basis, $vi_{t,db} / fv_{CH_4,RG,h} / fvi_{t,h}$	This parameter will be Recorded using a gas analyser operating in dry-basis. The equipment will be periodically calibrated according to the manufacturer's recommendation.
3.	Volumetric fraction of N_2 in the gaseous stream in time interval t on a dry basis, $vk_{t,db} / fvi_{t,h}$	As a simplification, the project participants shall monitor only the volumetric fraction of CH_4 , which is the only greenhouse gas in LFG that is considered in the emission reduction calculation by the underlying methodology (ACM0001) and assume that the difference to 100% is pure nitrogen. This simplification is valid under ACM0001.
4.	Temperature of the gaseous stream in time interval t , T_t	As the project participants intend to install flow meters that automatically convert LFG flow to Nm^3 , this parameter is only monitored continuously in order to demonstrate that the LFG is dry. The equipment will be periodically calibrated according to the manufacturer's recommendation
5	Pressure of the gaseous stream in time interval t , P_t	As the project participants intend to install flow meters that automatically convert LFG flow to Nm^3 , this parameter shall only be monitored for moisture content determination and is therefore only metered when performing such measurements. The equipment will be

		periodically calibrated according to the manufacturer's recommendation
6.	Saturation pressure of H ₂ O at temperature T in time interval t , $PH_{2O,t,sat}$	This parameter is solely a function of the gaseous stream temperature T and can be found in the above data source for a total pressure equal to 101,325 Pa.

Opinion:

By desk review of the PoA DD^{/1/}, CPA DD^{/2/}, Monitoring plan and on-site interviews with the representatives of the PP it is confirmed that detailed monitoring procedures, monitoring structure, monitoring items and functions are clearly demonstrated in the PoA DD which will enable subsequent verification of the project's emission reductions in line with the applied methodology. The validation team confirms that the specific uncertainty levels, methods, and associated accuracy level of measurement instruments and calibration procedures used for various parameters and variables are identified in the specific CPA DD^{/2/}, along with detailed quality assurance and quality control procedures. Moreover, training plan for the operation and maintenance and CDM monitoring of the project activity has been laid down by the PP, which was reviewed by validation team.

Hence the validation team confirms that the monitoring plan is in compliance with the requirements of the applied methodology, thereby satisfying the requirement of paragraph 124 (a) of VVM, version 1.2.

4.8 Environmental Impacts

Discussion:

In accordance with the PoA Guidance EB 55 Annex 38 approved by the CDM Executive Board, the CME in the PoA DD specify whether the Environment Impact analysis to be carried out at the PoA level as a whole activity or at the individual CPA level. The CME has selected to carry out the Environment Impact analysis at the individual CPA level according to Environmental Impact Assessment requirements for landfill defined in Decree concerning types Of Businesses Or Activities Required to prepare an Environmental Impact Assessment, Decree Ministry of Environmental^{/30/} No 11 Year 2006, Appendix I List Of activities requiring Environmental Impact Assessment. CPAs to be included in this programme of activities should comply with this or any renewed regulation regarding the environmental impact assessment requirements as issued by the authorities of the Republic of Indonesia.

For specific CPA, it has been confirmed that a complete Environmental Impact Assessment is not required as per Regulation of the Minister of Environment number 11 of 2006.

Opinion:

Local regulations do not require a full-fledged environmental impact assessment for this project activity. A simplified environmental impact assessment^{/33/} has been carried out and approved by the relevant authorities (EPA) and it has been confirmed that there is no trans-boundary environmental impact of this CPA.

4.9 Local Stakeholder Comments

Discussion:

In accordance with the PoA Guidance EB 55 Annex 38 approved by the CDM Executive Board, the CME in the PoA DD specify whether the local stakeholder consultation to be carried out at the PoA level as a whole activity or at the individual CPA level. The CME has selected to carry out the local stakeholder meet at the individual CPA level. In the opinion of the validation team this option has been appropriately considered by the CME as the PoA boundary is the entire host country of Indonesia and it is not promising to carry out the local stakeholder meet at the PoA level considering the fact that associated CPAs may come up in any

region of the host country. It has also been specified under the PoA DD that details of the local stakeholder consultation process to be provided under the respective CPAs.

For the specific CPA a Local Stakeholders meeting was carried out by the project proponent on 20/01/2011^{/32/} at the current administrative office of the landfill site. The validation team noted that all the relevant stakeholders identified are in line with the definition of stakeholders as per latest version of CDM Glossary of terms Version 6.0. The PP has utilized appropriate media to invite these stakeholders; published public notices in leading news papers^{/31/} and also by sending invitation letter to the government staff.

A summary of the comments received and a note on how due account was taken of the concerns raised in the above public consultation are included in section D of the CPA DD. This also states that appropriate immediate responses were provided to them. From the background of the stakeholders, it was reasonably believed that the general attitude of the local residents, who were likely to be affected by the project, was positive towards the project and same has been verified from the onsite visit interviews with the local stakeholders.

During the onsite visit, representatives from the local community were interviewed. In general, the interviewees showed adequate understanding of the nature of the project and felt that there would be no adverse impacts on the environment arising from the project activity. The interviewees also considered that the local economy would be benefitted from the project activity.

Opinion:

The validation team have verified the related documents^{/31/&/32/} and interviewed some of the attendees of the stakeholder meeting during onsite visit, which concludes that the project participant has explained about the project activity on 20/01/2011, in an unbiased manner and project has not received any adverse or significant comments.

4.10 Operational and management arrangements for the PoA

Discussion:

The PoA is a voluntary initiative of the PT Blue World Indonesia, acting as the coordinating and managing entity. This has been confirmed from interviews during the site visit. To participate in the programme, the proposed CPA must meet the eligibility criteria's defined in PoA DD. Roles and responsibilities of the CME, PoA manager, CPA CDM Manager and CPA inclusion team are clearly defined in the Management system Manual^{/27/} and are confirmed in tables below. BWC will be responsible for the management of records and data associated with each CPA. The database will be updated manually using the data supplied by the participating CPA. It will form the basis for the verification of CPAs and be available for inspection by the DOE at any point in time. The record keeping will be carried out by using the field instruments, hardware and software installed at every Project site and/or manual data recording in the log book. The captured data will be transferred to the server of CME, which will have provision to archive the data as per individual CPAs. Each CPA operator will carry out a periodic analysis (quarterly) of data for the individual Project. In case of any anomalies identified during the review by the CPA operator, appropriate corrective actions will be taken. The review report will be submitted to the CME & DOE.

The following table summarizes the operational, management and monitoring responsibilities in the CME for the implementation and operation of the programme of activity:

Department	Management Responsibilities and Arrangements
Board of Management	<ul style="list-style-type: none"> ▪ Registration of the PoA ▪ Implementation of the Program objectives ▪ Ensuring proper overall management of the PoA ▪ CER issuance

Head of Landfill gas PoA	<ul style="list-style-type: none"> Program operation as per CDM guidelines and board of management strategy. Proper and timely validation of the the PoA Review of program compliance as per guidelines Awareness creation and promotion of the PoA Ensuring proper CDM project operation and management as per required guidelines and board of management strategy throughout the crediting period.
PoA Operations	<p>This department has two main objectives: securitizing and preparation of documentation for initial inclusion of a CPA and monitoring an verification of included CPAs.</p> <p>(Pre) inclusion activities:</p> <ul style="list-style-type: none"> Inclusion of CPA under the PoA Review of CPA compliance as per guidelines Ensure verification of CPAs Identification of CPA Listing of eligible CPA's Inclusion of eligible CPAs under PoA CPA-DD and PoA-DD Development Investment analysis for CPA's <p>Validation and verification activities:</p> <ul style="list-style-type: none"> Validation / verification support Site support to CPA implementers (validation and verification) Validation and verification support to CPA implementer throughout the crediting period. Preparation of monitoring report for Emission Reduction CPA onsite monitoring support Development and implementation of monitoring system of each CPA Monitoring training of CPA Monitoring and record keeping and data backup / archival of monitoring parameters. Ensuring and implementing emergency preparedness program for monitoring Review and improvement suggestions of monitoring system and plan Site support to CPA implementers (monitoring)
PoA Document Control	<ul style="list-style-type: none"> Collecting information and documentation of the CPA Collection and scrutiny of all documents related to the eligibility criteria of CPA inclusion Collection of necessary statutory approvals from CPA implementers General document control
Quality Control and Technical review	<ul style="list-style-type: none"> Internal quality audit, Process and continuous improvement proposal reporting to stakeholders and management. Quality control of supporting documents and site information Technical review of the CPA-DD documentation.

Findings:

CL#10 was raised and closed successfully. Refer Annex 3 for detail.

Opinion:

The validation team confirms that PT Blue World Indonesia will coordinate the Programme of Activities (PoA) and will support the project operators in implementing the Component Project Activities (CPAs) in Indonesia.

The CME has developed teams for the operation, management and verification of the PoA as detailed in the Operation and management Manual. The CME has clearly defined roles and responsibilities of the personnel involved in the complete process. It has further divided the personnel involved into teams for operation, Documentation control and quality control for the PoA. The validation team has assessed the process and competencies of the team members in each of the teams while carrying out interviews during the course of validation and considers the same to be adequate and in line with the requirements of paragraph 17, Annex 3, EB 65.

4.11 Eligibility criteria for CPAs

Discussion:

The CME provided the eligibility criteria for the inclusion of the CPAs under the proposed PoA under section 4.2.2 of the web-hosted PoA DD. However, it was noted by the validation team that the eligibility criteria, presented in the web-hosted PoA DD, were not sufficiently objective and comprehensive to permit the assessment of the inclusion of the CPAs in the proposed PoA and raised clarification and Corrective action requests on the same.

The CME has developed the eligibility criteria as per paragraph 14 of “Standard for Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies for Programme of Activities” Annex 3 EB 65. The standard provides explicit guidance on the eligibility criteria need to be developed by the CME for the inclusion of the CPA. The validation team assessed, in details, each of the eligibility criteria based on its being verifiable, comprehensiveness and being objective and the assessment of the validation team has been presented in the table below:

Sr. No.	Eligibility Criteria	The evaluation of each of the eligibility criteria (developed by the CME for inclusion of the CPA under the proposed PoA) by the validation team
A.	The CPA implementer is aware of its participation in the PoA and has provided a declaration to confirm/accept relevant terms and conditions in relation to inclusion in the PoA.	Yes, the criterion is verifiable as supporting documents to be referred for validation are: • Declaration from the CPA Implementer confirming its participation in the PoA and affirmation of relevant terms and conditions.
B.	CME has permitted participation and inclusion of the CPA implementer into the PoA.	Yes, the criterion is verifiable as supporting documents to be referred for validation are; Declaration by CME to permit participation of the CPA Implementer into the PoA.
C.	The CPA shall confirm to one or both of the two scenarios described in section A.4.2 of the PoA-DD (Projects that (partial) utilize LFG for generation of heat in a boiler, air heater or kiln (brick firing only) and/or supplying the LFG to consumers through a natural gas distribution network <u>are not eligible</u> for inclusion under this PoA.)	Yes, the evaluation criterion is verifiable as supporting documents to be referred for validation are: • Confirmation by the CME regarding the applicable project scenario of the CPA. • Third party evidence on the situation that existed at the landfill site prior to implementation of the CPA. Any of the following documents shall be provided: • Purchase order of equipment • Feasibility Study / Project Proposal of the project that describes the project technology.

D.	The CPA shall be located in Indonesia	Yes, the evaluation criterion is verifiable as supporting documents to be referred for validation are <ul style="list-style-type: none"> • Business license of the CPA Implementer issued by Indonesian local authorities. • Declaration from the CPA implementer confirm that the boundary of the implemented CPA is within the geographical territory of Indonesia, including information regarding geographic reference (latitude and longitude), name and address of the CPA
E.	The CPA shall meet the applicability and other requirements of the methodology ACM0001 Version 12.	As described in section E.2 of the PoA DD, the CPA shall meet relevant requirement of the methodology and the required document shall be supplied to the DOE at the time of inclusion.
F.	Confirmation that the CPA is not registered or being registered as a stand-alone CDM project outside of this PoA, a bundled CDM Project Activity or another registered PoA. The CPA shall not lead to double counting of emission reductions.	Yes, the evaluation criterion is verifiable and supporting documents to be referred for validation are: <ul style="list-style-type: none"> • Declaration from the CPA Implementer confirming that the project is not registered or in the process of being registered as a stand-alone CDM project, outside of the PoA, a bundled CDM Project Activity or another registered PoA. And: <ul style="list-style-type: none"> • Confirmation described in the CPA-DD that states that the project is not registered or in the process of being registered as a stand-alone CDM project, outside of the PoA. • Confirmation check by reviewing the website of the UNFCCC.
G.	Confirmation on involvement of public funding or ODA from Annex I Parties in CPA	Yes, the evaluation criterion is verifiable and supporting documents to be referred for validation are: <ul style="list-style-type: none"> • Declaration from the CPA Implementer regarding the no involvement of public funding or ODA from Annex I Parties. And: <ul style="list-style-type: none"> • Confirmation in the CPA-DD regarding no involvement of public funding or ODA from Annex I Parties
H.	The start date of the CPA shall not be before the commencement of validation of the PoA as a whole (the date the PoA was published for global stakeholders consultation).	Yes, the evaluation criterion relies on the verification of the start date of the CPA in accordance with the glossary of the CDM terms (earliest date of the financial commitment of the PP towards construction or implementation) through review of the One of the following documents: <ul style="list-style-type: none"> • In case available, the earliest signed equipment or (sub) contractor agreement with a total contract value that is significant to the project activity (the date of signing the purchase order by CPA Implementer shall constitute the starting date of the CPA). • Declaration from the CPA Implementer that no contracts have been signed with a total contract value that is significant to the project activity.

I.	A CPA level local stakeholder's consultation and environmental impact assessment (if applicable) has to be carried out prior to inclusion.	<p>Yes, the evaluation criterion relies on the verification of following documents:</p> <ul style="list-style-type: none"> • Meeting minutes of the stakeholder consultation. • Attendance list <p>If available:</p> <ul style="list-style-type: none"> • Relevant other documentation, for example, pictures, feedback forms of the stakeholder meeting. <p>If an environmental impact assessment is required:</p> <ul style="list-style-type: none"> • Copy of the environmental impact assessment • Approval document of the environmental impact assessment <p>If an environmental impact assessment is not required: Justification described in the CPA-DD to explain why an environmental impact assessment has not been conducted.</p>
J.	The CPA implementer shall be duly registered by the Indonesian authorities prior to inclusion	<p>Yes, the evaluation criterion is verifiable and supporting documents to be referred for validation are:</p> <ul style="list-style-type: none"> • Business license of the CPA Implementer issued by Indonesian local authorities.
K.	The CPA shall be in conformance to statutory requirements of Indonesia.	<p>Yes, the evaluation criterion is verifiable and supporting documents to be referred for validation are:</p> <ul style="list-style-type: none"> • Approval document from the Indonesian local authorities for relevant statutory clearances.
L.	Confirmation on the crediting period of the CPA which shall not exceed the length of the PoA (28 years) regardless of the time of inclusion of CPA in the PoA	<p>Yes, the evaluation criterion is verifiable from Confirmation described in the CPA-DD that states that the crediting period of the CPA shall not exceed the length of the PoA.</p>
M.	Demonstration of additionality of the scenario implemented under the CPA in accordance with the " <i>Tool for the Demonstration and Assessment of Additionality</i> " and relevant information provided in section E.5.1 of the PoA-DD.	<p>Yes, the criterion is verifiable and supporting documents to be referred for validation are:</p> <ul style="list-style-type: none"> • Investment analysis including relevant supporting evidence • Description in the CPA-DD detailing the technology employed under the CPA, the identified baseline scenario and information to demonstrate the additionality of the CPA.
N.	At the start date of the CPA, no law/regulation has been issued or contract has been signed that forces the entity in charge of the management of the landfill to capture, destroy or use LFG or if such law/regulation exists, it can be still demonstrated that such law/regulation/contract is systematically not enforced. The baseline scenario is total atmospheric release of the LFG).	<p>Yes, the criterion is verifiable and supporting documents to be referred for validation are:</p> <ul style="list-style-type: none"> • Declaration from the CPA implementer to confirm the baseline scenario and confirmation that no law/regulation has been issued or contract has been signed that forces the entity in charge of the management of the landfill to capture, destroy or use LFG. • Third party evidence on the situation that existed at the landfill site prior to implementation of the CPA, confirming that there is no (partial) capture of the LFG. • Confirmation described in the CPA-DD that states that no law/regulation has been issued or contract has been signed that forces the entity in charge of the management of the landfill to capture, destroy or use LFG and a description of the baseline scenario. • CME assessment report of the pre-project activity situation, including existing practice of LFG recovery (if any).

O.	CPA shall involve the installation a new LFG capture system in an existing solid waste disposal site.	<p>Yes, the criterion is verifiable and supporting documents to be referred for validation are:</p> <ul style="list-style-type: none"> Declaration from the CPA implementer to confirm the baseline scenario and confirmation that no law/regulation has been issued or contract has been signed that forces the entity in charge of the management of the landfill to capture, destroy or use LFG Third party evidence on the situation that existed at the landfill site prior to implementation of the CPA with information to determine if the landfill is existing or new. <p>AND Any of the following documents:</p> <ul style="list-style-type: none"> Purchase order of equipment <p>Feasibility Study / Project Proposal of the project that describes the project technology</p>
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Findings:

CL#05, CAR#06, CAR#07 & CAR#08 were raised and closed successfully. This is discussed in detail in Annex 3 of this report.

Opinion:

Based on the above assessment Validation team confirms that,

- The Eligibility criteria defined by CME are verifiable
- The eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA.

4.12 Validation of CPAs

Discussion:

The specific CPA "CPA B11001- Bagendung Landfill Gas Recovery" involves development of a landfill recovery project in Bagendung district, province of Banten. PT ERC Austrindo is the CPA implementer. It is confirmed from Feasibility study Report^{/23/} and interview during site visit that project will include installation of a LFG collection system and an enclosed LFG flaring facility which will destroy the methane gas that is being generated within the City of Cilegon landfill, Bagendung in the first stage. In the second stage, the project will utilize collected LFG for the generation of electricity (Gas engines of 370 KW^{/28/}) that is supplied to the JAMALI electricity grid of Indonesia.

Compliance of CPA with each of the eligibility criteria's of PoA is discussed below

Sr. No.	Eligibility Criteria	Means of Validation of each Eligibility Criterion for the specific CPA
A.	The CPA implementer is aware of its participation in the PoA and has provided a declaration to confirm/accept relevant terms and conditions in relation to inclusion in the PoA	It is checked from the Declaration ^{/29/} provided by the CPA Implementer confirming its participation in the PoA.
B.	CME has permitted participation and inclusion of the CPA implementer into the PoA.	It is checked from the Declaration ^{/36/} provided by the CME to permit participation of the CPA Implementer into the PoA.
C.	The CPA shall confirm to one or both of the two scenarios described in section A.4.2 of the PoA-DD (Projects that (partial) utilize LFG for generation of heat in a boiler, air heater or kiln	A copy of the feasibility study report ^{/23/} has been provided by PP and it is confirmed that the project activity complies with technology scenario 2. That has also been confirmed from the Third party

	(brick firing only) and/or supplying the LFG to consumers through a natural gas distribution network <u>are not eligible</u> for inclusion under this PoA.)	Opinion ^{/31/} from the office of Head of Cleaning and Landscaping Department Cilegon.
D.	The CPA shall be located in Indonesia	Business license ^{/25/} of the CPA Implementer issued by Indonesian local authorities has been verified and it is confirmed that CPA is located within the geographical boundary of Indonesia.
E.	The CPA shall meet the applicability and other requirements of the methodology ACM0001 Version 12.	The applicability and other requirements of the methodology are discussed in section 4.5.2 of this report.
F.	Confirmation that the CPA is not registered or being registered as a stand-alone CDM project outside of this PoA, a bundled CDM Project Activity or another registered PoA. The CPA shall not lead to double counting of emission reductions.	Declaration ^{/29/} has been provided by the CPA Implementer confirming that the project is not registered or in the process of being registered as a stand-alone CDM project, outside of the PoA, a bundled CDM Project Activity or another registered PoA. It has also been crosschecked from the UNFCCC website that project CPA is not registered or being registered as a stand-alone CDM project outside of this PoA.
G.	Confirmation on involvement of public funding or ODA from Annex I Parties in CPA	Declaration ^{/29/} has been provided by the CPA Implementer confirming that there is no involvement of public funding or ODA from Annex I Parties in CPA. A confirmation of same has also been provided in CPA DD.
H.	The start date of the CPA shall not be before the commencement of validation of the PoA as a whole (the date the PoA was published for global stakeholders consultation).	Since no real action has been taken by CPA Implementer a declaration has been provided that no contracts have been signed with a total contract value significant to the project activity.
I.	A CPA level local stakeholder's consultation and environmental impact assessment (if applicable) has to be carried out prior to inclusion.	The validation team have verified the related documents ^{/31/8/32/} (invitation letters, MoM) and interviewed some of the attendees of the stakeholder meeting during onsite visit, which concludes that the project participant has explained about the project activity on 20/01/2011, in an unbiased manner and project has not received any adverse or significant comments. It has been confirmed that Environmental Impact Assessment is not required for the CPA as per Regulation ^{/30/} of the Minister of Environment number 11 of 2006.
J.	The CPA implementer shall be duly registered by the Indonesian authorities prior to inclusion	CPA implementer has been registered by the Indonesian authorities and same has been confirmed from the business license no. 00566/1/PPM/PMA/2011 issued by Indonesian local authority.
K.	The CPA shall be in conformance to statutory requirements of Indonesia.	Following statutory requirements have been checked <ul style="list-style-type: none"> • Business & Investment License^{/25/} • simplified environmental impact analysis approval^{/33/} • Land use License

L.	Confirmation on the crediting period of the CPA which shall not exceed the length of the PoA (28 years) regardless of the time of inclusion of CPA in the PoA.	A confirmation has been provided in section 4.3.2 of CPA DD.
M.	Demonstration of additionality of the scenario implemented under the CPA in accordance with the " <i>Tool for the Demonstration and Assessment of Additionality</i> " and relevant information provided in section E.5.1 of the PoA-DD.	This is discussed in section 4.6.2. of this report
N.	At the start date of the CPA, no law/regulation has been issued or contract has been signed that forces the entity in charge of the management of the landfill to capture, destroy or use LFG or if such law/regulation exists, it can be still demonstrated that such law/regulation/contract is systematically not enforced. The baseline scenario is total atmospheric release of the LFG).	It has been checked from the Declaration ^{/29/} provided by the CPA implementer confirming the baseline scenario and confirmation that no law/regulation has been issued or contract has been signed that forces the entity in charge of the management of the landfill to capture, destroy or use 100% of the LFG. That has also been confirmed from the Third party Opinion ^{/37/} from the office of Head of Cleaning and Landscaping Department Cilegon and CME assessment report ^{/39/} .
O.	CPA shall involve the installation a new LFG capture system in an existing solid waste disposal site.	It has been checked from the Declaration ^{/29/} provided by the CPA implementer and assessment report ^{/39/} confirming the situation that existed at the landfill and confirmation that no law/regulation has been issued or contract has been signed that forces the entity in charge of the management of the landfill to capture, destroy or use LFG is available. That has also been confirmed from the Third party Opinion ^{/37/} from the office of Head of Cleaning and Landscaping Department Cilegon.

Opinion:

Based on the above assessment validation team confirms that the Specific CPA # 01 is complying with all the eligibility criteria defined in PoA and therefore eligible for inclusion under the proposed PoA.

5. Global Stakeholder Consultation Process

In accordance with CDM modalities and procedures and section D of VVM V1.2, the PoA DD of a proposed CDM programme of activities shall be made publicly available and the DOE shall invite comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available.

5.1 *Description of how and when the POA DD was made publicly available*

The PoA DD version 01 dated 06/12/2011, specific CPA DD version 01 dated 06/12/2011 was made publicly available at

(<http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/MTFUUH9BLDEOKWUHPT76DTBR1I4Y63/view.html>) from 15/12/2011 to 13/01/2012 in order to invite comments from public stakeholders.

5.2 *Compilation of all comments received*

No public comments have been received during this period.

5.3 *Explanation of how comments have been taken into account*

No public comments have been received during this period.



6. References

S. No.	Name of document (Main Validation Documents)
/1/	/1.1/ PoA DD Version 01 dated 06/12/2011 (made publicly available) /1.2/ PoA DD Version 06 dated 04/12/2012 (final version)
/2/	/2.1/ CPA DD (Specific) Version 01 dated 06/12/2011 (made publicly available) /2.2/ CPA DD (Specific) Version 06 dated 04/12/2012 (final version)
/3/	/3.1/ CPA DD (Generic) Version 01 dated 06/12/2011 (made publicly available) /3.2/ CPA DD (Generic) Version 02 dated 04/12/2012 (final version)
/4/	/4.1/ Investment analysis spreadsheets version 01 dated 06/12/2011 /4.2/ Investment analysis spreadsheets Version 06 dated 04/12/2012 (final version)
/5/	/5.1/ Emission Reduction Calculation spreadsheets version 01 dated 06/12/2011 /5.2/ Emission Reduction Calculation spreadsheets version 06 dated 04/12/2012 (final version)
/6/	Letters of Approval /6.1/ Letter of Approval from National Committee on Clean Development Mechanism, Indonesia (host Party) dated 14/05/2012 ref. no. B081/KNMPB/05/2012. /6.2/ Letter of Approval from Ministry of Infrastructure and the Environment, Netherlands (indicated Party) dated 17/07/2012 ref no. 2012ANL642.
/7/	Modalities of Communication dated 01/08/2012

S. No.	Name of document (Background documents used during validation process)
/8/	CDM VVM Version 1.2 (EB 55 Annex 01)
/9/	Programme of activities Design Document Form and Guidelines (CDM-PoA -DD), version 01
/10/	CDM Programme activity Design Document Form and Guidelines (CDM-CPA-DD), version 01
/11/	Applied Methodology ACM0001 'Flaring or use of landfill gas' version 12.0.0
/12/	Combined tool to identify the baseline scenario and demonstrate additionality" (version 04.0.0)
/13/	Tool to calculate project or leakage CO2 emissions from fossil fuel combustion (version 02)



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/14/	Tool to determine Emissions from solid waste disposal sites (version 0.6.0.1)
/15/	Tool to calculate baseline, project and/or leakage emissions from electricity consumption (version 1)
/16/	Tool to determine project emissions from flaring gases containing methane (version 1)
/17/	Tool to determine the mass flow of a greenhouse gas in a gaseous stream (version 02.0.0)
/18/	Tool to calculate the emission factor for an electricity system (version 02.2.1)
/19/	Tool to determine the remaining lifetime of equipment (version 1)
/20/	Guidance on the assessment of investment analysis (version 05)
/21/	Standard for demonstration of additionality , development of eligibility criteria and application of multiple methodologies for programme of activities (version 01) Annex 3, EB 65
/22/	Sustainable development criteria defined by NCDMA of Indonesia
/23/	Feasibility Study report no Rep 20110802 dated 02/08/2011
/24/	Business license of PT Blue Word Indonesia no. 3162/1/PPM/1/PMA/2011 issued by Indonesian local authority.
/25/	Business license of PT ERC Austrindo no. 00566/1/PPM/PMA/2011 issued by Indonesian local authority.
/26/	Minutes of Board meeting for investment decision for CPA dated 2 nd Sep 2011
/27/	CME management system manual version 2.0 dated 14/02/2012
/28/	Technical specification of Gas engine provided by MTU onsite energy.
/29/	Declaration regarding eligibility criteria by PT. ERC Austrindo dated 08/03/2012
/30/	Regulation from Ministry of Environmental No 11 year 2006, regarding the EIA requirement for Project activity
/31/	Invitation Letter & Advertisement dated 17/01/2011 for Local Stake Holder Meeting
/32/	MoM and Attendance sheet of Local stakeholder meeting dated 20/01/2011
/33/	Approval of Environmental Impact Assessment (EIA), Environmental Management Plan (RKL) Environmental Monitoring Plan (RPL), Bagendung Landfill Development Bagendung Village, Cilegon District, Cilegon City No: 660/Kep.99-Keb/2009, Year 2009.
/34/	MoU between PT. ERC Austrindo and PT. Energy provider Indonesia for project implementation dated 12/02/2012
/35/	Law on Solid waste management, Act No. 18 of the Republic of Indonesia published in the year 2008
/36/	Declaration by CME for acceptance of inclusion of CPA B11001 in the PoA, dated 25/08/2012
/37/	Third party Opinion from the office of Head of Cleaning and Landscaping Department Cilegon, Dated 12 March 2012, Letter number: 658.1/59/DKP/2012



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/38/	http://data.worldbank.org/indicator/FR.INR.LEND
/39/	CME assessment report dated 25/08/2012 prepared by PT. Blue World Indonesia.



Annex 1: PoA Validation Protocol

Table 1 –Validation Requirements for Clean Development Mechanism (CDM) PoA.

Requirement	Reference	Comments	Conclusion	
			Draft	Final
<p>1. All Parties involved have approved the programme of activity</p> <p>1.1. Has the DNA of each Party involved in the proposed CDM programme of activity in section A.3 of the POA-DD provided a written letter of approval which confirms</p> <p>a) The country is a Party to the Kyoto Protocol</p> <p>b) Participation is Voluntary</p> <p>c) The Host Party confirming that the proposed CDM programme of activity contributes to sustainable development of the country Non-Annex 1 Party shall submit a letter of approval</p> <p>d) It refers to the precise proposed CDM programme of activity title in the POA-DD being submitted for registration</p>	<p>Annex 3, Clean Development Mechanism, Validation and Verification Manual, Version 01.2 (from this point forwarded referenced as VVM) – 45/49a-d /54a-b/127</p> <p>Paragraph 37 CDM Modalities and procedures</p>	<p>LoA has not been submitted at the time of desk review. Refer CAR 19 (1)</p> <p>LoA has been submitted and it is confirmed that the host party for the project activity is Indonesia, which has ratified Kyoto Protocol on 28th July, 2004. The same has been checked using http://unfccc.int/parties_and_observers/parties/items/2352.php</p> <p>The Indonesia has nominated National Committee on Clean Development Mechanism as DNA. The same has been confirmed using link below http://cdm.unfccc.int/DNA/index.html</p> <p>The Annex-I party involved in the project activity is Netherlands, which has ratified Kyoto Protocol on 31st May 2002. The same has been checked using http://unfccc.int/parties_and_observers/parties/items/2352.php</p> <p>The Netherlands has nominated Ministry of Infrastructure and the Environment as DNA. The same has been confirmed using link below http://cdm.unfccc.int/DNA/index.html</p>	CAR 19 (1)	Ok



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Requirement	Reference	Comments	Conclusion	
			Draft	Final
1.2. If the project participant(s) listed in the POA-DD published at international stakeholder ¹ consultation are not included in the PoA-DD submitted with request for registration, a letter should be obtained from the withdrawn project participant(s) confirming its voluntary withdrawal from the proposed programme of activity.	EB 30 Para. 41. EB50 Annex 48 para. 8	There is no inclusion or withdrawal of project participant at the time of request for registration.	Ok	Ok
1.3. The letter/s of approval are unconditional with respect to 1.1.a) to 1.1.d) above	VVM Para. 49/53,54	Refer CAR # 19 (1) LoA has been submitted and it is confirmed that letters of approval are unconditional with respect to 1.1.a) to 1.1.d) above	CAR # 19 (+)	Ok
1.4. Are there more than one Party involved in the programme of activity.	EB 55 Annex 38	Yes two parties are involved in PoA DD. Indonesia (host) Netherlands Same needs to be confirmed from LoAs. LoA has been submitted and information is found consistent; hence issue is closed	CAR # 19 (+)	Ok
1.5. Does the coordinating entity of the PoA identify measures to ensure that all CPAs under its PoA are	Document Review	The CME will have a database, with the information of the new CPA that will be incorporated, to verify the cases	Ok	Ok

¹Stakeholders mean the public, including individuals, groups or communities affected, or likely to be affected, by the proposed CDM project activity or actions leading to the implementation of such an activity



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Requirement	Reference	Comments	Conclusion	
			Draft	Final
neither registered as an individual CDM project activity nor included in another registered PoA and that the CPA is subscribed to the PoA?		if CDM project activity or CPA of another PoA has already been registered.		
1.6. Is the authority and responsibility of the coordinating/management entity clearly described?	VVM Para 45	Yes authority and responsibility of the coordinating/management entity is clearly described	Ok	ok
1.7. Is the Coordinating Entity a project participant authorized by all participating host countries DNAs involved and identified in the modalities of communication as the entity which communicates with the Board?	EB 55 Annex 38	Subject to closure of CAR 19 (1) Yes the Coordinating Entity a project participant authorized by all participating host countries DNAs involved and identified in the modalities of communication as the entity which communicates with the Board.	CAR 19 (1)	Ok
1.8. Are more than one CME involved in the programme	EB 55 Annex 38	No only one CME is involved in the PoA Private Entity: PT Blue World Indonesia	Ok	Ok
2. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for a minimum of 30 days, and the project design document and comments have been made publicly available	VVM Para. 128 Marrakech Accords, CDM Modalities, §40	Yes the project design document was made available publicly for the period 15/12/2011 to 13/01/2012 No comments have been received	Ok	Ok
3. The PoA-DD is in accordance with the applicable CDM requirements for completing PoA-DDs.	VVM Para. 57 Marrakech Accords, CDM Modalities, Appendix B, EB Decisions	Yes latest available template on UNFCCC webpage are used for completing the PoA DD	Ok	Ok



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Requirement	Reference	Comments	Conclusion	
			Draft	Final
4. The project participants shall submit a completed modalities of communication (MoC) Form	F_CDM_MOC form available on UNFCCC website	Modalities of communication (MoC) Form have not been submitted by PP. Refer CAR # 19 (2). MOC has been provided, confirming the specimen signature and designation of authorized personnel for signing the MoC. The same has been verified and found the information is consistent and authentic.	CAR # 19 (2)	Ok

Table 2: Validation of POA-DD

Checklist Question	Reference	MoV	Comments	Conclusion	
				Draft	Final
A. General Description of Programme of activity					
A.1. Project Title					
A.1.1. Does the used project title clearly enable the reader to identify the unique CDM-PoA?	VVM Para.56 Guidelines for completing a CDM-POA-DD (POA-DD) section A.1	DR	The title of the programme of activities is “BWC Sustainable Landfill Gas Recovery Programme of Activities in Indonesia”. The uniqueness of the title was verified by checking the same on UNFCCC website i.e. http://cdm.unfccc.int/ProgrammeOfActivities/Validation/index.html	Ok	Ok
A.1.2. Is there an indication of version number and the date of the version?	VVM Para.56 POA-DD section A.1	DR	The version no. of the PoA-DD is 1.0 and date of revision/completion is 06/12/2011	OK	Ok
A.2. Description of the programme of activities (PoA):					
A.2.1. Does the description of the proposed CDM	VVM Para.59	DR	The PoA-DD covers the relevant elements precisely and provides information	CAR #	Ok



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Checklist Question	Reference	MoV	Comments	Conclusion	
				Draft	Final
programme of activity as contained in the POA-DD sufficiently cover all relevant elements accurately?	POA-DD section A.2 see also A.4, A.4.3 and B.3		in regard to framework of PoA, Policy/measure or stated goal of the PoA and confirmation that the proposed PoA is a voluntary action by the CME. All these points are elaborated in a clear and transparent manner in the PoA-DD. However CAR # 03 was raised for further clarification. CAR 03 is closed. Refer annex 3 for details.	03	
A.2.2. Is all information provided consistent and in compliance with the actual situation or planning?	VVM Para.64 POA-DD section A.2 see also A.4, A.4.2 and B.3	DR	Yes the project design, baseline, monitoring as described in the PoA-DD is consistent with actual planning.	Ok	Ok
A.2.3. Is all information provided consistent with details provided in further sections of the POA-DD?	VVM Para.64 POA-DD section A.2	DR	Yes, the information provided in section A.2 of PoA-DD is consistent with the details provided in further sections of the PoA-DD in a clear and transparent manner.	Ok	Ok
A.3. Coordinating/managing entity and participants of POA:					
A.3.1. Is the table required for the indication of project participants correctly applied?	VVM Para. 51 POA-DD section A.3	DR	Yes the table required for the indication of project participants correctly applied	Ok	Ok
A.3.2. Is all information provided in consistency with details provided by further sections of the POA-DD (in particular annex 1)?	VVM Para. 51 POA-DD section A.3	DR	Yes all the information provided is in consistency with details provided by further sections of the POA-DD	Ok	OK



Checklist Question	Reference	MoV	Comments	Conclusion	
				Draft	Final
A.4. Technical Description of the Programme of activity					
A.4.1. Location of the programme of activities					
A.4.1.1. Does the information provided on the location of the programme allow for a clear definition identification of the boundary for the PoA in terms of a geographical area, within which all CPAs included in this PoA will be implemented?	VVM Para.64	DR,I	The CPAs under the PoA will be implemented in the host country Indonesia	OK	Ok
A.4.1.2. Is the consideration of all applicable national and/or sectoral policies and regulations of each host country within the boundary evident and substantiated?		DR,I	PoA-DD clearly describes the applicable national and sectoral policies and regulations within the boundary of the project activity taking place under the host country i.e. Indonesia	Ok	OK
A.4.1.3. Is/are the Host Party(ies) stated?		DR	Yes the Host Party is stated in PoA DD	Ok	Ok
A.4.1.4. Do the project participants possess ownership or licenses which will allow the implementation of the project at that site / those sites?	VVM Para.64	DR	Refer CAR 19 (5) Supporting document has been provided, hence the issue is closed.	CAR 19 (5)	Ok
A.4.1.5. Is the category(ies) of the programme of	VVM Para.64	DR	Yes it is a large scale PoA	Ok	OK



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activity correctly identified?					
A.4.1.6. Is all information provided in compliance with actual situation or planning as available by the project participants?	VVM Para.64 EB 52 Para. 13	DR	Yes all information provided is in compliance with actual situation or planning as available by the project participants	Ok	Ok
A.4.2. Description of a typical CDM programme activity (CPA)					
A.4.2.1. Is it unambiguously stated which technology or measures are to be employed by the CPA?		DR	The technology or measures to be employed are discussed in section A.4.2.1' however for further clarification CL 04 has been raised. Additional information has been provided, so CL 04 is closed	CL 04	Ok
A.4.2.2. Is the type and category of project activities correctly identified and indicated?	VVM Para.64	DR	Yes the type and category of project activities are correctly identified and indicated	Ok	OK
A.4.2.3. Does the technical design of the project activity reflect current good practices?	VVM Para.64	DR	Yes the technical design of the project activity reflect current good practices.	OK	OK
A.4.2.4. Does the implementation of the project activity require any technology transfer from Annex-I- countries to the host	VVM Para.64	DR,I	PP also needs to clarify whether implementation of the project activity involve any technology transfer from Annex-1 countries to host country. If the technology is already available in the country, no comparative analysis is given against the other commonly used technology is Indonesia in section A.4.2.1 of PoA DD.	CAR 02	Ok



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country (ies)?			CAR 02 is closed. Refer annex 3 for details.		
A.4.2.5. Is the technology implemented by the project activity environmentally safe?	VVM Para.64	DR	Refer CAR 02 CAR 02 is closed. Refer annex 3 for details.	CAR 02	Ok
A.4.2.6. Is the information provided in compliance with actual situation or planning?	VVM Para.64	DR	Subject to closure of CAR 02 CAR 02 is closed. Refer annex 3 for details	CAR 02	Ok
A.4.2.7. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	VVM Para.64	DR	Yes the project will use state of the Art technology	OK	Ok
A.4.2.8. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	VVM Para.64	DR	No, the project technology is not likely to be substituted by other or more efficient technologies within the project period	Ok	Ok
A.4.2.9. Does the project require extensive initial training and maintenance efforts in order to be carried out as	VVM Para.64	DR	The required training will be provided to the staff operating the monitoring equipment	Ok	Ok



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scheduled during the project period?					
A.4.2.10. Is information available on the demand and requirements for training and maintenance?	VVM Para.64	DR	Yes information is available in section A.4.2.1	OK	Ok
A.4.2.11. Are there clear and unambiguous eligibility criteria for the inclusion of a CPA into the PoA?	VVM Para.64	DR	Yes the eligibility criteria is defined for the inclusion of a CPA into the PoA. However for further clarification CL # 05 is raised CL 05 is closed. Refer annex 3 for detail.	CL-05	Ok
A.4.3. Description of how the anthropogenic emissions of GHG by sources are reduced by a CPA below those that would have occurred in the absence of the registered PoA (assessment and demonstration of additionality of the PoA)					
A.4.3.1. Is it evident and clearly documented that the proposed PoA is a voluntary coordinated action?	VVM Para 137 <u>EB63 Annex23</u> VVM Para.67d/95 EB 65, Annex 3	DR	Yes, it has been clearly indicated that the proposed PoA is a voluntary Coordinated action.	Ok	Ok
A.4.3.2. Has it been demonstrated that in the absence of CDM none of the CPA would occur	EB 65, Annex 3 para 7	DR	Yes it has been demonstrated using "Standard for demonstration of additionality of GHG Emission reductions achieved by a Programme of Activities" version 01.0 that in the absence of CDM none of the CPA would occur	Ok	Ok
A.4.3.3. Are the CPAs included in the PoA all microscale projects	EB 65, Annex 3 para 8	DR	No the CPA to be included is of Large scale	Ok	Ok
A.4.3.4. Are the CPAs included in the PoA	EB 65, Annex 3	DR	No the CPA to be included is of Large scale	Ok	Ok



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under small scale project activities?	para 9				
A.4.3.5. Are the CPAs included in the PoA under large scale project activities?	EB 65, Annex 3para 10	DR	Yes the CPA to be included is of Large scale	Ok	OK
A.4.3.6. Has the PP demonstrated the additionality as per the relevant additionality-related guidelines, tools	EB 65, Annex 3para 11	DR	Yes PP has demonstrated additionality using Combined tool to identify the baseline scenario and demonstrate additionality	Ok	Ok
A.4.3.7. Has the CME included all the eligibility criteria in PoA design documents?	EB 65, Annex 3 para 11	DR	Yes the CME included all the eligibility criteria in PoA design documents however CAR 6, CAR 7 And CAR 8 are raised to make further correction in the eligibility criteria. Corrections have been made, Refer annex 3 for details.	CAR-6, CAR-7 And CAR-8	Ok
A.4.3.8. Is the PoA involves combination of technologies /measures/ and /or methdologies?	EB 65, Annex 3 para 12	DR	No PoA is not using combination of Technology	Ok	Ok
A.4.3.9. Is it evident and substantiated that this voluntary coordinated action would not be implemented in the absence of the PoA?	VVM Para.93/91	DR	Yes it has been demonstrated using "Standard for demonstration of additionality of GHG Emission reductions achieved by a Programme of Activities" version 01.0 that in the absence of CDM none of the CPA would occur	Ok	Ok
A.4.3.10. Is it evident and substantiated that in case the PoA implements a mandatory policy or regulation this would	VVM Para.102b EB 62 Annex 13	DR,I	No proposed PoA is not implementing any mandatory policy	OK	Ok



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not be enforced otherwise?					
A.4.3.11. Is it evident and substantiated that in case the PoA implements a mandatory policy or regulation that is enforced the PoA will lead to a greater level of enforcement?	EB 63 Annex 13		NA	NA	NA
A.4.4. Eligibility Criteria including Operational, management and monitoring plan for the programme of activities (PoA)					
A.4.4.1. Has the boundary of the CPA being clearly defined for CPA inclusion?	EB 65, Annex 3 Para 14(a)	DR,SV	Yes the boundary for PoA is clearly defined. PoA will be implemented within the geographical boundary of Indonesia	Ok	Ok
A.4.4.2. Has the CME included the provisions to avoid double counting of the emission reduction?	EB 65, Annex 3 Para 14(b)	DR	Refer CAR # 07 CAR 07 is closed, Refer annex 3 for details.	CAR 07	Ok
A.4.4.3. Has the CME clearly included the specifications of technology/measure including the level and type of service	EB 65, Annex 3 Para 14(c)	DR	Yes CME has clearly included the specifications of technology/measure including the level and type of service	Ok	Ok
A.4.4.4. Has the CME included the conditions to check	EB 65, Annex 3 Para 14(d)	DR	Refer CAR # 08	CAR 08	Ok



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the start date of the CPA as per the start date definition of CPA			CAR 08 is closed, Refer annex 3 for details.		
A.4.4.5. Are there multiple methodologies involved in the POA	EB 65, Annex 3 para 14(e) EB 63 Annex 4	DR	No, PoA is using only one methodology ACM0001 ver. 12.		Ok
A.4.4.6. Has the CME included conditions for the CPAs to meet the requirements of the latest available Standard of Additionality	EB 65, Annex 3 para 14(f) EB 63 Annex 2	DR	Yes CME has included conditions for the CPAs to meet the requirements of the latest available Standard of Additionality	OK	OK
A.4.4.7. Has the CME included the specific requirements of the conditions of local stakeholder and environment impact analysis for each CPA	EB 65, Annex 3 para 14(g)	DR	Refer CAR 08 CAR 08 is closed, Refer annex 3 for details.	CAR-08	OK
A.4.4.8. Has the CME identified the target group correctly?	EB 65, Annex 3 para 14(i)	DR	Yes the CME has identified the target group correctly	OK	OK
A.4.4.9. Has the CME correctly provided the sampling plans and followed the correct guidelines/standards of sampling?	EB 65, Annex 3 para 14(j)		NA	NA	NA
A.4.4.10. Has the CME included the provisions of check	EB 65, Annex 3 para 14(k)		NA, As PoA involves inclusion of Large scale CPA	NA	NA



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for the micro scale or small scale threshold criteria throughout the crediting period?					
A.4.4.11. Has the CME included the provisions of check for debundling in case of each CPA?	EB 65, Annex 3 para 14(l)	DR	Yes the CME has included the provisions of check for debundling in case of each CPA	Ok	OK
A.4.4.12. Has the CME affirmed that funding from Annex I parties, if any, does not result in a diversion of official development assistance	EB 65, Annex 3 para 14(h)	DR,I	No public funding is involved in the implementation of proposed PoA	Ok	OK
A.4.4.13. Is there a clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies made available to the DOE at the time of validation of the PoA	EB 65, Annex 3 para 17	DR	Yes roles and responsibilities of personnel involved in the process of inclusion of CPAs are clearly defined. It has also been confirmed from a CME management manual provided by PP	OK	Ok
A.4.4.14. Are there records of arrangements for training and capacity development for personnel made available to the DOE at the time of	EB 65, Annex 3	DR	Since the CPA for the project activity is under implementation phase so there are no records for training and capacity development for personnel.	Ok	OK



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				Draft	Final
validation of the PoA;					
A.4.5. Public funding of the small-scale project activity					
A.4.5.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	PoA-DD A.4.5	DR	Yes information on Public funding is provided in section A.4.5 and it is confirmed during on site visit that no public funding is involved in the proposed PoA	Ok	Ok
A.4.5.2. Is all information provided consistent with the details given in remaining sections of the PoA-DD (in particular annex 2)?	PoA-DD A.4.5	DR	Yes information provided is consistent with Annex 2 of PoA DD.	Ok	Ok
B. Duration of the programme of activities					
B.1. Starting date of the programme of activities					
B.1.1. Is the programme's starting date clearly defined and reasonable?	VVM Para. 102a-c PoA-DD Section B	DR	Start date of PoA is not correctly defined hence CAR 19 (3) is raised. Correction has been made; hence issue is closed.	CAR 19 (5)	Ok
B.2. Length of the programme of activities (PoA)					
B.2.1. Is the assumed length of the PoA clearly defined by the coordinating managing entity and reasonable (max 28	VVM Para. 102a-c PoA-DD Section B	DR	Yes the assumed length of PoA is clearly defined. The length of PoA is considered as 28 years	Ok	Ok



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Checklist Question	Reference	MoV	Comments	Conclusion	
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years)?					
C. Environmental Analysis					
C.1. Definition of the level at which environmental analysis as per requirements of the CDM modalities and procedures is undertaken:					
C.1.1. Is it defined whether the environmental analysis takes place at PoA or CPA level?	VVM Para. 131/134d PoA-DD Section C	DR	Yes it is defined that environment analysis will be carried out at CPA level.	Ok	Ok
C.1.2. Is the choice whether the environmental analysis takes place at PoA or CPA level justified?	VVM Para. 131/134d PoA-DD Section C	DR	Yes the choice has been justified.	Ok	OK
C.2. Documentation on the analysis of the environmental impacts of the PoA, including trans-boundary impacts:					
C.2.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	VVM Para. 131/134d PoA-DD Section C	DR	NA, EIA will be carried out CPA level	Ok	Ok
C.2.2. Has the analysis of the environmental impacts of the project activity been sufficiently described?	VVM Para. 131/134d PoA-DD Section C	DR	NA, EIA will be carried out CPA level	Ok	Ok
C.2.3. Will the project create any adverse environmental effects?	VVM Para. 131/134d PoA-DD Section C	DR	NA, EIA will be carried out CPA level	Ok	Ok



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Checklist Question	Reference	MoV	Comments	Conclusion	
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C.2.4. Were trans-boundary environmental impacts identified in the analysis?	VVM Para. 131/134d PoA-DD Section C	DR	NA, EIA will be carried out CPA level	Ok	Ok
C.3. Please state whether in accordance with the host Party laws/regulations, an environmental impact assessment is required for a typical CPA of the PoA:					
C.3.1. Have the identified environmental impacts been addressed in the project design sufficiently?	VVM Para. 131/134d PoA-DD Section C	DR	NA, EIA will be carried out CPA level	Ok	Ok
C.3.2. Does the project comply with environmental legislation in the host country?	VVM Para. 131/134d PoA-DD Section C	DR	NA, EIA will be carried out CPA level	Ok	Ok
C.3.1. Is, per host country laws/regulations, an environmental impact assessment necessary for a typical CPA?	VVM Para. 131/134d PoA-DD Section C	DR	NA, EIA will be carried out CPA level	Ok	Ok
D. Stakeholders' comments					
D.1. Please indicate the level at which local stakeholder comments are invited. Justify the choice:					
D.1.1. Is there a clear statement whether the stakeholder comments will be invited at PoA or CPA level?	VVM Para. 128a PoA-DD Section D	DR	Yes it is clearly stated that Stakeholder comments would be invited at CPA level	Ok	Ok
D.1.2. Is the choice justified in a clear and reasonable	VVM Para.	DR	Yes a justification has been included in PoA DD	Ok	Ok



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manner?	128a PoA-DD Section D				
D.1.3.If the stakeholder comments will be invited at PoA level, is there sufficient information provided, on how comments by local stakeholders were invited?	VVM Para. 128a PoA-DD Section D	DR	NA, Stakeholder comments will be invited at CPA level.	Ok	Ok
D.1.4.If the stakeholder comments will be invited at PoA level, is there a summary of the contents?	VVM Para. 128a PoA-DD Section D	DR	NA, Stakeholder comments will be invited at CPA level.	Ok	Ok
D.1.5.If the stakeholder comments will be invited at PoA level, is there sufficient information provided, on how due account was taken of any comments received?	VVM Para. 128a PoA-DD Section D	DR	NA, Stakeholder comments will be invited at CPA level.	Ok	Ok
D.2. Brief description how comments by local stakeholders have been invited and compiled					
D.2.1. Have relevant stakeholders been consulted?	VVM Para. 128a PoA-DD Section D	DR	NA, Stakeholder comments will be invited at CPA level.	Ok	Ok
D.2.2. Have appropriate media been	VVM Para.	DR	NA, Stakeholder comments will be invited at CPA level.	Ok	Ok



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used to invite comments by local stakeholders?	128a PoA-DD Section D				
D.2.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	VVM Para. 128b PoA-DD Section D	DR	NA, Stakeholder comments will be invited at CPA level.	Ok	Ok
D.2.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	VVM Para. 128b PoA-DD Section D	DR	NA, Stakeholder comments will be invited at CPA level.	Ok	Ok
D.3. Summary of the comments received					
D.3.1. Is a summary of the received stakeholder comments provided?	VVM Para. 128b PoA-DD Section D	DR	NA, Stakeholder comments will be invited at CPA level.	OK	OK
D.4. Report on how due account was taken of any comments received					
D.4.1. Has due account been taken of any stakeholder comments received?	VVM Para. 128b PoA-DD Section D	DR	NA, Stakeholder comments will be invited at CPA level.	OK	OK



Checklist Question	Reference	MoV	Comments	Conclusion	
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E. Application of a baseline and monitoring methodology to a typical CPA					
E.1.Title and reference of the approved baseline and monitoring methodology applied to CPA included in the PoA					
E.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	VVM Para.67b.80/82/86 PoA-DD section E EB65 Annex03	DR	Yes version no and title of baseline methodology is clearly indicated in section E.1; however reference has not been provided hence CAR 09 has been raised Reference has been provided, So CAR 09 is closed	CAR 09	OK
E.1.2. Is the applied version the most recent one and / or is this version still applicable?	VVM Para.81/82/86a-d/83/84 PoA-DD section E	DR	Yes the most recent version of methodology has been used ACM0001 version 12.0.0	Ok	Ok
E.1.3. Is the applied methodology approved by the board, for use in PoA?	VVM Para.86b-c/95 PoA-DD section E	DR	Yes the applied methodology is approved by the board, for use in PoA	Ok	Ok
E.2. Justification of the choice of the methodology and why it is applicable to a CPA					
E.2.1. Is the applied methodology considered the most appropriate one?	VVM Para.86b	DR	Yes the applied methodology is considered the most appropriate one. The applicability for each criteria is discussed in Table E.2.1 of PoA DD	Ok	Ok
E.2.1. Does the methodology account for leakage in the context of a CPA?	VVM Para.86b	DR	The Methodology refers to Tool to calculate baseline, project and/or leakage emissions from electricity consumption & Tool to calculate project or leakage CO2 emissions from fossil fuel combustion for calculation of leakage emission.	Ok	Ok
E.2.2. Is there application of multiple CDM methodologies	EB65 Annex03	DR	No only ACM0001 has been applied for the proposed PoA	OK	Ok



Checklist Question	Reference	MoV	Comments	Conclusion	
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E.3. Description of the sources and gases included in the CPA boundary					
E.3.1. Does the CPA boundary include the physical and geographical location where the programme activities take place ?	EB61 Anne21	DR	Yes the CPA boundary includes the physical and geographical location where the programme activities take place	Ok	OK
E.3.2. Are all sources and gases within theboundary considered in a clear manner?		DR	Yes the sources and gases within the boundary are considered in a clear manner	Ok	OK
E.3.3. Do the spatial and technological boundaries as verified on-site comply with thediscussion provided by / indication included tothe PoA-DD?		DR	Yes the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included tothe PoA-DD	Ok	Ok
E.4. Description of how the baseline scenario is identified and description of the identified baseline scenario:					
E.4.1. Have all technically feasible baseline scenario alternatives to the PoA been identified and discussed by the PoA-DD? Why can this list be considered as being complete?	VVM Para.67b.80/82/8 6	DR	PP needs to justify with evidence of the inclusion of the baseline scenarios as a LFG2, E2 or E3 and/or H4 at the CPA level as required by the approved methodology ACM0001 Version 12 and exclusion of remaining scenarios in section E.4 of PoA DD. Hence CAR 11 has been raised. CAR 11 is closed. Refer Annex 3 for detail.	CAR 11	OK
E.4.2. Does project identify correctly exclude those options not in line with regulatory or legal	VVM Para.67b.80/82/8 6	DR	Subject to closure of CAR 11. CAR 11 is closed. Refer Annex 3 for detail.	CAR 11	OK



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requirements?					
E.4.3. Have applicable regulatory or legal requirements been identified?	VVM Para.67b.80/82/86	DR	Subject to closure of CAR 11. CAR 11 is closed. Refer Annex 3 for detail.	CAR 11	OK
E.4.4. Does the PoA-DD identify the most likely baseline scenario in absence of the project activity?	VVM Para.67b.90	DR	Subject to closure of CAR 11. CAR 11 is closed. Refer Annex 3 for detail.	CAR 11	OK
E.4.5. Is this identification supported by official and/or verifiable documents (e.g. studies, web pages, certificates, etc)?	VVM Para.90	DR	Subject to closure of CAR 11. CAR 11 is closed. Refer Annex 3 for detail.	CAR 11	OK
E.4.6. Is the identified baseline scenario in line with regulatory or legal requirements?	VVM Para.67b.80/82/86	DR	Subject to closure of CAR 11. CAR 11 is closed. Refer Annex 3 for detail.	CAR 11	OK
E.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of a typical CPA, included in a registered PoA (assessment and demonstration of additionality):					
E.5.1. Are the key criteria and data for assessing additionality of a CPA that is to be included into the PoA clearly and unambiguously stated?	VVM Para 137 EB 65 Annex 3	DR	The additionality of a CPA under the proposed PoA will be demonstrated using Combined tool to identify the baseline scenario and demonstrate additionality as per EB 65 Annex 3 para 10.	Ok	Ok



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E.5.2. Is the choice of the criteria justified, based on the analysis in section E.5.1 of the PoA-DD?	VVM Para.93/91	DR	Yes the choice of the criteria justified is based on the analysis in section E.5.1 of the PoA-DD	Ok	Ok
E.5.3. Does it become evident how these criteria would be applied to assess the additionality of a typical CPA at the time of inclusion?	VVM Para. 110	DR	With each eligibility criterion, CME has proposed a set of documentary evidences to demonstrate the compliance of CPA with the eligibility criterion. The assessment team has checked the proposed documentary requirements for each criterion and found them to be appropriate for demonstrating the eligibility of the CPA under the PoA.	OK	OK
E.5.4. Is this information incorporated into the specific CDM-CPA-DD ("real case")?		DR	Yes information is incorporated into the specific CDM-CPA-DD	OK	OK
E.5.5. If the starting date of the programme activity is before the date of validation, is evidence available to prove that incentive from the CDM was seriously considered in the decision to proceed with the programme activity?	VVM Para.102b	DR	Start date of PoA is considered as the date of webhosting of PoA, which is in line with EB 55 Annex 38	OK	Ok
E.5.6. Is a complete list of barriers developed that prevents the project activity to occur?	VVM Para 113 EB 50 Annex 13	DR	There are no realistic and credible barriers (other than insufficient financial returns and barrier due to prevailing practice) that prevent the alternative scenarios to occur. However CL 10 has been raised for further clarification.	CL-10	Ok



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			CL 10 is closed, Refer annex 3 for details.		
E.5.7. Does this list include at least one of the following barriers?	VVM Para. 105	DR	No, There are no realistic and credible barriers (other than insufficient financial returns and barrier due to prevailing practice) that prevent the alternative scenarios to occur.	Ok	Ok
E.5.8. Does the discussion sufficiently take into account relevant national and/or sectoral policies?	VVM Para. 119a/b	DR	There are no realistic and credible barriers that prevent the alternative scenarios to occur.	Ok	Ok
E.5.9. Is transparent and documented evidence provided on the existence and significance of these barriers?	VVM Para. 119a/b		Not applicable	NA	NA
E.5.1. Is it appropriately explained how the approval of the project activity will help to overcome the identified barriers?	VVM Para. 119a/b		Not applicable	NA	NA
E.6. Estimation of Emission reductions of a CPA					
E.6.1. Explanation of methodological choices, provided in the approved baseline and monitoring methodology applied, selected for a typical CPA					
E.6.1.1. Is it explained how the procedures provided in the methodology are applied?	VVM Para. 90/91d	DR	CME needs to transparently discuss the calculation approach and equation which will be used in CPA in calculations of FCH ₄ , sent_flare, y, PE _{flare} , y, FCH ₄ , HG, kiln, h using latest versions "Tool to determine the mass flow of a greenhouse gas in a gaseous stream", Tool to determine project emissions from flaring gases containing methane", respectively in section E.6.2 of the PoA DD.	CAR 12	OK



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			Hence CAR 12 is raised CAR 12 is closed. Refer annex 3 for details.		
E.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	VVM Para. 90/91d	DR	As per justification provided in applicability conditions mentioned in section E.2 of the project activity. Emissions from the use of natural gas are not allowed. However, Baseline emissions associated with natural gas use are included in section E.6.2 of the PoA DD. Also parameters “ $NCV_{LFG,NG,y}$ ” and “ $LFG_{NG,y}$ ” are parameters required for calculation of baseline emissions associated with natural gas use which are included in section E.7.1 of the PoA DD. Hence CAR 13 is raised CAR 13 is closed. Refer annex 3 for details.	CAR 13	Ok
E.6.2. Equations, including fixed parametric values, to be used for calculation of emission reductions of a CPA:					
E.6.2.1. Are the formulae required for the determination of emission reductions correctly presented, enabling a complete identification of parameters to be used and / or monitored?	VVM Para. 90/91d	DR	Subject to closure of CAR 12 & 13 CAR 12 & 13 are closed. Refer annex 3 for details	CAR 12 & 13	Ok
E.6.2.1. Are the equations, including fixed parametric values, to be used for calculation of emission reductions of a CPA, completely presented?	VVM Para. 90/91d	DR	Subject to closure of CAR 12 & 13 CAR 12 & 13 are closed. Refer annex 3 for details	CAR 12 & 13	Ok



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E.6.3. Data and parameters that are to be reported in CDM-CPA-DD form					
E.6.3.1. Is the list of parameters presented in section considered to be completewith regard to the requirements of theapplied methodology?	VVM Para 111	DR	There are two parameters of the same name i.e. "Operation of the energy plant" mentioned in section E.7.1 of the PoA DD hence CAR 14 has been raised for a corrective action. Correction has been made; Hence CAR 14 is closed.	CAR-14	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. Is the list of parameters presented inconsidered to be section B.7.1 considered to be complete with regard to the requirements of theapplied methodology?	VVM Para 91d	DR	There are two parameters of the same name i.e. "Operation of the energy plant" mentioned in section E.7.1 of the PoA DD hence CAR 14 has been raised for a corrective action. Correction has been made; Hence CAR 14 is closed.	CAR-14	OK
E.7.2. Description of the monitoring plan for a CPA					
E.7.2.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?	VVM Para. 122a	DR	As per justification provided in applicability conditions mentioned in section E.2 of the project activity emissions from the use of natural gas are not allowed. However, the Figure 1 mentioned in section E.7.2 of the PoA DD shows "Pipe" which reflects "use of natural gas" , also the statement mentioned in same section "The amountfeeding to the natural gas distribution network and continuously." Is also reflects the same. Hence CAR 15 has been raised for clarification.	CAR-15	Ok



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			CAR 15 is closed. Refer Annex 3 for details.		
E.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	VVM Para. 122a-c EB61 Annex 21	DR	In section E.7.2 POA –DD is not transparent on the authority and responsibility of the coordinating/managing entity (CME) and responsibility for registration, monitoring measurements and reporting of each CPA . Hence CAR 18 has been raised. CAR 18 is closed. Refer Annex 3 for details.	CAR 18	Ok
E.7.2.1. Does the monitoring plan provide current good monitoring practice?	VVM Para. 122b	DR	Yes the monitoring plan provide current good monitoring practice	Ok	Ok
If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	VVM Para. 123a-b EB61 Annex 21	DR	No information is provided in Annex 4	Ok	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. Is there any indication of a date when the baseline was determined?		DR	Yes the date of baseline determination is indicated in section E.8	Ok	OK
E.8.2. Has dd/mm/yyyy format been used to indicate the date?		DR	Yes Date of completion: 06/12/2011	Ok	OK
E.8.3. Is this consistent with the time line of the PoA-		DR	Yes it is consistent with the time line of the PoA-DD history	OK	OK



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DD history?					
E.8.4. Is the information on the person(s) / entity (ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?		DR	Yes the information on the person(s) / entity(ies) responsible for th application of the baseline and monitoring methodology provided consistent with the actual situation.	Ok	Ok
E.8.1. Is information provided whether this person / entity is also considered a project participant?		DR	The person is the project participant.	OK	OK



Annex 2: CPA Validation Protocol.

Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
F. General description of CDM programme activity (CPA)					
F.1. Project Title					
F.1.1. Does the used CPA title clearly enable to identify the unique CDM programme activity?	VVM Para.56 Guidelines for completing a CDM-CPA-DD (CPA-DD) section A.1	DR	The title of the CPA is “CPA B11001- Bagendung Landfill Gas Recovery”. The uniqueness of the title was verified by checking the same on UNFCCC website i.e. http://cdm.unfccc.int/ProgrammeOfActivities/Validation/index.html	Ok	OK
F.1.2. Is there an indication of a version number and the date of the version?	VVM Para.56 CPA-DD section A.1	DR	Yes there is indication of version no. And date of version Version: 01 Date: 06/12/2011	OK	OK
F.1.3. Is this consistent with the time line of the programme’s history?	VVM Para.56 CPA-DD section A.1	DR	Yes this is consistent with the time line of the programme’s history	OK	OK
F.1.4. Check the party involvement of the CPA	EB 55 Annex 38	DR	CPA will be implemented in the Indonesia, which is the host party for PoA.	OK	OK



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
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F.2. Description of the programme of activities (PoA):					
F.2.1. Is the description delivering a transparent overview of the CPA?	VVM Para.59 CPA-DD section A.2 see also A.4, A.4.3 and B.3 EB 65 Annex 3	DR	The description of CPA is included however it is not clear which scenario out of the two defined in PoA, will be used. Hence CAR 21 has been raised. Correction has been made, Hence CAR 21 is closed.	CAR 21	Ok
F.2.2. Is it unambiguously stated which technology or measures are to be employed by the CPA?	VVM Para.64 CPA-DD section A.2 see also A.4, A.4.2	DR	Further information is required on power plant description of the project activity such as capacity of equipments, generation and supply to grid voltage. CAR 22 is raised Correction has been made, Hence CAR 22 is closed.	CAR 22	OK
F.2.3. Does the technical design of the programme activity reflect current good practices?		DR	The project activity involves capturing of land fill gas and generation of electricity, which reflects good current practices.	Ok	OK
F.2.4. Is a schedule available for the implementation of the programme and are there any risks for delays?	VVM Para.64 CPA-DD section A.2	DR	No schedule is available as the implementation of the project activity will happen only upon the successful registration of PoA and CPA with the UNFCCC.	Ok	OK
F.2.5. What proofs are available demonstrating that the programme	VVM Para.64	DR	Not Applicable as the implementation of the project activity will happen only upon the successful registration of PoA and CPA with	Ok	OK



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description is in compliance with the actual situation or planning?			the UNFCCC.		
F.2.6. Is the information provided by these proofs consistent with the information provided by the CPA-DD and the CPA-DD?	CPA-DD section A.2	DR	Not Applicable as the implementation of the project activity will happen only upon the successful registration of PoA and CPA with the UNFCCC.	Ok	OK
F.3. Entity/individual responsible for the CPA:					
F.3.1. Does it become evident which entity/individual is responsible for the CPA (the CPA implementer)	VVM Para. 51 CPA-DD section A.3	DR	Yes the name of CPA implementer is clearly indicated in section A.3	Ok	Ok
F.3.2. Is there any document substantiating that the stated entity/individual is responsible for the implementation of the CPA?	VVM Para. 51 CPA-DD section A.3	DR	CPA implementer is requested to provide the required documents. Refer CAR 39 (12) CAR 39 is closed. Refer annex 3 for details.	CAR 39 (12)	OK
F.3.3. Is all information on the CPA implementer provided in		DR	Yes all information on the CPA implementer provided is in consistency with details provided by further chapters of the CPA-	Ok	OK



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consistency with details provided by further chapters of the CPA-DD (in particular annex 1)?			DD		
F.3.4. Is the CPA implementer project participant of the PoA and if so, is its name correctly stated in the CPA-DD?	VVM Para. 51 CPA-DD section A.3	DR	No CPA implementer is not a project participant of the PoA	Ok	Ok
F.4. Technical description of the CPA					
F.4.1. Identification of the CPA:					
F.4.1.1. Does the information provided on the location of the programme allow for a clear definition identification of the boundary for the PoA in terms of a geographical area, within which all CPAs included in this PoA will be implemented? Is the Host Party stated and consistent with the information provided in the PoADD?	VVM Para.64	DR, SV	The CPA is a landfill gas recovery project located in Bagendung district, province of Banten. The physical location and geo-coordinates as mentioned in CPA DD has been confirmed by validation team during site visit.	ok	ok
F.4.1.2. Is the consideration of all applicable national and/or sectoral policies and regulations of each host	EB 65 Annex 3	DR	The project boundary is within host country and in compliance with host country regulations. The same has also been confirmed by the validation team during site visit.	OK	OK



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
country within the boundary evident and substantiated? Does the information provided on the location of the programme activity allow for a unique identification of the location and the boundary of the CPA in terms of the geographical area?					
F.4.1.3. Is/are the Host Party(ies) stated?		DR	The CPA DD clearly indicates the host party as Indonesia	OK	OK
F.4.1.4. Do the project participants possess ownership or licenses which will allow the implementation of the project at that site / those sites?	VVM Para.64	DR	CAR 39 is raised to provide the relevant evidence. Evidence has been submitted, hence issue is closed	CAR 39 (12)	OK
F.4.1.5. Is the category(ies) of the programme of activity correctly identified?	VVM Para.64	DR	The Category of project activity is Correctly identified in section A.2	ok	ok
F.4.1.6. Is all information provided in compliance with actual situation or planning as available by the project participants?	VVM Para.64 EB 52 Para. 13	DR	All the information provided in final CPA DD are in compliance with planned programme activity. The same has been confirmed by review of supportive and by interviewing CME/CPA implementer.	ok	ok
F.4.2. Duration of the CPA: Description of a typical CDM programme activity (CPA)					
F.4.2.1. Is the starting date of the CPA provided?		DR	The start date of CPA is not correctly provided. CAR 23 is raised The revised CPA DD correctly mentions the start date as the date	CAR 23	ok



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
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			equipment supplier and CPA implementer signed a memorandum of understanding on the project implementation, the validation team confirms that there were no other activities prior to design contract, which can be categorised as start date.		
F.4.2.2. Is the starting date consistent with the PoA timeline and the requirements of the PoA procedures (Procedures para 5d, considering exception according to EB47, meeting report, para 72)?		DR	Yes the starting date consistent with the PoA timeline and the requirements of the PoA procedures	Ok	Ok
F.4.2.3. Is the operational lifetime of the CPA clearly defined and plausible?		DR	5. Yes the operational lifetime of the CPA clearly defined and plausible	Ok	Ok
F.4.3. Choice of the crediting period and related information:					
F.4.3.1. Is the starting date of the crediting period stated and plausible (in accordance with the PoA procedures)?		DR	Yes the starting date of the crediting period stated and plausible.	Ok	Ok
F.4.3.2. Is it evident that fixed crediting period is chosen, what is the length of the crediting period?		DR	PI provide the expected years of crediting period in section A.4.4 of CPA DD. CAR 24 is raised. The length of the crediting period for this CPA is 10 years (fixed crediting period).	CAR 24	Ok
F.4.3.3. Estimated amount of emission reductions stated?		DR	Yes the amount of emission reduction stated	Ok	Ok
F.4.3.4. Is the estimated amount consistent with section B 5 of the CPA-DD?		DR	The estimated amount of emission reduction is consistent with section B.5 of the CPA DD.	Ok	Ok



Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
F.4.4. Public funding of the project activity & Information to confirm that the proposed CPA is not a de-bundled component (considering PoA-de-bundling guidance):					
F.4.4.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	CPA-DD A.4.5	DR	The CPA will not receive any public funding from Parties included in Annex I of the UNFCCC	Ok	Ok
F.4.4.2. Is all information provided consistent with the details given in remaining sections of the CPA-DD (in particular annex 2)?		DR	Yes The information provided is consistent with other section of CPA DD.	Ok	Ok
F.4.4.3. Is there a registered CDM project or another CPA (either registered or in the state of application) which has the same activity implemented or has a coordinating/ managing entity which also manages a large scale PoA of the same scope and the boundary is within 1 km of the boundary of the proposed CPA?		DR, SV	There is no other registered CDM project or another CPA by CPA implementer or CME within 1 km range of proposed CPA. The same has been confirmed by reviewing the UNFCCC website and also confirmed during site visit.	Ok	Ok
F.4.4.4. If the proposed CPA is deemed to be a de-bundled component but the size of both activities combined does not exceed the SSC threshold, is this			Not Applicable, The proposed CPA is a large scale CPA	NA	NA



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
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statement provided in a transparent and substantiated manner?					
F.4.4.5. Is the information on registered CDM projects or other CPAs transparent, understandable and substantiated by documents?		DR	As mentioned above there are no registered CDM project activity by CPA implementer or CME.	Ok	Ok
F.5. Information to confirm that the proposed CPA is not a de-bundled component (considering PoA-de-bundling guidance):					
F.5.1. Is there a system or procedure to detect whether a CPA to be included in the PoA is not a de-bundled component of another CPA or CDM project?			Not Applicable, as the proposed CPA is a Large scale CPA	NA	NA
F.5.2. Are all PoAs considered which are in the same geographical area and use the same methodology?			Not Applicable, as the proposed CPA is a Large scale CPA	NA	NA
F.6. Confirmation that the CPA is neither registered as an individual CDM project activity or is part of another registered PoA					
F.6.1. Confirmation provided by coordinating/ managing entity or CPA implementer?	VVM Para. 102a-c CPA-DD Section B	DR	The CME has assessed and confirmed that proposed CPA is neither registered as individual CDM project activity nor a part of another registered PoA.	OK	OK



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
G. Eligibility of the CPA and estimation of emission reductions:					
G.1. Title and reference of the registered PoA to which the CPA is added:					
G.1.1. Are the title and reference correctly provided		DR	6. Yes the title and reference correctly provided “BWC Sustainable Landfill Gas Recovery Programme of Activities in Indonesia”	Ok	OK
G.2. Justification of why the CPA is eligible to be included in the registered PoA:					
G.2.1. Are all criteria as per PoA-DD addressed?		DR	The explanation along with appropriate evidences for justification of eligibility of CPA to be included in the Registered PoA is not provided in section B.2 of the CPA DD. CAR 25 is raised in this regard. CAR 25 is closed. Refer Annex 3 for details	CAR 25	Ok
G.2.2. Are all eligibility criteria met regarding the proposed CPA?		DR	Subject to closure of CAR 25	CAR 25	Ok
G.2.3. Are the statements substantiated by credible documents?		DR	Subject to closure of CAR 25	CAR 25	Ok
G.3. Assessment and demonstration of additionality of the CPA, as per eligibility criteria listed in the registered PoA:					
G.3.1. Are the key criteria and data for assessing additionality of CPA that are included into the PoA addressed?	EB 65 Annex 3	DR	As per PoA the eligible baseline scenarios/alternatives are LFG2, E2 or E3 and/or H4. However, in section B.3 of the CPA DD has justified all the scenarios mentioned in the methodology and not as per eligibility criteria listed in PoA to demonstrate the additionality of the project activity. CAR 26 is raised CAR 26 is closed. Refer Annex 3 for details	CAR 26	Ok
G.3.2. Are the key criteria and data for assessing additionality of a CPA that are		DR	The sensitivity analysis for methane generation is not carried out in sub step 3d of section B.3 of CPA DD in line with the options provided in sub step 3d. Hence CAR 28 is raised	CAR 28	Ok



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
included into the PoA met?			CAR 28 is closed, Refer Annex 3 for details.		
G.3.3. If the starting date of the CPA is before the date of validation, is evidence available to prove that incentive from the CDM was seriously considered in the decision to proceed with the programme activity?		DR	The date of investment decision is not provided in section B.3 of the PDD. CAR 27 is raised CAR 27 is closed. Refer Annex 3 for details	CAR 27	Ok
G.3.4. Does it become evident how these criteria were applied to assess the additionality of the CPA?		DR	The CPA DD has demonstrated the additionality using investment analysis as specified in PoA. However CPA specific values those are available at validation along with proper justification of the applicable case is not provided in section B.5.1 of CPA DD. Hence CAR 29 is raised CAR 29 is closed. Refer Annex 3 for details	CAR 29	Ok
G.3.5. Does this list include at least one of the following barriers?		DR	The CPA DD has demonstrated the additionality using investment analysis. However evidence for value used in investment analysis is not provided; Hence CAR 38 & 40 are raised CAR 38 & 40 are closed. Refer Annex 3 for details.	CAR 38 & 40	Ok
G.3.6. Does the discussion sufficiently take into account relevant national and/or sectoral policies?		DR	All the national and sectoral policies appropriately considered identification of alternatives and demonstration of additionality.	Ok	Ok
G.3.7. Is transparent and documented evidence provided on the existence and significance of these barriers?		DR	The documented evidence provided on the existence and significance of these barriers. However closure of issue is pending due to CARs raised in this section. Issues raised in this section are closed. Refer annex 3 for details.	Subject to closure of CAR 27, 28, & 29	Ok



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
G.3.8. Is it appropriately explained how the approval of the programme activity will help to overcome the identified barriers?		DR	Yes it is appropriately explained that how the approval of the programme activity will help to overcome the identified barriers	Ok	Ok
G.4. Description of the sources and gases included in the project boundary and proof that the CPA is located within the geographical boundary of the registered PoA					
G.4.1. Does the CPA boundary include the physical and geographical location where the programme activities take place?		DR	The physical location of proposed CPA is falls under the geographical boundary of PoA i.e. Republic of Indonesia and the CPA has correctly identified the grid as electricity system, which is in accordance with PoA DD.	OK	Ok
G.4.2. Is the choice justified in a clear and reasonable manner?		DR	The CPA has correctly identified and explained the choices as per applied approved methodology and tool.	OK	Ok
G.4.3. Is there any proof that the CPA is located within the geographical boundary of the registered PoA?		DR	The validation team was able to check the physical location of proposed CPA from feasibility study report and host country permit to implement and operate the project. The same has also been confirmed during site visit	OK	Ok
G.4.4. Are all sources and gases within the boundary considered in a clear manner?		DR	Yes all sources and gases within the boundary are considered in a clear manner	OK	Ok
G.4.5. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the CPA-DD or CPA-DD?		DR, SV	Pending Site visit. Yes the spatial and technological boundaries as verified on-site comply with the discussion provided included in the CPA-DD.	Pending Site visit	Ok
G.5. Estimation of Emission reductions of a CPA					
G.5.1. Explanation of methodological choices, provided in the approved baseline and monitoring methodology applied, selected for a typical CPA					



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
G.5.1.1. Is it explained how the procedures provided in the methodology are applied?	VVM Para. 90/91d	DR	<p>In line with eligibility criteria mentioned in section B.2 of CPA “$F_{CH4,HG,y}$” and “$F_{CH4,NG,y}$” are not applicable parameters for this CPA . However, the same is mentioned in section B.5.2 of CPA DD.</p> <p>Also the calculations approach using equations for the parameters $F_{CH4,EL,y}$, $F_{CH4,sent_flare,y}$, η_{PJ} is not provided in section B.5.2 of the CPA DD. The calculation of estimated value of each parameter is not provided in section B.5.2 of the CPA DD. Hence CAR 30 is raised.</p> <p>CAR 30 is closed. Refer Annex 3 for details</p>	CAR 30	Ok
G.5.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	VVM Para. 90/91d	DR	<p>The conclusion of Determination of $F_{CH4,BL,y}$ is not provided in section B.5.2 of CPA DD SPECIFIC.</p> <p>Also values along with their sources used for determination of methane mass flow rate in the residual gas on a dry basis and project specific determination of the hourly flare efficiency is not provided in section B.5.2 of the CPA DD. Hence CAR 31 is raised.</p> <p>CAR 31 is closed. Refer Annex 3 for details</p>	CAR 31	OK
G.5.2. Equations, including fixed parametric values, to be used for calculation of emission reductions of a CPA:					
G.5.2.1. Are the formulae required for the determination of emission reductions correctly presented, enabling a complete	VVM Para. 90/91d	DR	<p>$MD_{thermal,y}$ and $MD_{PL,y}$ are not applicable parameters for this CPA, however, the same is provided in section B.5.2 of the CPA.</p> <p>Also requirements or source equation of calculation of $MD_{project,y}$, $CEF_{elec,BL,y}$ is not provided in section B.5.2 of the CPA DD.</p>	CAR 32	OK



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
13. identification of parameters to be used and / or monitored?			Calculation along with equations and values of parameter $BE_{CH_4,SWDS,y}$ is not provided in section B.5.2 of the CPA DD. Hence CAR 32 is raised. CAR 32 is closed. Refer Annex 3 for details		
G.5.2.2.Are the equations, including fixed parametric values, to be used for calculation of emission reductions of a CPA, completely presented and match with the CPA-DD?	VVM Para. 90/91d	DR	Calculation of PE_y using $PE_{EC,y}$ and $PE_{FC,j,y}$ is not provided in section B.5.2 of the CPA DD. Also the calculation of BE_y by putting the values into it is not provided in section B.5.2 of CPA DD. Hence CAR 33 is raised. CAR 33 is closed. Refer Annex 3 for details	CAR 33	Ok
G.5.3. Data and parameters that are to be reported in CDM-CPA-DD form					
G.5.3.1.Is the list of parameters presented in section considered to be complete with regard to the requirements of the applied methodology?	VVM Para 111	DR	Non project specific parameters are included in section B.6.1 of CPA DD such as $LFG_{PL,y}$ etc. Also project specific values of the parameters are not provided for all parameters mentioned in section B. 6.1 of CPA DD. Hence CAR 34 is raised. CAR 34 is closed. Refer Annex 3 for details	CAR 34	Ok
G.6. Application of the monitoring methodology and description of the monitoring plan					
G.6.1. Description of the monitoring plan for the CPA					
G.6.1.1.Is the operational and management structure clearly described and in compliance with the envisioned situation?	VVM Para 91d	DR	The emergency preparedness plan are not provided in section B.6.1 the CPA-DD.PP also needs to provide the role and responsibility for project implementation, operation and maintenance, collection, storage and monitoring of the data in section B.6.1 the CPA-DD. Hence CAR 37 is raised. CAR 37 is closed. Refer Annex 3 for details	CAR 37	Ok
G.6.1.2.Are responsibilities and institutional	VVM Para	DR	The emergency preparedness plan are not provided in section B.6.1 the CPA-DD.PP also needs to provide the role and	CAR	OK



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
arrangements for data collection and archiving clearly provided?	91d		responsibility for project implementation, operation and maintenance, collection, storage and monitoring of the data in section B.6.1 the CPA-DD. Hence CAR 37 is raised. CAR 37 is closed. Refer Annex 3 for details	37	
G.6.1.3. Does the monitoring plan provide current good monitoring practice?	VVM Para 91d	DR	Yes the monitoring plan provide current good monitoring practice	Ok	Ok
G.6.1.4. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	VVM Para 91d	DR	14. Yes annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions	Ok	Ok
G.6.1.5. Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the applied methodology?	VVM Para 91d	DR	Additional parameters such as TM_{RGH} , $BE_{CH_4, SWDS, y}$ etc. are not included in section B.6.2 of the CPA DD. CPA system boundaries (component and facilities used to mitigate GHGs) are not clearly defined in the CPA-DD. Hence CAR 35 is raised. CAR 35 is closed. Refer Annex 3 for details	CAR 35	OK
H. Environmental Analysis					
H.1. Definition of the level at which environmental analysis as per requirements of the CDM modalities and procedures is undertaken:					
H.1.1. Is it defined whether the environmental analysis takes place at PoA or CPA level?	VVM Para. 131/134d CPA-DD Section C	DR	The CPA DD clearly mentions that EIA is conducted at CPA level, which is consistent with PoA DD	Ok	Ok
H.1.2. Is the choice whether the environmental	VVM Para.	DR	Yes the choice whether the environmental analysis takes place at	Ok	Ok



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Checklist Question	Ref. ID	MoV	Comments	Conclusion	
				Draft	Final
analysis takes place at PoA or CPA level justified?	131/134d CPA-DD Section C		PoA or CPA level is justified		
I. Stakeholders' comments					
I.1. Please indicate the level at which local stakeholder comments are invited. Justify the choice:					
I.1.1. Is there a clear statement whether the 15. stakeholder comments will be invited at PoA or CPA level?	VVM Para. 128a CPA-DD Section D	DR	The CPA DD clearly mentions that the local stakeholder comments invited at CPA level, which is consistent with statement made in PoA DD.	Ok	Ok
I.1.2. Is the choice justified in a clear and reasonable manner?	VVM Para. 128a CPA-DD Section D	DR	Yes the choice justified in a clear and reasonable manner.	Ok	Ok
I.1.3. Is information provided for Local stake holder Process?		DR	The date of LSC, date of invitation and types of attendees is not provided in section D.1 of CPA DD.Also Summary of comment received during LSC should be provided in section E.2 and how due action taken on it should provide in section D.3 instead of section D.1 of the CPA DD. Hence CAR 36 is raised CAR 36 is closed. Refer Annex 3 for details	CAR 36	Ok

Annex 3: Detailed Findings

Nature of findings:	CARs	CLs	FARs
Total Number raised	26	14	0

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#01	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PP is requested to identify the sustainable indicators of the host country and explain how the project contributes to each of the sustainable indicators as defined by the host country in section A.2 of PoA DD.			
Project participant response		Date: 16/02/2012	
Section A.2 of the PoA-DD has been revised in accordance with the sustainable development criterion and Indicators which have been published by the Clean Development Mechanism Designated National Authority of Indonesia (Komisi Nasional Mekanisme Pembangunan Bersih) .			
Documentation Provided as Evidence by Project Participant			
Download of content from website with sustainable development criterion and Indicators which have been published by the Clean Development Mechanism Designated National Authority of Indonesia CAR 01 - Doc 01 - Sustainable Development Criteria defined by DNA.pdf			
Information Verified by Lead Assessor		Date of review: 05/04/2012	
Validation team have reviewed the revised POA- DD, version 02 dated 03/03/2012 and the supporting document provided by PP as “Sustainable Development Criteria defined by DNA of Indonesia.”			
Reasoning for not acceptance or close out			
Required changes for the sustainable development criteria have been incorporated in section A.2 of the revised POA –DD, version 02 dated 03/03/2012, Hence CAR#01 is closed			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#02	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PP is requested to clarify how the technology used is environmentally safe and sound in section A.4.2.1 of PoA DD.			
PP also needs to clarify whether implementation of the project activity involves any technology transfer from Annex-1 countries to host country. If the technology is already available in the country, no comparative analysis is given against the other commonly used technology is Indonesia in section A.4.2.1 of PoA DD.			
Project participant response		Date: 16/02/2012	
In section A.4.2.1 of PoA DD details regarding technology transfer and the technology being environmental safe and sound are now indicated. Note that the technology description provided at PoA-Level is of generic nature and that details of the technology employed, including possible technology transfer of annex-1 countries, shall be described for each CPA-Specific individually, in section A.2 of the specific CPA-DD.			
Documentation Provided as Evidence by Project Participant			
Revised PDD, version 2.0 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised PDD, version 2.0 dated 03/03/2012 is reviewed by the validation team.			
Reasoning for not acceptance or close out			

Required information for the technology transfer from Annex-1 countries and to prove that the technology used is environmentally safe and sound is included in section A.4.2.1 the revised PDD, version 2.0 dated 03/03/2012. Hence accepted by the validation team. Hence CAR #02 is closed.

Date of acceptance or non acceptance	Date:20/04/2012	Status: Closed
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Date	Type & Number	Raised by	Reference
25/01/2012	CAR#03	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PP is requested to justify with evidence of the paragraph mentioned in p3 which states" At present.....waste disposal." In PoA DD.			
Project participant response		Date: 16/02/2012	
A copy of the document referenced has been provided to DOE.			
Documentation Provided as Evidence by Project Participant			
"Landfill Gas for Energy: Its Status and Prospect in Indonesia", Kardono and Wahyu Purwanta et al,2007 provided as file: CAR 03 - Doc 01- Landfill Gas for Energy in Indonesia.pdf			
Information Verified by Lead Assessor		Date of review: 17/04/2012	
Supporting document is provided by PP as Landfill Gas for Energy: Its Status and Prospect in Indonesia Kardono1 and Wahyu Purwanta1 Purwanta et al,2007.			
Reasoning for not acceptance or close out			
Required changes have been incorporated in the revised PoA-DD,version 2.0 dated 23/03/2012 to justify with supporting document (Landfill Gas for Energy: Its Status and Prospect in Indonesia Kardono1 and Wahyu Purwanta1 Purwanta et al,2007) of the paragraph mentioned in p3. However PP needs to provide supporting documents/evidences for the laws and regulation related to waste handling and disposal in Indonesia in section A.2 of the PoA-DD. PP needs to demonstrate that there are no such regulations in the region which provide directives to implement the project activity or similar alternative. Hence CAR#03 is open			
PP Response		Date: 07/06/2012	
In section A.2 an explanation is now provided to justify that there are no mandatory regulations regarding landfill gas capture and/or utilization in Indonesia.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 03 dated 06/06/2012			
Information Verified by Lead Assessor		Date of review: 25/06/2012	
Revised PoA-DD, version 03 dated 06/06/2012			
Reasoning for not acceptance or close out			
Changes have been incorporated in section A.2 of the revised PoA-DD, however PP to provide the supporting documents for the same.			
Date of acceptance or non expectance		Date: 25/06/2012	Status: Open
Project participant response		Date: 02/07/2012	
A copy of the Law on Solid Waste Management no. 18/2008 has now been provided to the DOE.			
Documentation Provided as Evidence by Project Participant			
CAR 03 - Law on Solid Waste Management no (18-2008).pdf			
Information Verified by Lead Assessor		Date of review: 20/07/2012	
It has been validated from the document "Law on Solid Waste management no. 18/2008" that there is no binding regulation in Indonesia to recover and/or utilize and/or flare LFG. Hence, the CAR is closed.			
Reasoning for not acceptance or close out			

It has been validated from the document "Law on Solid Waste management no. 18/2008" that there is no binding regulation in Indonesia to recover and/or utilize and/or flare LFG.

Hence, the CAR is closed.

Date of acceptance or non expectance	Date: 20/07/2012	Status: Closed
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Date	Type & Number	Raised by	Reference
25/01/2012	CL#04	Abhishek Mahawar	CDM-D-29

Non conformities raised

Please clarify the statement mentioned on p7 in scenario 2 of PoA DD "After this..... or be used on site."that whether electricity will be used on site or not.

If yes please justify the use of it in project activity and monitor the same.

Project participant response

Date: 16/02/2012

The technology scenario description provided at PoA-level is of generic nature and depending on specific conditions of each CPA, electricity may or may not be used on site. Details regarding the electricity usage will be described in section A.2 of the CPA-DD.

To take into account the possible captive usage of electricity, monitoring parameter $PE_{EC,y}$ is available in the monitoring plan.

Documentation Provided as Evidence by Project Participant

Revised PoA-DD, version 2.0 dated 03/03/2012

Information Verified by Lead Assessor

Date of review: 20/04/2012

Validation team have reviewed the revised PoA- DD, version 2.0.

Reasoning for not acceptance or close out

Justification provided for the technology scenario in p7 of scenario 2 is acceptable by the validation team however PP needs to provide detail of gas treatment system. It should be clearly defined in scenario-2 that it also includes situations where electricity can be consumed for captive purposes. Hence CL#04 is open

Date of acceptance or non acceptance

Date:20/04/2012

Status:Open

Project participant response

Date: 07/06/2012

Details on the gas treatment will be provided in the specific CPA-DD documentation. The technology description for scenario 2 now also clearly indicates that electricity can be used for captive use.

Documentation Provided as Evidence by Project Participant

PoA-DD, version 03 dated 06/06/2012

Information Verified by Lead Assessor

Date of review: 25/06/2012

PoA-DD, version 03 dated 06/06/2012

Reasoning for not acceptance or close out

PP has provided the detail of the technology description in scenario -2 of section A.4.2.1. CL#04 is closed.

Date of acceptance or non expectance

Date: 25/06/2012

Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CL#05	Abhishek Mahawar	CDM-D-29

Non conformities raised

PI clarify that how information requirement of Nr. 4.1 in section A.4.2.2 of PoA DD persuade completely the requirement of methodology i.e. Nr. 4.1 of the same section.

PP is also requested to clarify how information requirement of Nr. 4.3 in section A.4.2.2 of PoA DD persuade completely the requirement of methodology i.e. Nr. 4.3 of the same section.

Project participant response

Date: 16/02/2012

In section A.4.2.2 of the PoA-DD, eligibility criteria nr. 04 has been revised to indicate that compliance with methodology ACM0001 Version 12 (and relevant other requirements) shall be assessed in the specific CPA-DD.

Documentation Provided as Evidence by Project Participant

Revised PoA-DD, version 2.0 dated 3/3/2012.

Information Verified by Lead Assessor

Date of review: 20/04/2012

Revised PoA-DD, version 2.0 dated 3/3/2012.

Reasoning for not acceptance or close out

In section A.4.2.2, eligibility criteria, applicability requirements has been included in section A.4.2.2 of the revised PoA-DD, version 2.0 dated 3/3/2012. However PP should include the relevant requirements contained in the criteria 14 (i) of the Guidance for the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities" as per EB-65 Annex 03, version 01 for the target group and distribution mechanism in section A.4.2.2 of the PoA-DD. Hence CL#05 is open

Date of acceptance or non acceptance

Date: 20/04/2012

Status: Open

Project participant response

Date: 07/06/2012

CPA are only eligible for inclusion if they comply with the methodology requirements. Hence, a separate description of the measure as per EB 65, annex 03 was not included by CME to simplify the eligibility criteria.

Documentation Provided as Evidence by Project Participant

Revised PoA-DD, version 03 dated 06/06/2012

Information Verified by Lead Assessor

Date of review: 25/06/2012

Revised PoA-DD, version 03 dated 06/06/2012

Reasoning for not acceptance or close out

Justification provided by PP is acceptable to the assessment team. Hence CL#05 is closed.

Date of acceptance or non expectance

Date: 25/06/2012

Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#06	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PP is requested to justify the “Not applicable” condition of the methodology in section A.4.2.2 of the PoA DD. PP is also requested to justify the applicability conditions of the Tool applied in PoA in section A.4.2.2 or E.1 of the PoA DD.			
Project participant response		Date: 16/02/2012	
Please refer to CAR 05, since compliance with methodology ACM0001 Version 12 (and relevant other requirements) shall now be assessed in the specific CPA-DD.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 3/3/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised PoA-DD, version 2.0 dated 3/3/2012			
Reasoning for not acceptance or close out			
Compliances with methodology, ACM0001, version 12 of the not applicable conditions of the methodology is discussed now in revised CPA –DD, version 2.0 dated 03/03/2012. However PP needs to include all relevant CDM guidance for the inclusion of CPA in the PoA-DD.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Open
Project participant response		Date: 07/06/2012	
Furthermore, assessment of applicability requirements of the Tools applied in the PoA has now been indicated in section E.2 of the PoA-DD.			

Documentation Provided as Evidence by Project Participant		
Revised PoA-DD, version 03 dated 06/06/2012		
Information Verified by Lead Assessor	Date of review: 25/06/2012	
Revised PoA-DD, version 03 dated 06/06/2012		
Reasoning for not acceptance or close out		
Assessment of applicability condition is now included in section E.2 of revised PoA-DD, version 03 dated 06/06/2012. CAR#06 is closed.		
Date of acceptance or non expectation	Date: 25/06/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#07	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PP needs to include more GHG programs to check double counting of ER to justify Nr. 5 of section A.4.2.2 of the PoA DD.			
Project participant response		Date: 16/02/2012	
In section A.4.2.2 a summary of the CME's procedure to avoid double counting is provided. In the same section it is now indicated that as part of the the relevant documents for the compliance of para 9 (for development and implementation of management system) annex 3 of EB 63, the procedure to avoid double counting has been provided to the DOE for validation.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 03/03/2012			
Revised CPA-DD, version 2.0 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised PoA-DD, version 2.0 dated 03/03/2012.			
Revised CPA-DD, version 2.0 dated 03/03/2012.			
Reasoning for not acceptance or close out			
In section A.4.2.2, a summary of the CME's procedure to avoid double counting is included in revised PoA-DD, version 2.0 dated 03/03/2012. Hence Closed.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#08	Abhishek Mahawar	CDM-D-29
Non conformities raised			
To justify Nr. 7 of section A.4.2.2 of PoA DD , the given information requirement does not fully satisfy the requirement of the definition of start date of CPA as per glossary of terms of CDM.			
Also the justification Nr. 8 of section A.4.2.2 of PoA DD , the given information requirement is not fully justify the consultation of local stakeholders.			
Project participant response		Date: 16/02/2012	
Eligibility criteria 7 has been revised to be in compliance with the requirements and definition of the start date of CPA as per glossary of terms of CDM.			
Eligibility criteria 8 has been revised to also take into account additional documentary evidence of a stakeholder meeting, such as the attendance list, pictures, feedback forms.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 03/03/2012.			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Section 4.2.2 of revised PoA-DD, version 2.0 dated 03/03/2012.			

Reasoning for not acceptance or close out		
Eligibility criteria 7 and 8 has been modified in the revised PoA-DD, version 2.0 dated 03/03/2012. Hence CAR#08 is closed		
Date of acceptance or non acceptance	Date:20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#09	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PP is requested to include reference of the applied methodology in section E.1 of the PoA DD (refer PoA completing guidelines).			
Project participant response		Date: 16/02/2012	
Reference to the applied methodology is now indicated in section E.1 of the PoA-DD.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 03/03/2012.			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised PoA-DD, version 2.0 dated 03/03/2012.			
Reasoning for not acceptance or close out			
Reference to the applied methodology is included in section E.1 of the PoA-DD, version 2.0 dated 03/03/2012. Hence CAR#09 is closed.			
Date of acceptance or non acceptance		Date:20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CL#10	Abhishek Mahawar	CDM-D-29
Non conformities raised			
In section E.5.1 and E.5.2 Barrier analysis option is also included to justify the additionality of the CPA.			
Project participant response		Date: 16/02/2012	
Section E.5.1 and E.5.2 have been revised to explain that no barrier analysis will be conducted.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 3/3/2012.			
Information Verified by Lead Assessor		Date of review: 05/04/2012	
Revised PoA-DD, version 2.0 dated 3/3/2012.			
Reasoning for not acceptance or close out			
In the revised PoA-DD, version 2.0 dated 3/3/2012, section E.5.1, E.5.2 is revised. However CME management system manual version 2.0 dated 17/02/2012 includes the criteria for barrier analysis in the technical review document (Reference No Qf-82-02-3) which is not consistent with the revised PoA version 2.0. Please take corrective actions. Hence CL#10 is open.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status:Open
Project participant response			
Please note that the CME management plan is standardized and applies to several PoA that are under management of CME. The technical review procedure provides references to barrier analysis review that is not applicable to this PoA in particular. Note that since last submission CME manual has been updated to version 03, 30/03/2012, the same has been provided to DOE.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 3.1 dated 21/06/2012			
CL 10 - CME Management System Manual Version 03_1 21062012.pdf			
Information Verified by Lead Assessor		Date of review: 25/06/2012	

Revised PoA-DD, version 3.1 dated 21/06/2012		
CL 10 - CME Management System Manual Version 03_1 21062012.pdf		
Reasoning for not acceptance or close out		
The CME Management System Manual is reviewed and found that it has been appropriately modified for barrier analysis review. Hence CAR is closed.		
Date of acceptance or non expectation	Date: 25/06/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#11	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PP needs to justify with evidence of the inclusion of the baseline scenarios as a LFG2, E2 or E3 and/or H4 at the CPA level as required by the approved methodology ACM0001 Version 12 and exclusion of remaining scenarios in section E.4 of PoA DD.			
Project participant response		Date: 16/02/2012	
Assessment of baseline scenario LFG1, LFG2 as well as the alternatives for electricity generation have now been moved to CPA-level. In each CPA-DD an assessment will be performed to determine the appropriate baseline scenario. Furthermore, CME decided not to include CPA that involve heat generation in the PoA.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 3/3/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised PoA-DD, version 2.0 dated 3/3/2012			
Reasoning for not acceptance or close out			
In section E.4 of the revised PoA-DD, version 2.0 dated 3/3/2012, assessment of baseline scenario for LFG1, LFG2 as well as alternatives for electricity generation have now moved to CPA-level. Hence CAR 11 is closed.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#12	Abhishek Mahawar	CDM-D-29
Non conformities raised			
Please transparently discuss the calculation approach and equation which will be used in CPA in calculations of $F_{CH_4, sent_flare, y}$, $PE_{flare, y}$, $F_{CH_4, HG, kiln, h}$ using latest versions “Tool to determine the mass flow of a greenhouse gas in a gaseous stream” , Tool to determine project emissions from flaring gases containing methane” , respectively in section E.6.2 of the PoA DD.			
Project participant response		Date: 16/02/2012	
In section E.6.2 of the PoA-DD the calculation approach and equation which will be used in CPA in calculations of $F_{CH_4, sent_flare, y}$, $PE_{flare, y}$, are now described using latest versions “Tool to determine the mass flow of a greenhouse gas in a gaseous stream” and Tool to determine project emissions from flaring gases containing methane” . Monitoring parameters have been revised accordingly.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised PoA-DD, version 2.0 dated 03/03/2012			
Reasoning for not acceptance or close out			
Calculation approach and equation which will be used in CPA-DD in the calculation of $F_{CH_4, sent_flare, y}$, $PE_{flare, y}$ are now included in the revised-PoA-DD, version 2.0 dated 03/03/2012.			

Date of acceptance or non acceptance	Date:20/04/2012	Status: Closed
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Date	Type & Number	Raised by	Reference
25/01/2012	CAR#13	Abhishek Mahawar	CDM-D-29
Non conformities raised			
As per justification provided in applicability conditions mentioned in section E.2 of the project activity. Emissions from the use of natural gas are not allowed. However, Baseline emissions associated with natural gas use are included in section E.6.2 of the PoA DD.			
Also parameters “NCV _{LFG,NG, y} ” and “LFG _{NG,y} ” are parameters required for calculation of baseline emissions associated with natural gas use which are included in section E.7.1 of the PoA DD.			
Project participant response		Date: 16/02/2012	
Parameters related to the usage of natural gas have been removed from section E.7.1 of the PoA-DD.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Section E.7.1 of the revised PoA-DD, version 2.0 dated 03/03/2012			
Reasoning for not acceptance or close out			
Parameters related to natural gas have been removed from section E.7.1 of the PoA-DD, version 2.0 dated 3/3/2012.Hence CAR#13 is closed.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#14	Abhishek Mahawar	CDM-D-29
Non conformities raised			
There are two parameters of the same name i.e. “Operation of the energy plant” mentioned in section E.7.1 of the PoA DD. Please justify.			
Project participant response		Date: 16/02/2012	
The erroneous included duplicate parameter “operation of the energy plant” has been removed from section E.7.1 of the PoA-DD.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 3/3/2012.			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
In the revised PoA-DD, version 2.0 dated 3/3/2012			
Reasoning for not acceptance or close out			
Parameter “ Operation of energy plant” mentioned is now removed from section E.7.1 of PoA-DD, which is now acceptable by the validation team. Hence CAR#14 is closed.			
Date of acceptance or non acceptance		Date:20/04/2012	Status: closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#15	Abhishek Mahawar	CDM-D-29
Non conformities raised			
As per justification provided in applicability conditions mentioned in section E.2 of the project activity emissions from the use of natural gas are not allowed. However, the Figure 1 mentioned in section E.7.2 of the PoA DD shows “Pipe” which reflects “use of natural gas” , also the statement mentioned in same section “The amountfeeding to the natural gas distribution network and continuously.” Is also reflects the same. PI clarify.			

Project participant response	Date: 16/02/2012
Revisions have been made in section E.7.2 to remove references to the “use of natural gas”.	
Documentation Provided as Evidence by Project Participant	
Revised PoA-DD, version 2.0 dated 3/3/2012	
Information Verified by Lead Assessor	Date of review: 20/04/2012
Revised PoA-DD, version 2.0 dated 3/3/2012	
Reasoning for not acceptance or close out	
Required revision have been made in section E.7.2 of the revised PoA-DD, version 2.0 dated 3/3/2012. It is acceptable by the validation team. Hence CAR#15 is closed.	
Date of acceptance or non acceptance	Date: 20/04/2012
Status: Closed	

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#16	Abhishek Mahawar	CDM-D-29
Non conformities raised			
Common practice analysis in section E.5.1 is not complete and transparent as required by the Tool. The PoA-DD is not transparent on what the similar projects are and how elimination is done and how this project is distinct from other projects.			
Project participant response		Date: 16/02/2012	
The assessment of common practice has been moved from PoA-Level to CPA-level. Assessment of the common practice will be provided in the CPA-DD with information available at the time of inclusion. Common practice assessment at CPA-level has been revised in accordance with the Guideline on common practice version 01.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised PoA-DD, version 2.0 dated 03/03/2012			
Reasoning for not acceptance or close out			
Justification for the common practice analysis provided by PP is acceptable to the validation team. Hence CAR#16 is closed.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#17	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PP needs to provide provision regarding revision of the CPAs in case of hold or withdrawn the methodology in the POA-DD.			
Project participant response		Date: 16/02/2012	
The PoA will comply with guidance given in EB 55 Annex 38 paragraph 18 and further in case the applied methodology is placed on hold or withdrawn. This is now indicated in section E.2 of the PoA-DD.			
Documentation Provided as Evidence by Project Participant			
Revised PoA-DD, version 2.0 dated 03/03/2012.			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised PoA-DD, version 2.0 dated 03/03/2012.			
Reasoning for not acceptance or close out			

Required information is provided in section E.3 of the revised PoA-DD, version 2.0 dated 03/03/2012. However, PP needs to update the CME Management System Manual version 2.0 to include the assessment criteria for the hold/withdrawn of the methodology as well as replacement/revision of the methodology for the inclusion of CPA in accordance with EB 65 Annex 3. Hence, CAR 17 is open.

Date of acceptance or non acceptance	Date:20/04/2012	Status: Open
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Project participant response	Date: 07/06/2012
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As per definition in PoA-DD, latest guidance of EB will be applied in case methodology is placed on hold/withdrawn. Therefore, no further explanation is provided in the CME management plan in this regard since no further procedures are required.

Documentation Provided as Evidence by Project Participant

Revised PoA-DD, version 03 dated 06/06/2012

Information Verified by Lead Assessor	Date of review: 25/06/2012
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Revised PoA-DD, version 03 dated 06/06/2012

Reasoning for not acceptance or close out

Justification provided by PP is acceptable to assessment team. Hence CAR#17 is closed.

Date of acceptance or non acceptance	Date: 25/06/2012	Status: Closed
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Date	Type & Number	Raised by	Reference
25/01/2012	CAR#18	Abhishek Mahawar	CDM-D-29

Non conformities raised

In section E.7.2 POA –DD is not transparent on the authority and responsibility of the coordinating/managing entity (CME) and responsibility for registration, monitoring measurements and reporting of each CPA .

Project participant response	Date: 16/02/2012
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Authority and responsibility between CME and CPA implementer are now clearly defined in the PoA-DD, section E.7.2

Documentation Provided as Evidence by Project Participant

PoA-DD, version 2.0 dated 03/03/2012

Information Verified by Lead Assessor	Date of review:20/04/2012
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PoA-DD, version 2.0 dated 03/03/2012

Reasoning for not acceptance or close out

Authority and responsibility between CME and CPA is included in the revised PoA-DD, version 2.0 dated 03/03/2012.

Date of acceptance or non acceptance	Date:20/04/2012	Status: Closed
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Date	Type & Number	Raised by	Reference
25/01/2012	CAR#19	Abhishek Mahawar	CDM-D-29

Non conformities raised

PP is requested to provide

1. Letter of Approval issued by DNA of Indonesia and Netherlands
2. Modalities of Communication
3. Proof of starting date of PoA
4. Statutory clearances
5. Proof of the company name as per the Company Registration / Incorporation Act
6. Training plan and records
7. Technical specification of the equipments (gas collection system, engine, flare etc)

Necessary clearances, approvals, pre-feasibility report, land lease ownership documents and licences as per host country requirements.		
Project participant response		Date: 16/02/2012
<p>1. Letter of Approval issued by DNA of Indonesia has been obtained and has been submitted to the DOE. Annex 1 LoA will be available prior to request for registration.</p> <p>2. Modalities of Communication: will be available prior to request for registration.</p> <p>3. Proof of starting date of PoA: As per annex 26 of EB 60, prior consideration for PoA is not required. Hence, no evidence has been submitted.</p> <p>4. Statutory clearances: Company registration and business license has been provided.</p> <p>5. Proof of the company name as per the Company Registration / Incorporation Act: the same has now been provided</p> <p>6. Training plan and records: a copy of the CME management plan including training records has now been provided.</p> <p>7. Technical specification of the equipments (gas collection system, engine, flare etc)</p> <p>Necessary clearances, approvals, pre-feasibility report, land lease ownership documents and licences as per host country requirements: documents requested are related to the real case CPA, hence these documents have not been submitted by CME in relation to the validation of the PoA as a whole.</p> <p>CME manual has been updated to version 03, 30/03/2012, the same has been provided to DOE. This version complies with EB 65, Annex 03. The document also incorporates the training plan as per requirements of the EB.</p>		
Documentation Provided as Evidence by Project Participant		
CAR 19 - doc 1 - LoA BWC Sustainable LFG POA		
CAR 19 - Doc 06 - CME Management System Manual Version 03		
CAR 19 - Doc 04-05 - Business license BW Indonesia		
Information Verified by Lead Assessor		Date of review: 20/04/2012
Doc 06 - CME Management System Manual Version 02 is verified by the validation team.		
Doc 04-05 - Business license BW Indonesia is verified by the validation team.		
Reasoning for not acceptance or close out		
<p>PP has not provided supporting documents for Letter of Approval issued by DNA of Indonesia and Annex 1, Modalities of Communication, Training plan and records etc.</p> <p>Business licence of PT. Blue World Indonesia dated 23/11/2011 number 3162/1/PPM/1/PMA/2011 is reviewed by the validation team and found acceptable.</p> <p>CME management System Manual version 02 is reviewed by the validation team. However, the management system manual does not fully comply with the Guidance provided in EB 65 Annex 3, particularly management systems for assessment and approval of competency etc.</p> <p>Hence CAR#19 is open</p>		
Date of acceptance or non acceptance		Date:20/04/2012
		Status: Open
Project participant response		Date: 07/06/2012
Documentation Provided as Evidence by Project Participant		
Letter of Approval from DNA of Indonesia.		
Information Verified by Lead Assessor		Date of review: 25/06/2012
Letter of Approval from DNA of Indonesia.		
Reasoning for not acceptance or close out		
PP has provided the letter of approval from DNA of Indonesia. CAR is closed		
Date of acceptance or non acceptance		Date:25/06/2012
		Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR# 20	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PP needs to define unique identification number management system/nomenclature for the inclusion of CPA in the PoA-DD in section A.4.2.2			
Project participant response		Date: 16/02/2012	
The revised CME management system has been submitted to the DOE. This document also explains the record keeping system/identification system/database that is kept for each CPA.			
Documentation Provided as Evidence by Project Participant			
CAR 19 - Doc 06 - CME Management System Manual Version 03			
Information Verified by Lead Assessor		Date of review: 25/06/2012	
CME Management System Manual Version 03			
Reasoning for not acceptance or close out			
PP has included the revised CME Management System Manual Version 03 for the record keeping system/identification system for each CPA. Hence CAR is closed.			
Date of acceptance or non acceptance		Date:25/06/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#21	Abhishek Mahawar	CDM-D-29
Non conformities raised			
At actual the CPA is designed for both the scenario as mentioned in PoA. However, in section A.2 of CPA DD only scenario 2 has been defined.			
Project participant response		Date: 16/02/2012	
Section A.2 has been made consistent with the CPA-DD-Template and now both scenarios are indicated.			
Documentation Provided as Evidence by Project Participant			
CPA-DD, version 02 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised CPA-DD, version 2.0 dated 03/03/2012.			
Reasoning for not acceptance or close out			
In the revised CPA-DD, version 2.0 dated 03/03/2012, both the scenario is now included in section A.2 of CPA-DD.			
CAR 21 closed.			
Date of acceptance or non acceptance		Date:20/04/2012	Status: closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#22	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PI include more information in power plant description of the CPA such as capacity of equipments, generation and supply to grid voltage.			
Project participant response		Date: 16/02/2012	
More information with particulars regarding the CPA have now been indicated in section A.2 of the real case CPA-DD.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 02 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	

Revised CPA-DD, version 02 dated 03/03/2012		
Reasoning for not acceptance or close out		
Information regarding the technology, capacity is included in section A.2. This has been confirmed from the technical specification sheet. CAR 22 Closed.		
Date of acceptance or non acceptance	Date: 20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#23	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PI provide the exact start date of CPA in section A.4.2.1 of CPA DD and not the expected date.			
Project participant response		Date: 25/01/2012	
Project start is still pending. It is expected that the first major contract (that can constitute as the Start Date of the project as per Glossary of Terms) will be signed in May 2012. Therefore, start date will be indicated by the time the contract has been signed.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 2.0 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Justification provided by the PP is acceptable by the validation team and will be provided to the validation team.			
Reasoning for not acceptance or close out			
CAR will be closed after the submission of the supporting document for the start date of the project activity.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Open
Project participant response		Date: 07/06/2012	
Negotiations between equipment supplier and CPA implementer are currently ongoing. Hence, we have now defined the start date of the CPA as the 12/02/2012 (the date the equipment supplier and CPA implementer signed a memorandum of understanding on the project implementation). The MoU has been provided to the DOE for review.			
Documentation Provided as Evidence by Project Participant			
CAR 02 – MoU Equipment supplier and CPA Implementer.pdf			
Information Verified by Lead Assessor		Date of review: 25/06/2012	
CAR 02 – MoU Equipment supplier and CPA Implementer.pdf			
Reasoning for not acceptance or close out			
It is validated from the MoU that the first real action to implement the CPA was taken on 12/02/2012. Hence, it has been taken as start date. This date is also after publication of PoA, hence it is in accordance with PoA guidelines on start date. CAR is closed.			
Date of acceptance or non acceptance		Date: 25/06/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#24	Abhishek Mahawar	CDM-D-29
Non conformities raised			
PI provide the expected years of crediting period in section A.4.4 of CPA DD.			
Project participant response		Date: 16/02/2012	
The number of years of the crediting period is indicated in section A.4.4.			
Documentation Provided as Evidence by Project Participant			

Revised CPA-DD, version 2.0 dated 03/03/2012		
Information Verified by Lead Assessor	Date of review: 20/04/2012	
Revised CPA-DD, version 2.0 dated 03/03/2012		
Reasoning for not acceptance or close out		
Expected years and corresponding CERs are now mentioned in the revised CPA-DD version 2.0 dated 03/03/2012, which is in line with CPA DD filling guidelines. Hence CAR is Closed		
Date of acceptance or non acceptance	Date:20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#25	Abhishek Mahawar	CDM-D-29
Non conformities raised			
The explanation along with appropriate evidences for justification of eligibility of CPA to be included in the Registered PoA is not provided in section B.2 of the CPA DD.			
Project participant response		Date: 16/02/2012	
The explanation along with appropriate evidences for justification of eligibility of CPA to be included in the Registered PoA is now provided in section B.2 of the CPA DD			
Documentation Provided as Evidence by Project Participant			
Justification regarding eligibility of the CPA under the PoA is now indicated in section B.2 of the CPA-DD. Relevant documentation has been forwarded to DOE.			
Third party evidence to confirm the baseline scenario as well as the historic data of the amount of waste dumped at the site has now been forwarded to the DOE.			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
1. Business Licence 2. Declaration of CPA implementer 3. Feasibility Study Report 4. Investment Decision Date 5. Stake holder meeting_List of documents 6. Stake holder meeting_Minutes of Meeting			
Reasoning for not acceptance or close out			
Eligibility of CPA under the PoA is indicated in section B.2 of the CPA-DD. Supporting documents for eligibility of PoA submitted are mentioned as above.			
1. Business Licence number 286/EWT/III/2011 dated 11 maret 2011 is submitted and reviewed by the assessment team.			
2. ERC.BKPM approval PMA establishment approval No 00566/1/PPM/PMA/2011 dated 25/02/2011			
3. ERC establishment deed no AHU-24769.AH.01.01 tahun 2011 dated 18 Mei 2011.			
4. Declaration of CPA implementer No LETCDM20120308 dated 08/03/2012.			
5. Feasibility Study Report No REP20110802 dated 02/08/2011.			
6.Investment Decision dated 02/09/2011			
7. Stakeholder meeting List of participants dated 02/09/2011.			
Validation Team have reviewed the documents and found acceptable.			
However, third party evidence to confirm the baseline scenario is not provided. Hence, CAR 25 is open.			
Date of acceptance or non acceptance		Date:20/04/2012	Status: Open
Project participant response		Date: 07/06/2012	
Please find as submitted the document of the letter from third party (Cilegon Government) regarding the baseline situation (scenario) prior to the starting date of development of PoA / CDM			
Documentation Provided as Evidence by Project Participant			

Third party letter from Cilegon Government (Letter No: 658.1/59/DKP/2012) dated 12/03/2012		
Information Verified by Lead Assessor	Date of review: 25/06/2012	
Third party letter from Cilegon Government (Letter No: 658.1/59/DKP/2012) dated 12/03/2012		
Reasoning for not acceptance or close out		
Assessment team has reviewed the revised CPA-DD, third party letter issued by head of cleaning and landscaping department, cilegaon (Letter No: 658.1/59/DKP/2012)dated 12/03/2012 which confirms - 1.Project activity has never held a capture activity or destruction of methane gas or similar activities at Bagendung TPSA since it started operating in 1993 until 2010. On 01/02/2012 Muncipal Government of Cilegon has signed an agreement with CPA implementer which allow CPA implementer to install the LFG capturing and Destruction 2.Project activity has conducted cooperation agreement between the Government of Cilegon with The Emission Reduction Company (Australia) on the reduction and use of greenhouse gas emissions in the end of waste management (TPSA) Bagendung city Cilegon Since 2010. It is accepted to the assessment team. Hence CAR#25 is closed.		
Date of acceptance or non acceptance	Date:25/06/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR# 26	Abhishek Mahawar /Shilpy Gupta	CDM-D-29
Non conformities raised			
As per PoA the eligible baseline scenarios/alternatives are LFG2, E2 or E3 and/or H4. However, in section B.3 of the CPA DD has justified all the scenarios mentioned in the methodology and not as per eligibility criteria listed in PoA to demonstrate the additionality of the project activity.			
Project participant response		Date: 16/02/2012	
Revisions have been made in section B.3 of the real case CPA-DD to demonstrate the additionality of the CPA under this PoA as per requirements of the Tools referred to in the applied methodology and relevant requirements of the PoA eligibility criteria.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 2.0 dated 03/03/2012.			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Section B.3 of revised CPA-DD, version 2.0 dated 03/03/2012.			
Reasoning for not acceptance or close out			
In section B.3 of the revised CPA-DD, version 2.0 dated 03/03/2012, required baseline scenarios/alternatives are included as per eligibility criteria listed in PoA to demonstrate the additionality of the project activity..			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#27	Abhishek Mahawar	CDM-D-29
Non conformities raised			
The date of investment decision is not provided in section B.3 of the CPA DD.			
Project participant response		Date: 16/02/2012	
The date of the investment decision is now indicated in section B.3 of the CPA-DD specific.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 2.0 dated 03/03/2012.			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised CPA-DD, version 2.0 dated 03/03/2012.			

Reasoning for not acceptance or close out			
The date of the investment decision is 02/09/2011 now indicated in section B.3 of the CPA-DD specific to project activity. Same has been confirmed from the Board Note dated 02/09/2011. The information provided is found correct; hence CAR#27 is closed.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: closed
Date	Type & Number	Raised by	Reference
25/01/2012	CAR#28	Abhishek Mahawar	CDM-D-29
Non conformities raised			
The sensitivity analysis for methane generation is not carried out in sub step 3d of section B.3 of CPA DD in line with the options provided in sub step 3d.			
Project participant response		Date: 16/02/2012	
The sensitivity analysis for methane generation is now carried out in sub step 3d of section B.3 of CPA DD in line with the options provided in sub step 3d. In addition, the CPA-DD in Section B.3 now indicates a justification in respect to the sensitivity on the chosen input parameters.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 2.0 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: : 20/04/2012	
Revised CPA-DD, version 2.0 dated 03/03/2012			
Reasoning for not acceptance or close out			
Sensitivity analysis for the project activity is now included in section B.3 of the revised CPA-DD, version 2.0 dated 03/03/2012. However, PP needs to justify that 10% variation of the chosen input parameters is sufficient to cover the realistic variation possible. CAR 28 open.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Open
Project participant response		Date: 07/06/2012	
Please find the revised CPA DD in section sensitivity analysis which determined the likelihood of the occurrence of a scenario in order to provide a cross-check on the suitability of the assumptions used in the development of the investment analysis.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 03 dated 06/06/2012			
Information Verified by Lead Assessor		Date of review: 25/06/2012	
Revised CPA-DD, version 03 dated 06/06/2012			
Reasoning for not acceptance or close out			
PP to provide justification for 10% variation in case of methane generation to cover the realistic variation possible in the revised CPA-DD. CAR#28 is open			
Date of acceptance or non acceptance		Date: 25/06/2012	Status: Open
Project participant response		Date: 02/07/2012	
Revised CPA-DD now indicates methane generation increase beyond 10% is not deemed realistic since the financial model is based on an 80% recovery rate, which is already a very conservative figure. A review of methane recovery observed in various landfills as part of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 3 on Solid Waste Disposal (chapter 3.3) found the highest observed recovery rate to be 85%.			
Documentation Provided as Evidence by Project Participant			
CAR 08 V5_3_Ch3_SWDS - recovery rate evidence.pdf			
Information Verified by Lead Assessor		Date of review: 20/07/2012	
CAR 08 V5_3_Ch3_SWDS - recovery rate evidence.pdf			
Reasoning for not acceptance or close out			

It has been verified from the submitted document that the highest recovery rate possible for LFG recovery systems is 85%. Hence, the variation of 10% in sensitivity analysis is appropriate and accepted by the assessment team. Hence, CAR 28 is closed.

Date of acceptance or non acceptance	Date: 20/07/2012	Status: Closed
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Date	Type & Number	Raised by	Reference
25/01/2012	CAR#29	Abhishek Mahawar	CDM-D-29
Non conformities raised			
CPA specific values those are available at validation along with proper justification of the applicable case is not provided in section B.5.1 of CPA DD.			
Project participant response		Date: 16/02/2012	
Section B.5.1 of the real case CPA-DD has been revised to present the applicable values that are available at validation with proper justification.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 2.0 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised CPA-DD, version 2.0 dated 03/03/2012			
Reasoning for not acceptance or close out			
PP has included CPA specific values available at validation in section B.5.1 of the revised CPA-DD, version 2.0 dated 03/03/2012 for the applicable cases. However, in parameter “Decay rate of the waste type”, specific values for different waste types are not provided along with the specific information on the related parameters like MAT (Mean Annual Temperature), PET (potential evapotranspiration) and MAP (Mean Annual precipitation).CAR 29 open.			
Date of acceptance or non acceptance		Date:20/04/2012	Status: open
Project participant response		Date: 07/06/2012	
Please find the information on the parameter MAT, PET and MAP in the section B.5.1 in the revised CPA DD			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 03 dated 06/06/2012			
Information Verified by Lead Assessor		Date of review: 25/06/2012	
Revised CPA-DD, version 03 dated 06/06/2012			
Reasoning for not acceptance or close out			
PP has included information related to MAT, PET and MAP in section B.5.1 of the revised CPA-DD, version 03 dated 06/06/2012. PP to provide Justification of the choice of data. Hence CAR#29 is open.			
Date of acceptance or non acceptance		Date:25/06/2012	Status: Open
Project participant response		Date: 07/06/2012	
Mean Average Temperature (°C) (MAT) and Mean Average Precipitation (mm) MAP) have been derived from authentic government data (the Cilegon Statistic Book 2011). A copy of the statistical yearbook has been provided to the DOE for assessment.			
Documentation Provided as Evidence by Project Participant			
CAR 09 - Cilegon Statisitic Book 2011.pdf			
Information Verified by Lead Assessor		Date of review: 25/06/2012	
CAR 09 - Cilegon Statisitic Book 2011.pdf			
Reasoning for not acceptance or close out			
The ex ante parameters MAT and MAP are verified from the authentic records of Government of Cilegon. It was verified from the records that the complete data is consistent with the values used in the project documents. Hence, CAR is closed.			

Date of acceptance or non acceptance	Date: 25/06/2012	Status: Closed
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Date	Type & Number	Raised by	Reference
25/01/2012	CAR#30	Abhishek Mahawar	CDM-D-29
Non conformities raised			
In line with eligibility criteria mentioned in section B.2 of CPA " $F_{CH_4,HG,y}$ " and " $F_{CH_4,NG,y}$ " are not applicable parameters for this CPA . However, the same is mentioned in section B.5.2 of CPA DD. Also the calculations approach using equations for the parameters $F_{CH_4,EL,y}$, $F_{CH_4,sent_flare,y}$, η_{PJ} is not provided in section B.5.2 of the CPA DD. The calculation of estimated value of each parameter is not provided in section B.5.2 of the CPA DD.			
Project participant response		Date: 16/02/2012	
Section B.2 of the real case CPA has been revised to remove references to $F_{CH_4,HG,y}$ " and " $F_{CH_4,NG,y}$ " Furthermore, the calculations approach using equations for the parameters $F_{CH_4,EL,y}$, $F_{CH_4,sent_flare,y}$, η_{PJ} are now provided in section B.5.2 of the CPA DD. The calculation of estimated value of each parameter is not provided in section B.5.2 of the CPA DD but in annex 3 of real case CPA-DD. This is appropriate since LFG generation varies per year and thus relevant emissions also vary.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, verison 02			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised CPA-DD, verison 02			
Reasoning for not acceptance or close out			
Section B.2 is revised and calculations approach using equations for the parameters $F_{CH_4,EL,y}$, $F_{CH_4,sent_flare,y}$, η_{PJ} are now provided in section B.5.1 of the CPA DD. CAR 30 closed.			
Date of acceptance or non acceptance		Date:20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#31	Abhishek Mahawar /Shilpy Gupta	CDM-D-29
Non conformities raised			
The conclusion of Determination of $F_{CH_4,BL,y}$ is not provided in section B.5.2 of CPA DD SPECIFIC. Also values along with their sources used for determination of methane mass flow rate in the residual gas on a dry basis and project specific determination of the hourly flare efficiency is not provided in section B.5.2 of the CPA DD.			
Project participant response		Date: 16/02/2012	
The real case CPA-DD has been revised to transparently show the values along with their sources used for determination of methane mass flow rate in the residual gas on a dry basis. Also the project specific determination of the hourly flare efficiency is now provided in section B.5.2 of the CPA DD.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 2.0			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised CPA-DD, version 2.0			
Reasoning for not acceptance or close out			
Required information provided in section B.5.2 of the revised CPA-DD, version 2.0 dated 03/03/2012 has been assessed and found ok; hence CAR#31 is closed.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#32	Abhishek Mahawar	CDM-D-29
Non conformities raised			
<p>MD_{thermal,y} and MD_{PL,y} are not applicable parameters for this CPA, however, the same is provided in section B.5.2 of the CPA.</p> <p>Also requirements or source equation of calculation of MD_{project,y} , CEF_{elec,BL,y} is not provided in section B.5.2 of the CPA DD.</p> <p>Calculation along with equations and values of parameter BE_{CH4,SWDS,y} is not provided in section B.5.2 of the CPA DD.</p>			
Project participant response		Date: 16/02/2012	
References to MD _{thermal,y} MD _{project,y} and MD _{PL,y} have been removed from the real case CPA-DD as they are no longer used in ACM0001 Version 12.0.0. The source equation of calculation of CEF _{elec,BL,y} and BE _{CH4,SWDS,y} is now provided in section B.5.2			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 2.0 dated 03/03/2012			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised CPA-DD, version 2.0 dated 03/03/2012			
Reasoning for not acceptance or close out			
Required information is revised in section B.5.2 of the revised CPA-DD, version 2.0 dated 03/03/2012.			
Date of acceptance or non acceptance		Date:20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#33	Abhishek Mahawar /Shilpy Gupta	CDM-D-29
Non conformities raised			
Calculation of PE _y using PE _{EC,y} and PE _{FC,j,y} is not provided in section B.5.2 of the CPA DD. Also the calculation of BE _y by putting the values into it is not provided in section B.5.2 of CPA DD.			
Project participant response		Date: 16/02/2012	
Calculation of PE _y using PE _{EC,y} and PE _{FC,j,y} is now provided in section B.5.2 of the CPA DD. Also the calculation of BE _y by putting the values into provided in section B.5.2 and annex 3 of CPA DD			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 2.0.			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised CPA-DD, version 2.0.			
Reasoning for not acceptance or close out			
In section B.5.2 of the revised CPA-DD, version 2.0 dated 03/03/2012, required information is incorporated hence CAR#33 is closed.			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#34	Abhishek Mahawar	CDM-D-29
Non conformities raised			

Non project specific parameters are included in section B.6.1 of CPA DD such as $LFG_{PL,y}$ etc. PI remove this from same section including others.

Also project specific values of the parameters are not provided for all parameters mentioned in section B. 6.1 of CPA DD.

Project participant response
Date: 16/02/2012

Non project specific parameters have been removed from section B.6.1 of CPA DD. Also project specific values of the parameters are now provided for all parameters mentioned in section B. 6.1 of CPA DD.

Documentation Provided as Evidence by Project Participant

Revised CPA-DD, version 2.0 dated 03/03/2012

Information Verified by Lead Assessor
Date of review: 20/04/2012

Revised CPA-DD, version 2.0 dated 03/03/2012

Reasoning for not acceptance or close out

In the revised CPA-DD, version 2.0 dated 03/03/2012, Non project specific parameters have been removed from section B.6.1 of CPA DD, hence CAR#34 is closed.

Date of acceptance or non acceptance
Date: 20/04/2012

Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#35	Abhishek Mahawar	CDM-D-29
Non conformities raised			
Additional parameters such as TM_{RGh} , $BE_{CH4,SWDS,y}$ etc. are not included in section B.6.1 of the CPA DD. CPA system boundaries (component and facilities used to mitigate GHGs) are not clearly defined in the CPA-DD.			
Project participant response		Date: 16/02/2012	
Additional parameters such as TM_{RGh} , $BE_{CH4,SWDS,y}$ etc.are now included in section B.6.1 of the CPA DD. CPA system boundaries (component and facilities used to mitigate GHGs) are now clearly defined in the CPA-DD.			
Documentation Provided as Evidence by Project Participant			
Revised CPA-DD, version 2.0			
Information Verified by Lead Assessor		Date of review: 20/04/2012	
Revised CPA-DD, version 2.0			
Reasoning for not acceptance or close out			
Additional parameters such $BE_{CH4,SWDS,y}$ etc are now included in revised CPA-DD, version 2.0 dated 03/03/2012 however TM_{RGh} is not included in section B.6.1 of the CPA-DD, verison 2.0 dated 03/03/2012 Hence CAR#35 is open			
Date of acceptance or non acceptance		Date: 20/04/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#36	Abhishek Mahawar	CDM-D-29
Non conformities raised			
The date of Local stake holder consultation (LSC), date of invitation and types of attendees is not provided in section D.1 of CPA DD.			
Also Summary of comment received during LSC should be provided in section E.2 and how due action taken on it should provide in section D.3 instead of section D.1 of the CPA DD.			
Project participant response		Date: 16/02/2012	
Please see the revised CPA on the related section.			
The date of LSH is held on 20 January 2011 at the Bagendung site.			
Documentation Provided as Evidence by Project Participant			

Please mention the document provided to KBS along with the above response CAR-16-1 Invitation Letter and Advertisement, CAR-16-2 List of participant, CAR-16-3 Minutes of meetings.

Information Verified by Lead Assessor
Date of review: 20/04/2012

1. Revised CPA-DD,
2. Invitation letter and advertisement
3. List of Participants
4. Minutes of Meetings

Reasoning for not acceptance or close out

In the revised CPA-DD, date of invitation and types of attendees are provided in section D.1. Supporting documents for the summary of comments received during LSC, invitation letter and advertisements, list of participants, minutes of meetings are provided by the project proponent. Hence CAR is closed.

Date of acceptance or non acceptance
Date: 20/04/2012

Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#37	Abhishek Mahawar	CDM-D-29

Non conformities raised

The emergency preparedness plan is not provided in section E.7.2 the CPA-DD.
PP also needs to provide the role and responsibility for project implementation, operation and maintenance, collection, storage and monitoring of the data in section E.7.2 the CPA-DD.

Project participant response
Date: 16/02/2012

The emergency preparedness plan is now provided in section E.7.2 the CPA-DD.
The role and responsibility for project implementation, operation and maintenance, collection, storage and monitoring of the data are now indicated in section E.7.2 the CPA-DD.

Documentation Provided as Evidence by Project Participant

Revised CPA-DD, version 2.0 dated 03/03/2012

Reasoning for not acceptance or close out

PP has not provided the description of role and responsibility for project implementation.

Information Verified by Lead Assessor
Date of review: 06/04/2012

Revised CPA-DD, version 03 dated 06/06/2012

Reasoning for not acceptance or close out

There is figure E.7.2.1 in the revised CPA-DD, however the required information i.e the role and responsibility for project implementation, operation and maintenance, collection, storage and monitoring of the data is mentioned in section B.6.1 of the revised CPA-DD. Closed.

Date of acceptance or non acceptance
Date: 06/04/2012

Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#38	Abhishek Mahawar	CDM-D-29

Non conformities raised

PP is requested to respond the following queries raised related to ER and Investment analysis sheet:

1. Cell no. "C 20" and "H 20" of population sheet of ER calculation sheet needs to be divided by 366 instead of 365 as a leap year.
2. PI also needs to add recent data of year 2011 in population sheet of ER calculation sheet for amount of Waste Generated and disposed
3. PP needs to add density (0.3) along with its source in population sheet of ER calculation sheet to convert volume to mass value of amount of Waste Generated and disposed
4. PI justify along with source of Population growth data in population sheet of ER calculation sheet

5. How population growth rate of 3.4% is considered in population sheet of ER calculation sheet
6. PP needs to justify the calculation of MSW Generation rate in population sheet of ER calculation sheet
7. PP needs to provide the basis for consideration of Volumes of waste constant for the period of 1992 to 2007
8. PP needs to provide proof of Recovery Rate and Adjustment factor AF considered in input sheet of ER calculation sheet
9. PP needs to provide justification of 85% considered used for calculation of Electricity consumption engines in input sheet of ER calculation sheet
10. PP needs to clarify whether Grid Emission Factor in input sheet of ER calculation sheet is combined margin or weighted average of 3 years
11. PP needs to provide exact reference of Technical losses in the grid considered in input sheet of ER calculation sheet
12. PP needs to give actual year of generation instead of giving 1,2,3,4 etc no. of years of year in FOD basis sheet of ER sheet for calculation of $\sum W_{j,x} * DOC_j * e^{-kj(y-x)} * (1-e^{-kj})$
13. PP needs to provide basis for consideration of Methane correction factor as 1 in FOD basis sheet of ER sheet
14. PP needs to clarify why Waste composition is not considered on national data basis in FOD basis sheet of ER sheet
15. PP needs to justify the consideration of 0.5 in cell no. C 49 for calculation of Waste composition of "1t CO2e in baseline" in FOD calculation sheet of ER sheet
16. PP needs to link LFG captured (recovery rate) OF 80% input data sheet of electricity production sheet of sheet of ER sheet
17. PP needs to link 50% with cell B32 instead of punching in Electrical capacity calculation in of electricity production sheet of sheet of ER sheet
18. why only 13 years are shown in electricity production sheet of sheet of ER sheet
19. Why years are different in El Prod entire lifetime sheet and electricity production sheet of ER sheet
20. Please check why the net electricity average and total is different in ER and Invest sheet and why the formulae are applied differently
21. PP needs to provide Quotation dates as well as gap between investment decision and quotes considered in input parameters sheet of investment analysis sheet. PP also need to Comparison with other projects or kW or other basis for the calculations
22. PP needs to explain w source for consideration of Gas Engine Rent in input parameters sheet of investment analysis sheet
23. what is the basis for technical lifetime, if shorter period is chosen salvage value needs to be considered in input parameters sheet of investment analysis sheet
24. What is the basis for Lining / Cover materials cost considered in input parameters sheet of investment analysis sheet. Is there any policy that provides higher tariff in case power is generated from landfill similar to project activity
25. Why does year start on 2010 in Expense Bagendung sheet of investment analysis sheet
26. If PP intend to use LFG for electricity generation then why Flaring Plant value is considered Expense Bagendung sheet of investment analysis sheet
27. PI provide source capital cost is considered as values Expense Bagendung sheet of investment analysis sheet. PI also explain the costs heads and its variation over years of same parameters
28. PI provide justification alongwith souse of Variable outgoings considered in Bagendung sheet of investment analysis sheet.

Project participant response
Date: 16/02/2012

1. Noted, please see the revised spreadsheet on ER calculation
2. Noted, please see the revised spreadsheet on ER calculation
3. Noted, please see the revised spreadsheet on ER calculation on Tab Input 2

4. The population growth is taken by comparing population in year 2010 to 2009. The approach taken is using Arithmetic Rate of Growth: $P_n = P_0(1+rn)$. The formulae is used by Department of Statistic Indonesia. We rectify the growth rate to be 6.95% instead of 3.4%.
5. Please see number 4
6. The growth of the MSW generation from 2012 until 2025 is taken by approach of multiplying the projection of population by the waste generated per person in medium size city and also collection/dumping rate.
7. The data is taken from the statement from the Department of Municipal of Cilegon City. The statement is provided with this document
8. Recovery rate or efficiency of the system has been obtained from a report prepared by the US EPA (page 19). The AF is not considered anymore in the ER calculation since AF is no longer used in ACM0012 Version 12.0.0.
9. The availability of the gas engines has been revised to 98% based on the latest MoU signed with the gas engine provider. Document to substantiate availability (98%) of gas engines has been provided to DOE for assessment (please refer to page 7 of the document).
10. The grid emission factor is taken from Indonesian DNA data, which is Combined Margin on their latest data. This value is publicly available in their website, which is now indicated in section B.6.2 (parameter $CEF_{elec,y,BL,y}$ or $CEF_{elec,y}$). Since the connection will be with JAMALI grid, we take the data for ex-ante calculation.
11. TDL is refer to default value of "Tool to calculate baseline, project and/or leakage emissions from electricity consumption" with category A. This is now indicated in the revised emission reduction spreadsheet.
12. Noted, please see the revised spreadsheet of ER calculation in FOD basis sheet
13. The MCF is been rectified to be 0.8 for unmanaged solid waste disposal sites-deep, based on the observations made during the visit to the site during validation.
14. Since there is no recent data for waste composition in the similar size of city, the conservative approach being taken for the waste data composition from IPCC 2006 Guidelines for National Greenhouse Gas, Volume 5, Chapter 2, tables 2.3-2.5, MSW composition regional default values for South-Eastern Asia.
15. The value 0.5 is refer to 50% of methane content in the LFG. This is the default value for methane content of LFG, specified in ACM0001 Version 12.0.0.
16. Well noted. The spreadsheet has been rectified
17. Noted, please see the revised spreadsheet on ER calculation
18. We have rectified the double show of the sheet. The year of generating electricity already 12 year (as the end of the agreement with City government)
19. We have rectified the double show of the sheet.
20. We have rectified the approach. In the investment sheet should be by the electricity produced in yearly bases.
21. The quotation for geo-membrane is dated on 2nd of August 2011. The investment decision date is on 2nd of Sept 2011.
22. The gas engine rent agreement has been finalize and has come to some amount of agreement 410 IDR/Kwh. The agreement will be attached along with the document.
23. CPA Implementer has signed a cooperation agreement with the landfill owner. This agreement has a duration of 12 years, after which the facilities will transfer from CPA implementer to landfill owner at no cost. Therefore, the technical lifetime is based on the period of agreement. The agreement has been forwarded to DOE for assessment. Please refer to page 4 of the document.
24. The cost is based on the quotation of the lining material. The quotation for purchase of lining material has been forwarded to DOE for assessment. The lining material will be the major part of the system other than power plant. Power tariff used in the investment analysis is based on decision 31 of 2009 issued by the Ministry of Energy and Mineral Resources that defines a feed-in tariff of 656 IDR/kWh. English summary of main point of the regulation have been forwarded to DOE for assessment.

25. The investment analysis has been revised to state the year 2012, since in 2012 the first project expenses are expected to be made.
26. The flaring plant will be used until the quantity of gas is sufficient to generate electricity. The flaring plant is also used for combustion of LFG in the event of downtime/maintenance of the gas engines (for safety reason).
27. Documentation to substantiate the expenses and explanation of the costs has now been provided to the DOE.
28. Documentation to substantiate the variable outgoings has now been provided to the DOE.

Documentation Provided as Evidence by Project Participant

CAR 18-8 - recovery rate evidence
CAR 18 - 27&28 - Explanation on financial lines of CPA
CAR 18 - 23 Agreement between ERC and city government (english translation)
CAR 18 - 24 - Information on power tariff
CAR 18 - 24 - Geo-membrane quotation
CAR 18 – 4 Statistical Book of Cilegon 2009-2011
CAR 18 – 22 MoU between ERC and ENERPRO
CAR 18 – 23 Agreement between ERC and City government

Information Verified by Lead Assessor
Date of review: 20/04/2012

CAR 18-8 - recovery rate evidence
CAR 18 - 27&28 - Explanation on financial lines of CPA
CAR 18 - 23 Agreement between ERC and city government (english translation)
CAR 18 - 24 - Information on power tariff
CAR 18 - 24 - Geo-membrane quotation
CAR 18 – 4 Statistical Book of Cilegon 2009-2011
CAR 18 – 22 MoU between ERC and ENERPRO
CAR 18 – 23 Agreement between ERC and City government

Reasoning for not acceptance or close out

1. In the revised ER sheet, Population sheet is renamed as input 2 is verified by the assessment team and found that cell no “C 20” and “H 20” is now divided by 366 instead of 365.
2. Recent data for the year 2011 is now added in the input 2 sheet of the revised ER sheet.
3. Density is added in the revised ER sheet.
4. Population Growth data in population sheet of ER calculation sheet is calculated based on the Airthmatic Growth Rate. However one year data is not appropriate for long term. the population growth rate as mentioned in input2 sheet for the year 2011 is not consistent with the report of statistical data of cilegon 2011 which specify as 2.54. PP to justify.
5. Population growth rate is modified in the revised ER sheet from 3.4% to 6.95%. however as mentioned for point no 4, one year data is not appropriate for long term basis.
6. Calculation of MSW generation from 2012 to 2025 is taken by multiplying the projection of population by the waste generated per person in medium size city based on the Indonesian Standard for Medium Size of city population SNI 19-3983-1995 as mentioned in the Emission Reduction sheet. However PP needs to provide the supporting document for the same.
7. As mentioned above the basis for consideration of volumes of waste constant for the period of 1992 to 2007 is taken as data from department of municipal of Cilegon city, however PP has not provided the source of the data. Moreover in the earlier ER sheet data was taken from 1992 now in the revised ER sheet, data is taken from 1993, PP needs to provide justification for the same.
8. Proof of recovery rate is provided in page 20 of the report prepared by the US EPA which is not acceptable by the assessment team. PP needs to susbtentiate how this report is appropriate for Indonesian region, in particular when soil covered.

9. Adjustment factor AF is not considered in the revised ER sheet as AF is not considered in ER calculation as per ACM001, version 12.0.0. However in the response, PP has mentioned the methodology mentioned is ACM0012, version 12.0.0.
10. The availability of the gas engines has been verified with the MoU signed between the gas engine provider and the PP dated 02/12/2012. However PP needs to update the value in the ER sheet.
11. From the revised ER sheet it is now clear that the grid emission factor used in the ER sheet is combined margin (CM) not weighted average and grid emission factor is validated from the weblink provided.
12. Exact reference of the transmission and distribution losses is now included in the revised ER sheet and the value is verified from the "Tool to calculate baseline, project and/or leakage emissions from electricity consumption"(Version 01), EB 39,Annex 7.
13. PP needs to define the solid waste disposal site with soil cover and the value taken is 0.8 for the same.
14. Data for the waste composition is verified from the IPCC volume 5, chapter 2, table 2.3 =2.5 table for MSW composition for regional default value for south-Eastern Asia and found acceptable.
15. Default value of 0.5 is verified from the methodology ACM001, version 12 and is acceptable to the validation team.
16. Calculation performed in electricity production sheet is not linked to LFG captured rate in input1 sheet.
17. It is done in the emission reduction sheet.
18. PP needs to provide justification for the selection of the years. Moreover as mentioned in the response by PP, the year of generating electricity is written 15 while in the emission reduction sheet, 14 years (from 2012 to 2025) have been taken by PP.
19. It is rectified in the revised ER sheet and is acceptable by the assessment team.
20. Net electricity average and total is still different in the ER sheet (Total =36,906,248 and Average =2,636,161) and in the IRR sheet (Total= 43,375,404 and Average=3,098,243) in kwh. PP needs to substantiate the difference in the value and detail about what Approach is changed in the revised ER sheet.
21. The quotation for geo-membrane is dated as 2nd August 2011 and the investment decision date is 2nd Sept 2011 is accepted to the assessment team.
22. It is verified with the Gas engine rent agreement signed between PT ERC Austrindo and PT energy Provider Indonesia dated 02/12/2012 and is found acceptable to the assessment team and found that the amount is 410 IDR/Kwh. However PP needs to provide justification for including the cost of generator gas supply in the investment.
23. Cooperation agreement signed between CPA implementer(The Emission Reduction Company (Australia) and landfill owner (Municipal Government of Cilegon) Nomor : CON 20100120 signed on 01-02-2010 indicate that the duration of the agreement is 12 years and it can be extended to further 5 years based on the mutual agreement between both the parties.
24. PP needs to provide the supporting document for the cost of quotation of the lining material however power tariff used in the investment analysis sheet is 656 IDR/kwh which is also cross checked with the Ministry of Energy and Mineral Resources.
25. Investment analysis sheet is revised with the start year 2012 which is acceptable to the assessment team.
26. PP needs to provide the supporting document for the cost of flaring plant.
27. PP to provide the supporting document for the capital cost as well as expenses considered and variations in the parameters.
28. PP to provide the supporting document for variable outgoings considered in investment analysis sheet.

CAR 38 open

Date of acceptance or no acceptance	Date: 20/04/2012	Status: Open
Project participant response	Date: 07/06/2012	

4. We revised the approach of using the growth rate of the population based on the latest 10 years data as stated in the statistical data of Cilegon city 2011. The growth rate is 2.41. please find the revised calculation in the ER spreadsheet.
5. Please refer to no. 4.

6. Please refer to the document CAR 18 no 6
7. As there is no real historical data recorded properly since the landfill was opened, the Government of Cilegon made the approach of calculating amount of waste. The data is submitted to you on document CAR 18-7. We rectify the ER calculation with the relevant information as in the document.
8. As there is no report specifically on Indonesia region, we took the approach from the report on IPCC "2006 IPCC Guidelines for National Greenhouse Gas Inventories Chapter 3 page 3.19, with the conservative approach recovery rate 80%.
9. Noted. We confirm our response not to refer on ACM0012 in the response above, but refer to ACM0001 ver 12.
10. Noted, Please see the updated in the ER calculation spread sheet in term of specification/capacity of the engine.
13. Need Clarification
16. Noted, Please see the revised spreadsheet on ER which already linked to the relevant source
18. Noted. The actual is the electricity will be for the next 12 years. We add the calculation for year 15 in the spreadsheet.
20. We already put the consistency between electricity produced in the ER and IRR calculation. Please refer to the revised version.
22. Generator gas supply cost is the preparation of the location of the power plant proposed. Please see the investment cost breakdown for the detail of the item.
24. Please refer to document CAR 18-24.
- 26 – 28. Please see the document for investment cost breakdown and o&M cost breakdown.

Documentation Provided as Evidence by Project Participant

Revised IRR sheet
Revised ER sheet
Revised CPA-DD, version 03 dated 06/06/2012

Information Verified by Lead Assessor
Date of review: 25/06/2012

Revised IRR sheet
Revised ER sheet
Revised CPA-DD, version 03 dated 06/06/2012

Reasoning for not acceptance or close out

- No 4: Accepted to assessment team.
- No 5 : Kindly refer point no 4
- No 6 : Assessment team could not find any document referred as CAR 18 no 6
- No 7: Assessment team could not find any document referred as CAR 18 no 7
- No 8: Assessment team find the value acceptable.
- No 9: Acceptable to assessment team
- No 10: It is revised in the ER sheet hence it is acceptable to assessment team.
- No 13: PP to specify what clarification is required.
- No 16: It is acceptable to assessment team.
- No 18: It is acceptable to assessment team.
- No 20: It is acceptable to assessment team.
- No 21: It is acceptable to assessment team.
- No 22: It is not clear in the investment cost break up sheet.
- No 24: It is acceptable to the assessment team.
- No 26, 27, 28 FSR is not clear. Assessment team is not able to locate the values in FSR.

Date of acceptance or non acceptance
Date: 25/06/2012

Status: Open

Project participant response
Date: 02/07/2012

No 06: we have resubmitted the file. Please refer to the file name mentioned in table below		
No 07: we have resubmitted the file. Please refer to the file name mentioned in table below		
No 22, 26, 27, 28: Please refer to the detailed breakdown of the investment and O&M Cost for the project, and the document with quotations for substantiation of these costs.		
Documentation Provided as Evidence by Project Participant		
CAR-18-6 Indonesian Standard for Medium Size of city population (SNI 19-3983-1995).pdf		
CAR 18-7 Third Party opinion on Bagendung Landfill.pdf		
CAR 18 - 22, 26, 27, 28 - Capex Budget Bagendung breakdown.xls		
CAR 18 - 22, 26, 27, 28 - quotations.pdf		
Information Verified by Lead Assessor	Date of review:	
CAR-18-6 Indonesian Standard for Medium Size of city population (SNI 19-3983-1995).pdf		
CAR 18-7 Third Party opinion on Bagendung Landfill.pdf		
CAR 18 - 22, 26, 27, 28 - Capex Budget Bagendung breakdown.xls		
CAR 18 - 22, 26, 27, 28 - quotations.pdf		
Reasoning for not acceptance or close out		
6. The document has been checked and found ok. Closed		
7. The amount of waste has been checked from the submitted document and found to be ok. Closed		
22. The breakdown of all costs is included in the submitted document. The costs are supported by relevant evidences and hence found to be ok. Closed		
All issues are addressed. Hence CAR is closed		
Date of acceptance or non acceptance	Date: 20/07/2012	Status: Closed

Date	Type & Number	Raised by	Reference
25/01/2012	CAR#39	Abhishek Mahawar /Shilpy Gupta	CDM-D-29
Non conformities raised			
PP is requested to provide			
1. Letter of Approval issued by DNA of Indonesia			
2. Modalities of Communication			
3. Proof of starting date of CPA			
4. Proof of prior consideration of CPA			
5. Proof of the investment decision of this project activity with CDM consideration.			
6. Purchase Orders related to the project activity			
7. Proof of Conformity of PLF as per Annex 11, EB 48			
8. Power purchase Agreement			
9. Relevant proofs of local stakeholder consultation process			
10. Proof of Operational and management structure for implementation and monitoring of project activity			
11. Statutory clearances			
12. Proof of the company name as per the Company Registration / Incorporation Act			
13. Technical specifications for key equipment			
14. Training plan and records			
15. Key photographs of the current site activities along with photographs of the name plates of generation equipments			
16. Declaration for non diversion of ODA funding for the project activity			
17. All proof of justification of eligibility of the CPA for inclusion in the PoA provided in section B.2 of CPA DD			

18. Book on Fundamentals of Classical Thermodynamics"; Gordon J. Van Wylen, Richard E. Sonntag and Claus Borgnakke; 4 th Edition, 1994, John Wiley & Sons, Inc. 19. Proof of Regulation of the Minister of Environment number 11 of 2006 regarding the type of business plans and activities that require an environmental impact analysis	
Project participant response	Date: 25/01/2012
1. As per EB 55, Annex 38 LoA is not required for CPA. 2. MOC is not required for CPA. 3. Starting date of CPA will be the agreement between ERC and gas engine rental provider. The rent agreement has not been signed yet; this is expected to happen in the beginning of April. At that time the exact starting date will be defined in the real case CPA-DD and relevant evidence will be submitted to DOE. 4. As per annex 26 of EB 60, prior consideration for PoA is not required. Hence, no evidence has been submitted. 5. Meeting minutes of the board meeting where it was decided to invest in this project, dated 02 September 2011 have been provided to the DOE. 6. Since the project has not started yet (refer to point 03 above), purchase orders are presently not available. They will be submitted as soon as they become available. 7. PLF is 100%. All available LFG will be burnt by the engines, except during maintenance periods as per requirements of manufacturer. Document to substantiate availability (98%) of gas engines has been provided to DOE for assessment (please refer to page 7). 8. Power purchase agreement has not been signed yet. Power tariff used in the investment analysis is based on decision 31 of 2009 issued by the Ministry of Energy and Mineral Resources that defines a feed-in tariff of 656 IDR/kWh. 9. Invitation letters, pictures, meeting minutes and attendance list of the stakeholder meeting has been provided to DOE for assessment. 10. The operational and management structure of the CPA has been forwarded to the DOE. 11. Relevant statutory clearances have been forwarded to DOE for assessment. These are the agreement with the local government in its capacity as the landfill owner and the business license of the CPA implementer. 12. Proof of the company name as per the Company Registration / Incorporation Act has now been forwarded to DOE for assessment. 13. Technical specifications of the gas engines have been forwarded to the DOE for assessment. 14. Training plan is currently under development and will be provided as soon as possible. 15. Photographs from the project site have been provided to the DOE. 16. Declaration for non-diversion of ODA funding for the CPA has now been provided. 17. Relevant documents to confirm eligibility of the CPA for inclusion under this PoA have now been provided. 18. The reference requested was available in the previous (obsolete) version of ACM0001 (version 11). Reference is no longer available in the latest and currently applied methodology of the PoA. Hence, PoA-DD has been revised to reflect the same. 19. Proof of Regulation of the Minister of Environment number 11 of 2006 regarding the type of business plans and activities that require an environmental impact analysis have now been provided to DOE.	
Documentation Provided as Evidence by Project Participant	
CAR 19-12 Company Registration and Incorporation Act CAR 19 – 9 → please see the CAR 16 documentation CAR 19-19 Regulation of the Minister of Environment number 11 of 2006	
Information Verified by Lead Assessor	Date of review: 20/04/2012
CAR 19-12 Company Registration and Incorporation Act CAR 19 – 9 → please see the CAR 16 documentation	

CAR 19-19 Regulation of the Minister of Environment number 11 of 2006

Reasoning for not acceptance or close out

1. As per EB 55, Annex 38 LoA is not required for CPA is accepted by the validation team.
2. MOC is not required for CPA is accepted by the validation team.
3. Starting date of CPA will be the agreement between ERC and gas engine rental provider.
4. The rent agreement has not been signed yet so the exact starting date will be defined in the real case CPA-DD and relevant evidence needs to be submitted to the assessment team.
5. As per annex 26 of EB 60, prior consideration for PoA is not required. Hence it is accepted by the assessment team.
6. Decision making document (Meeting minutes of the board meeting) is provided where it was decided to invest in this project, dated 02 September 2011.
7. Since the project has not started yet, purchase orders has not submitted till now.
8. PLF is 100%. All available LFG will be burnt by the engines, except during maintenance periods as per requirements of manufacturer having substantiate availability (98%) of gas engines has been verified by memorandum of understanding signed between PT ERC Austrindo and PT Energy Provider Indonesia dated 02/12/2012 at page 7 by the assessment team.
9. Power tariff used in the investment analysis is based on decision 31 of 2009 issued by the Ministry of Energy and Mineral Resources that defines a feed-in tariff of 656 IDR/kWh for Java and Bali.
10. Invitation letters, pictures, meeting minutes and attendance list of the stakeholder meeting has been verified by the assessment team it was found that invitation letter provided in is local language and moreover date is not mentioned in the invitation latter as well as the minutes of meeting provided.
11. The operational and management structure of the CPA has been verified by the assessment team as follows
 - a) President Director (kyle Moyle)
 - b) Commisioner (Mark Le Cornu)
 - c) Area Manager Banten (Ryansyah Iswadi)
 - d) Bangeding Staff (Sarpata Mahdi)
 - e) Cilowong Staff (Sawidi)
 - f) Engineering team (Geoff Dyer, Steve Noolan)
 - g) CSR Team (Shirley Moyle Thari)
 - h) Carbon Team (Tim Moore, Joost Van Acht, William Christaens)
12. Relevant statutory clearances i.e agreement signed between the Emission Reduction Company and Pererintan Kota Cilegon (Reference No 660.1/04-HUK/2010) with the local government in its capacity as the landfill owner and the business license of the CPA implementer.
13. Proof of the company name as per the Company Registration / Incorporation Act has been verified by the assessment team..
14. Technical specifications of the gas system engines 400 series for biogas by Onsite Energy has been verified by the assessment team
15. Training plan is not provided by the PP.
16. Photographs from the project site have been verified by the assessment team.
17. Declaration for non-diversion of ODA for funding for the CPA dated 08/03/2012 with reference number LETCDM20120308 has been verified by the assessment team and found acceptable.
18. Following documents to confirm eligibility of the CPA for inclusion under this PoA have now been provided.
 1. Business Licence number 286/EWT/III/2011 dated 11 maret 2011 is submitted and reviewed by the assessment team.
2. ERC.BKPM approval PMA establishment approval No 00566/1/PPM/PMA/2011 dated 25/02/2011
3. ERC establishment deed no AHU-24769.AH.01.01 tahun 2011 dated 18 Mei 2011.
4. Declaration of CPA implementer No LETCDM20120308 dated 08/03/2012.

5. Feasibility Study Report No REP20110802 dated 02/08/2011.

These documents were found acceptable by the assessment team.

19. The reference of ACM0001 is revised in CPA-DD, version 02 dated 03/03/2012.

20. The reference requested was available in the previous (obsolete) version of ACM0001 (version 11). Reference is no longer available in the latest and currently applied methodology of the PoA. Hence, PoA-DD has been revised to reflect the same and verified by the assessment team.

21. Proof of Regulation of the Minister of Environment number 11 of 2006 regarding the type of business plans and activities that require an environmental impact analysis have been reviewed by the assessment team

Date of acceptance or non acceptance	Date: 20/04/2012	Status: open
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Project participant response	Date: 07/06/2012
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4. Document still in the process of waiting for signing.

15. Since the project has not started yet, the training plan has not been finalized yet. The training plan will be available prior to commissioning and during verification of the project.

Documentation Provided as Evidence by Project Participant

Revised CPA-DD, version 03 dated 06/06/2012

Information Verified by Lead Assessor	Date of review: 25/06/2012
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Revised CPA-DD, version 03 dated 06/06/2012

Reasoning for not acceptance or close out

CAR can be closed after review of the pending document from PP. Hence CAR is open

Date of acceptance or non acceptance	Date: 25/06/2012	Status: Open
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Project participant response	Date: 02/07/2012
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4. Negotiations between equipment supplier and CPA implementer are currently ongoing. Hence, we have now defined the start date of the CPA as the 12/02/2012 (the date the equipment supplier and CPA implementer signed a memorandum of understanding on the project implementation). The MoU has been provided to the DOE for review.

15. Training handbook of the project has now been provided to the DOE.

Documentation Provided as Evidence by Project Participant

CAR 19 - Training Plan and Training Manual.pdf

CAR 19 – MoU Equipment supplier and CPA Implementer.pdf

Information Verified by Lead Assessor	Date of review: 20/07/2012
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CAR 19 - Training Plan and Training Manual.pdf

CAR 19 – MoU Equipment supplier and CPA Implementer.pdf

Reasoning for not acceptance or close out

The documents are checked and found to be appropriate. The start date is now as per the PoA guidelines. Hence CAR is closed.

Date of acceptance or non acceptance	Date: 20/07/2012	Status: Closed
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Date	Type & Number	Raised by	Reference
25/01/2012	CAR#40	Abhishek Mahawar /Shilpy Gupta	CDM-D-29
Non conformities raised			
PP is requested to provide proof for the following references and evidences used in the financial calculation sheets:			

<ol style="list-style-type: none"> 1. Investment cost 2. Power Tariff Agreement 3. Capital Cost 4. the expenses (Gas Engine Rent) 5. Operation and Maintenance documents <ol style="list-style-type: none"> 6. Document for the Engineering design 7. Document for the Construction materials 8. Document for the Waste removal an wall construction 9. Document for the Environmental controls 10. Document for the Lining / Cover materials 11. Document for the Flaring Plant 12. Document for the Generator gas supply 13. The cells for the calculation of the IRR and NPV calculation are blank 	
Project participant response	Date: 25/01/2012
<p>Point 1, 3, 5, 6, 7, 8, 9, 10, 11: Please refer to the feasibility study report of the project and to the document explaining the expenses of the project.</p> <p>Point 2: please refer to the document with information of the feed-in-tariff of the project</p> <p>Point 13: The investment analysis spread sheet has been revised. Note that without CDM revenue, the CPA has a negative IRR, thus no result is shown in the spread sheet. Therefore, NPV is used to indicate as the financial indicator.</p>	
Documentation Provided as Evidence by Project Participant	
CAR 20 - FSR Bagendung Landfill CAR 20-2 - Information on power tariff CAR 20-12 - generator gas supply	
Information Verified by Lead Assessor	Date of review: 20/04/2012
Revised CPA-DD, version 2.0 dated 03/03/2012 FSR Bagendung Landfill dated Information on power tariff generator gas supply	
Reasoning for not acceptance or close out	
<p>Validation team have verified the following documents-</p> <p>1. Input parameters used in investment cost is not provided In FSR dated 02/08/2011, Power Tariff Agreement is provided by Ministry of Energy and Mineral Resources, Capital Cost is not provided in FSR dated 02/08/2011</p> <p>However PP needs to provide the supporting documents for the</p> <ol style="list-style-type: none"> 1. Operation and Maintenance cost <ol style="list-style-type: none"> 2. Document for the Engineering design document 3. Document for the Construction materials 4. Document for the Waste removal an wall construction 5. Document for the Environmental controls, 6. Document for the Lining / Cover materials 7. Document for the Flaring Plant 7. Document for the Generator gas supply 8. The cells for the calculation of the IRR and NPV calculation are now provided in investment analysis spread sheet dated 03/03/2012. 	

Reference of the inflation used is not in compliance with para 7 of appendix of the "GUIDELINES ON THE ASSESSMENT OF INVESTMENT ANALYSIS " provided in EB 62 Annex 5.		
CAR 40 Open		
Date of acceptance or non acceptance	Date: 20/04/2012	Status: open
Project participant response	Date: Please mention the date of your response to KBS	
1. Noted. Please see the complete scanned copy of the FSR, with complete part.		
1-7. Please see the document of breakdown investment cost and O&M cost.		
29. please see the MoU between ERC and Enerpro on gas engine rental agreement.		
Documentation Provided as Evidence by Project Participant		
1. FSR		
2. MoU signed between ERC and Enerpro for gas engine rental agreement		
Information Verified by Lead Assessor	Date of review: 25/06/2012	
1. FSR		
2. MoU signed between ERC and Enerpro for gas engine rental agreement		
Reasoning for not acceptance or close out		
In FSR, cost for Operation and Maintenance, Engineering design, Construction materials, environmental controls, cost for lining / Cover materials, for the Flaring Plant is not clearly mentioned.		
MoU signed between ERC and Enerpro for gas engine rental agreement is acceptable to the assessment team.		
Date of acceptance or non acceptance	Date:25/06/2012	Status: open
Project participant response	Date: Please mention the date of your response to KBS	
Please refer to the detailed breakdown of the investment and O&M Cost for the project, and the document with quotations for substantiation of these costs.		
Documentation Provided as Evidence by Project Participant		
CAR 20 - quotations.pdf		
CAR 20 - Capex Budget Bagendung breakdown.xls		
Information Verified by Lead Assessor	Date of review: 25/06/2012	
CAR 20 - quotations.pdf		
CAR 20 - Capex Budget Bagendung breakdown.xls		
Reasoning for not acceptance or close out		
The documents were checked and found to be appropriate. The detailed break up of cost is provided and it was validated by the assessment team that all identified costs were reasonable and relevant to the project activity. Hence CAR is closed.		
Date of acceptance or non acceptance	Date:25/06/2012	Status: Closed

Annex 4: Certificate of Competence

Personnel Name:		Abhishek Mahawar	
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input checked="" type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
Energy industries (renewable/non-renewable sources)	TA 1.2: Energy generation from renewable energy sources		
Approved by (Manager C & T)	Mayank Kumar Jain		
Approval date:	06/04/2012		

Personnel Name:		Gagandeep	
Qualified to work as:			
Team Leader	<input type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier (Trainee)	<input checked="" type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
Energy Industries (renewable/non-renewable sources)	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar		
Approved by (Manager C & T)	Mayank Kumar Jain		
Approval date:	23/02/2012		

Personnel Name:		Ashok Kumar Gautam	
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
Energy industries (renewable/non-renewable sources)	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar		
Waste handling and disposal	TA 13.1: Waste handling and disposal		
Approved by (Manager C& T)	Mayank Kumar Jain		



Approval date:	12/12/2011
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Personnel Name:		Yenni Sembiring	
Qualified to work as:			
Team Leader	<input type="checkbox"/>	Technical Expert	<input type="checkbox"/>
Validator/Verifier	<input type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input type="checkbox"/>	Local Expert (Indonesia)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope		Technical Area	
Not applicable		Not applicable	
Approved by (Manager C & T)		Mayank Kumar Jain	
Approval date:		20/12/2011	

Personnel Name:		Madhuri Nanda	
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope		Technical Area	
Not applicable		Not applicable	
Approved by (Manager C& T)		Mayank Kumar Jain	
Approval date:		04/09/2012	

Personnel Name:		Mayank Kumar Jain	
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope		Technical Area	
Energy industries (renewable/non-renewable sources)		TA 1.2: Energy generation from renewable energy sources	
Waste handling and disposal		TA 13.1: Waste handling and disposal	
Approved by (Manager V & V)		Kaviraj Singh	
Approval date:		19/04/2012	