



VALIDATION REPORT CDM AWARENESS & PROMOTION UNIT

VALIDATION OF THE PoA FOR FUEL
SWITCHING AT MICRO AND SMALL-
SIZED ENTERPRISES IN EGYPT

REPORT NO. EGYPT-VAL/001/2012

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BUREAU VERITAS CERTIFICATION

62/71 Boulevard du Château
92571 Neuilly Sur Seine Cdx - France



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<p>Summary:</p> <p>Bureau Veritas Certification has made the validation of the PoA for fuel switching at micro and small-sized enterprises in Egypt located in Egypt (within the international borders of the Arab Republic of Egypt) on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.</p> <p>The validation scope is defined as an independent and objective review of the PoA-DD, the baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the PoA design and the baseline and monitoring plan; ii) follow-up interviews with stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion. The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.</p> <p>The first output of the validation process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the Coordinating/Managing Entity revised its PoA design documents.</p> <p>In summary, it is Bureau Veritas Certification's opinion that the PoA correctly applies the baseline and monitoring methodologies AMS.III.B version 16.0 and AMS.III.Z version 4.0 and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.</p>	

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Project title: PoA for fuel switching at micro and small-sized enterprises in Egypt	
Work carried out by: Virginie Vitiello (Lead Verifier, code holder: NO), Dr. Abdelmourhit Lahbabi (Verifier in scopes TA 1.1 and TA 4.1),	
Internal Technical Review carried out by: Dr. Ashok Mammen (Lead verifier and Technical Specialist, code holder: NO) Mr. H.B.Muralidhar (ITR Specialist TA 4.1), Mr El Hadji Mbaye Diagne (ITR Specialist TA 1.1)	
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Flavio Gomes

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1 INTRODUCTION

The CDM-APU/EEAA has commissioned Bureau Veritas Certification to validate its CDM Program PoA for fuel switching at micro and small-sized enterprises in Egypt (hereafter called “the PoA”) in Egypt (within the international borders of the Arab Republic of Egypt).

This report summarizes the findings of the validation of the project, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1 Objective

The validation serves as programme design verification and is a requirement of all programme project activities. The validation is an independent third party assessment of the programme design. In particular, the PoA's baseline, the monitoring plan (MP), and the programme compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the programme design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Validation is a requirement for all CDM programme and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).

UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

1.2 Scope

The validation scope is defined as an independent and objective review of the programme design documents, the baseline study and monitoring plan and other relevant documents at POA level. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

The validation is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the programme design.

1.3 Validation team

The validation team consists of the following personnel:



FUNCTION	NAME	TA 1.1	TA 4.1	TASK PERFORMED*
Team Leader	Virginie Vitiello	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Team Member	Dr. Abdelmourhit Lahbabi	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Financial Specialist		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI
Internal Technical Reviewer (ITR)	Dr. Ashok Mammen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Specialist supporting ITR	Mr El Hadji Mbaye Diagne	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Specialist supporting ITR	Mr. H.B.Muralidhar	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI

*DR = Document Review; SV = Site Visit; RI = Report issuance

2 METHODOLOGY

The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a validation protocol was customized for the programme, according to the Clean Development Mechanism Validation and Verification Standard (version 2), Clean Development Mechanism Project Standard (version 02.0), issued by the Executive Board at its 70th meeting on 23/11/2012. The protocol shows, in a transparent manner, criteria (requirements), means of validation and the results from validating the identified criteria. The validation protocol serves the following purposes:

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

The completed validation protocol is enclosed in Appendix A to this report.

2.1 Review of Documents

The PoA-DD submitted by the PoA developer ERCC on behalf of the CDM-APU/EEAA and additional background documents related to the project design and baseline, i.e. country Law, PoA-DD form, Approved methodology, Kyoto Protocol, Clarifications on Validation Requirements to be Checked by a Designated Operational Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, ERCC revised four times the PoA-DD and resubmitted it on 03/12/2012.



The validation conclusions presented in this report relate to the project as described in the PoA-DD version 07

2.2 Follow-up Interviews

On 16/07/2012 and 17/07/2012 Bureau Veritas Certification performed interviews with stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of CDM-APU, the DNA, ERCC and Perspectives were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
CME CDM/APU DNA	<ul style="list-style-type: none"> ➤ Programme Project background information and CDM consideration. ➤ Energy and CDM National policies and PoA implementation framework ➤ Programme technology, operation, maintenance and monitoring capability. ➤ Project monitoring and management plan. ➤ Stakeholder consultation process. ➤ Project approval status
CPA implementers: <ul style="list-style-type: none"> • Yasser Hammad Fahmy Bakery • Ahmed Abd El-Rahim Hassan Bakery • Brick factory at Beni Suef 	<ul style="list-style-type: none"> ➤ CPA background information and CDM consideration and voluntary participation. ➤ Current technology and operation, maintenance and monitoring capability. ➤ CPA permitting status ➤ CPA implementation status
CONSULTANTS: ERCC Perspectives	<ul style="list-style-type: none"> ➤ PoA scope ➤ Applicability of selected methodologies ➤ Eligibility criteria ➤ Baselines determination. ➤ Emission reductions calculation. ➤ Emission reduction monitoring plan, ➤ Additionality ➤ Debundling

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the programme design.



Corrective Action Requests (CAR) is issued, where:

- (a) The CME/project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- (b) The applicable CDM requirements have not been met;
- (c) There is a risk that emission reductions cannot be monitored or calculated.

The validation team may also use the term Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

The validation team may also raise a forward action request (FAR) during validation to identify issues related to programme implementation that require review during the first verification of the CPA under the PoA.

To guarantee the transparency of the verification process, the concerns raised are documented in more detail in the verification protocol in Appendix A.

2.4 Internal Technical Review

The validation report underwent an Internal Technical Review (ITR) before requesting registration of the programme.

The ITR is an independent process performed to examine thoroughly that the process of validation has been carried out in conformance with the requirements of the validation scheme as well as internal Bureau Veritas Certification procedures.

The Team Leader provides a copy of the validation report to the reviewer, including any necessary validation documentation. The reviewer reviews the submitted documentation for conformance with the validation scheme. This will be a comprehensive review of all documentation generated during the validation process.

When performing an Internal Technical Review, the reviewer ensures that:

The validation activity has been performed by the team by exercising utmost diligence and complete adherence to the CDM rules and requirements.

The review encompasses all aspects related to the project which includes PoA design, baseline, additionality, monitoring plan and emission reduction calculations, internal quality assurance systems of the CME as well as the PoA, review of the stakeholder comments and responses, closure of CARs, CLs and FARs during the validation exercise, review of sample documents.

The reviewer compiles clarification questions for the Team Leader and Validation Team and discusses these matters with Team Leader.

After the agreement of the responses on the 'Clarification Request' from the Team Leader as well as the PP(s) the finalized validation report is accepted for further processing such as uploading on the UNFCCC webpage.



3 VALIDATION CONCLUSIONS

In the following sections, the conclusions of the validation are stated.

The findings from the desk review of the original programme design documents and the findings from interviews during the follow up visit are described in the Validation Protocol in Appendix A.

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A. The validation of the Project resulted in 48 Corrective Action Requests (CARs) and 68 Clarification Requests (CLs).

The CARs and CLs were closed based on adequate responses from the Project Participant(s) which meet the applicable requirements. They have been reassessed before their formal acceptance and closure.

The number between brackets at the end of each section correspond to the VVS paragraph

3.1 Approval (43-44)

A letter of approval and authorization from the Designated National Authority of Arab Republic of Egypt dated June 2012 written in English has been received (Ref 45). The CME of the PoA (CDM-APU/EEAA) provided copy of this letter (Ref 45) to the validation team. The letter of approval and authorization clearly states that Arab Republic of Egypt has ratified the Kyoto Protocol and the approval is for voluntary participation in CDM and in the Program of Activity. The DNA approval and authorization mentions the programme title as stated in the PDD.

Also, the letter of approval and authorization mentions that the project contributes to sustainable development. The letter is unconditional with respect to party to the Kyoto Protocol, voluntary participation, contribution to sustainable development and title of project program. The title and content of the letter of approval and authorization refer to the precise proposed CDM program of activities title in the PDD being submitted for registration. Moreover the validation team checked the UNFCCC website (<http://cdm.unfccc.int/ProgrammeOfActivities/Validation/index.html>) where a list of the Arab Republic of Egypt CDM programs at different stages could be found. It was confirmed that the "PoA for fuel switching at micro and small-sized enterprises in Egypt" has been published to be at validation stage on the website.

Bureau Veritas Certification received this letter from the CME and does not doubt its authenticity.

Bureau Veritas Certification considers the letter is in accordance with paragraphs 43 - 44 of the VVS.



3.2 Authorization (49)

The participation for the unique project participant, the CDM Awareness & Promotion Unit under the Egyptian Environmental Affairs Agency (CDM-APU/EEAA), has been approved by a Party of the Kyoto Protocol, namely the Arab Republic of Egypt as CME of the PoA and has obtained letter of authorization of its coordination of the PoA from the host party (ref /45/).

3.3 Contribution to sustainable development (52)

The host Party's DNA confirmed the contribution of the project to the sustainable development of the host Party in a letter of approval (ref /45/)

3.4 Modalities of Communications (58, 61)

The validation team has performed due diligence on the MoC statement in accordance with the requirements established in the VVS and confirms that the MOC statement complies with all relevant forms and requirements (ref /46/).

3.5 Project design document (63)

The validation team hereby confirms that the PoA-DD complies with the latest PoA-DD form, namely F-CDM-SSC-PoA-DD Version 02.0.

3.6 Changes in the Programme of Activity (17)

During the site visit, no physical change was observed in the Project as compared to details mentioned in webhosted PDD. However the sections A6, B2, B3 of Part I, and B2, B6, B7 of Part II and Appendix 4 of the PoA-DD, version 07 (ref /2/) have been changed compared to the webhosted PDD, version 02 (ref/1/). Only the major differences between these two versions of PDD are reflected below.

Item	PoA-DD version 02 (Webhosted)	PoA-DD version 07 (submitted to registration)	Validation Opinion
1	The webhosted PoA-DD did not consider fully in section A.6, applicable provisions for application of selected baseline and monitoring methodology for small-scale project activities in the Project standard . Accordingly, a Corrective Action request, CAR 6 was raised.	<p>PoA-DD has been modified where the description of the technologies/measures (Section A.6) refers to the provisions in each of the two approved methodologies related to what the methodology comprises.</p> <p>It is also explained that the independent use of either one of the two methodologies under this PoA will be limited to the fuel switching activities (from heavy or light fuel oil to NG) at micro and small enterprises in Egypt.</p> <p>PoA-DD has been modified (Version 07), where Section A.6 refers to EB67, Annex</p>	<p>Section A.6 of the Po-ADD has been modified with reference to the Guidelines for completing the programme design document form for small-scale CDM programmes of activities (EB 67, Annex 30, Version 02). Reference is made to the independent application of the two small scale methodologies AMS.III.B and AMS.III.Z with description of examples of typical targeted CPAs.</p> <p>CAR 6 has been closed</p>



		<p>30, Version 02, and states the specific guidelines to be followed for Section A.6.</p> <p>To show emphasize compliance with EB67, subtitles have been added to Section A.6 indicating the purpose of the paragraphs. Those subtitles are:</p> <ul style="list-style-type: none"> - Description of the fuel switching activity; - Schematic description of the fuel switching activity; - Applicable provisions for application of the selected methodologies; and - Examples of typical CPAs with a brief description on their operation. <p>Under the third subtitle, the applicable provisions applicable provisions for application of selected baseline and monitoring methodology for small-scale project activities in the Project standard have been considered.</p>	
2	<p>In section B2 of Part I related to the eligibility criteria of the published webhosted PoA-DD (Version 2) did not cover conditions that avoid double counting of emission reductions and Eligibility criteria covering specifications of technology/measure Subsequently, CAR 10 and CAR 11 were raised</p>	<p>Verification method of Eligibility Criteria #3 has been updated in the PoA-DD where it refers to the unique identification of CPA Facilities' locations.</p> <p>An additional criterion for eligibility has been added to the PoA-DD to address that CPA Facilities submitting for inclusion under the same CPA must be of the same type (same industrial activity).</p>	<p>A unique identification of location coordinates of each of the CPA Facilities will be used to avoid double counting. This has been added in the Table 3 of the POA-DD.</p> <p>The eligibility criteria has been added: For CPAs involving more than one facility, all facilities under a CPA must be applying the same industrial process to produce the same type of product, e.g. bakeries, smelters</p> <ul style="list-style-type: none"> - Proof of the activity type at each CPA Facility (onsite visit or official documentation, e.g. commercial registry, as applicable). <p>For details, please refer to CAR10 and CAR11.</p>



3	<p>In section Part I B.2. of the webhosted PoA-DD, the eligibility criteria did not cover the conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality in particular all the relevant additionality-related guidelines, tools or any requirements embedded in the used methodologies were not met</p> <p>CAR12 to CAR16 and CL15 to CL20 were raised</p>	<p>In response to CAR 12: eligibility Criteria #8 has been updated in the PoA-DD, where it specifies that in addition to the eligibility criteria table, each CPA must show that the applicability criteria of the applied methodology are met.</p> <p>In response to CAR 14, PoA-DD has been modified, where the threshold specified in criterion 14.1 is corrected to indicate that only micro-scale CPAs are eligible for inclusion as Type 1 CPAs (where the ERs are less than or equal 600 tCO₂e per year per element process, and less than or equal 20,000 tCO₂e per year per CPA). Since this applies to all Type 1 CPAs, therefore the application of methodology will always use equation 3, such that the amount of fossil fuel consumed in the project activity in year y, FC_y, can be used as a proxy for determining baseline emissions.</p> <p>The applicability criteria as set in each of the two methodologies should be demonstrated for each CPA Facility in details in Section B.2 of Part II. The verification method for criteria 14.1 and 14.2 is changed to highlight that demonstration of compliance with the methodology is part of the eligibility.</p> <p>Consistent changes are applied to the same table in Part II.</p> <p>In response to CAR 15, the PoA-DD has been modified, where it is specified that:</p> <ul style="list-style-type: none"> - The micro-scale threshold is specified as 20,000 tCO₂e per year. For micro-scale CPAs to be exempted from the de-bundling check, the ERs must not exceed 200 tCO₂e per element process per year (1% of the micro-scale threshold). - The small-scale threshold is specified as 60,000 tCO₂e per year. For small-scale CPAs to be exempted from the de-bundling check, the ERs must not exceed 600 tCO₂e per element process per year (1% of the small-scale threshold). <p>For more details see tables 1 and 2 in Annex A</p>	<p>In response to CAR12, the eligibility criteria Part II B2 -Table 3 # 8 of the PoA-DD has been updated with specification of the requirement that CPA type 1 should meet all the applicability criteria of methodology AMS III B (see Section B2 Table 6) and CPA Type 2 applicability criteria of methodology AMS III Z as stated in paragraph B2-Table 7</p> <p>In response to CAR14, The demonstration of the compliance to the eligibility criteria of both applied methodologies (AMS III.B for Type 1CPAs and AMS.III.Z for Type 2 CPAs) has been specified in the eligibility table.</p> <p>The micro-scale threshold specified in criterion 14.1 has been corrected to indicate that ERs are less than or equal 600 tCO₂e per year per element process, and less than or equal 20,000 tCO₂e per year per micro-scale CPA</p> <p>The micro-scale and small scale thresholds have been corrected and better specified in Table 4 of the PoA-DD</p> <p>With the corrections and modifications made, the raised CL15 to CL20 and CAR12 to CAR16 were all closed during the validation process. For more details see Table 1 and Table 2 in Annex A</p>
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4	<p>In section B.3 of the webhosted PDD, the PP referred to the use of the combination of the two methodologies AMS.III.B and AMS.III.Z. While the methodologies are used independently to two different categories of CPAs.</p> <p>Accordingly, a Corrective Action request, CAR17 was raised.</p>	<p>PoA-DD has been modified, where reference to the combination of methodologies was corrected into the independent use of one of the approved methodologies. Consistent changes have been made throughout the document.</p>	<p>The PP specified that CPAs under the PoA will apply independently one of the following two approved small scale methodologies:</p> <ul style="list-style-type: none"> • AMS-III.B. Switching Fossil Fuels (Version 16) or AMS-III.Z. Fuel switch, process improvement and energy efficiency in brick manufacture (Version 04) <p>Therefore CAR 17 has been closed.</p>
5	<p>The webhosted PoA-DD was published before EB70 decisions and did not take in consideration the provisions of the new version 2.0 of the CDM project standard (CDM-EB70-A02). In particular the PoA-DD did not comply with § 143 and §144 of the standard related to the use of multiple methodologies.</p> <p>Accordingly CAR18 was raised</p>	<p>The webhosted PoA-DD has been modified, where Section B.3 refers to the CDM Project Standard (EB70, Annex 02), paragraphs 143 and 144 and text has been added to show compliance with the requirements, where:</p> <ul style="list-style-type: none"> - Two separate generic CPAs are presented in Part II of the PoA-DD - One specific Type (1) CPA is submitted with the PoA for GSC and registration - The first specific Type (2) CPA to be submitted for inclusion after the PoA is registered will be provided for approval by the Board in accordance with the post-registration change process as defined in the most recent Project cycle procedure at the time of submission of the CPA. <p>Part II of the PoA-DD has been modified accordingly.</p>	<p>PoA-DD has been modified to be conform with to the latest version of CDM Project Standard (EB70, Annex 02) in particular with respect to the provisions of paragraphs 143 and 144 requiring generic and specific CPA for each applied methodology/measure or technology.</p> <p>Two separate generic CPAs have been presented in Part II of the PoA-DD for the two applied methodologies AMS.III.B and AMS.III.Z</p> <ul style="list-style-type: none"> - One specific Type (1) CPA using methodology AMS.III.B is submitted with the PoA for GSC and registration - The first specific Type (2) CPA using methodology AMS.III.Z will be submitted by the PP for inclusion after the PoA is registered in accordance with the post-registration change process as defined in latest version of CDM Project Standard (CDM-EB70-A02). <p>The modification was found satisfactory by the DOE validation team.</p> <p>CAR18 has been closed</p>
6	<p>In section B.2 of Part II, of the webhosted PoA-DD, it was not shown</p>	<p>In response to CL45, the PoA-DD has been modified, where the verification method for criterion 5 in tables 8 specifies</p>	<p>In response to CL45, the following clarification has been added to the verification method of criterion 5 in</p>



<p>that each generic CPA meets each applicability condition of the relevant methodology used. The following specifications/clarifications were not provided :</p> <ul style="list-style-type: none"> - which requirement the CPA has to comply with in case of replacement of existing equipment in particular for the estimation of the point in time where the existing equipment would be replaced in the absence of the project activity in accordance with the latest version of "Tool to determine the remaining lifetime of equipment" (CL45 raised) - how the compliance to the AMS-III.B methodology requirement 8 as presented in the Table 8 of the PoA DD would be met at the facilities (CL46 raised) - For Type 1 CPAs using AMS-III.B: <ul style="list-style-type: none"> what tests would be used to specify the quality/type of the manufactured product produced and the raw material used before the project implementation How the quality of products manufactured after the project implementation would not be affected by the fuel switch change and how the consumption per quality of products 	<p>that in case of equipment replacement, the point in time when the existing equipment would be replaced in the absence of CDM must be identified.</p> <p>This can be made using the lifetime in the equipment specification and the date of commissioning, or using a letter from industry expert.</p> <p>Consistent modifications are applied in the verification method of criterion 5 in the applicability table in Section B.2 of Type (2) Generic CPA.</p> <p>In response to CL46, PoA-DD has been modified where the verification method of criterion 8 in table 8 specifies that billed natural gas consumption, measured by the natural gas suppliers' meters, provide a direct measurement and record of the energy consumption in each CPA Facility.</p> <p>In response to CL47, PoA-DD has been modified where the verification method of criterion 12 in Table 8 states that:</p> <ul style="list-style-type: none"> - CME will ensure that in conformity with the methodology requirement, the CPA does not result in integrated process change in the CPA Facilities, (e.g. change in operational conditions, type of raw material processed, use of non-energy additives, or change in type or quality of products manufactured, etc). - An assessment of the CPA Facilities with respect to this requirement will be carried out by the technical expert of the CME before the CPA inclusion in the PoA. The assessment made, including a detailed description of the process before the implementation of the project activity, will be documented and made available for reference during the CPA verification. 	<p>Table 8 and Table 9: <i>For replaced equipment, the date at which it would have been replaced in absence of the CPA must be provided. This can be evidenced by one of two ways:</i></p> <ul style="list-style-type: none"> - <i>Manufacturer statement stating the lifetime and documentation showing the commissioning date, i.e. by subtracting the years of operation of the existing equipment from its lifetime, the duration remaining before replacement (without CDM) is obtained; or</i> - <i>Letter from an industry expert estimating the remaining lifetime of the equipment, i.e. a letter stating the point in time when the existing equipment would be replaced in the absence of the CPA.</i> <p>The explanation was accepted and validated.</p> <p>In response to CL46, the updated PoA-DD specifies that within each of the CPA Facilities, it will be possible to directly measure and record at least the energy consumption in the element process (e.g. fossil fuel input) after project implementation. The verification method of criterion 8 in table 8 has been specified as the billed natural gas consumption, measured by the natural gas suppliers' meters.</p> <p>As for CL47, the PP has specified in the updated version of the PoA DD as verification method for criterion 12 of Table 8 that CME will ensure that the CPA does not result in integrated process change in the CPA Facilities as required by the used methodology (AMS.III.B).</p> <p>This will be ensured by ex ante assessment of the CPA carried out by the technical expert of the CME as part of the CPA inclusion check by the CME. It is specified that assessment made, including a detailed description of the process before the implementation of the project activity, will be documented and made available for reference during the CPA verification.</p>
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	<p>manufactured will be monitored (CL47)</p> <p>CL45, CL46 and CL47 were raised on the application of the used methodology AMS.III.B</p>		<p>Accordingly CL45, CL46 and CL47 were closed.</p>
7	<p>In the webhosted PoA-DD, the project concept used in the context of Type 1 and Type 2 CPAs were not well explained in section B.6 Part II. This could affect the appropriate application of the two methodologies used. Moreover the definition/description of the parameters used for the emissions calculation were not consistent with the requirement of the methodology.</p> <p>CL52 (for type 1 CPA), CL63 (for Type 2 CPA) and CAR27 were raised.</p>	<p>In response to CL52 and CL63, the PoA-DD has been modified, where the concept used for the calculation of the emissions reduction for each type of two generic CPAs has been better described.</p> <p>In response to CAR27, PoA-DD has been modified (where the description of parameters is modified to become in accordance with the applied methodology.</p>	<p>Detailed description of the project concepts of the CPA type 1 and type 2 under the PoA has been provided in Sections B6 of Part II of the PoA-DD. The provided additional clarification on the projects concepts will allow for the appropriate application of the two used methodologies.</p> <p>The parameters used in equation 4 (FCPJ,y and NCVFF,PJ,y) for the project emissions calculation has been corrected in according to the AMSIII.B applied methodology</p> <p>Accordingly CL52, CL63 and CAR27 were closed</p>
8	<p>In the section B6.2 of webhosted PoA-DD, the fuels EF Data and parameters that are to be reported ex-ante were not reported and evaluated correctly</p> <p>CAR 28, CAR29, CAR30 and CAR 31 along with CL10, CL42, CL53 and CL54 were raised</p>	<p>In response to the different raised CARs and CLs, corrections were made to the PoA-DD for the reported and estimated fuels EF.</p> <p>The inconsistencies were due to approximation errors:</p> <ul style="list-style-type: none"> - The PoA-DD is modified, where the EF of HFO is 76.76 instead of 77 tCO₂/TJ. - The NCV for NG in the calculation sheet was taken as 0.0498 instead of 0.04983 TJ/tonNG. The error has been corrected in the ER calculation sheet: <p>Consistent modifications have been applied in Section B.6.2 of Type (2) Generic CPA.</p> <p>An ERs calculation sheet has been provided for the two typical examples for CPAs of Type 1 and Type 2 (presented in Appendix 04 of the PoA-DD):</p> <p>PoA-DD has been modified, where the</p>	<p>The different identified inconsistencies were corrected. Details of the national emissions factors of HFO, LFO and Natural Gas derivation based on the national reported data (carbon content and NCV) have been provided and the values used justified and validated.</p> <p>Details of the national emissions factor of upstream fugitive methane emissions derivation based on the national reported data (carbon content and NCV) have been provided and the value used justified and validated.</p> <p>The raised CARs and CLs were closed</p> <p>Please refer to CAR 28, CAR29, CAR30 and CAR 31 along with CL10, CL42, CL53 and CL54 in Table 3 for more details.</p>



		<p>tables refer to the values readily found in the national source, and demonstrates the method of obtaining the EF for each type of fuel.</p> <p>Consistent modifications are applied in Section B.6.2 of Type (2) Generic CPA.</p> <p>PoA-DD has been modified (Version 03), where the density is referred to as "d" and its unit is "g/l".</p> <p>Consistent modifications are applied in Section B.6.2 of Type (2) Generic CPA</p>	
9	<p>In the webhosted PoA-DD, transparent ex ante calculations of project, baseline and leakage emissions, were not provided for each type of CPA, applying all relevant equations provided in the selected methodologies, in conformity with the Guidelines for completing PoA-DD for small-scale CDM programmes of activities.</p> <p>CL56 and CAR33 were raised</p>	<p>ERs calculation sheets for each of the two types of eligible under this PoA have been provided, i.e. calculation sheet for the specific CPA-DD (Type 1) and a prototype calculation sheet for the brick factory visited during the validation onsite visit (Type 2).</p> <p>The ex-ante ER calculation for one typical CPA Facility of each type of CPAs is provided in Appendix 04, and referred to in Section B.6.3.</p> <ul style="list-style-type: none"> - The version of ACM0009 in Appendix 04 is specified as Version 04.0.0. - Units of the baseline, leakage and project emissions, as well as the emission reductions is corrected (tCO₂e/yr 	<p>Emissions reductions calculations have been provided in appendix 4 using the equations of section B.6. The baselines emissions were based on the fuel consumptions calculated on the basis of a specific ratio of 12 l/100kg of used flour that has been validated during the site visit. As for the brick factory, the brick production and the fuel consumption were as based on the declaration of the owner of the brick plant and factory manual records. (See ref /55/ and /56/). Both the bakery and the brick plant were visited during the site visit.</p> <p>Leakage has been calculated using ACM0009 as specified by the applied methodologies (AMSI.B and AMSI.Z). The leakage emissions were found negative for both CPAs and a 0 value was used as leakage.</p> <p>The project emissions were evaluated in conformity of the methodologies applied as the emission associated with the NG that would have been used to ensure the same energy consumed in the baseline by respectively the bakery and the brick factory</p> <p>The emissions reductions have been evaluated at 74.26 t CO₂e/year for the bakery and 1,447.38 t CO₂e/year for the brick plant.</p> <p>The requested corrections related to the update of the ACM0009 version and the emissions units have been made in the Appendix 4 of the</p>



			<p>updated PoA DD document</p> <p>Both facilities used as generic CPA for the ERs calculation purposes have been visited during the site visit.</p> <p>The ERs calculation spreadsheet has been provided with details information on the data sources. ERs Calculations have been checked for both CPAs types. They are correct and consistent with the used values in the PoA-DD.</p> <p>Accordingly CL56 and CAR33 were closed.</p>
10	<p>In the webhosted PoA_DD version 2.0, the description of the monitoring plan was not precise to allow for the application of the monitoring provisions of the used methodologies. In particular the level at which the monitoring, data collection and verification will be done was not clearly specified.</p> <p>CL58 and CL59 were raised</p>	<p>PoA-DD has been modified, where it is specified that the monitoring will be on the CPA Facility level. Consistent modifications are applied in Section B.7.2 of Type (2) Generic CPA.</p> <p>PoA-DD has been modified, where it is specified that the CME will archive data related to the CPA and the CPA Facilities during the crediting period.</p> <p>Consistent modifications are applied in Section B.7.2 of Type (2) Generic CPA.</p>	<p>It has been specified in the section B.7.2 of the PoA-DD that the Monitoring Report will comprise all required monitoring information in order to allow the DOE to verify the emission reductions for each monitoring period for each individual CPA Facility.</p> <p>It has been specified that the CME database will include information on both the CPA and the CPA Facility levels as described in Section C of the PoA-DD. The data recording and archiving activities will be utilized in the monitoring reports at the CPA Facilities level.</p> <p>Records will be kept for a minimum of two years after the end of the crediting period.</p> <p>Accordingly CL58 and CL59 were closed</p>

3.7 PoA description (69)

The submitted PoA aims at fuel switching activity at micro and small-sized enterprises (M/SMEs) in Egypt. The PoA will reduce green house gases (GHG) by switching HFO and LFO currently used in micro and small enterprises to Natural Gas. For the purpose of this PoA, micro and small enterprises will be defined based on their definitions in Law 141/2004, where the threshold of small enterprises (economic, productive or service enterprise employing up to 50 workers with a paid in capital of maximum one million EGP) will define the eligibility of potential CPAs.



PoA is designed by the CDM Awareness & Promotion Unit under the Egyptian Environmental Affairs Agency (CDM-APU/EEAA), as the coordinating and managing entity (CME), to reduce greenhouse gases (GHG) in micro and small enterprises wishing to switch from burning fuel oils to burning natural gas in their kilns/furnaces/ovens (where the output of combustion is heat/thermal energy used for manufacturing products, e.g. bread, bricks, etc).

The PoA and all CPAs to be included in the PoA will be located in the Arab Republic of Egypt. The geographical boundaries of the PoA are thus the international borders of the Arab Republic of Egypt (North 31.670878, South 21.725059, East 24.695463, and West 36.8967).

Scenario prior to the start of the project activity: Most of the M/SMEs in Egypt use energy generated from the combustion of either heavy fuel oil (HFO, locally known as mazout), or light fuel oil (LFO, also known as diesel oil and locally as solar/gaz) in their operations. The government of Egypt has been trying to encourage M/SMEs to switch to using natural gas (NG) instead of the traditionally used fuel oils (HFO/LFO). In this context, the government committed in 2011 to strongly support the measures required for supplying NG to SMEs as a way of reducing their energy costs and protect the environment at the same time (see ref /16/).

It is to be noted that the majority of M/SMEs are located in the middle of residential areas. Hence, the government plans for switching to NG at M/SMEs comes in line with their plans for switching to NG at households. In May 2012, EGAS announced their plan to connect about 750,000 household – in various governorates of Egypt – to the NG network in the fiscal year 2012/2013 (compared to 560,000 in 2011/2012, and 550,000 in 2010/2011). It is noted that 2012/2013 plan includes the NG connections to bakeries and commercial stores (ref /17/).

Presently, the government of Egypt subsidizes energy for most industries, and also provides subsidies for some products. An example of such subsidies is the one provided by the Ministry of Supply and Internal Trade to bakeries. This subsidy accounts for the high price of LFO through granting each bakery 10 EGP for each shewal (a weighing unit widely used locally – equivalent to 100 kg sack) of the consumed flour. Due to that such obligations represent a burden for the government of Egypt, the responsible ministry has been unable to release this subsidy for over 6 months, and has been struggling to obtain sufficient finance to meet its obligations/18/.

It should be mentioned, that LFO is imported as the NG is supplied from Egypt's national reserves. This explains the Government efforts to encourage switching to natural gas to reduce dependency on foreign currency imports which threaten the economy with shortages particularly in the present period of instability and the foreseeable future (ref /20/).



Under these circumstances and given the fact that LFO is neither consistently nor securely distributed compared to piped NG, therefore connecting bakeries to the NG network is becoming increasingly of special importance to the Egyptian government – in addition to their continuous efforts to promote NG switching activities in general.

In Egypt, the Egyptian Natural Gas Holding Company (EGAS) is responsible for designing the NG grid and infrastructure nation-wide. EGAS is also the only governmental body entitled to contract with NG suppliers for constructing the NG regional networks and trading NG in Egypt.

When a facility is interested in switching to NG, the facility owner is responsible for financing the construction of internal and external connections and other relevant constructions, as well as the replacement/retrofitting of the element processes burning fossil fuels in the facility, i.e. adaptation of the fuel storage system, feeding system and burners. If more than one facility is located in an area for which the closest NG line is at a similar distance, the owners may jointly finance the external connections. Connection cost from a visited brick factory during the site visited amounted to 2.1 million EGP /50/. This is considered an important barriers for SME to invest in fuel switching.

Under circumstances, the PoA CME (CDM-APU/EEAA) decided to do required actions to secure CDM before starting any CPA. The PoA designed documents are prepared and they are submitted to UNFCCC for GSC prior to any CPA start, and the validation of the project is followed accordingly. The PoA documents have been published on the UNFCCC website on 26/6/2012 /1/.

Among the manufacturing industries which are in the scope of this PoA are those burning fuel oils to produce heat for the manufacturing of their products, e.g. bakeries, smelters, brick factories, etc.

The proposed PoA is small scale. CPAs to be included under this PoA will independently apply one of the two approved small scale methodologies for two types of CPAs:

- Type 1 CPA : using AMS-III.B. Switching Fossil Fuels (Version 16) – Sectoral Scope 1 : Energy industries (renewable – non-renewable sources)

Or

- Type 2 CPA: AMS-III.Z. Fuel switch, process improvement and energy efficiency in brick manufacture (Version 04) – Sectoral Scope 4 : Manufacturing industries

Both methodologies (AMS-III.B and AMS-III.Z) will be used for the same measure; fuel switching from fuel oil to NG at micro and/or small enterprises.

The PoA aims to provide fuel switching activities in Egypt with a framework facilitating their implementation at micro and small enterprises. AMS-III.B will be applied for bakeries, smelters, and other facilities (except for brick manufacturing facilities), where the ERs per element process would not exceed 600 tCO₂ annually, and also not



exceeding 20,000 tCO₂ annually for the whole CPA. AMS-III.Z will be applied only for brick kilns, which represent a key sector targeted by the PoA, where the ERs per year would not exceed 60,000 tCO₂ annually for the whole CPA.

Therefore, each CPA will apply only one of the two methodologies. Thus, the independent use of the two approved methodologies does not result in cross effects of any kind.

The length of the submitted PoA is 28 years starting at the date of registration of the PoA.

The validation team validated the accuracy and completeness of the PoA-DD description through a combination of steps. Interviews organized on 16/07/2012 during the site visit with the CME, the consultants that help developed the PoA and with the DNA validated the scenario prior to the start of the PoA activities and stakeholder consultation process. National policies on energy subsidies, dominant use of HFO and LFO in Micro and SMEs in Egypt were confirmed by Eng. Tarek Shalaby CDM Manager and DNA member at the EEAA. He also confirmed that there is no legal/regulatory requirement for NG use. Site visits of two bakeries in Al-Zawya Al-Hamra in Cairo were carried out in the afternoon of 16/07/2012 as typical Type 1 CPAs (see /51/). The visit and interviews with their respective owners validated the bread baking process, use of LFO for the baking kilns and the existence of the NG end supply point nearby the bakeries. Also a site visit to a typical Type 2 CPA, a Brick factory located in Beni Suef, was organized on the 17/07/2012. The validation team validated the typical brick kiln process as presented in the PoA-DD and the use of the HFO as the only fuel used for firing. The voluntary participation in CDM and the initial investment constraint as barrier in investing in HFO switch were confirmed. A copy of the piping construction cost quotation of a similar brick factory NG supply has been provided and validated (see ref /50/). The investment required for the 5 km distance piping construction to the NG network is validated at 2,1 million EGP. The two visited bakeries and brick factory have been used as examples for the emissions reductions estimation of respectively generic CPAType 1 and type 2. It has been also validated that in the three facilities visited, the NG supply piping and thus the use of NG has not started yet.

The webhosted PoA-DD Version 2.0 (ref /1/) was published before EB70 decisions and did not take in consideration the provisions of the new version 2.0 of the CDM project standard (CDM-EB70-A02) (ref /52/). In particular the PoA-DD did not comply with § 143 and §144 of the standard related to the use of multiple methodologies. CAR18 was then raised.

In reply to the CAR, PoA-DD has been modified to be conform with provisions of paragraphs 143 and 144 of the latest version of CDM Project Standard requiring generic and specific CPA for each applied methodology/measure or technology. In the submitted PoA-DD version 07 (ref /2/), two separate generic CPAs are presented in Part II of the PoA-DD for the two applied methodologies AMS.III.B and AMS.III.Z. One specific Type 1 CPA using methodology AMS.III.B is submitted with the PoA for GSC and registration. The first specific Type 2 CPA using methodology AMS.III.Z is to be submitted by the PP for inclusion after the PoA is registered in accordance with the



post-registration change process as defined in latest version of CDM Project Standard (CDM-EB70-A02). CAR18 has been accordingly closed.

The webhosted PoA-DD Version 2.0 /1/ did not provide for each type of CPA, in conformity with the Guidelines for completing PoA-DD for small-scale CDM programmes of activities, a transparent ex ante calculation of project emissions, baseline emissions (or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the selected methodologies. Accordingly, CL56 was raised (See table 3, appendix A).

In reply to the CL, in the submitted PoA-DD version 07 (ref /2/), emissions reductions calculations have been provided in appendix 4 using the equations of section B.6. The baseline emissions were based on the fuel consumptions calculated on the basis of a specific ratio of 12 l/100kg of used flour that has been validated during the site visit (ref /53/). As for the brick factory, the fuel consumption was based on the declaration of the owner of the brick plant. Both the bakery and the brick plant were visited during the site visit.

Leakage has been calculated using ACM0009 as specified by the applied methodologies (AMSIII.B and AMSIII.Z). The leakage emissions were found negative for both CPAs and a 0 value was used as leakage.

The project emissions were evaluated in conformity of the methodologies applied as the emission associated with the NG that would have been used to ensure the same energy consumed in the baseline by respectively the bakery and the brick factory. Excel sheet /3/ for the emissions reductions of both generic CPAs has been provided. The calculations and the inputs parameters have been validated by the validation team. The emissions reductions have been evaluated at 74.26 t CO₂e/year for the bakery 1 owned by Yasser Hammad Fahmy and 1,447.38 t CO₂e/year for the brick plant located in Abu Seif and owned by Mohamed Osmane.

With respect to the above corrections, the CL56 has been closed.

The validation team hereby confirms that the programme description in PoA-DD version 07 (ref /2/) is accurate and complete in all respects.

3.8 Operational and management arrangements (186)

A clear and transparent operational and management arrangement has been established by the management/coordinating entity. Complying with **para.186/VVS**, the Validation team has assessed the management system described in the PoA-DD in accordance with “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities”.



By documents review, interviewing with CME during on site visit, the validation team confirms that the CME has the competencies to check the features of potential CPAs and ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA. For details of management system, please refer to section 6.4.5 of table 1 in appendix A.

3.9 Eligibility criteria for inclusion of a CPA in the PoA(196)

Complying with Para.196/VVS, the Validation team has assessed the eligibility criteria for inclusion a CPA in the PoA in accordance with “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities”.

According to the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (EB 65, Annex 03, Version 01) , sections A/B, paragraphs 11-13 and 15 state that:

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

12- For PoAs involving combinations of technologies/measures and/or methodologies, the eligibility criteria relative to each of them shall be proposed to demonstrate additionality.

13- The CME shall develop eligibility criteria for inclusion of a CPA under the PoA and shall include these criteria in the PoA design documents (e.g. CDM-PoA-DD, CDM-SSC-PoA-DD) and demonstrate their usability to assess the inclusion of CPAs in the generic CDM-CPA-DD.

15- The eligibility criteria shall be verifiable.

The validation team confirms that:

- The eligibility criteria are verifiable
- The eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA.
- The specified eligibility criteria in the PoA-DD are sufficient to ensure that all CPAs would comply with the CDM requirement applicable to the PoA, for details of eligibility criteria are presented in the following tables :



#	Eligibility criteria	Verification method/documents	Confirmation (must be Yes)
1	The CPA Facilities must be located within the geographic boundaries of Egypt.	Map of each CPA Facility location and its coordinates	YES/NO
2	The CPA is a voluntary action	Statement by each CPA Facility Owner that the CPA is a voluntary action.	YES/NO
3	The inclusion of the CPA in the present PoA does not represent any double counting of emissions reductions, i.e. The CPA is neither registered as an individual CDM project, nor is it included in another PoA.	<ul style="list-style-type: none"> - Statement by each CPA Facility Owner that their activity is neither registered as an individual CDM project activity nor is part of another registered PoA. - Cross-checking against the CME database and UNFCCC listing of projects in the Host Country to prove that the CPA is a distinct activity, at least by unique identification of location coordinates of each of the CPA Facilities. 	YES/NO
4	Each CPA Facility is a micro or small-sized enterprise (M/SE), the threshold of which is 1 million EGP capital and 50 workers.	- Statement by each CPA Facility Owner identifying its capital investment and number of employees.	YES/NO
5	The CPA activity is a switch from HFO or LFO to NG and provision of the attendant infrastructure where required.	Proof of the baseline situation via onsite visit, official documentation, or historical facility records (logbooks, purchase receipts, etc.) - as applicable.	YES/NO
6	For CPAs involving more than one facility, all facilities under a CPA must be applying the same industrial process to produce the same type of product, e.g. bakeries, smelters.	<ul style="list-style-type: none"> - Proof of the activity type at each CPA Facility (onsite visit or official documentation, e.g. commercial registry, as applicable). - Each CPA Facility must be in compliance with any mandatory regulations at the time of inclusion, i.e. bakeries must be in compliance with the Supply and Internal Trade Ministry requirements, brick kilns must comply with national brick strength standards, etc. 	YES/NO
7	Start date of the CPA, where the start date should not be before the start of validation of the PoA (webhosting date for global stakeholder comments)	Start date of the CPA as evidenced by the date of signing the first contract or purchase order for CPA implementation is compared to the date of PoA hosting on UNFCCC.	YES/NO
8	Each of the CPA Facilities should meet all the eligibility criteria of the applied methodology and CPA Developer has completed	- Comparison of CPA Facilities data with the requirements and methodology applicability criteria in the relevant generic CPA-DD.	YES/NO



	the applicability table in the relevant generic CPA-DD to the chosen methodology.	<ul style="list-style-type: none"> - Type (1) CPA Facilities should meet all the applicability criteria of methodology AMS-III.B, while Type (2) CPA Facilities should meet all the applicability criteria of methodology AMS-III.Z, as listed in Section B.2 of Part II of this document. - All relevant proofs must be provided to demonstrate that applicability criteria have been met, as defined in Section B.2 of Part II. 	
9	The CPA Facilities Owners have secured all environmental and social permits as required by the laws of Egypt – if any (some activities, e.g. bakeries, are exempted by the Environmental laws of Egypt from performing an EIA for their activities).	<ul style="list-style-type: none"> - To be conducted on the CPA level - In the case when an EIA is required by the law for the activity type applied at the CPA Facilities, letter of EIA approval from the Egyptian Environmental Affairs Agency (EEAA), or relevant regulation showing compliance should be submitted. 	YES/NO
10	The CPA Developer undertakes a stakeholder consultation meeting in accordance with Section D of this PoA-DD	<ul style="list-style-type: none"> - To be conducted on the CPA level - Copy of the stakeholder consultation meeting announcement, list of attendees, comments and conclusion of the meeting. 	YES/NO
11	CPA does not receive funding from Annex I parties, or can provide a letter of non-diversion of Official Development Assistance (ODA).	Identify source(s) of financing, and provide letter of non-diversion of Official Development Assistance (ODA) as applicable	YES/NO
12	The CPA meets small-scale threshold criteria and remains within those thresholds throughout the crediting period of the CPA	CPA emissions reduction (ERs) calculation spreadsheet will be checked upon submission for inclusion and prior to request for issuance of CERs to ensure that the ERs are in aggregate less than small-scale threshold.	YES/NO
13	Demonstration of additionality		
13.1	Wherever the CPA Developer demonstrates that the CPA is a micro-scale project activity (600 tCO ₂ e per year per element process and 20,000 tCO ₂ e per year per CPA), the CPA is automatically additional.	ERs estimations relating to each burner or combustion chamber at which the switching to NG is implemented, as well as for the CPA as a whole, showing that the CPA falls into the threshold of micro-scale CDM project (600 tCO ₂ e per year per element process and 20,000 tCO ₂ e per year per CPA) would therefore make the CPA automatically additional (to be considered in conjunction with EC #4, which requires proof that the CPA	YES/NO



		implementer is a M/SE).	
13.2	For Small-Scale CPAs, the CPA Developer will demonstrate additionality in accordance with Section B.1 of Part I of this PoA-DD	Supporting evidence showing that at least one of the additionality arguments in the PoA-DD (Section B.1, Part I) applies to the CPA studied for inclusion.	YES/NO
14	Methodological choice		
14.1	For using AMS.III.B (Ver. 16): CPA Facilities Owners burning heavy or light fuel oil to generate heat for their operation, where the CPA submitting for inclusion under the PoA is a micro-scale, i.e. ERs are estimated to fall below 600 tCO ₂ e per year per element process, and below 20,000 tCO ₂ e per year per CPA. Since only micro-scale CPAs are eligible for inclusion under Type (1), therefore all Type 1 CPAs will apply equation 3 of the methodology, such that the amount of fossil fuel consumed in the project activity in year y, FC _y , can be used as a proxy for determining baseline emissions	For each CPA Facility, the CPA Developer will study the applicability criteria listed under Type 1 generic CPA-DD (Section B.2, Part II of this PoA-DD), to demonstrate compliance with the requirements of AMS-III.B (Version 16) methodology.	YES/NO
14.2	For using AMS.III.Z (Ver. 04): CPA Facility Owners burning heavy or light fuel oil to produce brick in a brick manufacturing facility, where the annual ERs are estimated to fall below 60,000 tCO ₂ e per year (i.e. micro and small scale CPAs are eligible for inclusion under Type (2))	For each CPA Facility, the CPA Developer will study the applicability criteria listed under Type 2 generic CPA-DD (Section B.2, Part II of this PoA-DD), to demonstrate compliance with the requirements of AMS-III.Z (Version 04) methodology.	YES/NO

Please refer to CAR10 (Eligibility criteria #3), CAR11 (Eligibility criteria #6), CAR12 (Eligibility criteria #8), CAR13 (Eligibility criteria #13.1 and #13.2), CAR13 (Eligibility criteria #14.1 and #14.2), as described in above paragraph 3.6 for detailed modification amended in the final version of the POA-DD (ref /2/).

The submitted PoA-DD Version 07 (ref /2/) comprises, in accordance with “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities”, eligibility criteria to demonstrate that each CPA is not a de-bundled component of a large scale project in order to be eligible for inclusion in the PoA. The following table summarizes the checks to be performed on the CPA level (each CPA must respond to all the questions below – in the listed sequence – with a “Yes” in order to be eligible):



#	Criteria	Verification method/documents	Confirmation (must be Yes)
<i>Option 1: Exemption from debundling check for micro-scale CPAs /1 List2/</i>			
i	Does the fuel switching in each element process at each CPA Facility (bakery, smelter, brick kiln, etc), to be included in the proposed CPA, result in ERs equal to or less than 1% of the micro-scale threshold (20,000 tCO ₂ e/year), i.e. 1% of the micro-scale threshold is equal to 200 tCO ₂ e/year?	ERs at each element process at each CPA Facility must be less than or equal to 1% of the micro-scale threshold, i.e. ERs must be not more than 200 tCO ₂ e per year per element process.	YES/NO
<i>Option 2: Exemption from debundling check for SSC-CPAs /2, List 2/</i>			
ii	Does the fuel switching in each element process at each CPA Facility (bakery, smelter, brick kiln, etc) to be included in the CPA result in ERs equal to or less than 1% of the small scale threshold (60,000 tCO ₂ e/year), i.e. 1% of the small-scale threshold is equal to 600 tCO ₂ e/year?	ERs at each element process at each CPA Facility must be less than or equal to 1% of the small-scale threshold, i.e. ERs must be not more than 600 tCO ₂ e per year per element process.	YES/NO
<p>- If the response to either of the above questions is "Yes", then the CPA is exempted from having to perform the de-bundling check.- If the response to either of the above questions is "No", then the de-bundling check is to be performed as follows.</p>			
<i>Option 3: Debundling check without exemptions (see the figure below) /2, List 2/</i>			
1	There is no other CPA or CDM project activity with the same CPA Facility Owner that is registered or applying for registration. Please confirm.	Comparison with CME database, and UNFCCC listing of projects in the Host Country showing that the proposed CPA Facility Owner is distinct from them, with special focus on the geographical coordinates of the CPA Facilities.	YES/NO
2	There is no other CPA or CDM project activity with the same CME, which also manages a large scale PoA of same sectoral scope. Please confirm.	The CME for this PoA, CDM-APU/EEAA, does not manage any large scale PoAs.	YES/NO
<p>- If the response to either question 1 or 2 is "Yes", then the proposed CPA is not deemed to be a de-bundled component of a large-scale project activity. - If the response to either question 1 or 2 is "No", then continue the list of questions.</p>			
3	Is the CPA Facility location of the other CPA or CDM project activity more than 1 km away from the boundary of the proposed CPA Facility location at the closest point?	Compare the geographical location coordinates of each proposed CPA Facility with the other CPAs/CDM projects' locations having the same owner.	YES/NO
<p>- If the response to question 3 is "Yes", then the proposed CPA is not deemed to be a de-bundled component of a large-scale project activity. - If the response to question 3 is "No", then continue the list of questions.</p>			



4	Is the size of the proposed CPA combined with the other CPAs/CDM project activities equal to or less than the limit of small-scale projects?	Compare the summation of ERs resulting from all CPAs/CDM project activities having the same owner, and compare with the small scale threshold (60,000 tCO ₂ e/year)	YES/NO
<p>- If the response to question 4 is "Yes", then the proposed CPA is deemed to be a de-bundled component of a large-scale project activity but can qualify as a small scale CPA.</p> <p>- If the response to question 4 is "No", then the proposed CPA is deemed to be a de-bundled component of a large-scale project activity, and is not eligible to be registered as a small scale CPA.</p>			

Please refer to CL16 (option 3.1), CL17 (Option 3 criteria 3), and CAR15 (microscale and small scale thresholds), as described in above paragraph 3.6 for detailed modification amended in the final version of the POA-DD.

Hence for the de-bundling check requirement, for CPA Facilities to be considered for inclusion under this PoA:

- Any Type (1) CPA, applying AMS-III.B methodology, shall be exempted from performing the de-bundling check, using either option 1 or option 2, i.e. Type 1 CPAs will be eligible only if they're micro-scale and each element process reduces emissions of an amount less than or equal to 600 tCO₂e per year.
- Any brick manufacturing facility submitting for inclusion under a Type (2) CPA, applying AMS-III.Z methodology, shall indicate in their CPA Facilities Owners Statement whether they own other brick manufacturing facilities within 1 km, at the closest points, of their CPA Facility(ies) being considered for inclusion, and indicate their status with respect to CDM.

3.10 Baseline and monitoring methodology

3.10.1 Applicability of the selected baseline and monitoring methodology (77)

Validation team has assessed the application of multiple methodologies in accordance with the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities.

According to the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (EB 65, Annex 03, Version 01) , section C, paragraphs 26, 28 and 29 state that:

26- The CME shall list in the PoA-DD and the generic CPA-DD various combinations of technologies/measures and/or approved methodologies that will be implemented in the PoA.

28- Combinations of technologies/measures and/or methodologies for a PoA are eligible where it is demonstrated that there are no cross effects between the technologies/measures applied.

29- In particular, the following situations for applying combinations of



technologies/measures and/or methodologies are eligible:

(d) Combinations of technologies/measures and methodologies vary across CPAs of a PoA, i.e. the policy or goal can only be realized through the use of multiple and disparate methodologies. Therefore in such situations the CME shall demonstrate that the implementation of the activities is integrated through the design of the programme. This may include, for example, a range of activities within different sectors such as energy generation (e.g. wind electricity using AMS-I.D, solar water heaters using AMS-I.J), energy efficiency (e.g. efficient lighting using AMS-II.J, building energy efficiency using AMS-III.AE, efficient street lighting using AMS-II.L), water management (e.g. efficient irrigation), waste management (e.g. landfill gas recovery using AMS-III.G, composting using AMS-III.F, recycling using AMS-III.AJ), transport (e.g. using AMS-III.C) and agriculture (using AMS-III.D for manure management).

The webhosted PDD, in section B.3, referred to the use of the combination of the two methodologies AMS.III.B and AMS.III.Z while the methodologies were used independently to two different categories of CPAs. Accordingly, a Corrective Action request, CAR17 was raised.

In reply to the CAR, the PoA-DD has been modified, where reference to the combination of methodologies was corrected into the independent use of one of the approved methodologies. Consistent changes have been made throughout the document. The PP specified that CPAs under the PoA will apply independently one of the following two approved small scale methodologies:

- AMS-III.B. Switching Fossil Fuels (Version 16) – Sectoral Scope 1 : Energy industries (renewable – non-renewable sources)

OR

- AMS-III.Z. Fuel switch, process improvement and energy efficiency in brick manufacture (Version 04) – Sectoral Scope 4 : Manufacturing industries

Both methodologies (AMS-III.B and AMS-III.Z) will be used for the same measure; fuel switching from fuel oil to NG at micro and/or small enterprises.

- AMS-III.B will be used for facilities where element processes are producing heat and the ERs are within the micro-scale threshold (20,000 tCO₂e per year and 600 tCO₂e per element process per year), excluding brick manufacturing facilities.
- AMS-III.Z will be used for brick manufacturing facilities, where the ERs are within the small-scale threshold (60,000 tCO₂e per year).

Therefore, each CPA will apply only one of the two methodologies. Thus, the independent use of the two approved methodologies does not result in cross effects of any kind.



With respect to the above modification, CAR 17 has been closed.

A clarification request (CL21) has been raised as it was not clear whether the statement “AMS-III.B will be applied for bakeries, smelters, and other facilities whose ERs per element process would not exceed 600 tCO₂ annually”, specify if other facilities refer also to brick facilities. In reply to the CL, Section B.3 of the POA-DD now specifies that the AMS-III.B will be used for facilities where element processes are producing heat and the ERs are within the micro-scale threshold (20,000 tCO₂e per year and 600 tCO₂e per element process per year), excluding brick manufacturing facilities. Subsequently the CL21 has been closed

A clarification request (CL22) has been raised to specify if Type 1 CPA will all be limited to the micro scale threshold of a total ER of 20kt CO₂/year. In reply to the CL, the PP has specified in the PoA-DD that AMS-III.B will be applied for Type 1 CPA, for bakeries, smelters, and other facilities (except for brick manufacturing facilities), where the ERs per element process would not exceed 600 tCO₂ annually, and also not exceeding 20,000 tCO₂ annually for the whole CPA. Subsequently the CL22 has been closed

A clarification request (CL23) has been raised to clarify if the CME wished to have all CPAs verified or not. If the CME did not wish to have all CPAs verified, the POa-DD should have included a description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the amount of reductions of anthropogenic emissions by sources or removals by sinks of greenhouse gases achieved by CPAs under the PoA (EB55 Annex 38). In reply the the CL, It has been specified in the updated PoA-DD section B3 related to the application of the methodologies that each CPA under the proposed PoA will be verified. Subsequently the CL23 has been closed

The webhosted PoA-DD Version 2.0 (ref /1/) was published before EB70 decisions and did not take in consideration the provisions of the new version 2.0 of the CDM project standard (CDM-EB70-A02) (ref /52/). In particular the PoA-DD did not comply with § 143 and §144 of the standard related to the use of multiple methodologies. CAR18 was then raised.

In reply to the CAR, PoA-DD has been modified to comply with to provisions of paragraphs 143 and 144 of the latest version of CDM Project Standard requiring generic and specific CPA for each applied methodology/measure or technology. In the submitted PoA-DD version 07 (ref /2/), two separate generic CPAs are presented in Part II of the PoA-DD for the two applied methodologies AMS.III.B and AMS.III.Z. One specific Type 1 CPA using methodology AMS.III.B is submitted with the PoA for GSC and registration. The first specific Type 2 CPA using methodology AMS.III.Z is to be submitted by the PP for inclusion after the PoA is registered in accordance with the post-registration change process as defined in latest version of CDM Project Standard (CDM-EB70-A02). CAR18 has been accordingly closed.

The eligibility criteria of the applicability of the selected baseline and monitoring methodology is set in the PoA-DD version 07 (ref /2/) as criteria # 14.1 and #14.2 respectively for Type 1 CPA applying methodology AMS.III.B and Type 2 CPA applying methodology AMS.III.Z as presented in Table 3 of the PoA-DD version 07 (ref /2/).



These criteria further refer to the methodology AMS.III.B applicability criteria listed under Type 1 generic CPA-DD (Table 8, Section B.2, Part II of the PoA-DD /1/) and the methodology AMS.III.Z applicability criteria listed under Type 2 generic CPA-DD (Table 12, Section B.2, Part II of this PoA-DD).

The steps taken to assess the relevant information contained in the PoA-DD against each applicability condition are described below.

Applicability conditions of methodology AMS.III.B Version 16.0

For reference see PoA-DD Part II-Type 1 CPA- Section B2-Table 8: Applicability study of Type 1 CPAs for using AMS-III.B methodology under the PoA version 07 (ref /2/) and Table 2 of the present Validation Report.

Applicability clauses of AMS-III.B (Version 16)	Compliance assessed during the validation
(a) This methodology comprises fossil fuel switching in industrial, residential, commercial, institutional or electricity generation applications (e.g. fuel switch from fuel oil to natural gas in an existing captive electricity generation or replacement of a fuel oil boiler by a natural gas boiler).	Each of the CPA Facilities under this PoA will implement the fuel switching in industrial applications only.
(b) Fuel switch may be in a single element process or may include several element processes within the facility (For example fuel oil was used in one boiler and coal in another boiler in the baseline. The project plant used only natural gas in the boilers i.e. the project plant does not use more than one fuel in one equipment). Multiple fossil fuel switching in an element process however is not covered under this methodology. An "element process" is defined as fuel combustion, energy conversion or energy use in single equipment. Each element process generates a single output (such as electricity, steam, hot air) by using a single energy source. This methodology covers switch of energy sources in several element processes, i.e. project participants may submit one CDM-PDD for fuel switch in several element processes within a facility.	In each element process within a proposed CPA, the switch will be from only one type of fuel oil (heavy fuel oil/LFO) to one type of fuel (natural gas). For the purpose of the CPA Type I, an "element process" is defined as fuel combustion in single equipment (burner).
(c) This methodology is applicable for new facilities as well as for retrofit or replacement of existing installations. It also includes installation of new energy generating facility to replace existing energy generating facility that is solely fuelled by liquid petroleum fuel such as	The switching activity may be for new facilities, retrofit, or replacement of existing installations within the CPA boundary.



diesel or fuel oil.	
(d) Fuel switching may also result in energy efficiency improvements. If the project activity primarily aims at reducing emissions through fuel switching, it falls into this methodology. If fuel switching is part of a project activity focussed primarily on energy efficiency, the project activity falls under a Type II methodology.	<p>Each CPA shall primarily aim at reducing emissions through fuel switching from FO to NG.</p> <p>- CPA Developers and/or CPA Facilities Owners shall not claim emission reductions due to any resulting indirect energy efficiency improvements.</p>
(e) New facilities (Greenfield projects) and project activities involving capacity additions compared to the baseline scenario are only eligible if they comply with the related and relevant requirements in the general guidelines to SSC CDM methodologies. The requirements concerning demonstration of the remaining lifetime of the replaced equipment shall be met as described in the general guidelines to SSC CDM methodologies. If the remaining lifetime of the affected systems increases due to the project activity, the crediting period shall be limited to the estimated remaining lifetime, i.e. the time when the affected systems would have been replaced in the absence of the project activity.	<p>A Clarification Request (CL45) has been raised as in Table 8 and Table 9 (Applicability N°5, PoA-DD V 07) it was not clear to which requirement the CPA had to comply with (In case of replacement of existing equipment, project participants shall estimate the point in time where the existing equipment would be replaced in the absence of the project activity in accordance with the latest version of "Tool to determine the remaining lifetime of equipment".)</p> <p>In response to the above clarification, the following provision has been added to the verification method of criterion 5 in Table 8 and Table 9 of the updated PoA-DD: For replaced equipment, the date at which it would have been replaced in absence of the CPA must be provided. This can be evidenced by one of two ways:</p> <p>- Manufacturer statement stating the lifetime and documentation showing the commissioning date, i.e. by subtracting the years of operation of the existing equipment from its lifetime, the duration remaining before replacement (without CDM) is obtained; or</p> <p>- Letter from an industry expert estimating the remaining lifetime of the equipment, i.e. a letter stating the point in time when the existing equipment would be replaced in the absence of the CPA.</p>

	<p>The explanation has been accepted and validated. Hence, CL45 has been closed.</p> <p>Furthermore, the remaining lifetime condition has been defined as follows:, For CPA Facilities in which the remaining lifetime of the affected systems increases due to the project activity, the crediting period shall be limited to the estimated remaining lifetime.</p>
(f) This methodology is not applicable to project activities that propose switch from fossil fuel use in the baseline to renewable biomass, biofuel or renewable energy in the project scenario. A relevant Type I methodology shall be used for such project activities that generate renewable energy displacing fossil fuel use. This methodology is also not applicable to project activities involving the use of waste gas; these project activities might be eligible under AMS-III.Q.	CPA Facilities switching to the use of renewable biomass, bio-fuel, renewable energy, or waste gas to replace fuel oil combustion in their applications are not eligible under this PoA.
(g) The facility may involve grid connected elemental processes however this methodology does not cover emission reductions on account of shift from use of a grid electricity or electricity exported to a grid (Grid here refers to national/regional grid.)	CPA Developers and/or CPA Facilities Owners shall not claim emissions reduction due to shift from use of grid electricity or electricity exported to a grid under this PoA.
(h) This category is applicable to project activities where it is possible to directly measure and record the energy use/output (e.g. heat, steam and electricity) and consumption (e.g. fossil fuel) within the project boundary. In case of project activities that meet the criteria under paragraph 17 below, this methodology is applicable only where it is possible to directly measure and record at least the energy consumption in the element process (e.g. fossil fuel input).	<p>A clarification request has been raised (CL46) as the webhosted PDD did not specified how the compliance to the AMS-III.B methodology requirement 8 as presented in the Table 8 of the PoA DD would be met at the facility level.</p> <p>In response to this CL, the updated PoA-DD version 07 (ref /2/) specifies that within each of the CPA Facilities, it will be possible to directly measure and record at least the energy consumption in the element process (e.g. fossil fuel input) after project implementation. Proof will be provided by provision of fuel receipts or similar documentation.</p> <p>Furthermore the verification method of criterion 8 in table 8 has been specified as the billed natural gas consumption, measured by the natural gas suppliers' meters.</p> <p>Subsequently the CL46 has been closed</p>



<p>(i) Heat, steam or electricity produced under the project activity shall be for on-site captive use and/or export to other facilities included in the project boundary. In case of electricity generation plants, the generated electricity may also be supplied to users via mini/isolated grid(s) system (Stand alone or interconnected grid system that are not connected to a grid as defined above) exclusively supplied by fossil fuel units.</p>	<p>The heat produced under each of the CPA Facilities will be only for on-site captive use.</p> <p>Electricity generation plants are eligible to this PoA.</p>
<p>(j) In case energy produced by the project activity is delivered to another facility, or facilities, within the project boundary, a contract between the supplier and consumer(s) of the energy will have to be entered into specifying that only the facility generating the energy can claim emission reductions from the energy displacement.</p>	<p>The energy (heat) produced by each of the CPA Facilities will not be delivered to other facilities and will be used only within the CPA Facility.</p>
<p>(k) Regulations do not constrain the facility from using the energy sources cited in paragraph 1 before or after the fuel switch. Regulations do not require the use of low carbon energy source (e.g. natural gas or any other fuel) in the element processes.</p>	<p>The regulations in Egypt do not constrain the CPA Facilities from using the energy sources cited in paragraph 1.</p> <p>Regulations do not require the use of low carbon energy source (e.g. natural gas or any other fuel) in the element processes.</p> <p>This has been validated by the validation team during the site visit.</p>
<p>(l) The project activity does not result in integrated process change. The purpose is to exclude measures that affect other characteristics of the process besides switch of energy sources e.g. operational conditions, type of raw material processed, use of non-energy additives, change in type or quality of products manufactured etc.</p>	<p>A clarification request (CL47) has been raised as clarification was needed with respect to the applicability criteria N°12 in Table 8::</p> <ul style="list-style-type: none"> - what tests would be used to specify the quality/type of the manufactured product produced and the raw material used before the project implementation - How the quality of products manufactured after the project implementation would not be affected by the fuel switch change and how the consumption per quality of products manufactured will be monitored <p>The PP has specified in the updated version of the PoA-DD (ref /2/) that the verification method for criterion 12 of Table 8 that CME will ensure that the CPA does not result in integrated process change in the CPA Facilities as required by the used methodology</p>

	<p>(AMS.III.B).</p> <p>This will be ensured by ex ante assessment of the CPA carried out by the technical expert of the CME as part of the CPA inclusion check by the CME. It is specified that assessment made, including a detailed description of the process before the implementation of the project activity, will be documented and made available for reference during the CPA verification.</p> <p>Subsequently the CL47 has been closed</p>
(m) Measures are limited to those that result in emission reductions of less than or equal to 60 kt CO ₂ equivalent annually.	Each CPA shall result in emissions reduction of less than or equal to 20 kt CO ₂ eq annually (micro-scale threshold).
(n) Additional applicability criteria for inclusion of a Type 1 CPA under the PoA. In case of project activities where the estimated annual emission reductions of each of the element processes are equal to or less than 600 tCO ₂ e per year per element process an alternative approach may be used to calculate baseline emissions as per paragraph 21 using equation 3 instead of applying equation 1.	Each element process with each CPA shall result in emissions reduction of less than or equal to 600 tCO ₂ eq per year.

Applicability conditions of methodology AMS.III.Z Version 4.0

For reference see PoA-DD Part II-Type 2 CPA- Section B2-Table 12: Applicability study of Type 2 CPAs for using AMS-III.Z methodology under the PoA version 07 (ref /2/) and Table 2 of the present Validation Report.

Applicability clauses of AMS-III.B (Version 16)	Compliance assessed during the validation
<p>(a) The methodology comprises one or more technology/measures listed below in brick (Brick in the context of this methodology includes solid bricks and blocks as well as hollow blocks used in building construction production facilities):</p> <ul style="list-style-type: none"> ✓ Shift to an alternative brick production technology/process; or ✓ Complete/Partial substitution of fossil fuels with renewable biomass² (including solid biomass residues such as sawdust and food industry organic liquid residues); (Fatty acids from oil extraction, waste oil and waste fat of biogenic origin (includes waste oil from 	<p>Each of the CPA Facilities under this PoA will be brick producing facilities.</p> <ul style="list-style-type: none"> ✓ The applicability of this methodology within this PoA is limited only to CPA Facilities implementing fuel switching project activities (complete substitution of high carbon fossil fuels with low carbon fossil fuels). ✓ In each element process within a proposed CPA, the switch will be from only one type of fuel oil (HFO/LFO) to one type of fuel (NG). ✓ CPA Facilities switching to the use



<p>restaurants, agro and food industry, slaughterhouses or related commercial sectors). The sources/origin of waste oil/fat and respective volumes must be identified and clearly documented in the PDD. No CERs from waste oil/fat can be claimed under this methodology if it is not produced from biogenic origin, biogenic shall mean the oils and/or fats originate from either vegetable or animal biomass, but not from mineral (fossil) sources. or</p> <p>✓ Complete/partial substitution of high carbon fossil fuels with low carbon fossil fuels. (For example from anthracite coal to natural gas.)</p>	<p>of renewable biomass, bio-fuel, renewable energy, or waste gas to replace fuel oil combustion in their applications are not eligible under this PoA. Thus, the following paragraphs do not apply to CPAs under this PoA; 7, 8, 9 and 10</p>
<p>(b) Complete or partial fuel substitution and associated activities may also result in improved energy efficiency of existing facility; however project activities primarily aimed at emission reductions from energy efficiency measures shall apply AMS-II.D "Energy efficiency and fuel switching measures for industrial facilities". Thus, the methodology is applicable for the production of:</p> <p>(a) Bricks that are the same in the project and baseline cases; or</p> <p>(b) Bricks that are different in the project case versus the baseline case due to a change(s) in raw materials, use of different additives, and/or production process changes resulting in reduced use or avoidance of fossil fuels for forming, sintering (firing) or drying or other applications in the facility as long as it can be demonstrated that the service level of the project brick is comparable to that of the baseline brick (see paragraph 11). Examples include pressed mud blocks (soil blocks) with cement or lime stabilization and other 'unburned' bricks that attain strength due to fly ash, lime/cement and gypsum chemistry.</p>	<p>- Each CPA shall primarily aim at reducing emissions through fuel switching from FO to NG.</p> <p>- CPA Developers and/or CPA Facilities Owners shall not claim emission reductions due to indirect resulting energy efficiency improvements.</p> <p>- CPA Facilities Owners will carry out the necessary tests to demonstrate that the produced brick is the same in the project and baseline cases, or that the service level of the project brick is comparable to that of the baseline brick, based on the specification provided in the CPA-DD and agreed upon with the CME.</p> <p>A clarification request (CL61) was raised as clarification was needed as per the applicability criteria N°11 in Table 12,:</p> <ul style="list-style-type: none"> ○ what tests would be used to specify the quality/type of the brick produced and the raw material used before the project implementation ○ How the quality of brick after the project implementation would not be affected by the fuel switch change, how the consumption per quality of products manufactured will be monitored <p>The methodology AMS.III Z has retained the compressive strength as valid standard to specify the CPA level of service i.e. the quality of manufactured bricks.</p>



	<p>For the verification of this criterion, the PP has specified in the updated table 12 that compressive strength of the bricks will be carried in the baseline and as stated in the methodology every 6 months after the CPA implementation to check the quality of the manufactured bricks.</p> <p>With respect to the above corrections, the CL61 has been closed.</p>
(c) The measures may replace, modify, retrofit (For example to, replace and/or modify an existing heating and/or firing facility(/-ies) to enable the use of biomass residues) or add capacity to systems in existing facilities or be installed in a new facility.	The switching activity may involve replacing, modifying, retrofitting, or adding capacity to the element process whether in existing or new facilities.
(d) New facilities (Greenfield projects) and project activities involving capacity additions are only eligible if they comply with the requirements for Greenfield projects and capacity increase projects specified in the "General Guidelines for SSC CDM methodologies".	CPAs involving new facilities shall comply with the related and relevant requirements in the general guidelines to SSC CDM methodologies.
(e) The requirements concerning demonstration of the remaining lifetime of the replaced equipment shall be met as described in the "General Guidelines for SSC CDM methodologies". If the remaining lifetime of the affected systems increases due to the project activity, the crediting period shall be limited to the estimated remaining lifetime, i.e. the time when the affected systems would have been replaced in the absence of the project activity.	<p>Requirements concerning demonstration of the remaining lifetime of the replaced equipment as described in the "General Guidelines for SSC CDM methodologies" shall be met by each of the CPA Facilities, where the guidelines state that "11-c) For the lifetime of existing equipment, project participants and coordinating/managing entities must refer to applicable provisions for application of selected baseline and monitoring methodology for small-scale project activities in the Project standard" For replaced equipment, the date at which it would have been replaced in absence of the CPA must be provided. This can be evidenced by one of two ways:</p> <ul style="list-style-type: none"> - Manufacturer statement stating the lifetime and documentation showing the commissioning date, i.e. by subtracting the years of operation of the existing equipment from its lifetime, the duration remaining before replacement (without CDM) is obtained; or - Letter from an industry expert



	<p>estimating the remaining lifetime of the equipment, i.e. a letter stating the point in time when the existing equipment would be replaced in the absence of the CPA.</p> <p>For CPA Facilities within which the remaining lifetime of the affected systems increases due to the project activity, the crediting period shall be limited to the estimated remaining lifetime.</p>
<p>(f) For existing facilities, it shall be demonstrated, with historical data, that for at least three years immediately prior to the start date of the project implementation, only fossil fuels (no renewable biomass) were used in the brick production systems that are being modified or retrofitted. In cases where small quantities of biomass were used for experimental purposes this can be excluded.</p>	<p>- Three year of historical data regarding the fuel consumption proving that the baseline at each of the existing CPA Facilities is the combustion of fossil fuel (HFO/LFO).</p> <p>- No renewable biomass has been used in any of the existing CPA Facilities during the last three years prior to the start of the CPA.</p>
<p>(g) The renewable biomass utilized by the project activity shall not be chemically processed (e.g. esterification to produce biodiesel, degumming and/or neutralization by chemical reagents) prior to the combustion but it may be processed mechanically (e.g. pressing, filtering)/thermally (e.g. gasification to produce syngas).</p> <p>✓ The syngas shall be derived from gasification of renewable biomass only and no methane emissions are to be released to the atmosphere, thus demonstrating the complete use for combustion of the syngas in the project equipment.</p>	Not applicable
<p>(h) In cases where the project activity uses crops from renewable biomass origin as fuel, the crops should be cultivated at dedicated plantations and the following conditions shall be met:</p> <p>✓ The project activity does not lead to a shift of pre-project activities outside the project boundary, i.e. the land under the proposed project activity can continue to provide at least the same amount of goods and services as it would in the absence of the project;</p> <p>✓ The plantations are established on land that:</p> <p>✓ Was classified as degraded or degrading at the start of the project implementation, as</p>	Not applicable



<p>per the "Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project</p> <ul style="list-style-type: none"> ✓ activities"; or ✓ Is included in the project boundary of one or several registered A/R CDM project activities; ✓ (c) Plantations established on peatlands are not eligible even if qualifying under condition (i) or (ii) above. 	
<p>(i) In cases where the project activity utilizes charcoal produced from renewable biomass as fuel, the methodology is applicable provided that:</p> <ul style="list-style-type: none"> ✓ Charcoal is produced in kilns equipped with a methane recovery and destruction facility; or ✓ (If charcoal is produced in kilns not equipped with methane recovery and destruction facility, methane emissions from the production of charcoal shall be considered. 	Not Applicable
<p>(j) In the case of project activities involving changes in raw materials (including additives), it shall be demonstrated that additive materials are abundant in the country/region, according to the following procedures:</p> <ul style="list-style-type: none"> ✓ Step 1: using relevant literature and/or interviews with experts, a list of raw materials to be utilized is prepared based on the historic and/or present consumption of such raw materials. ✓ Step 2: the current supply situation for each type of raw material to be utilized is assessed and their surplus availability is demonstrated using one of the approaches below: <p>Approach 1: demonstrate that the raw materials to be utilized, in the region of the project activity, are not fully utilized. For this purpose, demonstrate that the quantity of material is at least 25% greater than the demand for such materials or the availability of alternative materials for at least one year prior to the project implementation;</p> <p>Approach 2: demonstrate that suppliers of the raw materials to be utilized, in the region of the project activity, are not able to sell all</p>	Not applicable



<p>of their supply of these materials. For this purpose, project participants shall demonstrate that a representative sample of suppliers of the raw materials to be utilized, in the region, had a surplus of materials (e.g. at the end of the period during which the raw material is sold) that they could not sell and that is not utilized.</p>	
<p>(k) This methodology is applicable under the following conditions:</p> <p>(a) The service level of project brick shall be comparable to or better than the baseline brick, i.e. the bricks produced in the brick production facility during the crediting period shall meet or exceed the performance level of the baseline bricks (in terms of, for example dry compressive strength, wet compressive strength, density). An appropriate national standard shall be used to identify the strength class of the bricks; bricks that have compressive strengths lower than the lowest class bricks in the standard are not eligible under this methodology. Project bricks are tested in nationally approved laboratories at six-month intervals (at a minimum) and test certificates on compressive strength are made available for verification;</p> <p>(b) The existing facilities involving modification and/or replacement shall not influence the production capacity beyond $\pm 10\%$ of the baseline capacity unless it is demonstrated that the baseline for the added capacity is the same as that for the existing capacity in accordance with paragraph 4 above;</p> <p>(c) Measures are limited to those that result in emission reductions of less than or equal to 60 kt CO₂ equivalent annually.</p> <p>(d) This methodology is not applicable if local regulations require the use of the proposed technologies or raw materials for the manufacturing of bricks unless widespread non compliance (i.e. less than 50% of brick production activities in the country comply) of the local regulation evidenced.</p>	<ul style="list-style-type: none"> - Compressive strength test will be made prior to the CPA implementation (to identify the baseline brick quality). - Compressive strength test will be made every 6 months after the CPA implementation (as per the monitoring plan in the methodology) to determine the quality of the product brick. - CME will ensure that in conformity with the methodology requirement, the the service level (compressive strength) of project brick is comparable to or better than that of the baseline brick at each CPA Facility. - An appropriate national standard will be identified in each CPA-DD, and the CPA Facilities Owners shall comply with the specifications in the standard. - CPA Developers shall submit test certificates (at 6 month intervals) during verification. <p>(b) CPA Facilities applying modifications and/or replacements shall undergo a comparison between the baseline production capacity and the project capacity after CPA implementation.</p> <p>(c) Each CPA shall result in emissions reduction of less than or equal to 60 kt CO₂eq annually.</p>

The DOE hereby confirms that the selected baseline and monitoring methodology (AMS.III.B, version 16.0.0) along with the guidance provided in the leakage section of ACM0009 Consolidated baseline and monitoring methodology for fuel switching from



coal or petroleum fuel to natural gas (Version 04.0.0) are previously approved by the CDM Executive Board, and are applicable to the Type 1 CPA under the PoA as defined in the PoA-DD version 07 (ref /2/), which complies with all the applicability conditions therein.

The DOE hereby confirms also that the selected baseline and monitoring methodology (AMS.III.Z, version 4.0.0) along with the guidance provided in the leakage section of ACM0009 Consolidated baseline and monitoring methodology for fuel switching from coal or petroleum fuel to natural gas (Version 04.0.0) and applicable tool to calculate project or leakage CO₂ emissions from fossil fuel combustion (Version 02.0.0) are previously approved by the CDM Executive Board, and are applicable to the Type 2 CPA under the PoA as defined in the PoA-DD version 07 (ref /2/), which complies with all the applicability conditions therein. The DoE confirms that both selected methodologies are approved by the CDM EB for application to CPAs under PoAs by the Board.

3.10.2 PoA boundary (192)

Boundary for the PoA in terms of geographical area is defined the international borders of the Arab Republic of Egypt (North 31.670878, South 21.725059, East 24.695463, and West 36.8967).

The eligibility criterion of the CPA boundary is set as criterion #1 as presented in the Table 3: Eligibility criteria for inclusion of CPAs under the PoA of the PoA-DD version 07 (ref /2/),

Bureau Veritas Certification confirms that in establishing the boundary of the PoA, the project participants have taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary.

3.10.3 Baseline identification (94-95)

The steps taken to assess the requirement given in paragraph 94 and 95 of the VVS are described below:

The PoA aims at fuel switching HFO and LFO used in micro and small enterprises in Egypt to natural gas. CPAs under this PoA will apply one of the following approved small scale methodologies:

AMS-III.B. Switching Fossil Fuels (Version 16) for type 1 CPAs, and,
AMS-III.Z. Fuel switch, process improvement and energy efficiency in brick manufacture (Version 04) for Type 2 CPAs.

Both methodologies (AMS-III.B and AMS-III.Z) will be used for the same measure; fuel switching from fuel oil to NG at micro and/or small enterprises.

- ✓ Type I (AMS-III.B) will be used for facilities where element processes are producing heat and the ERs are within the micro-scale threshold (20,000



tCO₂e per year and 600 tCO₂e per element process per year), excluding brick manufacturing facilities.

- ✓ Type 2 (AMS-III.Z) will be used for brick manufacturing facilities, where the ERs are within the small-scale threshold (60,000 tCO₂e per year).

Eligibility criteria #5 of inclusion of CPAs under the PoA (Table 3 of the PoA-DD version 07 ref /2/) specifies that: *the CPA activity is a switch from HFO or LFO to NG and provision of the attendant infrastructure where required.* This will be verified before the CPA inclusion by mean of as stated in the PoA-DD *Proof of the baseline situation via onsite visit, official documentation, or historical facility records (logbooks, purchase receipts, etc.) - as applicable.*

Type 1 CPA applying AMS.III.B

CPA Facilities to be submitted for inclusion under this PoA and applying AMS-III.B will include those facilities which burn fuel oil in their industrial applications to produce heat necessary for their operations.

The applicability criteria #1 of Table 8: Applicability study (PoA-DD version 07 /2/ Part II-Type 1 CPA, specifies that *Each of the CPA Facilities under this PoA will implement the fuel switching in industrial applications only.*

The methodology AMS.III.B specifies in §15 that “*in case of existing facilities, historical information (detailed records) on the use of fossil fuels and the energy output (e.g. heat, steam or electricity) in the element process from at least three years prior to project implementation shall be used in the baseline calculations, e.g. information on coal use and heat output by a district heating plant, diesel use and steam generated by an industrial plant, liquid fuel oil use and electricity generated by a generating unit (records of fuel used and output can be used in lieu of actual collecting baseline validation data9). For facilities that are less than three years old, all historical data shall be available (a minimum of one year data would be required)*”.

Version 16 of AMS-III.B methodology exempts CPAs with estimated emission reductions of less than or equal to 600 tCO₂e per year per element process from having to provide historical records of their fuel consumption and eliminate the need for energy output data.

Type 1 CPAs shall apply equations (3) and (4) in the methodology (AMS-III.B) for the calculation of baseline and project emissions directly, where the actual NG consumption is multiplied in the baseline by the emission factor and calorific value of the baseline fuel, while in the project emissions multiplied by the emission factor and calorific value of NG.

Type 2 CPA applying AMS.III.Z:

For CPAs applying AMS III.Z (Version 04.0.0) methodology in brick manufacturing facilities, and in accordance with paragraph 14 of the methodology, baseline emissions are defined as the fossil fuel consumption related emissions (fossil fuel consumed multiplied by an emissions factor) associated with the system(s), which were or would have otherwise been used, in the brick production facility(ies) in the absence of the project activity.

As described in the same paragraph (14), for CPAs which involve replacing, modifying or retrofitting systems in existing facilities, the average of the immediately prior three-year historical fossil fuel consumption data, for the existing facility, shall be used to determine an average annual baseline fossil fuel consumption value. Similarly, prior three-year historical production data (excluding abnormal years) for the existing facility, shall be used to determine an average annual historical baseline brick production rate in units of weight or volume.

CPAs involving the installation of systems in a new facility or a capacity addition in an existing system, the average annual baseline fossil fuel consumption value and the baseline brick production rate shall be determined as that which would have been consumed and produced, respectively, under an appropriate baseline scenario.

The applicability criteria of Table 12: Applicability study (PoA-DD version 07 /2/ Part II-Type 2 CPA), specifies the following compliance conditions:

Criteria #1:

- ✓ Each of the CPA Facilities under this PoA will be brick producing facilities.
- ✓ The applicability of this methodology within this PoA is limited only to CPA Facilities implementing fuel switching project activities (complete substitution of high carbon fossil fuels with low carbon fossil fuels).
- ✓ In each element process within a proposed CPA, the switch will be from only one type of fuel oil (HFO/LFO) to one type of fuel (NG).

Criteria #6 (existing facilities):

- ✓ Three year of historical data regarding the fuel consumption proving that the baseline at each of the existing CPA Facilities is the combustion of fossil fuel (HFO/LFO).
- ✓ No renewable biomass has been used in any of the existing CPA Facilities during the last three years prior to the start of the CPA.

Criteria #14b (for projects involving the installation of systems in a new facility or a capacity addition in an existing system)

- ✓ For new facilities, the average annual baseline fossil fuel consumption value and the baseline brick production rate will be determined based on national industry practices.



In establishing the baseline scenario the project participants didn't clearly specify the national and/or sectoral policies including E+/E- policies in conformity with the CDM project Standard §43-45. Subsequently, a Clarification Request (CL48) was raised.

In response to the raised clarification request, the updated version 07 of the PoA-DD /2/ provides more information on the national energy policies and on energy consumption in Egypt. The PoA-DD specifies that the vast majority of Egypt's energy consumption is in the form of fossil fuels. The World Bank reports that in 2009 this as 96.29% of Egypt's total energy consumption. The assumptions were checked on the following website <http://www.tradingeconomics.com/egypt/fossil-fuel-energy-consumption-percent-of-total-wb-data.html> (see ref /57/).

Egypt's general policy of subsidizing fossil fuels in general has reduced incentives to increase the efficiency of use or seek alternatives, and therefore has acted as an E+-policy.

Based on the above assessment, the validation team hereby confirms that:

- (a) All the assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;
- (b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoA-DD;
- (c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- (d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD;
- (e) The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of PoA.

3.10.4 Algorithms and/or formulae used to determine emission reductions (99-100)

The steps taken to assess the requirement outlined in paragraph 99 of the VVS are described below:

- A. For Type 1 CPAs, the emission reductions calculation is explained under section B.6.1 of PoA-DD, Part II, Type 1 Generic CPAs applying AMS.III.B (ref /2/), as per version 16.0.0 of the AMS.III.B approved methodology :**

Baseline emissions:

As per the approved methodology AMS.III.B. Version 16.0, in §21- *In case of project activities where the estimated annual emission reductions of each of the element processes are equal to or less than 600 tCO₂e per year per element process the*

amount of fossil fuel consumed in the project activity in year y , FC_y , can be used as a proxy for determining baseline emissions using the following equation:

$$BE_y = FC_{PJ,y} * NCV_{FF,PJ,y} * EF_{FF,CO2,BL} \quad (3)$$

Parameter	Description	Unit
BE_y	Baseline emissions in the project activity in year y	tCO ₂ e
$FC_{PJ,y}$	Amount of fuel consumed in the project activity during year y (mass or volume unit)	Unit mass or volume
$NCV_{FF,PJ,y}$	Net calorific value of the fossil fuel used in the project activity	TJ/Unit mass or volume
$EF_{FF,CO2,BL}$	CO ₂ emission factor of the fossil fuel used in the baseline activity	tCO ₂ /TJ

Project emissions:

As per the approved methodology AMS.III.B. Version 16.0, in §23, *Project emissions from on-site consumption of fossil fuel should be calculated as follows:*

$$PE_y = FC_{PJ,y} * NCV_{FF,PJ,y} * EF_{FF,CO2,PJ} \quad (4)$$

Parameter	Description	Unit
PE_y	Project emissions in the project activity in year y	tCO ₂ e
$FC_{PJ,y}$	Amount of fuel consumed in the project activity during year y (mass or volume unit)	Unit mass or volume
$NCV_{FF,PJ,y}$	Net calorific value of the fossil fuel used in the project activity	TJ/Unit mass or volume
$EF_{FF,CO2,PJ}$	CO ₂ emission factor of project fuel used in the project activity	tCO ₂ /TJ

Leakage:

As per the approved methodology AMS.III.B. Version 16.0, project activity under a programme of activities should consider leakage and the following conditions apply §27: *“Leakage emissions resulting from fuel extraction, processing, liquefaction, transportation, regasification and distribution of fossil fuels outside of the project boundary shall be considered, as per the guidance provided in the leakage section of ACM0009 - Consolidated baseline and monitoring methodology for fuel switching from coal or petroleum fuel to natural gas. In case leakage emissions in the baseline situation are higher than leakage emissions in the project situation, leakage emissions will be set to zero.”*

Accordingly, leakage emissions are calculated according to ACM0009 (Version 04.0.0), which states that: *In this methodology, the following leakage emission sources shall be considered: Fugitive CH₄ emissions associated with fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of natural gas used in the project plant and fossil fuels used in the grid in the absence of the project activity. For the purpose of determining fugitive methane emissions associated with the production – and in case of natural gas, the transportation and distribution of the fuels – project participants should multiply the quantity of natural gas consumed in all element processes i with a methane emission factor for these upstream emissions ($EF_{NG,upstream,CH_4}$), and subtract for all fuel types k which would be used in the absence of the project activity the fuel quantities multiplied with respective methane emission factors ($EF_{k,upstream,CH_4}$), as follows:*

$$LE_{CH_4,y} = [FF_{project,y} * NCV_{NG,y} * EF_{NG,upstream,CH_4} - \sum_k FF_{baseline,k,y} * NCV_k * EF_{k,upstream,CH_4}] * GWP_{CH_4}$$

$$FF_{project,y} = \sum_i FF_{project,i,y}$$

$$FF_{baseline,k,y} = \sum_i FF_{baseline,i,k,y} \quad , \text{ where:}$$

Parameter	Description	Unit
$LE_{CH_4,y}$	Leakage emissions due to upstream fugitive CH ₄ emissions in year y	tCO ₂ e
$FF_{project,y}$	Quantity of NG combusted in all element processes during year y	m ³
$FF_{project,i,y}$	Quantity of NG combusted in the element process i during year y	m ³
$NCV_{NG,y}$	Average net calorific value of the NG combusted during year y	GJ/m ³
$EF_{NG,upstream,CH_4}$	Emission factor for upstream fugitive methane emissions from production, transportation and distribution of NG - in tCH ₄ per GJ fuel supplied to final consumers	tCH ₄ /GJ
$FF_{baseline,k,y}$	Quantity of fuel type k (a coal or petroleum fuel type) that would be combusted in the absence of the project activity in all element processes during the year y - in a volume or mass unit	Unit mass or volume
$FF_{baseline,i,k,y}$	Quantity of fuel type k (a coal or petroleum fuel type) that would be combusted in the absence of the project activity in the element process i during the year y - in a volume or mass unit	Unit mass or volume
NCV_k	Average net calorific value of the fuel type k (a coal or petroleum fuel type) that would be combusted in the absence of the project activity during the year y - in GJ per volume or mass unit	GJ/Unit mass or volume
$EF_{k,upstream,CH_4}$	Emission factor for upstream fugitive methane emissions from production of the fuel type k (a coal or petroleum fuel type) - in tCH ₄ per GJ fuel produced	tCH ₄ /GJ



GWP_{CH_4}	Global warming potential of methane valid for the relevant commitment period	
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Emission reductions:

The emission reductions achieved by the project activity are calculated as the difference between the baseline emissions and the sum of project emissions and leakage as follows:

$$ER_y = BE_y - PE_y - LE_y \quad (5)$$

Parameter	Description	Unit
ER_y	Emission reductions in the year y	tCO ₂ e

As per the methodology AMS.III.B, for the fossil fuels emission factors and the net calorific value of the fuels used, guidance by the 2006 IPCC Guidelines for National Greenhouse Gas Inventories shall be followed where appropriate. Project participants may either conduct measurements or they may use accurate and reliable local or national data where available. In the case of coal, the data shall be based on test results for periodic samples of the coal purchased if such tests are part of the normal practice for coal purchases. Where such data is not available, IPCC default emission factors (country specific, if available) may be used if they are deemed to reasonably represent local circumstances. All values shall be chosen in a conservative manner (i.e. lower values for the baseline and higher values for the project should be chosen within a plausible range) and the choice shall be justified and documented in the SSC-CDM-PDD. Where measurements are undertaken, project participants shall document the measurement results and the calculated average values of the emission factor or net calorific value, either for the ex-ante investment analysis and efficiency determination, or for the ex post determination of the baseline and project emissions.

For the Type 1 CPA using the methodology AMS.III.B, the following values are to be used as fossil fuels EF and NCV. They are either official national published values or in the absence of such values, IPCC lower default values:

Net calorific value for HFO $NCV_{HFO} = 41.08$ GJ/ton HFO, (national source ref /26/)

Net calorific value for LFO $NCV_{FO} = 41.9$ GJ/ton LFO, (national source ref /26/)

Net calorific value for Natural Gas NG $NCV_{NG} = 49.83$ GJ/ton NG, (national source ref /26/)

CO₂ emission factor for HFO, $EF_{CO_2,HFO} = 76.76$ tCO₂/TJ,

This value is calculated based on nationally reported carbon content of 86% for the Egyptian HFO using national source ref /26/. The EF for HFO was derived from the

national reported data as follows considering that C-content= 86% and NCV= 41.08 GJ/ton HFO:

- 1- Basis: 1 ton fuel. Therefore, the C-content is equal to 0.86 tCO₂/ton HFO.
- 2- Quantity of CO₂ released is the product of multiplying the C-content by the molecular weight of CO₂ (44), and dividing by the molecular weight of Carbon (12).
i.e. $m_C/Mwt_C = m_{CO_2}/Mwt_{CO_2}$
Therefore, CO₂-content = $(0.86 \times 44/12) = 3.1533$ tCO₂/ton HFO
- 3- To obtain the emission factor per unit energy, divide the CO₂ quantity obtained (tCO₂/ton HFO) by the calorific value (GJ/ton HFO)
Therefore, EF = $3.1533/41.08 = 0.076760$ tCO₂/GJ

CO₂ emission factor for LFO, EF_{CO₂,LFO} = 75.52 tCO₂/TJ,

This value is calculated based on nationally reported carbon content of 86.3% for the Egyptian Diesel FO using national source /26/. The EF for light fuel oil (LFO) was derived from the national reported data as follows considering that C-content=86.3% and NCV=0.0419 TJ/ton LFO:

- ()
- 1- Basis: 1 ton fuel. Therefore, the C-content is equal to 0.863 tCO₂/ton LFO.
- 2- Quantity of CO₂ released is the product of multiplying the C-content by the molecular weight of CO₂ (44), and dividing by the molecular weight of Carbon (12).
i.e. $m_C/Mwt_C = m_{CO_2}/Mwt_{CO_2}$
Therefore, CO₂-content = $(0.863 \times 44/12) = 3.16433$ tCO₂/ton LFO
- 3- To obtain the emission factor per unit energy, divide the CO₂ quantity obtained (tCO₂/ton LFO) by the calorific value (TJ/ton LFO)
Therefore, EF = $3.16433/0.0419 = 75.5210$ tCO₂/TJ

CO₂ emission factor for Natural Gas NG, EF_{CO₂,NG} = 55.19 tCO₂/TJ,

This value is calculated based on nationally reported carbon content of 75% for the Egyptian Natural Gas using national source ref /26/. The EF for LFO was derived from the national reported data as follows considering that C-content=75% and NCV=0.04983 TJ/ton NG:

- 1- Basis: 1 ton NG. Therefore, the C-content is equal to 0.75 tCO₂/ton NG.
- 2- Quantity of CO₂ released is the product of multiplying the C-content by the molecular weight of CO₂ (44), and dividing by the molecular weight of Carbon (12).
i.e. $m_C/Mwt_C = m_{CO_2}/Mwt_{CO_2}$
Therefore, CO₂-content = $(0.75 \times 44/12) = 2.75$ tCO₂/ton NG
- 3- To obtain the emission factor per unit energy, divide the CO₂ quantity obtained (tCO₂/ton NG) by the calorific value (TJ/ton NG)
Therefore, EF = $2.75/0.04983 = 55.1876$ tCO₂/TJ

The reported density of the Egyptian Natural Gas d_{NG} = 0.84 Kg/m³. National source: the Egyptian General Petroleum Corporation (EGPC) (ref /13/).

As per methodology ACM0009, leakage evaluation is based on two EF parameters, namely: emission factors for upstream fugitive methane emissions from production,



transportation and distribution of NG and from production of the used petroleum fuel type. The EF have been evaluated using publically available national data.

Emission factor for upstream fugitive methane emissions from production, transportation and distribution of NG, $EF_{NG,upstream,CH_4} = 5.35 \cdot 10^{-6} \text{ tCH}_4/\text{GJ}$ has been evaluated using data from Egypt's Second National Communication (ref /25/) as follows:

- 1- The consumption of NG is obtained from Figure (I.9) in page 15. The most recent value corresponds to 23 MTOE:
 $23 \text{ (MTOE)} \cdot 41.87 \cdot 10^6 = 9.63 \cdot 10^8 \text{ GJ}$
- 2- In page 33, it is stated that: "The total fugitive emissions encompass 1.47 Mt CO₂, 0.444 Mt CH₄ and 0.02 Kt of N₂O, collectively equivalent to 10.81 Mt CO₂e (Aziz, 2007). Sources of these emissions entail oil production, natural gas production, petroleum products processing and distribution, with oil production being the main source with a contribution of more than 99% of the emissions." Accordingly, the contribution of NG in the fugitive emissions was taken as 1% of the 10.81 Mt CO₂e (108,100 tCO₂e)
- 3- The emission factor was thus calculated from the above two values:
 $EF_{K,upstream,CH_4} = 108,100 \text{ tCO}_2\text{e} / 9.63 \cdot 10^8 \text{ GJ} = 1.123 \cdot 10^{-4} \text{ tCO}_2\text{e}/\text{GJ}$
- 4- To obtain the emission factor in (tCH₄/GJ), the global warming potential of Methane is used:
 $EF_{NG,upstream,CH_4} \text{ (tCH}_4/\text{GJ)} = 1.123 \cdot 10^{-4} \text{ (tCO}_2\text{e}/\text{GJ})/21 = 5.35 \cdot 10^{-6} \text{ tCH}_4/\text{GJ}$

Emission factor for upstream fugitive methane emissions from production, transportation and distribution of petroleum fuel k type $EF_{k,upstream,CH_4} = 4.35 \cdot 10^{-4} \text{ tCH}_4/\text{GJ}$ has been evaluated using data from Egypt's Second National Communication (ref /25/) as follows:

- 1- The consumption of petroleum products is obtained from Figure (I.9) in page 15. The most recent value corresponds to 28 MTOE:
 $28 \text{ (MTOE)} \cdot 41.87 \cdot 10^6 = 1.17 \cdot 10^9 \text{ GJ}$
- 2- In page 33, it is stated that: "The total fugitive emissions encompass 1.47 Mt CO₂, 0.444 Mt CH₄ and 0.02 Kt of N₂O, collectively equivalent to 10.81 Mt CO₂e (Aziz, 2007). Sources of these emissions entail oil production, natural gas production, petroleum products processing and distribution, with oil production being the main source with a contribution of more than 99% of the emissions." Accordingly, the contribution of petroleum products in the fugitive emissions was taken as 99% of the 10.81 Mt CO₂e (10,701,900 tCO₂e)
- 3- The emission factor was thus calculated from the above two values:
 $EF_{k,upstream,CH_4} = 10,701,900 \text{ t CO}_2\text{e} / 1.17 \cdot 10^9 \text{ GJ} = 9.129 \cdot 10^{-3} \text{ tCO}_2\text{e}/\text{GJ}$
- 4- To obtain the emission factor in (tCH₄/GJ), the global warming potential of Methane is used:
 $EF_{k,upstream,CH_4} \text{ (tCH}_4/\text{GJ)} = 9.129 \cdot 10^{-3} \text{ (tCO}_2\text{e}/\text{GJ})/21 = 4.35 \cdot 10^{-4} \text{ tCH}_4/\text{GJ}$

The detailed calculation has been provided in the ER calculation excel- sheet (ref /3/). The calculation were checked and validated as reported above.

The main issue that was found during the validation process regarding emissions reduction calculation section B.6 and appendix 4 of the of the webhosted PoA-DD (ref /1/), was the fuels EF Data and parameters that were to be reported ex-ante and were not reported and evaluated correctly. In all, eight corrective and clarifications requests were made to the project proponent, namely CAR 28, CAR29, CAR30 and CAR 31 along with CL10, CL42, CL53 and CL54. The details of these requests and their resolution are presented in table 3 of Appendix A. A summary of the corrective actions made and the clarifications added to the PoA-DD version 07 (ref /2/) related to these requests is presented as item number 8 of the table presented in above §3.6.

B. For Type 2 CPAs, the emission reductions calculation is explained under section B.6.1 of PoA-DD, Part II, Type 2 Generic CPAs applying AMS.III.Z (ref /2/), as per version 04.0.0 of the AMS.III.Z approved methodology

Baseline emissions:

The emission baseline is the current emissions of the facility expressed as emissions per unit of output. Baseline emissions shall be determined as follows:

$$BE_y = EF_{BL} * P_{PJ,y} \quad (1)$$

Parameter	Description	Unit
BE_y	Baseline emissions in the project activity in year y	tCO ₂ e
EF_{BL}	Annual production specific emission factor for year y	tCO ₂ /kg or m ³
$P_{PJ,y}$	Annual net brick production in the project activity in year y	kg or m ³

The emission factor in the baseline situation (EF_{BL}) is the coefficient for the fossil fuel used in the baseline expressed as emissions per unit of output (e.g. tCO₂/kg or m³).

$$EF_{BL} = \sum FC_{BL,i,j} * NCV_j * EF_{CO2,j} / P_{Hy} \quad (2)$$

Parameter	Description	Unit
EF_{BL}	Annual production specific emission factor for year y	tCO ₂ /kg or m ³
$FC_{BL,i,j}$	Average annual baseline fossil fuel consumption value for fuel type j combusted in the process i	volume or weight units
NCV_j	Net calorific value of the fuel type j	TJ/ volume or weight units
$EF_{CO2,j}$	CO ₂ emission factor of the fuel type j	tCO ₂ /TJ
P_{Hy}	Average annual historical baseline brick production rate	volume or weight units, m ³ or kg

Project activity emissions:

§20-The project emissions should be calculated as follows:

$$PE_y = PE_{elec,y} + PE_{fossilfuel,y} + PE_{transport,y} + PE_{cultivation,y} + PE_{CH_4,y}$$

CPAs submitting for inclusion under this PoA does not involve the use of renewable biomass; therefore, there are no project emissions from cultivation or transportation. Production of charcoals in brick kilns is also not eligible for inclusion under this PoA; therefore there are no CH₄ project emissions.

In addition, brick kilns do not require electricity to operate neither in the baseline nor project scenarios. Only fuel is combusted to generate the necessary heat for brick cooking (see the schematic diagram in Section B.3 of the PoA-DD /ref 2/).

The typical firing brick kiln as presented in the PoA-DD has been visited during the site visit by the validation team. The exclusive use of fossil fuel types for firing is confirmed and validated.

Therefore, there are no project emissions due to electricity consumption.

Hence, $PE_y = PE_{fossilfuel,y}$

§22- The emissions include fossil fuel consumption (including auxiliary use) $PE_{fossilfuel,y}$, associated with the operation of the manufacturing process and the biomass treatment and processing, calculated as per the “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion”

$PE_y = FC_{i,j,y} * COEF_{i,y}$ where:

Parameter	Description	Unit
PE_y	Project emissions in the project activity in year y	tCO ₂ e
$FC_{i,j,y}$	Quantity of fuel type i combusted in process j during the year y	mass or volume unit/yr
$COEF_{i,y}$	CO ₂ emission coefficient of fuel type i in year y	tCO ₂ /mass or volume unit

$COEF_{i,y} = EF_{CO_2,i,y} * NCV_{i,y}$, where:

Parameter	Description	Unit
$EF_{CO_2,i,y}$	Weighted average CO ₂ emission factor of fuel type i in year y	tCO ₂ /GJ
$NCV_{i,y}$	Weighted average net calorific value of the fuel type i in year y	GJ/mass or volume unit

Leakage:

As for Type 1 CPAs, leakage emissions resulting from fuel extraction, processing, liquefaction, transportation, regasification and distribution of fossil fuels outside of the project boundary shall be considered, as per the guidance provided in the leakage section of ACM0009 - Consolidated baseline and monitoring methodology for fuel switching from coal or petroleum fuel to natural gas.

Accordingly, leakage for Type 2 CPAs, shall be determined as presented above for Type 1 CPAs.

Emission reductions:

The emission reduction achieved by the project activity will be calculated as the difference between the baseline emissions and the sum of project emissions and leakage as follows:

$$ER_y = BE_y - PE_y - LE_y \quad (4)$$

Parameter	Description	Unit
ER_y	Emission reductions in the year y	tCO ₂ e

The emissions factors for the used baseline fuels (HFO or LFO) and for project fuel (NG) have been determined using national data as presented above for Type 1 CPAs.

Appendix 4 of the PoA-DD (ref /2/) provides the detailed calculation of the emissions reductions estimations based on the above equations for the two examples of generic type 1 and type 2 CPA facilities: a bakery and a brick factory.

Both facilities used as generic CPA for the ERs calculation purposes have been visited during the site visit.

The estimation of the baselines emissions of the bakery is based on the fuel consumptions calculated on the basis of a specific ratio of 12 l/100kg of used flour that has been validated during the site visit (ref /53/). As for the brick factory, the fuel consumption and the brick consumption were based on the declaration of the owner of the brick plant and checked with the factory manual records (ref /55/ and /56/).

Leakage has been calculated using ACM0009 as specified by the applied methodologies (AMSIII.B and AMSIII.Z). The leakage emissions were found negative for both CPAs and a 0 value was used as leakage.

The project emissions were evaluated in conformity with the methodologies applied as the emission associated with the NG that would have been used to ensure the same energy consumed in the baseline by respectively the bakery and the brick factory. The data and parameters that are to be reported ex-ante (NCV_{HFO} , $EF_{CO_2,HFO}$, NCV_{LFO} , $EF_{CO_2,LFO}$, NCV_{NG} , $EF_{CO_2,NG}$, d_{NG} , EF_{NG} , $EF_{NG,upstream,CH_4}$ and $E_{k, upstream, CH_4}$) are the



same as the one determined under AMS.III.B version 16.0 methodology and have been validated as described above.

The emissions reductions have been evaluated at 74.26 t CO₂e/year for the bakery and 1,447.38 t CO₂e/year for the brick plant.

The ERs calculation spread-sheet has been provided with details information on the data sources. ERs Calculations have been checked for both CPAs facilities types. They are correct and consistent with the above equations and data reported above and in the submitted PoA-DD version 07 (ref /2/).

Based on the above assessment, the validation team hereby confirms that:

- (a) All assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;
- (b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PoA-DD;
- (c) All values used in the PoA-DD are considered reasonable in the context of the proposed CDM project activity;
- (d) The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions;
- (e) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PoA-DD.

The validation team has verified the data and parameters used in the equations of the emissions reduction calculations and validated them using the provided reference sources as detailed above (/13/, /25/, /26/, 28/, /53/, /55/ and /56/). The annual emissions reductions of typical CPA facilities that could be included under this PoA have been evaluated at 74.26 t CO₂e for the bakery (Type 1 CPA Facility) and 1,447.38 t CO₂e for the brick plant (Type 2 CPA Facility). The ERs calculations have been checked and validated by the validation team. They are deemed to be conservative.

3.11 Additionality of PoA

3.11.1 Start date of the PoA/CPA(193)

The eligibility criteria of the start date for inclusion of CPA has been set as criteria number 7 as presented in Table 3 of the submitted PoA-DD /2/.

Bureau Veritas Certification confirms that the start date of any CPA is not prior to the commencement of the validation of the PoA, which is the date of the CDM-PoA-DD is first published for global stakeholder consultation.

3.11.2 Demonstration of additionality of the PoA as a whole

The demonstration of the PoA as a whole has been established using the barrier analysis approach. The PoA-DD version 07 (ref /2/) explains the various barriers the Micro and Small-sized enterprises are facing in particular the lack of access to finance and the successive increases of NG prices (ref /37/ and /38/) that currently discourages fuel switching in these industries. Reference documentation have been provided to support these barriers, especially in the very particular conditions of Egypt (ref /34/, /35/, /36/ and /39/), and to confirm that the CPAs would not be implemented in the absence of the PoA .

It is explained in the PoA-DD that the M/SME sector have limited access to the capital and financial services that constitute a major constraint to its development of (ref /11/).

The following barriers have been invoked for preventing micro and small industrial facilities to switch to burning NG rather than continuing to burn fuel oil:

- **Investment barrier:** a financially more viable alternative to the project activity would have led to higher emissions;

Most CPA Facilities Owners are unable to solely carry the burden of providing the capital investment required for the implementation of their project activities due to the following reasons:

- a) Large capital investment related to the implementation of the fuel switching CPA sometimes involves extension of the NG network, construction of internal connections, pressure reduction stations, gas pumping stations and other accompanying installations that require considerable capital cost

The confidential document obtained from a sample NG internal and external construction contract for a brick factory in Egypt (ref /50/) was checked during the site visit and it was confirmed that the capital investment consists mainly of the construction of internal and external NG networks and typically exceeds 2 million EGP.

The document was crossed check with publically available documentation “cost benefit analysis of a natural gas lateral pipeline to the Annapolis valley” by William L. Turner dated April, 2011 (ref/58/) where it is specified that “The Canadian Energy Pipeline Association suggests \$1,000 per millimeter of diameter per kilometer as a rough estimate of pipeline cost”. Then it can be concluded that external NG networks would exceeds 2 million EGP and that this estimate is conservative.

- b) Fragile national financial position: reflected in the downgrade of the credit rating of Egypt,

The Egypt's credit rating and currency outlook have been checked by the DOE validation team: the B+ rating by Standard and Poor's , and BB- rating by Fitch have been checked by checking the Egypt rating by S&P - Reuters - Nov 2011 (ref /35/) and the Egypt rating by Fitch - Reuters - Dec 2011(ref /36/) documents

- c) Impact of rising NG local price on the investment of the M/SMEs in fuel switching .



The ministerial decree number 1914/2007 was checked by the DOE validation team (Ministerial Decree no. 1914/2007 - http://www.ida.gov.eg/PDF/Cabinet%20Decisions/Direct%20Council/1914_2007.pdf, see ref /37/) where it is confirmed that NG rose from 1.25 USD/MBTU to 2.65 USD/MBTU over 3 phases, with an average rate of increase of 0.466 USD/MBTU/year. This was followed by ministerial decree number 1795/2008 raising the NG for energy intensive industries to 3.00 USD/MBTU. (Ministerial Decree no. 1795/2008 - <http://www.ida.gov.eg/PDF/qrar1795.pdf>, see ref /38/)

It was also confirmed that starting 2012, the energy (NG and electricity) prices have already been increased by 33% for energy intensive industries (Egypt plans to cut subsidies on energy-intensive industries, Reuters Business News, Article dated 01 Jan 2012 - <http://af.reuters.com/article/commoditiesNews/idAFL6E8C107S20120101>)

- **Other barriers:** such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies. The following constraints were invoked in the submitted PoA-DD version 07 (ref /2/) as other barriers to the M-SME investment in fuel switching:

a) Institutional barriers leading to the lack of financial resources;

The DOE validation team verified that there is an absence of a clear definition provided by the Central Bank of Egypt (CBE) for SMEs. The Quarterly newsletter published by the Ministry of Planning & International Co-operation, Centre for Project Evaluation and Macroeconomic Analysis, Vol. IX, Issue no. 4, Oct 2011 - <http://www.pema.gov.eg/FileUpload/Publication/Files/328.pdf> was checked (see ref/ 8/) and it confirms that commercial banks do not use a unified method of classifying and categorizing SMEs.

Inadequate institutional structure of the M/SME sector;

The DOE validation team verified that the level of informality limits M/SMEs access to a wide range of formal services, most importantly credit facilities by checking the Egypt Book – CI Capital Research (CICR), Nov 2008 – <http://www.gafinet.org/English/Publications/CI%20Capital%20Research%20Book%20%20EGYPT-2008.pdf> (ref/9/).

The Challenges of Egypt's Economic Transition, The Carnegie Papers, Carnegie Middle East Center, Nov 2011 document available at http://carnegieendowment.org/files/egypt_econ_transition.pdf was checked by the DOE validation team and it was confirmed that although M/SMEs provide affordable goods and services that suit the lower and lower-middle income groups – which account for 57% of the population, they are highly interrelated to the informal economy. Such a high level of informality limits M/SMEs access to a wide range of formal services, most importantly credit facilities

b) Non-familiarity with the banking sector.

Many SMEs do not have a bank account (SMEs with business account are estimated at less than 10% of the total SMEs by the National Bank of Egypt in 2008). They do not



use the banking sector, very often because they are partially in the informal sector where most of the transactions are on cash basis, and where financing is done through the family-friend network. This was confirmed by checking the Egypt Private Sector Country Profile, The African Development Bank, 2009 document available at <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Brochure%20Egypt%20Anglais.pdf> (see ref/12/).

- **Eligibility criteria of the additionality:**

The eligibility criteria of the additionality were set as Criteria 13.1 for micro scale CPA automatically additional as per the guidelines for demonstrating additionality of micro-scale project activities (EB 68, Annex 26, Version 04) and Criteria 13.2 for CPAs that should demonstrate their additionality per at least one barrier developed in section B.1, Part I of the PoA-DD.

Eligibility Criteria 13.1: Wherever the CPA Developer demonstrates that the CPA is a micro-scale project activity (600 tCO₂e per year per element process and 20,000 tCO₂e per year per CPA), the CPA is automatically additional. Compliance to be checked as follows: ERs estimations relating to each burner or combustion chamber at which the switching to NG is implemented, as well as for the CPA as a whole, showing that the CPA falls into the threshold of micro scale CDM project (600 tCO₂e per year per element process and 20,000 tCO₂e per year

As defined, Type 1 CPA complies with the conditions and therefore are automatically additional.

Eligibility Criteria 13.2: For Small-Scale CPAs, the CPA Developer will demonstrate additionality in accordance with Section B.1 of Part I of this PoA-DD. Compliance to be checked as follows: Supporting evidence showing that at least one of the additionality arguments in the PoA-DD (Section B.1, Part I) applies to the CPA studied for inclusion.

Validation team has assessed the additionality of the PoA in accordance with Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities.

As per the additionalily tool, barrier analysis was adopted to demonstrate the additionality.

The eligibility criteria of the additionality were set as Criteria 13.1 and 13.2 as presented above.

Bureau Veritas Certification confirms that none of the implemented CPA would occur in the absence of CDM.



3.12 Monitoring plan (198)

The validation team hereby confirms that the monitoring plan complies with the requirements of the used methodologies AMS.III.B version 16.0.0 and AMS.III.Z version 04.0.0.

The steps taken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the programme design are described below.

The submitted PoA uses independently two small-scale Approved Baseline and Monitoring Methodologies:

- AMS-III.B. Switching Fossil Fuels (Version 16) – Sectoral Scope 1 : Energy industries (renewable – non-renewable sources), and
- AMS-III.Z. Fuel switch, process improvement and energy efficiency in brick manufacture (Version 04) – Sectoral Scope 4 : Manufacturing industries

The monitoring plans for the two used methodologies are provided in Part II of the PoA-DD respectively in generic CPA Type 1 and generic CPA type 2.

As per the requirement of the methodology AMS.III.B § 26, monitoring shall include:

- a) Monitoring of the fossil fuel consumption (FCy) and energy output of element process i after the project activity has been implemented (QPJ,y) - (e.g. gas use and heat output by a district heating plant, diesel use and steam generated by an industrial plant, gas use and electricity generated by a generating unit) for project activities under paragraphs 15 and 16;*
- b) Monitoring of the fossil fuel consumption (FCy) for project activities under paragraph 17;*
- c) For electricity/thermal energy exported to other facilities, monitoring of the use of electricity and thermal energy shall be undertaken in the recipient end (In the case of electricity generated and supplied to distributed users via mini/isolated grid(s) the recipient end is defined as the mini/isolated grid)*

As defined, Type 1 CPAs using the approved methodology AMS.III.B, comply with the requirement of §17 of the methodology: *in case of project activities where the estimated annual emission reductions of each of the element processes are equal to or less than 600 tCO₂e per year per element process an alternative approach may be used to calculate baseline emissions as per paragraph 21 using equation 3 instead of applying equation 1.*



Accordingly, the above b) condition applies and only the monitoring of the fossil fuel consumption (FCy) for project activities under paragraph 17, is required.

It should be mentioned that condition c) related to the electricity/thermal energy exported to other facilities, is not applicable to the CPA under this PoA as it concerns electricity generation activities.

Accordingly the flow rate of the consumed NG in the element process (es) for captive energy generation will be measured continuously by a flow meter contracted by the NG supplier. Monthly readings will be kept by CPA owners and reported to the authorized CPA implementer. CPA Developers will provide the CME with the collected data quarterly to be included in each CPA's progress reports. The recorded consumptions will be cross-checked with NG receipts. Records will be kept for the entire duration of the crediting period, plus two additional years. Flow meters will be subjected to regular maintenance operations and calibrations following the manufacturer's specifications for calibration procedures.

It should be mentioned that one important monitoring aspect that was not clear in the webhosted PoA-DD (ref /1/) was the level at which the monitoring would be done (CPA or Facility). CL57, CL58 and CL59 were then raised on respectively the facility level data monitoring, data and ERs estimation and data recording. The monitoring plan has been amended to specify that every aspect of the monitoring plan will be implemented at the facility level.

See table 3 in appendix A for more details on these clarifications and how they addressed and reflected in the submitted PoA-DD (ref /2/).

As for type 2 CPAs, using the small scale approved methodology AMS-III.Z. Fuel switch, process improvement and energy efficiency in brick manufacture (Version 04), the monitoring plan is provided in Part II of the PoA-DD, in the second generic CPA (Type 2).

As per the requirement of the methodology AMS.III.Z §28, monitoring shall include:

- a) *Production output (kg or m3 per day);*
- b) *Principal raw and additive material purchases on monthly basis;*
- c) *Tests to validate that the project bricks meet the performance requirements and specifications at six-month intervals;*
- d) *Project emissions associated with the electricity use shall be monitored as per the "Tool to calculate baseline, project and/or leakage emissions from electricity consumption";*
- e) *Project emissions due to the fossil fuels consumption shall be monitored as per the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion";*



- f) *Daily consumption of biomass of the production facility. Each type of solid/liquid biomass shall be monitored separately. Cross-checking with purchase invoice, delivery notes and the stock is required;*
- g) *In order to assess the compliance with the applicability conditions concerning organic liquid residues as defined in footnote 3, monitoring shall include data on the origin of organic residue liquids;*
- h) *The calorific value of each fossil fuel type and the density, mass fraction and carbon content of each biomass fuel type used;*
- i) *Parameters for determining project emissions from renewable biomass cultivation and from transportation of renewable biomass over distances of 200 km shall be monitored as per the relevant provisions of AMS-III.AK;*
- j) *Parameters for determining methane emissions from the charcoal produced in kilns not equipped with a methane recovery and destruction facility shall be monitored as per the relevant procedures of AMS-III.K.*

Type 2 CPAs aims at fuel switching activity in brick factories using exclusively fossil fuels. Applicability criteria #1 of the AMS.III.Z to Type 2 CPAs specifies that in each element process within a proposed CPA, the switch will be from only one type of fuel oil (HFO/LFO) to one type of fuel (NG) (Table 12 of the submitted PoA-DD /2/). The Furthermore criteria #6 specifies that no renewable biomass has been used in any of the existing CPA Facilities during the last three years prior to the start of the CPA. Also as defined, the kiln firing is based on thermal fossil fuels use and thus the electricity is not use in the element process of the CPA. Under these conditions, the monitoring of parameters related to electricity (d), biomass ((f), (i)), organic liquids (g), charcoal (j) does not apply to the Type 2 CPA considered under the PoA.

All the other required monitored parameters specified in §28 of the methodology have been included in the monitoring plan ((a), (b), (c), (e), (h) for the NCV of NG). Hence the monitoring plan includes the following list of the parameters to be monitored during the CPAs crediting period:

- NG consumed in the project element process ;
- Annual net brick production in the project activity ;
- Net calorific value of NG;
- Quality of project bricks;
- Principle raw and additive materials purchases;
- Backup fossil fuel consumption

The parameters tables of each monitored parameter are provided in section B.7.1 according to the format and the requirements of the Guidelines for completing the Programme Design Document Form For Small-Scale CDM Programmes of Activities.



The quality of project bricks is to be monitored at a minimum of 6 months interval through the test of compressive strength of produced bricks according to the applicable appropriate national standard in order to identify the strength class of the bricks and demonstrate its service level compared to that of the baseline brick.

It should be mentioned that with respect to the webhosted PoA-DD version 02 (ref /1/), the parameter related to the quantity of raw and additive materials has been added following CAR 44. Also, the PP mentioned that there is a possibility of backup fuel oil use in the brick manufacturing facility during the project activity due to abnormal NG supply problems. CAR45 was then raised and the FO backup consumption was added to the list of the monitored parameters.

No sampling is required. The requirements of the proposed monitoring plan will be applied to each one of the facilities considered under the CPA.

The validation team hereby confirms that the monitoring plan complies with the requirements of the methodology(ies).

The steps taken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the programme design.

3.13 Environmental impacts (199)

The CME has undertaken an analysis of environmental impacts at the CPA level. This has been justified by the fact that environmental impacts are case specific, and CPAs may differ in the type of activity performed, CPA Facilities' locations, element processes used and the type of output considered. Therefore, all environmental impacts will be assessed at the CPA Facility level and will adhere to Egypt's environmental laws and regulations.

According to the Egyptian regulations and depending on the type of the facility implementing a project, the required EIA may be in category A, B, or C, with each category requiring different levels of assessment and documentation.

The Guidelines of Principles and Procedure for EIA, 2nd Edition (ref /22/) define "lowest", "medium", and "highest" levels, as well as a positive list of activities, which do not require an EIA at all. It should be mentioned that for example, fuel switching in bakeries targeted by the PoA as type 1 CPAs, are on this list and are thus exempt from performing EIAs for their project activities.

It is worth noting that the CME specified in the PoA-DD *that where a group of CPA Facilities are to be developed in one CPA, or when a group of CPAs are in the same region; environmental analysis may be conducted for each individual CPA Facility, each CPA or for a group of CPAs together in a single EIA, as allowed by the host country regulations.*

The PoA-DD states in section E1 that the environmental impacts of the PoA are expected to be largely positive due to the reduction in greenhouse gas emissions and



other pollutants. There are also no significant transboundary impacts expected as a result of this PoA, and the negative impacts assessed, if any, will be mitigated at the CPA Facility level.

3.14 Local stakeholder consultation (201)

The CME has undertaken the local stakeholder consultation at the CPA level.

Due to the several potential variations in the CPAs under the PoA (activity type, Facilities' location, etc), the CME has opted to carry out the the stakeholder consultations at CPA level.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

The PoA-DD using methodologies AMS.III.B and AMS.III.Z were webhosted on the UNFCCC for global stakeholder's comments as per CDM requirements. The programme was webhosted from 26/06/2012 to 25/07/2012.

No comments were received.



5 VALIDATION OPINION

Bureau Veritas Certification has performed a validation of the PoA for fuel switching at micro and small-sized enterprises in Egypt (within the international borders of the Arab Republic of Egypt). The validation was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The validation consisted of the following three phases: i) a desk review of the design and the baseline and monitoring plan; ii) follow-up interviews with stakeholders; iii) the resolution of outstanding issues and the issuance of the final validation report and opinion.

By reviewing VVS, PS, Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, Bureau Veritas Certification is of the opinion that management system of CME is robust and efficient to ensure eligibility and quality of CPAs. Eligibility criteria are sufficient so that the inclusion of CPAs could fulfill all requirements of EB rules. Emission reductions attributable to the CPA under the PoA are additional to any that would occur in the absence of the PoA, and hence are likely to be achieved.

Given that this PoA and its CPAs are implemented and maintained as designed, the two type of CPAs under this PoA are likely to achieve during the crediting period the estimated average annual emission reductions of : Type 1 CPA : 74.26 (tCO₂e/yr); Type 2 CPA : 1,447.38 (tCO₂e/yr).

The review of the PoA-DD (07) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the PoA correctly applies and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification concludes that PoA for fuel switching at micro and small-sized enterprises in Egypt meets all stated criteria and thus requests registration of PoA for fuel switching at micro and small-sized enterprises in Egypt as PoA.



6 REFERENCES

Category 1 Documents:

Documents provided by Type the name of the company that relate directly to the GHG components of the PoA.

- /1/ Fuel Switching PoA-DD (V-02) - Published for GSC
- /2/ Fuel Switching PoA-DD (V-07) - Submitted for registration
- /3/ Fuel switching PoA ERs calculation PoA for two typical CPAs (Appendix 04)
- /4/ Fuel Switching PoA - CME Database 121114
- /5/ EB66_repan56_Revison of AMS-III.B_ver16
- /6/ EB67_repan21_Revisionof AMS-III.Z_ver04.0
- /7/ EB68_repan12 ACM0009 v4.0 (track changes)
- /8/ Quarterly newsletter - Ministry of Planning & International Cooperation
- /9/ EGYPT Book – CICR
- /10/ Egypt Country Paper – UNIDO
- /11/ Polices for Business in Mediterranean Countries - Formez_CAIMED
- /12/ African Economic Outlook for Egypt - AfDB_OECD
- /13/ Natural Gas Density – EGPC
- /14/ MSMEs Profile in Egypt - Ministry of Foreign Trade
- /15/ MSME Definition Study - Ministry of Foreign Trade
- /16/ Al-Youm Online Newspaper - Oct 2011
- /17/ El-balad Online Newspaper - May 2012
- /18/ Al-Masry Al-Youm Newspaper - May 2012
- /19/ Akhbar Al-Youm Newspaper - April 2012
- /20/ Reuters - Fuel Shortage May 2012



- /21/ Egyptian Law 141 of 2004
- /22/ Guidelines of Principles and Procedures for EIA (2nd Edition)
- /23/ Environmental Aspect of MSME Policy Development - CIDA_IDRC
- /24/ Sustainability and SMEs – UNEP
- /25/ Egypt 2nd National Communication – UNFCCC
- /26/ EPAP-EEAA Self-monitoring Report
- /27/ Promoting technologies through CDM - Umwelt Bundes Amt
- /28/ Fuel Oil Density – EGPC
- /29/ CDM-APU Team Profile
- /30/ Executive Regulation of Law 4 of 1994 – EGYPT
- /31/ EPAP-EEAA Report - Proof of fuel naming
- /32/ The Brick Oven Project
- /33/ CDM-APU Contact Information
- /34/ Challenges of Egypt's Economic Transition – Carnegie
- /35/ Egypt rating by S&P - Reuters - Nov 2011
- /36/ Egypt rating by Fitch - Reuters - Dec 2011
- /37/ Ministerial decree number 1914 for 2007
- /38/ Ministerial decree number 1795 for 2008
- /39/ Reuters Business News - Jan 2012
- /40/ African Economic Outlook for Egypt - AfDB_OECD
- /41/ Organizational chart for the CME of the PoA
- /42/ Organizational chart for Climate Change Unit - EEAA
- /43/ Letter of No Objection from Egyptian DNA - Feb 2012
- /44/ Validity of the letters of no objection - Egyptian DNA
- /45/ Fuel switching PoA-LoA from Egyptian DNA



- /46/ Fuel switching PoA-MOC
- /47/ CME authorized signatory notarization letter
- /48/ Letter from CME to DNA requesting issuance of LoA - May 2012
- /49/ EPF deductions of CERs - Egyptian DNA Statement
- /50/ CONFIDENTIAL - Sample NG Network Construction Contract (Brick Factory)
- /51/ Site Visit Plan
- /52/ EB70_repan02-project Standard 2.0
- /53/ Akhbar Al-Youm - Evidence on diesel consumption proxy
- /54/ Fossil Fuel Energy Consumption in Egypt - WB Data
- /55/ HFO consumption data used in Type 2 Typical example (Appendix 04)
- /56/ Brick production data used in Type 2 Typical example (Appendix 04)
- /57/ Fossil fuel energy consumption in Egypt -
<http://www.tradingeconomics.com/egypt/fossil-fuel-energy-consumption-percent-of-total-wb-data.html>
- /58/ cost benefit analysis of a natural gas lateral pipeline to the Annapolis valley” by William L. Turner dated April, 2011

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents:

- /1/ Guidelines For Demonstrating Additionality Of Microscale Project Activities (Paragraph 10, EB 63, Annex 23, Version 03) –
http://cdm.unfccc.int/Reference/Guidclarif/ssc/methSSC_guid22.pdf
- /2/ Guidelines on Assessment of Debundling for SSC Project Activities (EB 54, Annex 13, Version 03) –
http://cdm.unfccc.int/Reference/Guidclarif/ssc/methSSC_guid17.pdf
- /3/ Standard for demonstration of additionality, eligibility, multiple meth for PoAs (V-01)
- /4/ Guidelines for demonstrating additionality of microscale project activities (V-04)
- /5/ Guidelines on demonstration of additionality of small-scale project activities (V-09)



- /6/ CDM Project Standard (V-02.1)
- /7/ Glossary of CDM Terms (V-07)
- /8/ AMS-III.B Methodology – V-16 (EB66)
- /9/ AMS-III.B Methodology – V-11 with applicability for PoAs (EB33)
- /10/ ACM0009 Methodology - V-04.0.0 (EB68)
- /11/ General Guidelines for SSC CDM Methodologies (V-19)
- /12/ AMS-III.Z Methodology - V-04 (EB67)
- /13/ AMS-III.Z Methodology - V-01 with applicability for PoAs (EB46)
- /14/ Tool to calculate project or leakage emissions from FF combustion (V-02)
- /15/ Guideline for completing the PDD form for small scale CDM POA, EB67, Ann30

**Persons interviewed:**

List persons interviewed during the validation or persons that contributed with other information that are not included in the documents listed above.

- /1/ Ahmed Medhat, Operational manager of the CDM/APU, EEAA (Head of the CME for this PoA);
- /2/ Ahmed Abd El-Rasoul, CDM Specialist, CDM/APU, EEAA;
- /3/ Mamdouh Higazy, Technical Expert, Egyptian Environmental Affairs Agency;
- /4/ Mohamed Nagieb, Financial Accountant, CDM/APU, EEAA;
- /5/ Omar Roushdy, CDM Consultant, ERCC;
- /6/ Aya Salah, CDM Consultant, ERCC;
- /7/ Ahmad Wafiq, Project Engineer, ERCC;
- /8/ Killian Wentrup, CDM Consultant, Perspectives GmbH;
- /9/ Eng. Tarek Shalaby, Director of CDM Department, Climate Change Central Department, and member of the Egyptian DNA, EEAA;
- /10/ Yasser Hammad Fahmy, CPA Facility Owner - Manager of visited Bakery 01 (CPA Type 1)
- /11/ Ahmed Abd El-Rahim, CPA Facility Owner - Manager of visited Bakery 02 (CPA Type 1)
- /12/ Mohamed Osman, Manager of visited brick factory in Beni Suef, (CPA Type 2)
- /13/ Mr. Attia Eid, Vice President of Cairo Bakeries' Chamber, Federation of Egyptian Industries

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7 CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Mrs Virginie Vitiello (Team Leader): M.Sc. in chemical engineering with more than 8 years of experience in the field of environment and climate change with related expertise in Chemical, Oil & Gas and Energy sector. She is an auditor with Bureau Veritas Certification for Environment Management System and Corporate Sustainability and a lead auditor for EUETS Verification and carbon accounting. She has done consultancy and training on energy management system, carbon accounting and carbon management. She has undergone intensive training on Clean Development Mechanism and has been involved in the validation and verification processes of CDM projects in Asia, Middle-East and Africa and JI projects in France and Russia.

Dr. Abdelmourhit Lahbabi (Verifier): Ph.D, Chemical Engineering, and Engineer Degree in Industrial Processes, Dr. Abdelmourhit LAHBABI have been working in the CDM field for the last ten years. He developed the first Moroccan CDM project in 2005 (Lafarge's 10 MW wind farm project) and helped define the Moroccan strategy for CDM development. He has been also involved in the preparation of Morocco's first and second national communications to the UNFCCC (inventory and mitigation).

Dr. Abdelmourhit LAHBABI has more than 20 years of professional experience in industrial processes, energy management and energy efficiency. He managed and supervised more than one hundred technical projects. During the last twenty years he carried out various assignments for the World Bank, Islamic Development Bank, African Development Bank, UNDP, UNIDO, UNEP, USAID, GIZ, JICA, FAO, EU.

Dr. Lahbabi is a CDM Verifier with BVCH since end 2010.

Dr. Ashok Mammen (Internal Technical Reviewer): Ph.D (Oils & Lubricants) and M.Sc.(Analytical chemistry) with over 20 years of experience in petrochemical sector. He is a Lead auditor with Bureau Veritas Certification for Environment Management System, Quality Management System and Occupational Health and Safety Management System. He has undergone intensive training on Clean Development Mechanism and has been involved in the validation and verification processes of more than 100 GHG projects.

Mr. H.B.Muralidhar (Technical expert)

Graduate in Electrical Engineering with 25 years of experience in power generation and distribution related fields as well as in management system auditing. He is the Lead auditor for Environmental Management System, Quality Management system and Occupational Health and Safety Management System. He has undergone intensive training on Clean Development Mechanism. He is the technical expert & conducted Validation / Verification for more than 50 CDM Projects.

**Mr El Hadji Mbaye Diagne (Technical expert)**

Engineer in mechanical engineering, associated senior consultant and UNFCCC negotiator as member of the COMNACC (Senegalese National Board on Climate Change). He has a deep knowledge in Clean Development Mechanism and in energy science. He is also the Chair of the Environment team of SPIDS (Association of Senegalese industry and mine companies). He has a background in mechanical and energy engineering and environment science. He has conducted many projects in energy efficiency, renewable energy and has completed CDM projects in these fields in Senegal.

APPENDIX A: PROGRAMME OF ACTIVITIES VALIDATION PROTOCOL (VERSION 1.0)

TABLE 1 GENERAL REQUIREMENT PROTOCOL FOR POA

Validation requirements based on VVS version 02.0 (EB 65 Annex 4), PS version 01.0 (EB 65 Annex 5), PCP version 02.0 (EB 66 Annex 64), PoA Standard version 01.0 (EB 65 Annex 3) and Guidelines for completing the SSC-PoA-DD form version 02.0 (EB 67 Annex 30)

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Part I Programme of activities (PoA)					
A General description of PoA					
A.1 Title of the PoA					
A.1.1 Is the title of the proposed PoA provided?	DD PS	31	Yes: PoA for fuel switching at micro and small-sized enterprises in Egypt	OK	OK
A.1.2 Is the current version number of the SSC-PoA-DD indicated?	DD		yes	OK	OK
A.1.3 Is the completion date of the SSC-PoA-DD provided in DD/MM/YYYY format?	DD		yes	OK	OK
A.2 Purpose and general description of the PoA					
A.2.1 Is policy/measure or stated goal that the PoA seeks to promote described?	DD PS	139	CL01: please define what CDM-APU/EEAA is. CL02: please provide the evidence translated in English of the newspaper	CL01 CL02	OK OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>references N°9, 10, 11 and 12 (all proof need to be translated in English as the official language)</p> <p>CL03: please provide the law (141/2004) and Law 4/1994 and make reference to it in the PDD</p> <p>CL04: please describe the meaning of the table 2.</p> <p>CAR01: The paragraph titled social benefits in section A2 the PoA-DD is limited to health issues- Please correct .</p>	<p>CL03</p> <p>CL04</p> <p>CAR01</p>	<p>OK</p> <p>Ok</p> <p>OK</p>
A.2.2 Is a framework developed for the implementation of the proposed PoA and inclusion of CPAs under the PoA?	DD PS	138	<p>Yes</p> <p>CAR02: Last sentence of last para of the framework. Correct "the employed methodology" to reflect the used methodologies (page 9).</p> <p>CL05: Referring to the <u>Framework for the implementation of the proposed PoA</u>, provide background information on CDM activities in Egypt developed/registered under the same category and</p>	<p>CAR02</p> <p>CL05</p>	<p>OK</p> <p>OK</p>

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>technology/measure of the current PoA</p> <p>CAR03: specify correctly the average daily diesel consumption of the bakeries</p> <p>CAR04: Referring to the paragraph : <i>The proposed PoA is small scale. CPAs to be included under this PoA will apply one of two independent small scale methodologies, namely AMS-III.B and AMS-III.Z</i>, correct the statement to reflect the independent use of the two methodologies (not the use of the independent two methodologies)</p>	CAR03 CAR04	OK OK
A.2.3 Is it confirmed that the proposed PoA is a voluntary action by the coordinating/managing entity?	DD PS	140	yes	OK	OK
A.2.4 Is it explained how the PoA will reduce GHG emissions or increase GHG removals?	PS	31	Yes. See para of Contributions of the PoA to sustainable development	OK	OK
A.2.5 Are sectoral scope(s) and type of the PoA indicated?	PS	31	<p>No sectoral scope</p> <p>CAR05: Indicate sectoral scope and type of PoA</p>	CAR05	OK
A.2.6 Is the contribution of PoA to sustainable	DD PS	31	Yes	CL06	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
development explained?			CL06: Specify the Contribution of the PoA CERs revenues to the EPF		
A.3 CMEs and participants of PoA					
A.3.1 Is CME of the PoA identified, as the entity which communicates with the Board?	DD PS	141	yes	OK	OK
A.3.2 Are project participants to the PoA indicated?	DD PS	141	CL07: Specify the Boundary of a typical CPA provided the defined possible locations of its facilities CL08: Clarify the fuel type condition that apply to facilities under the same CPA	CL07 CL08	OK OK
A.4 Party(ies)					
A.4.1 Are Party(ies) and CMEs involved in the proposed PoA listed in the table?	DD PS	141	yes	OK	OK
A.4.2 Is contact information on entity/individual responsible for the PoA provided in Appendix 1?	DD		yes	OK	OK
A.5 Physical/Geographical boundary of the PoA					
A.5.1 Are details of the defined boundary of the PoA provided, in terms of a geographical area(e.g., municipality, region within a country, country or several countries) within which all CPAs included in the PoA will be implemented?	DD PS	142	Yes: The PoA and all CPAs to be included in the PoA will be located in Egypt. The geographical boundaries of the PoA are the international borders of the Arab Republic of Egypt (North 31.670878, South 21.725059, East 24.695463, and West 36.8967).	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
A.5.2 In establishing the boundary, if the project participants have taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary?	VVS PS	192 142	Yes. It has been checked during the site visit with the DNA and the Environment Department that the project participants have taken into consideration all applicable national and sectoral policies and regulations related to fuel swithing activities	OK	OK
A.6 Technologies/measures					
A.6.1 Are the technologies and/or measures to be employed and/or implemented by the CPAs in the PoA described, to enable the identification of the project's scale and type, demonstration of additionality, application of the selected methodology and calculations of GHG emission reductions or net GHG removals?	DD PS	147	Technologies and measures to be used by the CPAs in the PoA described in this section of the PoA-DD enable the identification of the project's scale and type, demonstration of additionality, application of the selected methodology and calculations of GHG emission reductions or net GHG removals	OK	OK
A.6.2 For the description, where relevant, are applicable provisions for application of selected baseline and monitoring methodology for small-scale project activities in the Project standard considered?	DD		CAR06: in section A.6, applicable provisions for application of selected baseline and monitoring methodology for small-scale project activities in the Project standard are not considered	CAR06	OK
A.6.3 Are the technologies to be employed by the CPAs in the PoA described including a description of how environmentally safe and sound technology(ies) applied in the CPAs and know-how to be used are transferred to the host Party(ies)?	PS	31	CL09: Describe how environmentally safe and sound technology(ies) applied in the CPAs and know-how to be used are transferred to the host Party(ies)?	CL09 CL10	OK OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			CL10: Provide source and evidence of the national values of the EF provided for HFO, LFO and NG. CL11: clarify the meaning of Project in the Project Boundary presented in the diagram and explain how the drawn boundary in the figure is related to a CPA boundary	CL11	OK
A.7 Public funding of PoA					
A.7.1 Is it indicated whether the PoA receives public funding from Parties included in Annex I?	DD		YES – no public funding	OK	OK
A.7.2 In case where public funding from Annex I Parties is involved, are followings provided? (a) Information on Parties providing public funding (b) Attached in Appendix 2: the affirmation obtained from such Parties that such funding does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those Parties	DD PS	34	NOT APPLICABLE	NA	OK
B Demonstration of additionality and development					

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
of eligibility criteria					
B.1 Demonstration of additionality for PoA					
B.1.1 Is it described that how in the absence of CDM, none of the implemented CPAs would occur?	DD PoA- Stand	7	<p>CL12: The PoA-DD states that access to financing is an important barrier for the CPAs implementation. The 2004 provided reference is outdated. Provide a recent reference to substantiate this statement (footnote 27)</p> <p>CL13: Provide more information and evidence on <i>the large capital investment</i> required for a typical CPA</p> <p>CAR07: Update figure 12 according the latest version of the Guidelines for demonstrating additionality of microscale project activities (EB 68, repa 26, figure 2, page 7).</p> <p>CAR08: Update the additionality tool reference according the latest version of the Guidelines for demonstrating additionality of small scale project activities (EB 68, repa 27).</p>	<p>CL12</p> <p>CL13</p> <p>CAR07</p> <p>CAR08</p>	<p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p>

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			CAR09: The sentence that refers to the African Economic Outlook for Egypt, AfDB/OECO, 2008 (footnote N°38) should be correct to better reflect the statement in the source	CAR09	OK
B.2 Eligibility criteria for inclusion of a CPA in the PoA					
B.2.1 Do the eligibility criteria cover the geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA?	PoA- Stand	14(a)	CL14: Please refer correctly to the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Programme of Activities throughout the POA-DD (eg. Section B.2)	CL14	OK
B.2.2 Do the eligibility criteria cover conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo)?	PoA- Stand	14(b)	CAR10: Include in the eligibility criteria unique identification of facilities locations to avoid double counting of emissions reductions	CAR10	OK
B.2.3 Do the eligibility criteria cover the specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications?	PoA- Stand	14(c)	CAR11 : Add eligibility criteria covering the specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	CAR11	OK
B.2.4 Do the eligibility criteria cover conditions to check the start date of the CPA through documentary evidence?	PoA- Stand	14(d)	YES –The eligibility criteria are described in table 3 of the PDD. The eligibility criteria #6 cover conditions to check the start date of	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.2.5 Do the eligibility criteria cover conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs?	PoA- Stand	14(e)	the CPA through documentary evidence YES – The eligibility criteria are described in table 3 of the PDD. The eligibility criteria #7 and 13 cover conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs	OK	OK
B.2.6 Do the eligibility criteria cover the conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified below:	PoA- Stand	14(f)	YES – The eligibility criteria are described in table 3 of the PDD. The eligibility criteria #7 and 12 cover the conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified below		
B.2.6.1 PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of attachment A of Appendix B of the “Simplified modalities and procedures for small-scale CDM project activities”.	PoA- Stand	9	Please refer to Table-2 below See CAR14 CAR12: Eligibility criteria Part I B2 -Table 3 # 7 : please correct to ensure that the CPA implementer should not only complete the generic table but check that the CPA meets all the eligibility criteria of the applied methodology. As verification method: please correct to ensure that the CPA type 1 should meet all the applicability criteria of	CAR12	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			methodology AMS III B (see Section B2 Table 6) and CPA Type 2 applicability criteria of methodology AMS III Z as stated in paragraph B2-Table 7		
B.2.6.2 The CME shall demonstrate that compliance with the additionality-related eligibility criteria set in the PoA design document will ensure that all the relevant additionality-related guidelines, tools or any requirements embedded in the methodologies are met.	PoA- Stand	11	<p><i>Refer to Table-2, provide assessment opinion on eligibility criteria pertaining to additionality</i></p> <p>CAR13: the eligibility criteria #13.1 does not clearly specify the threshold of micro-scale activity. Also, the eligibility criteria #13.2 is referring to section A.5.2 of the POA.DD for the demonstration of additionality. This is not the correct reference.</p>	CAR13	OK
B.2.6.3 For PoAs involving combinations of technologies /measures and/or methodologies, the eligibility criteria relative to each of them shall be proposed to demonstrate additionality.	PoA- Stand	12	<p>Types of combinations as indicated in paragraph 29(a) to 29(d) of PoA Standard have been taken into account.</p> <p><i>Refer to Table-2,</i></p>		
B.2.7 Do the eligibility criteria cover the PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental	Eb65 Ann3	14(g)	YES - The eligibility criteria are described in table 3 of the PDD. The eligibility criteria #8 and 9 cover the PoA-specific requirements	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
impact analysis?			stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis		
B.2.8 Do the eligibility criteria cover conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance?	PoA- Stand	14(h)	YES - The eligibility criteria are described in table 3 of the PDD. The eligibility criteria #10 covers conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance CL15: Please specify explicitly the ODA in the Table 3 criteria #10	CL15	OK
B.2.9 Do the eligibility criteria cover, where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation)?	PoA- Stand	14(i)	Not applicable for fuel switch (NA)	NA	NA
B.2.10 Do the eligibility criteria cover, where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys?	PoA- Stand	14(j)	NA	NA	NA
B.2.11 Do the eligibility criteria cover, where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale threshold criteria and remains within those thresholds throughout	PoA- Stand	14(k)	YES - The eligibility criteria are described in table 3 of the PDD. The eligibility criteria #4 covers the conditions that ensure that every CPA in aggregate meets the small-scale	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
the crediting period of the CPA?			threshold criteria and remains within those thresholds throughout the crediting period of the CPA		
B.2.12 Do the eligibility criteria cover, where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) project categories?	PoA- Stand	14(l)	<p>CAR15: the mircorscale threshold (200 tCO2e/year) and small-scale threshold (600 tCO2e/year) specified in table 4 are not the correct ones. (Please indicate clearly the small-scale threshold and the element process threshold to avoid any confusion.)</p> <p>CL16: Explain in the context that CME could be CPAs implementer, how the debundling check criteria of Table 4, option 3, criteria 1 could be applied</p> <p>CL17: Explain the meaning given to the CPA Boundary with the context of the application of the debundling check criteria of Table 4, option 3 criteria 3. Check the coherence of the CPA boundary as applied in Table 4 with the conditions applied to the CPA localizations provided in section A.6 of the PoA-DD (See also CL07)</p>	<p>CAR15</p> <p>CL16</p> <p>CL17</p>	<p>OK</p> <p>OK</p> <p>Ok</p>
B.2.13 Are the eligibility criteria verifiable?	PoA- Stand		CL18: For the verification of eligibility criteria number 5, provide clarifications on what kind of evidence will be used during	CL18	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>the facility site visit to verify a consistent past use of either one of the eligible fuels : HFO or Diesel.</p> <p>CL19: for each criteria of table 3, provide clarifications on how the criteria will be verified at the facility level</p> <p>CL20: Clarify the specific meaning given to the <i>element process</i> of the micro scale threshold when applied to the PoA CPAs.</p> <p>CAR16 : For all criteria verification in Table 3, clarify inconsistencies between the CPA implementer (referred to in singular and plural) with the owners of the facilities that compose the CPA. Make coherent and consistent corrections throughout the PoA-DD document</p>	<p>CL19</p> <p>CL20</p> <p>CAR16</p>	<p>OK</p> <p>OK</p> <p>OK</p>
B.2.14 Are the eligibility criteria sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA?	PoA- Stand	16	Please refer to the above CARs and CLs related to eligibility criteria		
B.2.15 For PoAs that include combinations of technologies /measures and/or methodologies, are distinct eligibility criteria developed separately for each of the combinations?	PoA- Stand	20&27	All the eligibility criteria of the applicable methodologies are not specified. See CAR14.	See CAR14	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.2.16 If a CPA uses technologies/measures from several methodologies, are the eligibility criteria derived from the requirements of all the methodologies?	PoA- Stand	27	N.A	NA	NA
B.3 Application of methodologies					
B.3.1 Are the technology/measures described and is the methodology chosen indicated?	DD		Yes	OK	OK
B.3.2 In cases where multiple technologies/measures or multiple methodologies are being applied, are all the combinations of technologies/measures and methodologies that will be used in the PoA listed?	DD PoA- Stand Part I Section B.3	26	<p>CAR17: concerning the application of the two methodologies, please correct reference to the use of the combination of the two methodologies. Corrections should be made over all the documents sections.</p> <p>Part I-Section B3-Page 25 of the PDD. CL21: In the statement : <i>AMS-III.B will be applied for bakeries, smelters, and other facilities whose ERs per element process would not exceed 600 tCO₂ annually</i>, specify if other facilities refer also to brick facilities</p> <p>CL22: Specify if Type 1CPA will all be limited to the micro scale threshold of a total ER of 20kt CO₂/year</p>	<p>CAR17</p> <p>CL21</p> <p>CL22</p>	<p>OK</p> <p>OK</p> <p>OK</p>
B.3.3 If applicable, is a description of the sampling plan provided and is it demonstrated how it meets	DD		CL23: please clarify if the CME wishes to have all CPAs verified or not. If the CME	CL23	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
applicable provisions in the “Standard for sampling and surveys for CDM project activities and programme of activities”?			does not wish to have all CPAs verified, the POa-DD should include a description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the amount of reductions of anthropogenic emissions by sources or removals by sinks of greenhouse gases achieved by CPAs under the PoA (EB55 Annex 38)		
B.3.4 Has CME defined, where applicable, sampling plans for each of the combinations separately in accordance with the guidelines in section III. B of PoA Standard as well as any approved guidelines/standard from the Board pertaining to sampling and surveys?	PoA- Stand	27	See CL23 above	CL23	OK
B.3.5 Where combinations of technologies/measures and/or methodologies are applied for a PoA, is it demonstrated that there are no cross effects between the technologies/measures applied?	PoA- Stand	28	AMS-III.B will be applied for bakeries, smelters, and other facilities whose ERs per element process would not exceed 600 tCO ₂ annually, while AMS-III.Z will be applied for brick kilns only	OK	OK
B.3.6 Where such cross effects do exist, has the CME proposed methods to account for such cross effects using the “Procedures for requests to the	PoA- Stand	28	NA	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
executive board for deviation from an approved methodology” so as to ensure that the calculation of emission reductions is accurate?					
B.3.7 Does the proposed PoA belong to the following eligible situations for applying combinations of technologies/measures and/or methodologies?	PoA- Stand	29			
B.3.7.1 The same combination of technologies/measures under the same combination of methodologies applied consistently in each and every CPA of a PoA	PoA- Stand	29 (a)	NA two methodologies for two different types of facilities	NA	NA
B.3.7.2 A single methodology is consistently applied in each CPA of a PoA but using multiple technologies/measures	PoA- Stand	29 (b)	NA	NA	NA
B.3.7.3 A principle technology/measure is applied consistently in each CPA using multiple combinations of methodologies	PoA- Stand	29 (c)	NA	NA	NA
B.3.7.4 Combinations of technologies/measures and methodologies vary across CPAs of a PoA.	PoA- Stand	29 (d)	Two types of CPAs using each one specific methodology	OK	OK
B.3.7.5 In case of (B.3.7.4) above, has the CME demonstrated that the implementation of the activities is integrated through the design of the programme?	PoA- Stand	29 (d)	CAR18: Referring to EB69 report-§93b page 18, <i>the Board agreed that one actual case CPA-DD for every technology/measure included in the PoA design document (PoA-DD) is required at</i>	CAR18	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<i>the time of registration of the PoA-DD; similar requirements would apply when combinations of methodologies are applied in component project activities (CPAs).</i> Submit CPA-DDs that cover the full scope of the PoA-DD in conformity with this EB decision.		
B.3.7.6 In case of (B.3.7.4) above, is it confirmed that the intended sectoral scopes and the combinations of methodologies intended for implementation are known ex ante, and no revisions of PoA documentation are foreseen for the duration of one crediting period, i.e. seven or 10 years of PoA implementation?	PoA- Stand	29 (d)	Yes	OK	OK
B.3.8 Has the CME optionally used the "Procedure for the submission and consideration of request for clarification on the application of approved small scale methodologies" (EB 34, annex 6) to seek clarifications on cross effects in the proposed combinations?	PoA- Stand	30	No cross effect possible	OK	OK
B.3.9 Is the compliance with the SSC threshold of a CPA met by following the "General Guidelines to SSC CDM methodologies"?	PoA- Stand	31	Yes	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
C Management system					
C.1.1 Is a clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies provided?	PoA- Stand	17(a)	CL24: In the context of CME being a CPA implementer, clarify how its responsibilities as implementer are to be formalized and to be met	CL24	OK
			CL25: Clarify in the PoA-DD (section C page 28) the meaning of CPAs owners	CL25	OK
			CL26: Referring to Section C page 28, specify the responsibilities of the CPA implementers that will be <i>captured in the authorization</i> .	CL26	OK
			CL27: referring to the supervision of the monitoring plan by the CPA implementer, clarify if the monitoring plan envisioned is to cover each individual facility of the CPA	CL27	OK
			CL28: Referring to Section C Management System of the PoA-DD document, specify the responsibilities of the CPA implementer/developer and how the CME will ensure that he has the management and the technical capacities to meet these responsibilities	CL28	OK
				CAR19	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			CAR19: Correct the title of figure 14 to reflect the content of the provided diagram	CAR20	OK
			CAR20: Review the communication role of CPA developers in conformity with the definition and role of a CME as stated in the Glossary of CDM terms (eb66, repan63, page 8)	CAR21	OK
			CAR21: The proposed role and responsibilities of the CME in figure 15 should be completed to reflect better its responsibilities. .	CL29	OK
			CL29: Clarify if the CDM expert is also an environment expert and make appropriate change to ensure the consistency in the CDM management system description	CL30	
			CL30: Referring to Assignment of carbon rights responsibility of the CPA developer, specify whether this responsibility is limited the owners share or it concerns all the CPA carbon credits	CAR22	OK
			CAR22: Correction should be made to figure 16 to ensure the visibility of all the figure texts		

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
C.1.2 Are records of arrangements for training and capacity development for personnel provided?	PoA- Stand	17(b)	YES		
C.1.3 Are procedures for technical review of inclusion of CPAs described?	PoA- Stand	17(c)	<p>CL31: Referring to section C §d of the PoA-DD, page 29, define the <i>Geographic coordinates of the CPA</i></p> <p>CL32: In the PoA DD it is stated that <i>The Technical Expert and CDM Expert of the CME must have an onsite due diligence visit to the CPA location, where they would confirm the type of activity and product, as well as assess the exact fuel switching activity implementation requirements. (Part I, Section C §C page 29)</i> Define the CPA location within the context of its composed facilities</p>	<p>CL31</p> <p>CL32</p>	<p>OK</p> <p>OK</p>
C.1.4 Is a procedure to avoid double counting described?	PoA- Stand	17(d)	<p>CL33: Clarify how the proposed recording system allow for precise identification and codification for each facility of the CPA/PoA</p> <p>CL34: Clarify how the proposed codification system accounts for possible various facilities' activities within Type 1 CPA</p>	<p>CL33</p> <p>CL34</p>	<p>OK</p> <p>OK</p>
C.1.5 Are records and documentation control process for each CPA under the PoA described?	PoA- Stand	17(e)	YES	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
C.1.6 Are measures for continuous improvements of the PoA management system described?	PoA- Stand	17(f)	YES	OK	OK
C.1.7 Is there any other relevant elements indicated?	PoA- Stand	17(g)	No other relevant elements is indicated	OK	OK
D Duration of PoA					
D.1 Start date of PoA					
D.1.1 Is there a description of how the start date was determined?	DD		CL35: Clarify how start date was determined	CL35	OK
D.2 Length of the PoA					
D.2.1 Is the length of the PoA stated with a maximum total length of 28 years?	DD VVS	197	YES	OK	OK
E Environmental impacts					
E.1 Level at which environmental analysis is undertaken					
E.1.1 Is it indicated whether the environmental analysis is performed at the PoA and/or the CPA level?	DD VVS PS	199 165	YES – CPA level	OK	OK
E.1.2 Is the choice of level at which the environmental analysis is undertaken justified?	DD		CL36: please explain what the different category A, B, or C are related to and give reference in the POA-DD in section E.1. CL37: Justify that M/MSE require form (A) for the EIA and explain what is the level of	CL36 CL37	OK OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			analysis required for this category(PoA-DD, Part I – Section E page 31)		
E.2 Analysis of the environmental impacts					
E.2.1 Is a summary of the analysis of the environmental impacts and references to all related documentation in accordance with applicable provisions related to environmental impacts for PoAs in the Project Standard provided?	DD		NO – Undertaken at CPA level	OK	OK
F Local stakeholder comments					
F.1 Solicitation of comments from local stakeholders	VVS	201			
F.1.1 Is it indicated whether the local stakeholder consultation process is performed at the PoA and/or the CPA level?	DD PS	166	YES – CPA level	OK	OK
F.1.2 Is the choice of level at which the local stakeholder consultation is undertaken justified?	DD		YES – It is <i>due to the several potential variations in the CPAs under the PoA (activity type, location, etc),</i>	OK	OK
F.1.3 Is there a description of the process by which comments from local stakeholders were invited and compiled?	DD		NA	NA	NA
F.2 Summary of comments received	VVS	201			
F.2.1 Are stakeholders that have made comments identified?	DD		NA	NA	NA



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
F.2.2 Is a summary of these comments provided?	DD		NA	NA	NA
F.3 Report on consideration of comments received	VVS	201			
F.3.1 Is information demonstrating that all comments received have been considered provided	DD		NA	NA	NA
G G. Approval and authorization					
G.1 General					
G.1.1 Is it indicated whether the letter(s) of approval from Party(ies) which wishes to be involved in the PoA, is available at the time of submitting the SSC-PoA-DD to the validating DOE?	DD		<p>CAR23: Update the status of the LoA availability in Table 7 of the PoA-DD document</p> <p>CL38: Specify in the POA-DD section G the issuing entity and the status of the LOA.</p> <p>CL39: Clarify how the letter of no objection is required as authorization for the PoA registration (table 7 of the PoA-DD) in the context that it expires on 6/11/2012. Please correct the issuing entity as specified in the letter .</p> <p>CL40: Specify if the LoA authorizes the CDM-APU/EEAA to act as CME for the PoA in conformity with the guidelines for completing SS PoA-DD documents</p>	<p>CAR23</p> <p>CL38</p> <p>CL39</p> <p>CL40</p>	<p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p>

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CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
G.2 Approval			COUNTRY A (Arab Republic of Egypt)	COUNTRY B (Not applicable)		
G.2.1 Has the coordinating/managing entity obtained a letter of approval from the DNA of each Party involved in the proposed PoA confirming that: (a) The Party is a Party of the Kyoto Protocol (b) Participation in the proposed PoA is voluntary (c) In case of the host Party, the proposed PoA assists the host Party in achieving sustainable development	VVS PS	39&51 169&170	The LoA has been provided from the Ministry of state for Environment Affairs and is dated June 2012 (code: LoA EC-CDMO017 / 4).It confirms that: that: (a) The Party is a Party of the Kyoto Protocol (b) Participation in the proposed PoA is voluntary (c) In case of the host Party, the proposed PoA assists the host Party in achieving sustainable development	Not Applicable	NA	NA



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
G.2.2 Is(are) the letter(s) of approval unconditional with respect to (G.2.1) above?	VVS	40	Yes	NA	NA	NA
G.2.3 Has(ve) the letter(s) of approval been issued by the respective Party's DNA? If there is doubt with respect to (G.2.1) above, was it verified with the DNA that the letter of approval is valid for the proposed PoA under validation?	VVS	41,42	CL41: please provide the communication evidence between the CME and the DNA for getting the letter of approval.		CL41	OK
G.3 Authorization						
G.3.1 Has each project participant been authorized by at least one Party involved in a letter of approval?	VVS PS	45 172	Yes		OK	OK
G.3.2 Is the information in tabular form in the SSC-PoA-DD consistent with the contact information for project participants provided?	VVS	46	Yes		OK	OK
G.3.3 Are any entities other than those approved as project participants included in the SSC-PoA-DD?	VVS	47	No other entities is a project participant.		OK	OK
G.3.4 Has the approval of participation issued from the relevant DNA? And if in doubt, was it verified with the DNA that the approval of participation is valid for the proposed CDM project participants?	VVS	48	See CL41		CL41	OK
G.3.5 Has the coordinating/managing entity obtained letters of authorization of its coordination of the PoA from each host Party?	PS	171	Yes		OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
G.3.6 Is CDM project participation recorded only at the PoA level while the operators of individual CPAs are not required to be project participants?	PS	173	Yes	OK	OK
Part II. Generic component project activity (CPA) Type (1) Generic CPA: CPAs applying AMS-III.B methodology			<i>Repeat all of Part II for each of the combination of technologies/measures and/or methodologies.</i>		
A General description of a generic CPA					
A.1 Purpose and general description of generic CPAs					
A.1.1 Is a description of each generic CPA within the PoA provided?	DD		CL42: In part II, section A.1, please provide evidence that LFO is known locally as solar/gaz. CL43: in part II, please correct the "CPA entity" wording as in Part I of the POA-DD.	CL42 CL43	OK OK
B Application of a baseline and monitoring methodology					
B.1 Reference of the approved baseline and monitoring methodology(ies) selected					
B.1.1 Is exact reference (number, title, version) of the selected methodology or multiple methodologies indicated?	DD VVS PS	74 37	Yes	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.1.2 Are there any tools and other methodologies to which the selected methodology refers?	DD VVS PS	74 37	<p>YES</p> <p>.Tool to determine baseline efficiency of thermal and electricity systems</p> <p>Tool to calculate project or leakage CO2 emissions from fossil fuel combustion (V-02)</p> <p>- Tool to calculate baseline, project and/or leakage emissions from electricity consumption</p> <p>Not applicable – since the PoA does not involve biomass project activities (no emissions would occur due to electricity consumption associated with the biomass treatment and processing).</p> <p>- Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities</p> <p>Not applicable – since</p>	OK	OK
B.1.3 Is it confirmed that the selected methodology(ies) is(are) approved for application to CPAs under PoAs by the Board?	DD		CL44 : Specify whether the selected methodologies are approved for application to CPAs under PoAs by the Board	CL44	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.2 Application of methodology(ies)					
B.2.1 Is the choice of the selected methodology(ies) justified by showing that each generic CPA meets each applicability condition of the methodology(ies)?	DD VVS PS	76 38	CAR25: in Table 6 (Applicability study of Type 1 CPAs for using AMS-III.B methodology under this PoA), for each criteria correct to refer, as appropriate, to "CPA, CPAs or each facility of the CPA" instead of CPA or CPAs. Please refer to Table 2: see CL45 to CL47	CAR25	OK
B.2.2 If applicable, is a general description of the sampling plan provided?	DD		NA	NA	NA
B.2.3 Is it demonstrated that the CPA qualifies as Type I, II, and/or III during every year of the crediting period in accordance with applicable provisions for project activity eligibility in the Project standard?	DD PS	81-84	Yes The CPA is a Type III: (Other project activities not included in Type 1 or Type 2 that result in GHG emission reductions not exceeding 60 ktCO ₂ e per year in any year of the crediting period).	OK	OK
B.2.4 Is documentation that has been used as a basis of justification explained or include in Appendix 3? Are references provided?	DD		Yes	Ok	OK
B.3 Sources and GHGs					
B.3.1 Are the sources and GHGs included in each	DD		YES	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
generic CPA boundary described?	VVS PS	82 39			
B.3.2 In cases where the selected methodology(ies) allows project participants to choose whether a source or gas is to be included in the CPA boundary, is the choice explained and justified?	VVS PS	84 40	NA	NA	NA
B.3.3 Where possible, is a flow diagram physically delineating each generic CPA presented?	DD		CAR26: Insert flow diagram physically delineating each generic CPA presented	CAR26	OK
B.3.4 Are all the equipment, systems and flows of mass and energy included in the flow diagram?	DD		See above	OK	OK
B.3.5 Are emissions sources and GHGs which included in the project boundary and the data and parameters to be monitored indicated in the diagram?	DD		See above	OK	OK
B.4 Description of baseline scenario					
B.4.1 Is it described how the baseline scenario is identified for each generic CPA?	DD		YES	NA	NA
B.4.2 Is it explained how the baseline scenario is established in accordance with the selected methodology(ies) and applicable provisions for establishment and description of baseline scenarios in the Project standard?	DD VVS PS	88 41	Refer to Table-2 YES	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.4.3 Do the project participants follow the “Guidelines on the consideration of suppressed demand in CDM methodologies” when establishing the baseline scenario, where future anthropogenic emissions by sources are projected to rise above current levels due to the specific circumstances of the host Party?	PS	42	<i>Refer to Table-2</i> NA	NA	NA
B.4.4 Do the project participants take into account national and/or sectoral policies including E+/E- policies when establishing the baseline scenario?	VVS PS	93 43-45	CL48: Clarify how the national and/or sectoral policies including E+/E- policies might affect the CPAs baseline scenarios	CL48	OK
B.4.5 Where the procedure in the selected methodology (ies) involves several steps, is it described how each step is applied and is the outcome of each step transparently documented?	DD		NA	NA	NA
B.4.6 Are key assumptions and rationales explained and justified?	DD		Yes	OK	OK
B.4.7 Are all data used to establish the baseline scenario (variables, parameters, data sources, etc.) provided and explained?	DD		Provided in section B6	OK	OK
B.4.8 Are all relevant documentation and/or references provided?	DD		YES – references are the methodologies	OK	OK
B.4.9 Is a transparent description of the baseline scenario provided?	DD VVS PS	92 46	<i>A summary of the transparent baseline scenario is provided. The full description of the technology of the baseline scenario is to be provided in section A.6 of Part I.</i>	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.5 Demonstration of eligibility for a generic CPA					
B.5.1 Is it demonstrated how each generic CPA meets the eligibility criteria of the PoA including confirmation of additionality of the generic CPA for its inclusion into the PoA?	DD		<p>See all CL and CAR related to eligibility criteria and their verification CL49: Table 9- Section IIB5- Clarify if Criteria 8 and 10 are limited to bakeries.</p> <p>CL50: please clarify how it is estimated that the the ERs of the CPA implementers burning fuel oil to generate heat for their operation using AMS.III.B fall below 600 tCO₂e per element process. (Also please write correctly CO₂e)</p>	CL49 CL50	OK
B.6 Estimation of emission reductions of a generic CPA					
B.6.1 Explanation of methodological choices					
B.6.1.1 Is it explained how the methods or methodological steps, in the selected methodology, for calculating baseline emissions, project emissions, leakage emissions and emission reductions are applied to each generic CPA?	DD VVS PS	97 51	<p><i>Refer to Table-2</i></p> <p>CL51: Please refer to the latest version of ACM0009 methodology.</p> <p>CL52: Referring to <i>project emissions</i> used in section B.6, define the project concept used in the context of Type 1 and Type 2 CPAs</p>	CL51 CL52 CAR27	OK OK OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			CAR27: revise definition/description of parameters to be consistent with description in methodology.		
B.6.1.2 Is it clearly stated which equations will be used in calculating emission reductions?	DD VVS PS	97 50-51	YES	OK	OK
B.6.2 Data and parameters that are to be reported ex-ante					
B.6.2.1 Is a compilation of information on the data and parameters that are not monitored during the crediting period but are determined before the validation and remain fixed throughout the crediting period included?	DD VVS PS	98 52	<p>CAR28: The EF national values provided for HFO and Natural gas fuel, in the parameters tables of section 6.2 should be consistent with the calculated values in the provided ER calculations spreadsheet</p> <p>CAR29: The EF national values provided for HFO, LFO and Natural gas fuel, in the parameters tables of section 6.2, could not be readily found in the cited source.</p> <p>CAR30: The EF factors national values provided for upstream fugitive methane emissions could not be readily found in the cited sources.</p>	<p>CAR28</p> <p>CAR29</p> <p>CAR30</p> <p>CAR31</p>	<p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p>



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>CAR31: International standard abbreviations should be used for the density of the natural gas</p> <p>Please refer to: CL42: In part II, section A.1, please provide evidence that LFO is known locally as solar/gaz and that Mazout is HFO. CL10: Provide source and evidence of the national values of the EF provided for HFO, LFO and NG. CL53: please indicate the temperature and pressure at which the natural density is provided CL54: please provide the EF calculation for upstream fugitive methane emissions.</p>	<p>CL42</p> <p>CL10</p> <p>CL53</p> <p>CL54</p>	<p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p>
B.6.2.2 Is it ensured that data that become available only after the registration/inclusion of the CPAs in the PoA (e.g. measurements after the implementation of the CPAs in the PoA) should not be included here but in the table in section B.7?	DD		YES		
B.6.2.3 The compilation of information may include data that are measured or sampled, and data	DD		YES	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature, etc.), is the compilation in compliance with this?					
B.6.2.4 Data that are calculated with equations provided in the selected methodology(ies) or default values specified in the methodology(ies) should not be included in the compilation, is the compilation in compliance with this?	DD		YES	OK	OK
B.6.2.5 For each piece of data or parameter, is the table in SSC-PoA-DD completed, following these instructions below:					
B.6.2.5.1 "Value(s) applied": Provide the value applied. Where a time series of data is used, where several measurements are undertaken or where surveys have been conducted, provide detailed information in Appendix 4. To report multiple values referring to the same data or parameter, use one table. If necessary, reference(s) to electronic spreadsheets may be used	DD		YES	OK	OK
B.6.2.5.2 "Choice of data": Indicate and justify the choice of data source. Provide clear and valid references and, where applicable,	DD		CL55: Referring to the parameter FC _{BL} table (Average annual baseline fossil fuel consumption value); clarify if the data	CL55	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
additional documentation in Appendix 4			source is to be determined at the CPA level or the facility level CAR32: Referring to the parameter FC _{BL} table (Average annual baseline fossil fuel consumption value); correct to use a table per CPA type .	CAR32	OK
B.6.2.5.3 "Measurement methods and procedures": Where values are based on measurement, include a description of the measurement methods and procedures applied (e.g. which standards have been used), indicate the responsible person/entity that undertook the measurement, the date of the measurement and the measurement results. More detailed information can be provided in Appendix 4	DD		YES	OK	OK
B.6.2.5.4 "Purpose of data": Choose one of the following: (i) Calculation of baseline emissions; (ii) Calculation of project emissions; (iii) Calculation of leakage	DD		YES	OK	OK
B.6.3 Ex-ante calculations of emission reductions					
B.6.3.1 Is a transparent ex ante calculation of project emissions, baseline emissions(or, where	DD		CL56: in conformity with the Guidelines for completing PoA-DD for small-scale CDM	CL56	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the selected methodology provided?			programmes of activities, provide for each type of CPA, a transparent ex ante calculation of project emissions, baseline emissions(or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the selected methodology.		
B.6.3.2 For data or parameters available before validation, are values contained in the table in section B.6.2 of SSC-PoA-DD used?	DD		Yes	OK	OK
B.6.3.3 For data/parameters not available before validation and monitored during the crediting period, are estimates for parameters contained in the table in section B.7.1 of SSC-PoA-DD used?	DD		At the CPA level	OK	OK
B.6.3.4 If any of these estimates has been determined by a sampling approach, is a description of the sampling efforts provided in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities"?	DD		N.A	NA	NA
B.6.3.5 Is it documented how each equation is applied, in a manner that enables the reader	DD		Yes	OK	OK



 VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
to reproduce the calculation?					
B.6.3.6 Where relevant, are additional background information and/or data in Appendix 4, including relevant electronic spreadsheets provided?	DD	6-3	CAR33: In conformity with the guidelines for completing SS PoA-DD, provide sample ER calculations for both types of CPA targeted by the PoA- relevant additional information should be provided in appendix 4.	CAR33 See CL56	OK
B.6.3.7 Is a sample calculation for each equation used provided, substituting the values used in the equations?	DD		See CAR 40	OK	OK
B.7 Application of the monitoring methodology and description of the monitoring plan					
B.7.1 Data and parameters to be monitored by each generic CPA					
B.7.1.1 Is specific information on how the data and parameters that need to be monitored would actually be collected during monitoring included?	DD		Yes	Ok	Ok
B.7.1.2 In case of data that are determined only once for the crediting period but that will become available only after registration/inclusion of the CPAs in the PoA, are they included here?	DD		Yes	OK	OK
B.7.1.3 For each piece of data or parameter, is the table in SSC-PoA-DD completed, following these instructions below:	DD				

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.7.1.3.1 "Source of data": Indicate the source(s) of data that will be used for the CPAs in the PoA (e.g. which exact national statistics). Where several sources may be used, justify which data sources should be preferred	DD		YES	OK	OK
B.7.1.3.2 "Value(s) applied": The value applied is an estimate of the data/parameter that will be monitored during the crediting period, but is used for the purpose of calculating estimated emission reductions. To report multiple values referring to the same data or parameter, use one table. If necessary, reference(s) to electronic spreadsheets may be used	DD		CL57: For all the monitored data/parameters specify if the monitored parameters will be determined at the facility level and provide estimates of these data/parameters that should be used for the estimations of the emission reductions	CL57	OK
B.7.1.3.3 "Measurement methods and procedures": Where data or parameters are to be monitored, specify the measurement methods and procedures, standards to be applied, accuracy of the measurements, person/entity responsible for the measurements, and, in case of periodic measurements, the measurement intervals	DD		Yes	OK	OK
B.7.1.3.4 "QA/QC procedures": Describe the Quality Assurance (QA)/Quality Control (QC) procedures to be applied, including the calibration procedures, where applicable	DD		YES	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.7.1.3.5 "Purpose of data": Choose one of the following: (i) Calculation of baseline emissions; (ii) Calculation of project emissions; (iii) Calculation of leakage.	DD		YES	OK	OK
B.7.1.4 Is there any relevant further background documentation provided in Appendix 5?	DD		No relevant further documentation is provided in Appendix 5	OK	OK
B.7.2 Description of the monitoring plan for a generic CPA					
B.7.2.1 Is the monitoring plan for a generic CPA developed in accordance with the approved monitoring methodology(ies), including applicable tool(s)?	DD VVS PS	198 156	YES	OK	OK
B.7.2.2 If data and parameters monitored in section B.7.1 of the SSC-PoA-DD are determined by a sampling approach, is a description of the sampling plan provided in accordance with the recommended outline for a sampling plan in the "Standard for sampling and surveys for CDM project activities and programme of activities"?	DD PS	53	CL58: Referring to the section B7.2 on the Description of the monitoring plan for a generic CPA, it is stated that <i>The Monitoring Report will comprise all required monitoring information in order to allow the DOE to verify the emission reductions for each monitoring period for each individual CPA verify the emission reductions for each monitoring period for each individual CPA.</i> Clarify if the PoA MP envisions a DOE verification at each individual facility of the CPA	CL58 CL59	OK OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			CL59: Specify if the data recording and storage in the CME database will be done on the CPA level only or will include all the information/data collected at the facility level		
B.7.2.3 Is there any relevant further background information provided in Appendix 5?	DD		NA	NA	NA

Part II. Generic component project activity (CPA)				<i>Repeat all of Part II for each of the combination of technologies/measures and/or methodologies.</i>		
Type (2) Generic CPA: CPAs applying AMS-III.Z methodology						
C General description of a generic CPA						
C.1 Purpose and general description of generic CPAs						
C.1.1	Is a description of each generic CPA within the PoA provided?	DD		See CL42 and CL43. CL60: please explain why there is no element process described regarding the CPA applying AMS-III.Z methodology.	CL60	OK
D Application of a baseline and monitoring methodology						
D.1 Reference of the approved baseline and monitoring methodology(ies) selected						
D.1.1	Is exact reference (number, title, version) of the selected methodology or multiple methodologies indicated?	DD VVS PS	74 37	CAR34: the ACM0009 methodology referred to in section B.1 is not the latest version of the methodology.	CAR34	OK

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D.1.2 Are there any tools and other methodologies to which the selected methodology refers?	DD VVS PS	74 37	<p>YES</p> <p><i>.Tool to determine baseline efficiency of thermal and electricity systems</i></p> <p>Tool to calculate project or leakage CO2 emissions from fossil fuel combustion (V-02)</p> <p>- Tool to calculate baseline, project and/or leakage emissions from electricity consumption</p> <p>Not applicable – since the PoA does not involve biomass project activities (no emissions would occur due to electricity consumption associated with the biomass treatment and processing).</p> <p>- Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities</p> <p>Not applicable – since</p>	OK	OK
D.1.3 Is it confirmed that the selected methodology(ies) is(are) approved for application to CPAs under PoAs by the Board?	DD		See CL 44	OK	OK
D.2 Application of methodology(ies)					
D.2.1 Is the choice of the selected methodology(ies) justified by showing that each generic CPA meets each applicability condition of the	DD VVS PS	76 38	See CAR25: in Table 6 (Applicability study of Type 1 CPAs for using AMS-III.B methodology under this PoA), for each	Ok	OK



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methodology(ies)?			<p>criteria correct to refer, as appropriate, to "CPA, CPAs or each facility of the CPA" instead of CPA or CPAs.</p> <p>See CL45</p> <p>CAR35: in Table 7 (Applicability study of Type 2 CPAs - applying AMS-III.Z methodology - under this PoA) correct to refer in to refer, as appropriate, to CPA, CPAs or each facility of the CPA.</p> <p>CAR36: Referring to table 9 of the PoA-DD, specify how the compliance to the following methodology requirement is to be met: Prior three-year historical production data (excluding abnormal years) for the existing facility, shall be used to determine an average annual historical baseline brick production rate in units of weight or volume.</p> <p>CAR37: in conformity of the methodology AMS.III.Z requirement add compliance to the the following eligibility criteria:"No renewable biomass has been used in the existing project facility during the last three years prior to the start of the project"</p> <p>See CL46: .</p>	<p>CAR35</p> <p>CAR36</p> <p>CAR37</p>	<p>OK</p> <p>OK</p> <p>OK</p>
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VALIDATION REPORT

			See CL47		
D.2.2 If applicable, is a general description of the sampling plan provided?	DD		NA	NA	NA
D.2.3 Is it demonstrated that the CPA qualifies as Type I, II, and/or III during every year of the crediting period in accordance with applicable provisions for project activity eligibility in the Project standard?	DD PS	81-84	Yes The CPA is a Type III: (Other project activities not included in Type 1 or Type 2 that result in GHG emission reductions not exceeding 60 ktCO ₂ e per year in any year of the crediting period).	OK	OK
D.2.4 Is documentation that has been used as a basis of justification explained or include in Appendix 3? Are references provided?	DD		See CL 66	OK	OK
D.3 Sources and GHGs					
D.3.1 Are the sources and GHGs included in each generic CPA boundary described?	DD VVS PS	82 39	YES	OK	OK
D.3.2 In cases where the selected methodology(ies) allows project participants to choose whether a source or gas is to be included in the CPA boundary, is the choice explained and justified?	VVS PS	84 40	NA	NA	NA
D.3.3 Where possible, is a flow diagram physically delineating each generic CPA presented?	DD		CAR38: Insert flow diagram physically delineating each generic CPA presented	CAR38	OK

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D.3.4 Are all the equipment, systems and flows of mass and energy included in the flow diagram?	DD		See above	OK	OK
D.3.5 Are emissions sources and GHGs which included in the project boundary and the data and parameters to be monitored indicated in the diagram?	DD		See above	OK	OK
D.4 Description of baseline scenario					
D.4.1 Is it described how the baseline scenario is identified for each generic CPA?	DD		YES	NA	NA
D.4.2 Is it explained how the baseline scenario is established in accordance with the selected methodology(ies) and applicable provisions for establishment and description of baseline scenarios in the Project standard?	DD VVS PS	88 41	<i>Refer to Table-2</i> YES	OK	OK
D.4.3 Do the project participants follow the “Guidelines on the consideration of suppressed demand in CDM methodologies” when establishing the baseline scenario, where future anthropogenic emissions by sources are projected to rise above current levels due to the specific circumstances of the host Party?	PS	42	<i>Refer to Table-2</i> NA	NA	NA
D.4.4 Do the project participants take into account national and/or sectoral policies including E+/E- policies when establishing the baseline scenario?	VVS PS	93 43-45	See CL48	OK	OK
D.4.5 Where the procedure in the selected methodology (ies) involves several steps, is it described how	DD		NA	NA	NA

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each step is applied and is the outcome of each step transparently documented?					
D.4.6 Are key assumptions and rationales explained and justified?	DD		Yes	OK	OK
D.4.7 Are all data used to establish the baseline scenario (variables, parameters, data sources, etc.) provided and explained?	DD		Provided in section B6	OK	OK
D.4.8 Are all relevant documentation and/or references provided?	DD		YES – references are the methodologies	OK	OK
D.4.9 Is a transparent description of the baseline scenario provided?	DD VVS PS	92 46	<i>A summary of the transparent baseline scenario is provided. The full description of the technology of the baseline scenario is to be provided in section A.6 of Part I.</i>	OK	OK
D.5 Demonstration of eligibility for a generic CPA					
D.5.1 Is it demonstrated how each generic CPA meets the eligibility criteria of the PoA including confirmation of additionality of the generic CPA for its inclusion into the PoA?	DD		<p>See all CL and CAR related to eligibility criteria and their verification See CL49</p> <p>See CL50: please clarify how it is estimated that the the ERs of the CPA implementers burning fuel oil to generate heat for their operation using AMS.III.B fall below 600 tCO₂e per element process. (Also please write correctly CO₂e)</p>	CL50	

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D.6 Estimation of emission reductions of a generic CPA					
D.6.1 Explanation of methodological choices					
D.6.1.1 Is it explained how the methods or methodological steps, in the selected methodology, for calculating baseline emissions, project emissions, leakage emissions and emission reductions are applied to each generic CPA?	DD VVS PS	97 51	<p><i>Refer to Table-2</i></p> <p>CL62: Please refer to the latest version of ACM0009 methodology.</p> <p>CL63: Referring to <i>project emissions</i> used in section B.6, define the project concept used in the context of Type 1 and Type 2 CPAs</p> <p>CAR39: section II B.6.1page 43 :AMS-III.B under the heading Type 2: <i>CPAs applying AMS-III.Z methodology</i>, should be corrected..</p> <p>See CAR27: revise definition/description of parameters to be consistent with description in methodology.</p> <p>CAR40: The following statement referring to AMS III Z (v4): "<i>Project activity emissions consist of those emissions associated with the use of electricity or fossil fuel or both.</i>"</p>	CL62 CL63 CAR39 OK CAR40 CAR41	OK OK OK OK OK



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			Cannot be found in the used version of the methodology CAR41: the Project activity emission equation for the Type 2 CPA does not include the emissions associated with the use of electricity as specified in the methodology. Please correct.		
D.6.1.2 Is it clearly stated which equations will be used in calculating emission reductions?	DD VVS PS	97 50-51	YES	OK	OK
D.6.2 Data and parameters that are to be reported ex-ante					
D.6.2.1 Is a compilation of information on the data and parameters that are not monitored during the crediting period but are determined before the validation and remain fixed throughout the crediting period included?	DD VVS PS	98 52	CAR42: Specifications of the brick quality produced before the project activity are not included in the Type 2 CPA baseline data list CAR43: Correct to ensure that the data/information on the baseline brick quality, raw materials used by each facility of Type 2 CPA is determined before validation See CAR28: The EF national values provided for HFO and Natural gas fuel, in the parameters tables of section 6.2 should be consistent with the calculated values in the provided ER calculations spreadsheet	CAR42 CAR43	OK OK



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			<p>See CAR29: The EF national values provided for HFO, LFO and Natural gas fuel, in the parameters tables of section 6.2, could not be readily found in the cited source.</p> <p>See CAR30: The EF factors national values provided for upstream fugitive methane emissions could not be readily found in the cited sources.</p> <p>See CAR31: International standard abbreviations should be used for the density of the natural gas</p> <p>Please refer also to: CL10: Provide source and evidence of the national values of the EF provided for HFO, LFO and NG.</p> <p>CL42: In part II, section A.1, please provide evidence that LFO is known locally as solar/gaz and that Mazout is HFO.</p> <p>See CL53: please indicate the temperature and pressure at which the natural density is provided</p> <p>See CL54: please provide the EF</p>		
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			calculation for upstream fugitive methane emissions.		
D.6.2.2 Is it ensured that data that become available only after the registration/inclusion of the CPAs in the PoA (e.g. measurements after the implementation of the CPAs in the PoA) should not be included here but in the table in section B.7?	DD		YES		
D.6.2.3 The compilation of information may include data that are measured or sampled, and data that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature, etc.), is the compilation in compliance with this?	DD		YES	OK	OK
D.6.2.4 Data that are calculated with equations provided in the selected methodology(ies) or default values specified in the methodology(ies) should not be included in the compilation, is the compilation in compliance with this?	DD		YES	OK	OK
D.6.2.5 For each piece of data or parameter, is the table in SSC-PoA-DD completed, following these instructions below:					
D.6.2.5.1 "Value(s) applied": Provide the value applied. Where a time series of data is used, where several measurements are	DD		YES	OK	OK

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undertaken or where surveys have been conducted, provide detailed information in Appendix 4. To report multiple values referring to the same data or parameter, use one table. If necessary, reference(s) to electronic spreadsheets may be used					
D.6.2.5.2 "Choice of data": Indicate and justify the choice of data source. Provide clear and valid references and, where applicable, additional documentation in Appendix 4	DD		<p>See CL55: Referring to the parameter FC_{BL} table (Average annual baseline fossil fuel consumption value); clarify if the data source is to be determined at the CPA level or the facility level</p> <p>See CAR32: Referring to the parameter FC_{BL} table (Average annual baseline fossil fuel consumption value); correct to use a table per CPA type</p> <p>CL64: Referring to the parameter P_{Hy} table (Bricks production rate in the baseline situation); specify if the data source is the recorded three year brick production of each facility of the CPA</p>	Ok OK CL64	OK OK OK
D.6.2.5.3 "Measurement methods and procedures": Where values are based on measurement, include a description of the measurement methods and procedures applied (e.g. which standards have been used), indicate the responsible person/entity that undertook the measurement, the date of the measurement and the measurement results. More detailed information can be provided	DD		YES	OK	OK

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in Appendix 4					
D.6.2.5.4 "Purpose of data": Choose one of the following: (i) Calculation of baseline emissions; (ii) Calculation of project emissions; (iii) Calculation of leakage	DD		YES	OK	OK
D.6.3 Ex-ante calculations of emission reductions					
D.6.3.1 Is a transparent ex ante calculation of project emissions, baseline emissions(or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the selected methodology provided?	DD		See CL56: in conformity with the Guidelines for completing PoA-DD for small-scale CDM programmes of activities, provide for each type of CPA, a transparent ex ante calculation of project emissions, baseline emissions(or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the selected methodology.	CL56	OK
D.6.3.2 For data or parameters available before validation, are values contained in the table in section B.6.2 of SSC-PoA-DD used?	DD		Yes	OK	OK
D.6.3.3 For data/parameters not available before validation and monitored during the crediting period, are estimates for parameters contained in the table in section B.7.1 of SSC-PoA-DD used?	DD		At the CPA level	OK	OK
D.6.3.4 If any of these estimates has been	DD		N.A	NA	NA

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determined by a sampling approach, is a description of the sampling efforts provided in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities"?					
D.6.3.5 Is it documented how each equation is applied, in a manner that enables the reader to reproduce the calculation?	DD		Yes	OK	OK
D.6.3.6 Where relevant, are additional background information and/or data in Appendix 4, including relevant electronic spreadsheets provided?	DD	6-3	See CAR33: In conformity with the guidelines for completing SS PoA-DD, provide sample ER calculations for both types of CPA targeted by the PoA- relevant additional information should be provided in appendix 4.	See CAR33 See CL60	OK
D.6.3.7 Is a sample calculation for each equation used provided, substituting the values used in the equations?	DD		See CAR 32	OK	OK
D.7 Application of the monitoring methodology and description of the monitoring plan					
D.7.1 Data and parameters to be monitored by each generic CPA					
D.7.1.1 Is specific information on how the data and parameters that need to be monitored would actually be collected during monitoring included?	DD		CAR44: According to the requirements of methodology AMS-III.Z. the quantity of raw and additive materials should be also monitored. CAR45: As stated in the monitoring plan, the FO consumption should also be	CAR44 CAR45	OK OK

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			included in the the parameters to monitored during the crediting period CAR46: Include in the monitoring reports templates all monitored data	CAR46	OK
D.7.1.2 In case of data that are determined only once for the crediting period but that will become available only after registration/inclusion of the CPAs in the PoA, are they included here?	DD		<i>e.g. measurements after the implementation of the CPAs in the PoA</i>	OK	OK
D.7.1.3 For each piece of data or parameter, is the table in SSC-PoA-DD completed, following these instructions below:	DD				
D.7.1.3.1 "Source of data": Indicate the source(s) of data that will be used for the CPAs in the PoA (e.g. which exact national statistics). Where several sources may be used, justify which data sources should be preferred	DD		YES	OK	OK
D.7.1.3.2 "Value(s) applied": The value applied is an estimate of the data/parameter that will be monitored during the crediting period, but is used for the purpose of calculating estimated emission reductions. To report multiple values referring to the same data or parameter, use one table. If necessary, reference(s) to electronic spreadsheets may be used	DD		See CL57: For all the monitored data/parameters specify if the monitored parameters will be determined at the facility level and provide estimates of these data/parameters that should be used for the estimations of the emission reductions	CL57	OK
D.7.1.3.3 "Measurement methods and procedures":	DD		CL65: Referring to table P _{P,J,y} parameter	CL65	

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Where data or parameters are to be monitored, specify the measurement methods and procedures, standards to be applied, accuracy of the measurements, person/entity responsible for the measurements, and, in case of periodic measurements, the measurement intervals			(Annual net brick production in the project activity in year y) clarify the statement: <i>Brick factories will sign 2 forms (one with the CME, and the other to the brick factory owner) indicating the hours of production, the total brick production on a monthly basis and brick type.</i>		OK
D.7.1.3.4 "QA/QC procedures": Describe the Quality Assurance (QA)/Quality Control (QC) procedures to be applied, including the calibration procedures, where applicable	DD		YES	OK	OK
D.7.1.3.5 "Purpose of data": Choose one of the following: (i) Calculation of baseline emissions; (ii) Calculation of project emissions; (iii) Calculation of leakage.	DD		YES	OK	OK
D.7.1.4 Is there any relevant further background documentation provided in Appendix 5?	DD		No relevant further documentation is provided in Appendix 5	OK	OK
D.7.2 Description of the monitoring plan for a generic CPA					
D.7.2.1 Is the monitoring plan for a generic CPA developed in accordance with the approved monitoring methodology(ies), including applicable tool(s)?	DD VVS PS	198 156	YES	OK	OK
D.7.2.2 If data and parameters monitored in section B.7.1 of the SSC-PoA-DD are determined by a sampling approach, is a description of the	DD PS	53	See CL58: Referring to the section B7.2 on the Description of the monitoring plan for a generic CPA, it is stated that <i>The</i>	CL58	OK



VALIDATION REPORT

sampling plan provided in accordance with the recommended outline for a sampling plan in the "Standard for sampling and surveys for CDM project activities and programme of activities"?			<p><i>Monitoring Report will comprise all required monitoring information in order to allow the DOE to verify the emission reductions for each monitoring period for each individual CPA verify the emission reductions for each monitoring period for each individual CPA. Clarify if the PoA MP envisions a DOE verification at each individual facility of the CPA</i></p> <p>See CL59: Specify if the data recording and storage in the CME database will be done on the CPA level only or will include all the information/data collected at the facility level</p>	CL59	OK
D.7.2.3 Is there any relevant further background information provided in Appendix 5?	DD		NA	NA	NA

Part III Others					
E Appendix					
E.1 Appendix 1: Contact information on entity/individual responsible for the PoA					
E.1.1 For each organization listed in section A.4 of the SSC-PoA-DD, is the table in SSC-PoA-DD completed, with the following mandatory fields: Organization, Street/P.O. Box, City, Postcode, Country, Telephone, Fax and E-mail, and Name	DD		YES	OK	OK

VALIDATION REPORT

of contact person?					
E.2 Appendix 2: Affirmation regarding public funding					
E.2.1 If applicable, is the affirmation obtained from Parties included in Annex I providing public funding to the PoA attached?	DD		NA	NA	NA
E.3 Appendix 3: Application of methodology(ies)					
E.3.1 Is there any further background information on the applicability of the selected methodology(ies) provided?	DD		CL66: please indicate in appendix 3 the reference to the appropriate section of the POA-DD	CL66	Ok
E.4 Appendix 4: Further background information on ex ante calculation of emission reductions					
E.4.1 Is there any further background information on the ex-ante calculation of emission reductions provided? This may include data, measurement results, data sources, etc.	DD		NO See CAR 32 CL67: Add reference sources for the data used in the brick factory ER calculation spreadsheet	CL67	OK
E.5 Appendix 5: Further background information on the monitoring plan					
E.5.1 Is there any further background information used in the development of the monitoring plan? This may include tables with time series data, additional documentation of measurement equipment, procedures etc.	DD		NA	NA	NA



VALIDATION REPORT

F Global Stakeholder Consultation				TO BE CHECKED AT CPA LEVEL		
F.1.1	Is there any comment on the SSC-PoA-DD of the proposed project activity received during Global Stakeholder Consultation process?	VVS	34	No comment has been received from the Global stakeholder Consultation of the SSC-POA-DD. The SSC-POA-DD has been published from 26 juin to 25 july 2012	OK	OK
F.1.2	If yes, have all comments been taken into account during the validation of the proposed project activity?	VVS	35	NA	NA	NA
F.1.3	If comments indicate that the proposed project activity does not comply with the CDM requirements and are not substantiated, is there any further clarification from the entity providing the comment?	VVS	36	N.A	NA	NA
F.1.4	If yes, how comments received have been taken due account?	VVS	36	N.A	NA	NA
F.1.5	If no, are the comments as originally provided proceeded to assess?	VVS	36	N.A	NA	NA
G Modalities of Communications (MoC)						
G.1.1	Has the corporate identity of all project participants and focal points included in MoC statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories been validated by:	VVS	53	NO CAR47: The MoC should be completed CL68: Better specify in the MoC and in appendix 1 of the PoA-DD, the personal data of the undersigned	CAR47 CL64	Ok OK



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G.1.1.1 Directly checking evidence for corporate, personal identity and other relevant documentation; or	VVS	54(a)	See Above	OK	OK
G.1.1.2 Notarized documentation; or	VVS	54(b)	CAR48: Provide a notarized MoC or a written statement from CME on the accuracy of the undersigned personal details	CAR48	OK
G.1.1.3 Written confirmation from the project participant or the coordinating/managing entity that all corporate and personal details, including specimen signatures, are valid and accurate.	VVS	54(c)	See CAR46 above	CAR48	OK
G.1.2 If (G.1.1.3) above was chosen, is it ensured that the MoC statement is received from the Coordinating/ managing entity?	VVS	55	See CAR48 above	CAR48	OK
G.1.3 If (G.1.1.3) above was chosen, is it ensured that the official who submits the MoC statement to the DOE and the official who signed the written confirmation (if a different person) is/are duly authorized to do so on behalf of the respective project participant?	VVS	56	See CAR48 above	CAR48	OK
G.1.4 If it is unable to validate the requirements by applying G.1.1.1 to G.1.1.3 above, are any further validation activities performed?	VVS	57	Signature validated at the site visit	OK	OK
G.1.5 Has the latest version of the form “Modalities of Communication statement” (F-CDM-MOC) been used?	VVS PS	60(a) 72	Yes	OK	OK



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G.1.6	Is the information required as per F-CDM-MOC, including its annex 1, correctly completed?	VVS PS	60(b) 72	See Above CARs 47 and 48	CAR47 and CAR48	OK
G.1.7	Do the project participant's authorized signatories signing the F-CDM-MOC correspond to the project participant's authorized signatories included in F-CDM-MOC, annex 1?	VVS PS	60(c) 174	Yes	OK	OK
G.1.8	Is it confirmed that the CME is either the sole or a joint focal point for each scope of authority?	PCP	29	Yes	OK	OK
G.1.9	Is it confirmed that the number of joint focal points is limited to five, or equal to the number of host parties if greater than five?	PCP	29	Yes	OK	OK

TABLE 2 SPECIFIC REQUIREMENTS FOR METHODOLOGIES AMS.III.B AND AMS.III.Z

Validation requirements based on the eligibility criteria set in the PoA-DD

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
H Eligibility criteria set in the AMS III.B./Version 16.0 methodology for Part I of POA-DD					
H.1 In case of project activities where the estimated annual emission reductions of each of the element processes are equal to or less than 600 tCO ₂ e per year per element process an alternative approach may be used to calculate baseline emissions as per paragraph 21 using equation 3 instead of applying equation 1.	AMS III.B./Version 16.0	Part I B.2.6.1	CAR14: The eligibility criteria as set in AMS III. Z version 04.0 and AMS III.B version 16.0 are not entirely taken into account. Moreover the threshold specified in the eligibility criteria #14.1 is not correct.	CAR14	OK
I Eligibility criteria set in the AMS III.Z./Version 04.0 methodology for Part I of POA-DD					
I.1 Measures are limited to those that result in emission reductions of less than or equal to 60 kt CO ₂ equivalent annually	AMS III.Z./Version 04.0	Part I B.2.6.1	CAR14: The eligibility criteria as set in AMS III. Z version 04.0 and AMS III.B version 16.0 are not entirely taken into account. Moreover the threshold specified in the eligibility criteria #14.1 is not correct.	CAR14	OK
J Applicability condition of the AMS III.B./Version 16.0 methodology for Part I of POA-DD					
J.1 This methodology comprises fossil fuel switching in industrial, residential, commercial, institutional	AMS III.B./V	Part II B.2.1	Each of the CPA Facilities under this PoA will implement the fuel switching in	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
or electricity generation applications (e.g. fuel switch from fuel oil to natural gas in an existing captive electricity generation or replacement of a fuel oil boiler by a natural gas boiler).	ersion 16.0		industrial applications only.		
<p>J.2 Fuel switch may be in a single element process or may include several element processes within the facility (For example fuel oil was used in one boiler and coal in another boiler in the baseline. The project plant used only natural gas in the boilers i.e. the project plant does not use more than one fuel in one equipment). Multiple fossil fuel switching in an element process however is not covered under this methodology.</p> <p>An “element process” is defined as fuel combustion, energy conversion or energy use in a single equipment. Each element process generates a single output (such as electricity, steam, hot air) by using a single energy source. This methodology covers switch of energy sources in several element processes, i.e. project participants may submit one CDM-PDD for fuel switch in several element processes within a facility.</p>	AMS III.B./V ersion 16.0	Part II B.2.1	In each element process within a proposed CPA, the switch will be from only one type of fuel oil (heavy fuel oil/LFO) to one type of fuel (natural gas).	OK	OK
<p>J.3 This methodology is applicable for new facilities as well as for retrofit or replacement of existing installations.</p> <p>It also includes installation of new energy generating facility to replace existing energy generating facility that is</p>	AMS III.B./V ersion 16.0	Part II B.2.1	The switching activity may be for new facilities, retrofit, or replacement of existing installations within the CPA boundary.	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION		Ref.	§	COMMENTS	Draft Concl	Final Concl
solely fuelled by liquid petroleum fuel such as diesel or fuel oil.						
J.4	Fuel switching may also result in energy efficiency improvements. If the project activity primarily aims at reducing emissions through fuel switching, it falls into this methodology. If fuel switching is part of a project activity focussed primarily on energy efficiency, the project activity falls under a Type II methodology.	AMS III.B./V ersion 16.0	Part II B.2.1	Each CPA shall primarily aim at reducing emissions through fuel switching from FO to NG. - CPA Developers and/or CPA Facilities Owners shall not claim emission reductions due to any resulting indirect energy efficiency improvements.	OK	OK
J.5	New facilities (Greenfield projects) and project activities involving capacity additions compared to the baseline scenario are only eligible if they comply with the related and relevant requirements in the general guidelines to SSC CDM methodologies. The requirements concerning demonstration of the remaining lifetime of the replaced equipment shall be met as described in the general guidelines to SSC CDM methodologies. If the remaining lifetime of the affected systems increases due to the project activity, the crediting period shall be limited to the estimated remaining lifetime, i.e. the time when the affected systems would have been replaced in the absence of the project activity.	AMS III.B./V ersion 16.0	Part II B.2.1	CL45: In Table 8 and Table 9 (Applicability N°5, PoA-DD V3.0) please indicate to which requirement the CPA has to comply with (In case of replacement of existing equipment, project participants shall estimate the point in time where the existing equipment would be replaced in the absence of the project activity in accordance with the latest version of "Tool to determine the remaining lifetime of equipment".)	CL45	OK
J.6	This methodology is not applicable to project activities that propose switch from fossil fuel use	AMS III.B./V ersion	Part II B.2.1	CPA Facilities switching to the use of renewable biomass, bio-fuel, renewable energy, or waste gas to replace fuel oil	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
in the baseline to renewable biomass, biofuel or renewable energy in the project scenario. A relevant Type I methodology shall be used for such project activities that generate renewable energy displacing fossil fuel use. This methodology is also not applicable to project activities involving the use of waste gas; these project activities might be eligible under AMS-III.Q.	16.0		combustion in their applications are not eligible under this PoA.		
J.7 The facility may involve grid connected elemental processes however this methodology does not cover emission reductions on account of shift from use of a grid electricity or electricity exported to a grid (Grid here refers to national/regional grid.)	AMS III.B./V version 16.0	Part II B.2.1	CPA Developers and/or CPA Facilities Owners shall not claim emissions reduction due to shift from use of grid electricity or electricity exported to a grid under this PoA.	OK	OK
J.8 This category is applicable to project activities where it is possible to directly measure and record the energy use/output (e.g. heat, steam and electricity) and consumption (e.g. fossil fuel) within the project boundary. In case of project activities that meet the criteria under paragraph 17 below, this methodology is applicable only where it is possible to directly measure and record at least the energy consumption in the element process (e.g. fossil fuel input).	AMS III.B./V version 16.0	Part II B.2.1	CL46: Specify how the compliance to the AMS-III.B methodology requirement 8 as presented in the Table 6 of the PoA DD will be met at the facility level.	CL46	OK
J.9 Heat, steam or electricity produced under the	AMS III.B./V	Part II B.2.1	The heat produced under each of the CPA Facilities will be only for on-site captive use.	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
project activity shall be for on-site captive use and/or export to other facilities included in the project boundary. In case of electricity generation plants, the generated electricity may also be supplied to users via mini/isolated grid(s) system (Stand alone or interconnected grid system that are not connected to a grid as defined above) exclusively supplied by fossil fuel units.	ersion 16.0				
J.10 In case energy produced by the project activity is delivered to another facility, or facilities, within the project boundary, a contract between the supplier and consumer(s) of the energy will have to be entered into specifying that only the facility generating the energy can claim emission reductions from the energy displacement.	AMS III.B./V ersion 16.0	Part II B.2.1	The energy (heat) produced by each of the CPA Facilities will not be delivered to other facilities and will be used only within the CPA Facility.	OK	OK
J.11 Regulations do not constrain the facility from using the energy sources cited in paragraph 1 before or after the fuel switch. Regulations do not require the use of low carbon energy source (e.g. natural gas or any other fuel) in the element processes.	AMS III.B./V ersion 16.0	Part II B.2.1	The regulations in Egypt do not constrain the CPA Facilities from using the energy sources cited in paragraph 1.	OK	OK
J.12 The project activity does not result in integrated process change. The purpose is to exclude measures that affect other characteristics of the process besides switch of energy sources e.g. operational conditions, type of raw material	AMS III.B./V ersion 16.0	Part II B.2.1	CL47: As per the applicability criteria N°12 in Table 8, please clarify : - what tests will be used to specify the quality/type of the manufactured product produced and the raw material used before the project implementation	CL47	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
processed, use of non-energy additives, change in type or quality of products manufactured etc.			- How the quality of products manufactured after the project implementation will not be affected by the fuel switch change and how the consumption per quality of products manufactured will be monitored,		
J.13 Measures are limited to those that result in emission reductions of less than or equal to 60 kt CO ₂ equivalent annually.	AMS III.B./V ersion 16.0	Part II B.2.1	Each CPA shall result in emissions reduction of less than or equal to 20 kt CO ₂ eq annually (micro-scale threshold).	OK	OK
J.14 Additional applicability criteria for inclusion of a Type 1 CPA under the PoA In case of project activities where the estimated annual emission reductions of each of the element processes are equal to or less than 600 tCO ₂ e per year per element process an alternative approach may be used to calculate baseline emissions as per paragraph 21 using equation 3 instead of applying equation 1.	AMS III.B./V ersion 16.0	Part II B.2.1	Each element process with each CPA shall result in emissions reduction of less than or equal to 600 tCO ₂ eq per year.	OK	OK
K Estimation of emission reductions of a generic CPA baseline: AMS.III.B/Version 16.0					
K.1 In case of existing facilities, historical information (detailed records) on the use of fossil fuels and the energy output (e.g. heat, steam or electricity) in the element process from at least three years	AMS.III .B/Vers ion 16.0	Part II B.6.1	Three year of historical data regarding the fuel consumption proving that the baseline at each of the existing CPA Facilities is the combustion of fossil fuel (HFO/LFO).	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
prior to project implementation shall be used in the baseline calculations, e.g. information on coal use and heat output by a district heating plant, diesel use and steam generated by an industrial plant, liquid fuel oil use and electricity generated by a generating unit (records of fuel used and output can be used in lieu of actual collecting baseline validation data). For facilities that are less than three years old, all historical data shall be available (a minimum of one year data would be required).					
K.2 For existing facilities having no historical data/information on baseline parameters such as efficiency, energy consumption and output (e.g. the available data is not reliable due to various factors such as the use of imprecise or non-calibrated measuring equipment), the baseline parameters can be determined using a performance test/measurement campaign to be carried out prior to the implementation of the project activity. The project proponent may follow the relevant provisions from the .Tool to determine baseline efficiency of thermal and electricity systems. In the case of project activities that export to other facilities within the project boundary, historical data from the recipient plants is also required.	AMS.III .B/Vers ion 16.0	B.6.1	Not applicable	NA	NA



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
K.3 In case of project activities where the estimated annual emission reductions of each of the element processes are equal to or less than 600 tCO ₂ e per year per element process an alternative approach may be used to calculate baseline emissions as per paragraph 21 using equation 3 instead of applying equation 1.	AMS.III .B/Vers ion 16.0	B.6.1	Each element process with each CPA shall result in emissions reduction of less than or equal to 600 tCO ₂ eq per year	OK	OK
K.4 The emission baseline is the current emissions of the facility expressed as emissions per unit of output. Baseline emissions shall be determined as follows: $BE_y = EF_{BSL} * Q_{PJ,y}$ <p>Where:</p> <p>BE_y Baseline emissions in the project activity in year y (tCO₂e)</p> <p>EF_{BSL} Emission factor for the baseline situation (tCO₂/MWh)</p> <p>Q_{PJ,y} , Net energy output in the project activity in year y (MWh)</p>	AMS.III .B/Vers ion 16.0	B.6.1	Not applicable: Each element process with each CPA shall result in emissions reduction of less than or equal to 600 tCO ₂ eq per year	OK	OK
K.5 The net energy output in the project activity (PJ y Q , y) is limited to the installed capacity in the baseline situation, unless it has been	AMS.III .B/Vers ion	B.6.1	Not applicable: Each element process with each CPA shall result in emissions reduction of less than or equal to 600	NA	NA

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
demonstrated in accordance with paragraph 5 that the new installation (Greenfield project) or the added capacity has the same baseline scenario.	16.0		tCO2eq per year		
K.6 The emission factor in the baseline situation (BSL EF) is the coefficient for the fossil fuel used in the baseline expressed as emissions per unit of energy output (e.g. kg CO2e/kWh). $EF_{BSL} = \sum_{i,j} FC_{i,j,BSL,y} * NCV_j * EF_{CO2,j} / Q_{BSL,j}$ Where: <i>EF BSL</i> Emission factor for the baseline situation (tCO2/MWh) <i>FC i j BSL y</i> , , , Amount of fuel <i>j</i> consumed by the element process <i>i</i> during the year <i>y</i> operating at the baseline energy scenario (mass or volume unit) <i>NCV j</i> Net calorific value of the fuel type <i>j</i> (kJ/unit) <i>EF CO2, j</i> CO2 emission factor of the fuel type <i>j</i> (tCO2/kJ) <i>Q BSL j</i> , Net energy generated in the element process <i>j</i> in the baseline situation during the corresponding period of time for which the total fuel consumption was taken, in accordance with paragraph 15 (MWh)	AMS.III .B/Vers ion 16.0	B.6.1	Not applicable: Each element process with each CPA shall result in emissions reduction of less than or equal to 600 tCO2eq per year	NA	NA
K.7 In case of project activities where the estimated annual emission reductions of each of the element processes are equal to or less than 600 tCO2e per year per element process the amount	AMS.III .B/Vers ion 16.0	B.6.1	OK	OK	OK

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<p>of fossil fuel consumed in the project activity in year y, $FC_{PJ,y}$, can be used as a proxy for determining baseline emissions using the following equation:</p> $BE_y = FC_{PJ,y} * NCV_{FF,PJ,y} * EF_{FF,CO_2,BL}$ <p>Where: $FC_{PJ,y}$, Amount of fuel consumed in the project activity during year y (mass or volume unit) $NCV_{FF,PJ,y}$, Net calorific value of the fossil fuel used in the project activity in TJ/mass or volume unit $EF_{FF,CO_2,BL}$, CO₂ emission factor of the fossil fuel used in the baseline activity (tCO₂/TJ)</p>					
<p>K.8 For the emission factor ($EF_{CO_2,j}$) and the net calorific value (j NCV) of the fuels used, guidance by the 2006 IPCC Guidelines for National Greenhouse Gas Inventories shall be followed where appropriate. Project participants may either conduct measurements or they may use accurate and reliable local or national data where available. In the case of coal, the data shall be based on test results for periodic samples of the coal purchased if such tests are part of the normal practice for coal purchases. Where such data is not available, IPCC default emission factors (country specific, if available) may be used</p>	AMS.III .B/Vers ion 16.0	B.6.1	<p>See CAR28 in Table 1: CAR28: The EF national values provided for HFO and Natural gas fuel, in the parameters tables of section 6.2 should be consistent with the calculated values in the provided ER calculations spreadsheet</p> <p>See CAR29 in table 1: CAR29: The EF national values provided for HFO, LFO and Natural gas fuel, in the parameters tables of section 6.2, could not be readily found in the cited source.</p>	CAR28 CAR29	OK OK

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if they are deemed to reasonably represent local circumstances. All values shall be chosen in a conservative manner (i.e. lower values for the baseline and higher values for the project should be chosen within a plausible range) and the choice shall be justified and documented in the SSC-CDM-PDD. Where measurements are undertaken, project participants shall document the measurement results and the calculated average values of the emission factor or net calorific value, either for the <i>ex ante</i> investment analysis and efficiency determination, or for the <i>ex post</i> determination of the baseline and project emissions.			See CAR30 in table 1: CAR30: The EF factors national values provided for upstream fugitive methane emissions could not be readily found in the cited sources.	CAR30	OK
			See CAR31 in table 1: CAR31: International standard abbreviations should be used for the density of the natural gas.	CAR31	OK
			See CL10 in table 1: CL10: Provide source and evidence of the national values of the EF provided for HFO, LFO and NG.	CL10	OK
			See CL42 in table 1: CL42: In part II, section A.1, please confirm and give evidence that LFO is known locally as solar/gaz and that Mazout is HFO.	CL42	OK
			$EF_{CO_2,HFO}$, CO2 emission factor for HFO = 76.76 tCO ₂ /TJ $EF_{CO_2,LFO}$, CO2 emission factor for LFO =		

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			75.52 tCO ₂ /TJ $EF_{CO_2,NG}$, CO ₂ emission factor for the NG = 55.19 tCO ₂ /TJ		
Project emission: AMS.III.B/Version 16.0					
K.9 Project emissions from on-site consumption of fossil fuel should be calculated as follows: $PE_y = FC_{PJ,y} * NCV_{FF,PJ,y} * EF_{FF,CO_2,PJ}$ Where: $EF_{FF,CO_2,PJ}$, CO ₂ emission factor of project fuel combusted in the project activity in tCO ₂ /TJ $NCV_{FF,PJ,y}$, Net calorific value of the fossil fuel used in the project activity in TJ/mass or volume unit	AMS.III .B/Vers ion 16.0	B.6.1	See CL53 in table 1: CL53: please indicate the temperature and pressure at which the natural density is provided	CL53	OK
Leakage: AMS.III.B/Version 16.0					
K.10 Leakage emissions resulting from fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of fossil fuels outside of the project boundary shall be considered, as per the guidance provided in the leakage section of ACM0009 .Consolidated baseline and monitoring methodology for fuel switching from coal or petroleum fuel to natural gas.. In case	AMS.III .B/Vers ion 16.0	B.6.1	OK	OK	OK

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leakage emissions in the baseline situation are higher than leakage emissions in the project situation, leakage emissions will be set to zero.					
<p>K.11 Leakage may result from fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of fossil fuels outside of the project boundary. This includes mainly fugitive CH₄ emissions and CO₂ emissions from associated fuel combustion and flaring. In this methodology, the following leakage emission sources shall be considered:</p> <ul style="list-style-type: none"> Fugitive CH₄ emissions associated with fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of natural gas used in the project plant and fossil fuels used in the grid in the absence of the project activity; In the case LNG is used in the project plant: CO₂ emissions from fuel combustion/electricity consumption associated with the liquefaction, transportation, re-gasification and compression into a natural gas transmission or distribution system. <p>Thus, leakage emissions are calculated as follows:</p> $LE_y = LE_{CH_4,y} + LE_{LNG,CO_2,y}$ <p>Where: LE_y = Leakage emissions during the year y in tCO₂e</p>	ACM0009 / Version 04.0.0	B.6.1	<p>See CL54 in table 1:</p> <p>CL54: please provide the EF calculation for upstream fugitive methane emissions.</p> $LE_{CH_4,y} = [FF_{project,y} * NCV_{NG,y} * EF_{NG,upstream,CH_4} - \sum_k FF_{baseline,k,y} * NCV_k * EF_{NG,k,y}]$ $FF_{project,y} = \sum_i FF_{project,i,y}$ $FF_{baseline,k,y} = \sum_i FF_{baseline,i,k,y}$ <p>, where:</p>	CL54	OK

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<p>LE CH 4y, = Leakage emissions due to fugitive upstream CH4 emissions in the year y in tCO2e</p> <p>LE , LNG CO2 y, = Leakage emissions due to fossil fuel combustion/electricity consumption associated with the liquefaction, transportation, re-gasification and compression of LNG into a natural gas transmission or distribution system during the year y in tCO2e</p> <p>Note that to the extent that upstream emissions occur in Annex I countries that have ratified the Kyoto Protocol, from 1 January 2008 onwards, these emissions should be excluded, if technically possible, in the leakage calculations.</p> <p>Fugitive methane emissions : please refer to ACM009</p> <p>CO2 emissions from LNG please refer to ACM009</p>					
Emission reduction: AMS.III.B/Version 16.0					
<p>K.12 The emission reduction achieved by the project activity will be calculated as the difference between the baseline emissions and the project emissions.</p> $ER_y = BE_y - PE_y$ <p>Where: ER_y Emission reductions in the year y (tCO2e)</p>	AMS.III .B/Vers ion 16.0	B.6.1	$ER_y = BE_y - PE_y - LE_y$ <p>OK as POA. Leakage is not equal to zero</p>	OK	OK

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L Description of the monitoring plan for a generic CPA: AMS.III.B/Version 16.0					
L.1 Monitoring shall include: (a) Monitoring of the fossil fuel consumption (y_{FC}) and energy output of element process i after the project activity has been implemented ($PJ y Q$,) - (e.g. gas use and heat output by a district heating plant, diesel use and steam generated by an industrial plant, gas use and electricity generated by a generating unit) for project activities under paragraphs 15 and 16; (b) Monitoring of the fossil fuel consumption (y_{FC}) for project activities under paragraph 17; (c) For electricity/thermal energy exported to other facilities, monitoring of the use of electricity and thermal energy shall be undertaken in the recipient end.	AMS.III.B/Version 16.0	B.7.2	OK Section B.7.1 specifies $FCNG,y$,Flow rate of NG consumed in the element process(es) for captive energy generation in year y	OK	OK
M Applicability condition of the AMS III.Z./Version 04.0 methodology for Part I of POA-DD					
M.1 The methodology comprises one or more technology/measures listed below in brick (Brick in the context of this methodology includes solid bricks and blocks as well as hollow blocks used in building construction production facilities: <input type="checkbox"/> Shift to an alternative brick production technology/process; or <input type="checkbox"/> Complete/Partial substitution of fossil fuels with	AMS III.Z./Version 04.0	Part II B.2.1	Each of the CPA Facilities under this PoA will be brick producing facilities. - The applicability of this methodology within this PoA is limited only to CPA Facilities implementing fuel switching project activities (complete substitution of high carbon fossil fuels with low carbon fossil fuels). - In each element process within a	OK	OK

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<p>renewable biomass² (including solid biomass residues such as sawdust and food industry organic liquid residues); (Fatty acids from oil extraction, waste oil and waste fat of biogenic origin (includes waste oil from restaurants, agro and food industry, slaughterhouses or related commercial sectors). The sources/origin of waste oil/fat and respective volumes must be identified and clearly documented in the PDD. No CERs from waste oil/fat can be claimed under this methodology if it is not produced from biogenic origin, biogenic shall mean the oils and/or fats originate from either vegetable or animal biomass, but not from mineral (fossil) sources. or</p> <p><input type="checkbox"/> Complete/partial substitution of high carbon fossil fuels with low carbon fossil fuels. (For example from anthracite coal to natural gas.)</p>			<p>proposed CPA, the switch will be from only one type of fuel oil (HFO/LFO) to one type of fuel (NG).</p> <p>- CPA Facilities switching to the use of renewable biomass, bio-fuel, renewable energy, or waste gas to replace fuel oil combustion in their applications are not eligible under this PoA. Thus, the following paragraphs do not apply to CPAs under this PoA; 7, 8, 9 and 10</p>		
<p>M.2 Complete or partial fuel substitution and associated activities may also result in improved energy efficiency of existing facility; however project activities primarily aimed at emission reductions from energy efficiency measures shall apply AMS-II.D "Energy efficiency and fuel switching measures for industrial facilities". Thus, the methodology is applicable for the production of:</p> <p>(a) Bricks that are the same in the project and baseline cases; or</p> <p>(b) Bricks that are different in the project case versus the</p>	AMS III.Z./V ersion 04.0	Part II B.2.1	<p>CL61: As per the applicability criteria N°11 in Table 9, please clarify :</p> <ul style="list-style-type: none"> - what tests will be used to specify the quality/type of the brick produced and the raw material used before the project implementation - How the quality of brick after the project implementation will not be affected by the fuel switch change, how the consumption per quality of products manufactured will be 	CL61	OK

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baseline case due to a change(s) in raw materials, use of different additives, and/or production process changes resulting in reduced use or avoidance of fossil fuels for forming, sintering (firing) or drying or other applications in the facility as long as it can be demonstrated that the service level of the project brick is comparable to that of the baseline brick (see paragraph 11). Examples include pressed mud blocks (soil blocks) with cement or lime stabilization ⁵ and other 'unburned' bricks that attain strength due to fly ash, lime/cement and gypsum chemistry.			<p>monitored,</p> <ul style="list-style-type: none"> - Each CPA shall primarily aim at reducing emissions through fuel switching from FO to NG. - CPA Developers and/or CPA Facilities Owners shall not claim emission reductions due to indirect resulting energy efficiency improvements. - CPA Facilities Owners will carry out the necessary tests to demonstrate that the produced brick is the same in the project and baseline cases, or that the service level of the project brick is comparable to that of the baseline brick, based on the specification provided in the CPA-DD and agreed upon with the CME. 		
M.3 The measures may replace, modify, retrofit (For example to, replace and/or modify an existing heating and/or firing facility(/-ies) to enable the use of biomass residues) or add capacity to systems in existing facilities or be installed in a new facility.	AMS III.Z./V ersion 04.0	Part II B.2.1	The switching activity may involve replacing, modifying, retrofitting, or adding capacity to the element process whether in existing or new facilities.	OK	OK
M.4 New facilities (Greenfield projects) and project activities involving capacity additions are only eligible if they comply with the requirements for	AMS III.Z./V ersion	Part II B.2.1	CPAs involving new facilities shall comply with the related and relevant requirements in the general guidelines to SSC CDM	OK	OK

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Greenfield projects and capacity increase projects specified in the "General Guidelines for SSC CDM methodologies".	04.0		methodologies.		
M.5 The requirements concerning demonstration of the remaining lifetime of the replaced equipment shall be met as described in the "General Guidelines for SSC CDM methodologies". If the remaining lifetime of the affected systems increases due to the project activity, the crediting period shall be limited to the estimated remaining lifetime, i.e. the time when the affected systems would have been replaced in the absence of the project activity.	AMS III.Z./V ersion 04.0	Part II B.2.1	<p>Requirements concerning demonstration of the remaining lifetime of the replaced equipment as described in the "General Guidelines for SSC CDM methodologies" shall be met by each of the CPA Facilities, where the guidelines state that "11-c) For the lifetime of existing equipment, project participants and coordinating/managing entities must refer to applicable provisions for application of selected baseline and monitoring methodology for small-scale project activities in the Project standard" For replaced equipment, the date at which it would have been replaced in absence of the CPA must be provided. This can be evidenced by one of two ways:</p> <ul style="list-style-type: none"> - Manufacturer statement stating the lifetime and documentation showing the commissioning date, i.e. by subtracting the years of operation of the existing equipment from its lifetime, the duration remaining before replacement (without CDM) is obtained; or - Letter from an industry expert estimating 	OK	OK

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				<p>the remaining lifetime of the equipment, i.e. a letter stating the point in time when the existing equipment would be replaced in the absence of the CPA.</p> <p>For CPA Facilities within which the remaining lifetime of the affected systems increases due to the project activity, the crediting period shall be limited to the estimated remaining lifetime.</p>		
M.6	For existing facilities, it shall be demonstrated, with historical data, that for at least three years immediately prior to the start date of the project implementation, only fossil fuels (no renewable biomass) were used in the brick production systems that are being modified or retrofitted. In cases where small quantities of biomass were used for experimental purposes this can be excluded.	AMS III.Z./V ersion 04.0	Part II B.2.1	<p>- Three year of historical data regarding the fuel consumption proving that the baseline at each of the existing CPA Facilities is the combustion of fossil fuel (HFO/LFO).</p> <p>- No renewable biomass has been used in any of the existing CPA Facilities during the last three years prior to the start of the CPA.</p>	OK	OK
M.7	<p>The renewable biomass utilized by the project activity shall not be chemically processed (e.g. esterification to produce biodiesel, degumming and/or neutralization by chemical reagents) prior to the combustion but it may be processed mechanically (e.g. pressing, filtering)/thermally (e.g. gasification to produce syngas).</p> <p>The syngas shall be derived from gasification of</p>	AMS III.Z./V ersion 04.0	Part II B.2.1	Not applicable	NA	NA

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renewable biomass only and no methane emissions are to be released to the atmosphere, thus demonstrating the complete use for combustion of the syngas in the project equipment.					
<p>M.8 In cases where the project activity uses crops from renewable biomass origin as fuel, the crops should be cultivated at dedicated plantations and the following conditions shall be met:</p> <p>(a) The project activity does not lead to a shift of pre-project activities outside the project boundary, i.e. the land under the proposed project activity can continue to provide at least the same amount of goods and services as it would in the absence of the project;</p> <p>(b) The plantations are established on land that:</p> <p>(i) Was classified as degraded or degrading at the start of the project implementation, as per the "Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities"; or</p> <p>(ii) Is included in the project boundary of one or several registered A/R CDM project activities;</p> <p>(c) Plantations established on peatlands are not eligible even if qualifying under condition (i) or (ii) above.</p>	AMS III.Z./V ersion 04.0	Part II B.2.1	Not applicable	NA	NA
M.9 In cases where the project activity utilizes charcoal produced from renewable biomass as fuel, the methodology is applicable provided that:	AMS III.Z./V ersion	Part II B.2.1	Not Applicable	NA	NA

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(a) Charcoal is produced in kilns equipped with a methane recovery and destruction facility; or (b) If charcoal is produced in kilns not equipped with methane recovery and destruction facility, methane emissions from the production of charcoal shall be considered.	04.0				
M.10 In the case of project activities involving changes in raw materials (including additives), it shall be demonstrated that additive materials are abundant in the country/region, according to the following procedures: Step 1: using relevant literature and/or interviews with experts, a list of raw materials to be utilized is prepared based on the historic and/or present consumption of such raw materials. Step 2: the current supply situation for each type of raw material to be utilized is assessed and their surplus availability is demonstrated using one of the approaches below: Approach 1: demonstrate that the raw materials to be utilized, in the region of the project activity, are not fully utilized. For this purpose, demonstrate that the quantity of material is at least 25% greater than the demand for such materials or the availability of alternative materials for at least one year prior to the project implementation; <input type="checkbox"/> Approach 2: demonstrate that suppliers of the raw	AMS III.Z./V ersion 04.0	Part II B.2.1	Not applicable	NA	NA



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materials to be utilized, in the region of the project activity, are not able to sell all of their supply of these materials. For this purpose, project participants shall demonstrate that a representative sample of suppliers of the raw materials to be utilized, in the region, had a surplus of materials (e.g. at the end of the period during which the raw material is sold) that they could not sell and that is not utilized.					
<p>M.11 This methodology is applicable under the following conditions:</p> <p>(e) The service level of project brick shall be comparable to or better than the baseline brick, i.e. the bricks produced in the brick production facility during the crediting period shall meet or exceed the performance level of the baseline bricks (in terms of, for example dry compressive strength, wet compressive strength, density). An appropriate national standard shall be used to identify the strength class of the bricks; bricks that have compressive strengths lower than the lowest class bricks in the standard are not eligible under this methodology. Project bricks are tested in nationally approved laboratories at six-month intervals (at a minimum) and test certificates on compressive strength are made available for verification;</p> <p>(f) The existing facilities involving modification and/or</p>	AMS III.Z./V ersion 04.0	Part II B.2.1	<ul style="list-style-type: none"> - Compressive strength test will be made prior to the CPA implementation (to identify the baseline brick quality). - Compressive strength test will be made every 6 months after the CPA implementation (as per the monitoring plan in the methodology) to determine the quality of the product brick. - CME will ensure that in conformity with the methodology requirement, the the service level (compressive strength) of project brick is comparable to or better than that of the baseline brick at each CPA Facility. - An appropriate national standard will be identified in each CPA-DD, and the CPA Facilities Owners shall comply with the specifications in the standard. - CPA Developers shall submit test certificates (at 6 month intervals) during verification. 	OK	OK

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<p>replacement shall not influence the production capacity beyond $\pm 10\%$ of the baseline capacity unless it is demonstrated that the baseline for the added capacity is the same as that for the existing capacity in accordance with paragraph 4 above;</p> <p>(g) Measures are limited to those that result in emission reductions of less than or equal to 60 kt CO₂ equivalent annually.</p> <p>(h) This methodology is not applicable if local regulations require the use of the proposed technologies or raw materials for the manufacturing of bricks unless widespread non compliance (i.e. less than 50% of brick production activities in the country comply) of the local regulation evidenced.</p>			<p>(b) CPA Facilities applying modifications and/or replacements shall undergo a comparison between the baseline production capacity and the project capacity after CPA implementation.</p> <p>(c) Each CPA shall result in emissions reduction of less than or equal to 60 kt CO₂eq annually.</p>		
N Estimation of emission reductions of a generic CPA baseline: AMS.III.Z/Version 04.0					
N.1 The baseline emissions are the fossil fuel consumption related emissions (fossil fuel consumed multiplied by an emissions factor) associated with the system(s), which were or would have otherwise been used, in the brick production facility(ies) in the absence of the project activity. For projects that involve replacing, modifying or retrofitting systems in existing facilities, the average of the immediately prior	AMS.III.Z/Vers ion 04.0	B.6.1	The project emissions concept is accounting for the actual consumed NG quantity and multiplying it by the emission factor and calorific value of NG. The emissions reduction result from using a less carbon-intensive fuel than that used in the baseline.	OK	OK



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<p>three-year historical fossil fuel consumption data, for the existing facility, shall be used to determine an average annual baseline fossil fuel consumption value. Similarly, prior three-year historical production data (excluding abnormal years) for the existing facility, shall be used to determine an average annual historical baseline brick production rate in units of weight or volume. For calculating the emission factor for fossil fuel, reliable local or national data shall be used. IPCC default values shall be used only when country or project specific data are not available or demonstrably difficult to obtain;</p> <p>N.2 For projects involving the installation of systems in a new facility or a capacity addition in an existing system, the average annual baseline fossil fuel consumption value and the baseline brick production rate shall be determined as that which would have been consumed and produced, respectively, under an appropriate baseline scenario. If the baseline scenario identification as per paragraph 4 above results in more than one alternative technologies with different levels of energy consumption, the alternative with the least emissions intensity should be chosen for determining the baseline emissions of the facility.</p>					
N.3 The emissions are calculated as below:	AMS.III	B.6.1	OK	OK	OK

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$BE_y = EF_{BL} * P_{PJ,y}$ <p>Where: BE_y The annual baseline emissions from fossil fuels displaced by the project activity in t CO2e in year y (of the crediting period) EF_{BL} The annual production specific emission factor for year y, in tCO2/kg or m3 $P_{PJ,y}$, The annual net production of the facility in year y, in kg or m3</p>	.Z/Version 04.0				
<p>N.4 The annual production specific emission factor EF_{BL} shall be calculated ex ante for project activities that involve replacing, modifying or retrofitting systems in existing facilities as follows:</p> $EF_{BL} = \sum_{j,i} (FC_{BL,i,j} * NCV_j * EF_{CO_2,j}) \div P_{Hy}$ <p>Where: $FC_{BL,i,j}$, Average annual baseline fossil fuel consumption value for fuel type j combusted in the process i, using volume or weight units⁸ NCV_j Average net calorific value of fuel type j combusted, TJ per unit volume or mass unit $EF_{CO_2,j}$ CO2 emission factor of fuel type j combusted in the process i in tCO2/TJ P_{Hy} Average annual historical baseline brick production</p>	AMS.III .Z/Version 04.0	B.6.1	<p><i>The emission factor in the baseline situation (EF_{BL}) is the coefficient for the fossil fuel used in the baseline expressed as emissions per unit of output (e.g. tCO2/kg or m3).</i></p> $EF_{BL} = \sum_{j,i} (FC_{BL,i,j} * NCV_j * EF_{CO_2,j}) \div P_{Hy}$	OK	OK

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rate in accordance with paragraph 14(a), in units of weight or volume, kg or m3					
N.5 Annual production specific emission factor (BL EF) for installation of systems in a new facility or for capacity addition in an existing system shall be determined using one of the options below: (a) Using manufacturers' specifications such as for brick production rate, energy consumption in the process; (b) Using specifications of comparable units having similar techno-economic parameters; (c) Using reference plant approach.	AMS.III .Z/Vers ion 04.0	B.6.1	Not applicable	NA	NA
Estimation of emission reductions of a generic CPA Leakage: AMS.III.Z/Version 04.0					
N.6 Leakage emissions on account of the diversion of biomass from other uses (competing uses) shall be calculated as per "General guidance on leakage in biomass project activities".	AMS.III .Z/Vers ion 04.0	B.6.1	Not applicable: no biomass used	NA	NA
N.7 In the case of project activities involving a change in the production process or a change in the type or quantity of raw and/or additive materials as compared to the baseline, the incremental emissions associated with the production/consumption and transport of those raw and/or additive materials consumed as compared to baseline, shall be calculated as	AMS.III .Z/Vers ion 04.0	B.6.1	Not applicable	NA	NA

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leakage.					
N.8 Leakage emissions resulting from fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of fossil fuels outside of the project boundary shall be considered, as per the guidance provided in the leakage section of ACM0009 "Consolidated baseline and monitoring methodology for fuel switching from coal or petroleum fuel to natural gas". If leakage emissions in the baseline scenario are higher than leakage emissions in the project scenario, leakage emissions may be set to zero.	AMS.III .Z/Vers ion 04.0	B.6.1	Leakage emission is calculated according to ACM009	OK	OK
N.9 Leakage may result from fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of fossil fuels outside of the project boundary. This includes mainly fugitive CH ₄ emissions and CO ₂ emissions from associated fuel combustion and flaring. In this methodology, the following leakage emission sources shall be considered: <ul style="list-style-type: none"> Fugitive CH₄ emissions associated with fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of natural gas used in the project plant and fossil fuels used in the grid in the absence of the project activity; In the case LNG is used in the project plant: CO₂ emissions from fuel combustion/electricity consumption 	ACM00 09 / Versio n 04.0.0	B.6.1	<i>In this methodology, the following leakage emission sources shall be considered: Fugitive CH₄ emissions associated with fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of natural gas used in the project plant and fossil fuels used in the grid in the absence of the project activity. For the purpose of determining fugitive methane emissions associated with the production – and in case of natural gas, the transportation and distribution of the fuels – project participants should multiply the quantity of natural gas consumed in all element processes i with a methane emission factor for these upstream</i>	OK	OK

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<p>associated with the liquefaction, transportation, re-gasification and compression into a natural gas transmission or distribution system.</p> <p>Thus, leakage emissions are calculated as follows:</p> $LE_y = LE_{CH_4,y} + LE_{LNG,CO_2,y}$ <p>Where:</p> <p>LE_y = Leakage emissions during the year y in tCO₂e</p> <p>LE_{CH₄y} = Leakage emissions due to fugitive upstream CH₄ emissions in the year y in tCO₂e</p> <p>LE_{LNG CO₂ y} = Leakage emissions due to fossil fuel combustion/electricity consumption associated with the liquefaction, transportation, re-gasification and compression of LNG into a natural gas transmission or distribution system during the year y in tCO₂e</p> <p>Note that to the extent that upstream emissions occur in Annex I countries that have ratified the Kyoto Protocol, from 1 January 2008 onwards, these emissions should be excluded, if technically possible, in the leakage calculations.</p> <p>Fugitive methane emissions : please refer to ACM009</p> <p>CO₂ emissions from LNG please refer to ACM009</p>			<p><i>emissions (EF_{NGL,upstream,CH4}), and subtract for all fuel types k which would be used in the absence of the project activity the fuel quantities multiplied with respective methane emission factors (EF_{k,upstream,CH4}), as follows:</i></p> $LE_{CH_4,y} = [FF_{project,y} * NCV_{NG,y} * EF_{NG,upstream,CH_4} - \sum_k FF_{baseline,k,y} * NCV_k * EF_{k,upstream,CH_4}] * GWP_{CH_4}$ $FF_{project,y} = \sum_i FF_{project,i,y}$ $FF_{baseline,k,y} = \sum_i FF_{baseline,i,k,y}$ <p>, where:</p>		

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Estimation of emission reductions of a generic CPA Project activity emission: AMS.III.Z/Version 04.0					
<p>N.10 The project emissions should be calculated as follows:</p> $PE_y = PE_{elec,y} + PE_{fossilfuel,y} + PE_{transport,y} + PE_{cultivation,y} + PE_{CH_4,y}$ <p>Where:</p> <p>PE_y Project emissions in year y (tCO₂)</p> <p>$PE_{elec,y}$, Project emissions due to electricity consumption in year y (tCO₂)</p> <p>$PE_{fossilfuel,y}$, Project emissions due to fossil fuel consumption in year y (tCO₂)</p> <p>$PE_{transport,y}$, Project emissions from transportation of the renewable biomass from the places of their origin to the manufacturing facility site in year y (tCO₂)</p> <p>$PE_{cultivation,y}$, Project emissions from renewable biomass cultivation in year y (tCO₂e)</p> <p>$PE_{CH_4,y}$, Project emissions due to the production of charcoal in kilns not equipped with a methane recovery and destruction facility in year y (tCO₂e)</p>	AMS.III .Z/Vers ion 04.0	B.6.1	OK	OK	OK
<p>N.11 Calculation of $PE_{elec,y}$</p> <p>The emissions include electricity consumption (including auxiliary use) $PE_{elec,y}$, associated with the biomass treatment and processing, calculated as per the tool "Tool to calculate baseline, project and/or leakage emissions from electricity consumption".</p>	AMS.III .Z/Vers ion 04.0	B.6.1	Brick kilns do not require electricity to operate neither in the baseline nor project scenarios. Only fuel is combusted to generate the necessary heat for brick cooking (see the schematic diagram in Section B.3 above). Therefore, there are no	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			project emissions due to electricity consumption. $Hence, PE_y = PE_{fossilfuel,y}$		
N.12 Calculation of $PE_{fossilfuel,y}$ The emissions include fossil fuel consumption (including auxiliary use) $PE_{fossilfuel,y}$, associated with the operation of the manufacturing process and the biomass treatment and processing, calculated as per the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion".	AMS.III .Z/Vers ion 04.0	B.6.1	$PE_y = FCI_{j,y} * COEF_{i,y}$	OK	OK
N.13 Calculation of $PE_{transport,y}$ Project emissions from the transportation of the renewable biomass from its source to the manufacturing production site shall be accounted for following the procedures in AMS-III.AK "Biodiesel production and use for transport applications" if the transportation distance is more than 200 km, otherwise they can be neglected.	AMS.III .Z/Vers ion 04.0	B.6.1	CPAs submitting for inclusion under this PoA does not involve the use of renewable biomass; therefore, there are no project emissions from cultivation or transportation.	OK	OK
N.14 Calculation of $PE_{cultivation,y}$ In cases where the project activity utilizes biomass sourced from dedicated plantations, the project emissions from renewable biomass cultivation shall be calculated as per the relevant provisions of AMS-III.AK "Biodiesel production and use for transport applications".	AMS.III .Z/Vers ion 04.0	B.6.1	CPAs submitting for inclusion under this PoA does not involve the use of renewable biomass; therefore, there are no project emissions from cultivation or transportation.	OK	OK
N.15 Calculation of $PE_{CH_4,y}$ The project methane emissions from the charcoal produced in kilns not equipped with a methane recovery	AMS.III .Z/Vers ion	B.6.1	Production of charcoals in brick kilns is also not eligible for inclusion under this PoA; therefore there are no CH4 project	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
and destruction facility and methane emissions from the production of charcoal shall be accounted for as per the relevant procedures of AMS-III.K "Avoidance of methane release from charcoal production by shifting from traditional open-ended methods to mechanized charcoaling process". Alternatively, conservative emission factor values from peer reviewed literature or from a registered CDM project activity can be used, provided that it can be demonstrated that the parameters from these are comparable, e.g. the source of biomass, characteristics of biomass such as moisture, carbon content, type of kiln and operating conditions such as ambient temperature.	04.0		emissions		
Estimation of emission reductions of a generic CPA Emission Reductions: AMS.III.Z/Version 04.0					
N.16 Emission reductions (ER_y) achieved by the project activity will be calculated as the difference between the baseline emissions and the sum of project emissions and leakage as follows: $ER_y = BE_y - PE_y - Leakage$ Where: ER_y Emission reductions in year y (tCO ₂ e/yr) BE_y Baseline emissions in year y (tCO ₂ e/yr)	AMS.III .Z/Vers ion 04.0	B.6.1	OK	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
<i>PE y</i> Project emissions in year <i>y</i> (tCO ₂ /yr) <i>LE y</i> Leakage emissions in year <i>y</i> (tCO ₂ /yr)					
O Description of the monitoring plan for a generic CPA: AMS.III.Z/Version 04.0					
O.1 The applicable requirements specified in the “General Guidelines for SSC CDM methodologies” and the “Standard on sampling and surveys for CDM project activities and PoAs” are also an integral part of the monitoring guidelines specified below and therefore shall be referred to by the project participant.			OK	OK	OK
O.2 Monitoring during the crediting period shall include: (a) Production output (kg or m ³ per day); (b) Principal raw and additive material purchases on monthly basis; (c) Tests to validate that the project bricks meet the performance requirements and specifications at six-month intervals; (d) Project emissions associated with the electricity use shall be monitored as per the “Tool to calculate baseline, project and/or leakage emissions from electricity consumption”; (e) Project emissions due to the fossil fuels consumption shall be monitored as per the “Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion”;			The following parameters are being monitored: FC_{NG,y} , NG consumed in the project element process(es) year <i>y</i> PP_{J,y} Annual net brick production in the project activity in year <i>y</i> NCV_{NG} Net calorific value of NG in year <i>y</i> Quality of project bricks Compressive strength of produced bricks Principle raw and additive material which are purchased and used in the brick manufacturing process	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
<p>(f) Daily consumption of biomass of the production facility. Each type of solid/liquid biomass shall be monitored separately. Cross-checking with purchase invoice, delivery notes and the stock is required;</p> <p>(g) In order to assess the compliance with the applicability conditions concerning organic liquid residues as defined in footnote 3, monitoring shall include data on the origin of organic residue liquids;</p> <p>(h) The calorific value of each fossil fuel type and the density, mass fraction and carbon content of each biomass fuel type used;</p> <p>(i) Parameters for determining project emissions from renewable biomass cultivation and from transportation of renewable biomass over distances of 200 km shall be monitored as per the relevant provisions of AMS-III.AK;</p> <p>(j) Parameters for determining methane emissions from the charcoal produced in kilns not equipped with a methane recovery and destruction facility shall be monitored as per the relevant procedures of AMS-III.K.</p>			FC_{FO,y} Backup fossil fuel consumption value		

TABLE 3 FINDINGS

Corrective Action Requests (CARs), Clarification Requests (CLs) and Forward Action Requests (FARs)

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CAR01: The paragraph titled social benefits in section A2 the PoA-DD is limited to health issues- Please correct	PART I A.2.1	PoA-DD has been modified (Version 04), where the title of the paragraph is corrected ("Health benefits" instead of "Social benefits").	The title has been changed to better reflect the content of the paragraph. The modification is found satisfactory by the DOE validation team. <u>CAR01 is closed</u>
CAR02: Last sentence of last para of the framework. Correct "the employed methodology" to reflect the used methodologies (page 9).	PART I A.2.2	PoA-DD has been modified (Version 2.1), where the singular reference to the "employed methodology is..." is corrected into the plural to become "The employed methodologies are..."	The Last sentence of last paragraph of the framework has been corrected. The modification is found satisfactory by the DOE validation team. <u>CAR02 is closed.</u>
CAR03: specify correctly the average daily diesel consumption of the bakeries	PART I A.2.2	PoA-DD has been modified (Version 03), where the average daily diesel consumption is referred to as in the reference source, i.e. the daily diesel consumption corresponding to the average daily flour consumption.	The average daily diesel consumption has been specified and the source provided and validated <u>CAR03 is closed</u>
CAR04: Referring to the paragraph : <i>The proposed PoA is small scale. CPAs to be included under this PoA will apply one of two independent small scale</i>	PART I A2.2	PoA-DD has been modified (Version 03), where it is specified that the methodologies are to be used independently by CPAs under this PoA.	The updated version of the PoA-DD states that the two applied methodologies will be used independently The modification is found satisfactory by the DOE validation team.

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
<i>methodologies, namely AMS-III.B and AMS-III.Z, correct the statement to reflect the independent use of the two methodologies (not the use of the independent two methodologies)</i>			<u>CAR04 is closed</u>
CAR05: Indicate sectoral scope and type of PoA	PART I A.2.5	<p>PoA-DD has been modified (Version 2.1), where the sectoral scope of the PoA is specified as being (1) and (4), based on the methodologies to be independently applied by CPAs under the PoA.</p> <p>PoA-DD has been modified (Version 04), where the version of each of the two independent methodologies are specified; AMS-III.B (Version 16) and AMS-III.Z (Version 04).</p>	<p><u>Response 1:</u> The Sectoral scope has been added in the new version of the POA-DD: The PoA falls under sectoral scope (1): energy industries (renewable-/non-renewable sources), and sectoral scope (4): manufacturing industries. The POA is small scale. CPAs to be included under this PoA will apply one of two independent small scale methodologies, namely AMS-III.B and AMS-III.Z. Please indicate the version number of the methodologies.</p> <p><u>Response 2:</u> The version of the two applied methodologies has been added as requested. The modification is found satisfactory by the DOE validation team.</p> <p><u>CAR05 is closed.</u></p>
CAR06: in section A.6, applicable provisions for application of selected	PART I A.6.2	<u>Response 1:</u> PoA-DD has been modified (Version 04), where the description of the technologies/measures (Section A.6) refers to the provisions in each of the two	<u>Response 1:</u> Please indicate the modification in <u>section A.6</u> as per EB67, Annex 30 the provision from the methodologies applicable to the technologies/measures mentioned

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
baseline and monitoring methodology for small-scale project activities in the Project standard are not considered		<p>approved methodologies related to what the methodology comprises.</p> <p>It is also explained that the independent use of either one of the two methodologies under this PoA will be limited to the fuel switching activities (from heavy or light fuel oil to NG) at micro and small enterprises in Egypt.</p> <p>Response 2: PoA-DD has been modified (Version 06), where Section A.6 refers to EB67, Annex 30, Version 02, and states the specific guidelines to be followed for Section A.6.</p> <p>To show emphasize compliance with EB67, subtitles have been added to Section A.6 indicating the purpose of the paragraphs. Those subtitles are:</p> <ul style="list-style-type: none"> - Description of the fuel switching activity; - Schematic description of the fuel switching activity; - Applicable provisions for application of the selected methodologies; and - Examples of typical CPAs with a brief description on their operation. <p>Under the third subtitle, the applicable provisions applicable provisions for application of selected baseline and monitoring methodology for small-scale project activities in the Project standard have been</p>	<p>Response 2: Section A.6 of the Po-ADD has been modified with reference to the Guidelines for completing the programme design document form for small-scale CDM programmes of activities (EB 67, Annex 30, Version 02). Reference is made to the independent application of the two small scale methodologies AMS.III.B and AMS.III.Z with description of examples of typical targeted CPAs. The modification is found satisfactory by the DOE validation team.</p> <p><u>CAR06 is Closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
		considered.	
CAR07: Update figure 12 according the latest version of the Guidelines for demonstrating additionality of microscale project activities (EB 68, repa 26, figure 2, page 7).	PART I B1.1	PoA-DD has been modified (Version 03), where the figure has been updated in accordance with the latest version of the guidelines.	The figure 12 has been updated according the latest version of the Guidelines for demonstrating additionality of microscale project activities (EB 68, repa 26, figure 2, page 7). <u>CAR07 is closed</u>
CAR08: Update the additionality tool reference according the latest version of the Guidelines for demonstrating additionality of small scale project activities (EB 68, repa 27).	Part I B.1	PoA-DD has been modified (Version 03), where the additionality tool reference in the text and footnote are updated in accordance with the latest version of the guidelines.	PoA-DD has been modified (Version 03), where the additionality tool reference in the text and footnote are updated in accordance with the latest version of the guidelines. <u>CAR08 is closed</u>
CAR09: The sentence that refers to the African Economic Outlook for Egypt, AfDB/OECD, 2008 (footnote N°38) should be correct to better reflect the statement in the source	Part 1 B.1	PoA-DD has been modified (Version 03), where the sentence is rephrased to be in accordance with the reference mentioned in the footnote	The statement in the PDD has been changed to reflect the cited source <u>CAR09 closed</u>
CAR10: Include in the eligibility criteria unique identification of facilities	PART I B2.	Verification method of Eligibility Criteria #3 has been updated in the PoA-DD (Version 2.1), where it refers to the unique identification of CPA Facilities' locations.	A unique identification of location coordinates of each of the CPA Facilities will be used to avoid double counting. This has been added in the Table 3 of the POA-DD.

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
locations to avoid double counting of emissions reductions			<u>CAR10 is closed</u>
CAR11: Add eligibility criteria covering the specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	PART I B.2.3	An additional criterion for eligibility has been added to the PoA-DD (Version 2.1) to address that CPA Facilities submitting for inclusion under the same CPA must be of the same type (same industrial activity).	<p>The eligibility criteria #6 has been added: For CPAs involving more than one facility, all facilities under a CPA must be applying the same industrial process to produce the same type of product, e.g. bakeries, smelters</p> <ul style="list-style-type: none"> - Proof of the activity type at each CPA Facility (onsite visit or official documentation, e.g. commercial registry, as applicable). - Each CPA Facility must be in compliance with any mandatory regulations at the time of inclusion, i.e. bakeries must be in compliance with the Supply and Internal Trade Ministry requirements, brick kilns must comply with national brick strength standards, etc <p><u>CAR11 is closed</u></p>
CAR12: Eligibility criteria Part II B2 -Table 3 # 7 : please correct to ensure that the CPA meets all the eligibility criteria of the applied methodology. As verification method: Please correcte to ensure that the CPA type 1 should meet all	PART I B2- Table 3 Page 21	Eligibility Criteria #7 has been updated in the PoA-DD (Version 2.1), where it specifies that in addition to the eligibility criteria table, each CPA must show that the applicability criteria of the applied methodology are met.	<p>The eligibility criteria Part II B2 -Table 3 # 8 in version 3.0 of the PoA-DD has been updated with specification of the requirement that CPA type 1 should meet all the applicability criteria of methodology AMS III B (see Section B2 Table 6) and CPA Type 2 applicability criteria of methodology AMS III Z as stated in paragraph B2-Table 7</p> <p><u>CAR12 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
the applicability criteria of methodology AMS III B (see Section B2 Table 6) and CPA Type 2 applicability criteria of methodology AMS III Z as stated in paragraph B2-Table 7			
CAR13: the eligibility criteria #13.1 does not clearly specify the threshold of micro-scale activity in the verification method. Also, the eligibility criteria #13.2 is referring to section A.5.2 of the POA-DD for the demonstration of additionality. This is not the correct reference.	PART I B2- Table 3 Page 21	<p>PoA-DD has been modified (Version 04), where:</p> <ul style="list-style-type: none"> - The verification method for criterion 13.1 in the eligibility demonstration table specifies the threshold of micro-scale; 600 tCO₂e per year per element process and 20,000 tCO₂e per year per CPA. - The reference to the demonstration of additionality section in criterion 13.2 is corrected into "Section B.1, Part I of the PoA-DD". <p>Consistent changes are applied to the same table in Part II.</p>	<p>The threshold of the microscale has been specified correctly as 600 tCO₂e per year per element process and 20,000 tCO₂e per year per CPA.</p> <p>The reference to the demonstration of additionality section in criterion 13.2 has been corrected into Section B.1, Part I consistent with the PoA-DD document.</p> <p><u>CAR 13 is closed</u></p>
CAR14: The eligibility criteria as set in AMS III. Z version 04.0 and AMS III.B version 16.0 are not entirely taken into account. Moreover the threshold specified in the eligibility criteria #14.1 is not	PART I B2- Table 3 Page 21 And Table 2, 1.1 and 2.1	PoA-DD has been modified (Version 04), where the threshold specified in criterion 13.1 is corrected to indicate that only micro-scale CPAs are eligible for inclusion as Type 1 CPAs (where the ERs are less than or equal 600 tCO ₂ e per year per element process, and less than or equal 20,000 tCO ₂ e per year per CPA).	<p>The demonstration of the compliance to the eligibility criteria of both applied methodologies (AMS III.B for Type 1 CPAs) and AMS.III.Z for Type 2 CPAs) has been specified in the eligibility table.</p> <p>The microscale threshold specified in criterion 13.1 is corrected to indicate that ERs are less than or equal</p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
correct.		<p>Since this applies to all Type 1 CPAs, therefore the application of methodology will always use equation 3, such that the amount of fossil fuel consumed in the project activity in year y, FCy, can be used as a proxy for determining baseline emissions.</p> <p>The applicability criteria as set in each of the two methodologies should be demonstrated for each CPA Facility in details in Section B.2 of Part II. The verification method for criteria 14.1 and 14.2 is changed to highlight that demonstration of compliance with the methodology is part of the eligibility.</p> <p>Consistent changes are applied to the same table in Part II.</p>	<p>600 tCO₂e per year per element process, and less than or equal 20,000 tCO₂e per year per micro-scale CPA</p> <p>The applicability criteria as set in each of the two methodologies should be demonstrated for each CPA Facility in details in Section B.2 of Part II. The verification method for criteria 14.1 and 14.2 is changed to highlight that demonstration of compliance with the methodology is part of the eligibility.</p> <p>Consistent changes are applied to the same table in Part II.</p> <p><u>CAR 14 is closed</u></p>
CAR15: the microscale threshold (200 tCO ₂ e/year) and small-scale threshold (600 tCO ₂ e/year) specified in table 4 are not the correct ones. (Please indicate clearly the small-scale threshold and the element process threshold to avoid any confusion.)	PART I B2	<p>PoA-DD has been modified (Version 04), where it is specified that:</p> <ul style="list-style-type: none"> - The micro-scale threshold is specified as 20,000 tCO₂e per year. For micro-scale CPAs to be exempted from the de-bundling check, the ERs must not exceed 200 tCO₂e per element process per year (1% of the micro-scale threshold). - The small-scale threshold is specified as 60,000 tCO₂e per year. For small-scale CPAs to be exempted from the de-bundling check, the ERs must not exceed 600 tCO₂e per element process per year (1% of the small-scale threshold). 	<p>The microscale and small scale thresholds have been corrected and better specified in Table 4 of the PoA-DD</p> <p><u>CAR 15 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CAR16: For all criteria verification in Table 3, clarify inconsistencies between the CPA implementer (referred to in singular and plural) with the owners of the facilities that compose the CPA. Make coherent and consistent corrections throughout the PoA-DD document	PoA-Stand §15 PDD-PoA Part I - Section B2; Table 3	PoA-DD has been modified (Version 2.1), where the inconsistencies are corrected and reference to CPA Developers and CPA Facilities Owners is in accordance with the definitions provided in section A.3.	The PP made corrections throughout the PoA-DD clarifying the term "CPA Implementer" as a CPA CDM Developer <u>CAR 16 is closed</u>
CAR17: concerning the application of the two methodologies, please correct reference to the use of the combination of the two methodologies. Corrections should be made over all the documents sections.	PoA-DD PART I Section B3- page 25	PoA-DD has been modified (Version 2.1), where reference to the combination of methodologies is corrected into the independent use of one of the approved methodologies. Consistent changes are made throughout the document.	The PP specified that CPAs under the PoA will apply independently one of the following two approved small scale methodologies: <ul style="list-style-type: none"> AMS-III.B. Switching Fossil Fuels (Version 16) – Sectoral Scope 1 : Energy industries (renewable – non-renewable sources) OR AMS-III.Z. Fuel switch, process improvement and energy efficiency in brick manufacture (Version 04) – Sectoral Scope 4 : Manufacturing industries <u>Therefore CAR 17 is closed</u>

VALIDATION REPORT



Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
<p>CAR18: Update the PoA-DD document according to version 2.2 of the CDM project standard (EB70 annex 2). In particular the PoA-DD should comply with § 143 and §144 of the standard related to the use of multiple methodologies.</p>	<p>Part I Section B3.7</p>	<p>PoA-DD has been modified (Version 06), where Section B.3 refers to the CDM Project Standard (EB70, Annex 02), paragraphs 143 and 144 and text is added to show compliance with the requirements, where:</p> <ul style="list-style-type: none"> - Two separate generic CPAs are presented in Part II of the PoA-DD - One specific Type (1) CPA is submitted with the PoA for GSC and registration - The first specific Type (2) CPA to be submitting for inclusion after the PoA is registered will be provided for approval by the Board in accordance with the post-registration change process as defined in the most recent Project cycle procedure at the time of submission of the CPA. <p>Part II of the PoA-DD has been modified accordingly.</p>	<p>PoA-DD has been modified to be conform with to the latest version of CDM Project Standard (EB70, Annex 02) in particular with respect to the provisions of paragraphs 143 and 144 requiring generic and specific CPA for each applied methodology/measure or technology.</p> <p>Two separate generic CPAs have been presented in Part II of the PoA-DD for the two applied methodologies AMS.III.B and AMS.III.Z</p> <ul style="list-style-type: none"> - One specific Type (1) CPA using methodology AMS.III.B is submitted with the PoA for GSC and registration - The first specific Type (2) CPA using methodology AMS.III.Z will be submitted by the PP for inclusion after the PoA is registered in accordance with the post-registration change process as defined in latest version of CDM Project Standard (CDM-EB70-A02). <p>The modification is found satisfactory by the DOE validation team.</p> <p><u>CAR18 is therefore closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CAR19: Correct the title of figure 14 to reflect the content of the provided diagram	Part I Section C	PoA-DD has been modified (Version 03), where the figure caption is updated to reflect the content and purpose of the figure.	The title of figure 14 has been updated to Schematic diagram showing the parties involved in the PoA, that reflect better the content of the figure <u>CAR19 is closed</u>
CAR20: Review the communication role of CPA developers in conformity with the definition and role of a CME as stated in the Glossary of CDM terms (eb66, repa63, page 8)	Part I Section C	PoA-DD has been modified (Version 03), where the communication with EB and Secretariat is stated as the responsibility of the CME in accordance with the CME definition in the Glossary of CDM Terms.	Updated PoA-DD specifies that the main responsibility of the CME is to communicate with the Board and the secretariat at UNFCCC, including on matters relating to the distribution of CERs. <u>CAR20 is closed</u>
CAR21: The proposed role and responsibilities of the CME in figure 15 should be completed to reflect better its responsibilities	Part I Section C	PoA-DD has been modified (Version 03), where the figure caption is updated to reflect that the diagram is limited to the proposed roles in the CME, while the responsibility of each role is as explained in the text.	The figure title has been updated to the Proposed roles for members of the CME which reflects better the depicted diagram. The responsibility and role of each CME members is explained in the text. <u>CAR21 is closed</u>
CAR22: Correction should be made to figure 16 to ensure the visibility of all the figure texts	Part I Section C	PoA-DD has been modified (Version 03), where the figure is modified and the text is visible.	Correction was made as requested. The text in the depicted figure is clear <u>CAR22 is closed</u>
CAR23: Update the status of the LoA availability in Table 7 of the PoA-DD document	Part I Section G	PoA-DD has been modified (Version 03), where the date of obtaining the LoA is inserted in the table.	The date of the LoA has been updated to June 2012. <u>CAR23 is closed</u>
CAR24: the ACM0009 methodology referred to in	PART II-	PoA-DD has been modified (Version 04), where the	The version of the the referred methodology ACM0009 is

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
section B.1 is not the latest version of the methodology.	Type (1) Generic CPA Section B.1	version number of methodology ACM0009 is updated ("04.0.0" instead of "3.2").	updated from V03.2 to the latest version of V04.0. <u>CAR24 is closed</u>
CAR25: in Table 8 (Applicability study of Type 1 CPAs for using AMS-III.B methodology under this PoA), for each criteria correct to refer, as appropriate, to CPA, CPAs or each facility of the CPA instead of CPA or CPAs.	PoA-DD PART II Type (1) Generic CPA Section B.2	PoA-DD has been modified (Version 2.1), where the compliance level is modified and it is specified whether the requirement is to be met on the CPA or CPA Facilities level.	CPA(s) Facility(ies) has been added to Table 8 Section B2 <u>CAR25 is closed.</u>
CAR26: Insert flow diagram physically delineating the generic CPA presented	PoA-DD PART II Type (1) Generic CPA B.3	PoA-DD has been modified (Version 2.1), where schematic flow diagrams physically delineating type (1) of generic CPAs is included under Part II, section B.3.	Process flow diagram physically delineating Type (1) CPAs has been added in section B.3 as per Guidelines for completing the SSC-PoA-DD form version 02.0 (EB 67 Annex 30) <u>CAR 26 is closed</u>
CAR27: revise definition/description of parameters to be consistent with description in methodology.	PoA-DD PART II Type (1) Generic CPA B.6.1	PoA-DD has been modified (Version 2.1), where the description of parameters is updated to become in accordance with the applied methodology.	The parameters used in equation 4 ($FC_{PJ,y}$ and $NCV_{FF,PJ,y}$) for the project emissions calculation has been corrected in according to the AMSIII.B applied methodology <u>CAR 27 is closed</u>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
	equation 4		
CAR28: The EF national values provided for HFO and Natural gas fuel, in the parameters tables of section 6.2 should be consistent with the calculated values in the provided ER calculations spreadsheet	PoA-DD, Part II Type (1) Generic CPA Section B6.2	<p>The inconsistencies were due to approximation errors:</p> <ul style="list-style-type: none"> - The PoA-DD is modified, where the EF of HFO is 76.76 instead of 77 tCO₂/TJ. - The NCV for NG in the calculation sheet was taken as 0.0498 instead of 0.04983 TJ/tonNG. The error has been corrected in the ER calculation sheet: [100099-3303-04 - ERs Calculation Sheet for the First CPA - 120903] <p>Consistent modifications are applied in Section B.6.2 of Type (2) Generic CPA.</p> <p>An ERs calculation sheet is provided for the two typical examples for CPAs of Type 1 and Type 2 (presented in Appendix 04 of the PoA-DD):</p> <ul style="list-style-type: none"> ➤ [100099-3305-01 - ERs calculation sheet for two typical CPAs (Appendix 04) - 121114] 	<p>The inconsistencies in the round up of the EF values have been corrected to be coherent with the results of the ER calculations spreadsheet.</p> <p>The ERs calculation spreadsheet has been provided with details information on the data sources. ERs Calculations have been checked for both CPAs types. They are correct and consistent with the used values in the PoA-DD.</p> <p><u>CAR 28 is closed</u></p>
CAR29: The EF national values provided for HFO, LFO and Natural gas fuel, in the parameters tables of section 6.2, could not be readily found in the cited	PoA-DD, Part II Type (1) Generic CPA Section	PoA-DD has been modified (Version 03), where the tables refer to the values readily found in the national source, and demonstrates the method of obtaining the EF for each type of fuel.	Details of the national emissions factors of HFO, Diesel and Natural Gas derivation based the national reported data (carbon content and NCV) have been provided and the values used justified and validated

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
source.	B6.2	Consistent modifications are applied in Section B.6.2 of Type (2) Generic CPA.	<u>CAR29 is closed.</u>
CAR30: The EF factors national values provided for upstream fugitive methane emissions could not be readily found in the cited sources.	PoA-DD, Part II Type (1) Generic CPA Section B6.2	<p>PoA-DD has been modified (Version 03), where the tables refer to the values readily found in the national source, and demonstrates the method of obtaining the EF for each type of fuel.</p> <p>Consistent modifications are applied in Section B.6.2 of Type (2) Generic CPA.</p>	<p>Details of the national emissions factor of upstream fugitive methane emissions derivation based the national reported data (carbon content and NCV) have been provided and the value used justified and validated</p> <p><u>CAR30 is closed.</u></p>
CAR31: International standard abbreviations should be used for the density of the natural gas	PoA-DD, Part II Type (1) Generic CPA Section B6.2	<p>PoA-DD has been modified (Version 03), where the density is referred to as “d” and its unit is “g/l”.</p> <p>Consistent modifications are applied in Section B.6.2 of Type (2) Generic CPA.</p>	<p>The unit of the density has been corrected to international standards kg/m3</p> <p><u>CAR31 is closed</u></p>
CAR32: Referring to the parameter FC _{BL} table (Average annual baseline fossil fuel consumption value); correct to use a table per CPA type ..	PoA-DD, Part II Type (1) Generic CPA Section B6.2	<p>PoA-DD has been modified (Version 2.1), where a separate table for FC_{BL} parameter is included for each type of CPAs.</p> <p>PoA-DD has been modified (Version 04), where the choice of data in FC_{BL} parameter table for Type 1 CPAs is specified to be “These data are to be obtained in accordance with the methodology from the available</p>	<p>Two different tables have been added for the applied methodologies.</p> <p>For the FC_{BL} of CPA applying the methodology AMS.III.B correct and specify the Choice of data or Measurement methods and procedures See also CL55</p> <p>The parameter FC_{BL} is the average annual baseline fossil</p>

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
		<p>documentation at each CPA Facility"</p> <p>A separate table for the same parameter has been included in Section B.6.2 of Type (2) Generic CPA.</p>	<p>fuel consumption value at the baseline. The choice of the data has been modified in the PoA-DD table as "These data are to be obtained in accordance with the methodology from the available documentation at each CPA Facility". The FC_{BL} value for Type 1 CPAs (AMS.III.B.) is used in the ex-ante ERs calculations at each CPA Facility during the development of the CPA DD only. After CPA implementation, the actual project fuel consumption will be used for calculations of both the baseline and project emissions.</p> <p><u>CAR32 is closed</u></p>
CAR33: In conformity with the guidelines for completing SS PoA-DD, provide sample ER calculations for both types of CPA targeted by the PoA- relevant additional information should be provided in appendix 4.	PoA-DD, Part II Type (1) Generic CPA Section B6.3	<p>The ex-ante ER calculation for one typical CPA Facility of each type of CPAs is provided in Appendix 04, and referred to in Section B.6.3.</p> <p>An ERs calculation sheet is provided for the two typical examples for CPAs of Type 1 and Type 2 (presented in Appendix 04 of the PoA-DD):</p> <ul style="list-style-type: none"> ➤ [100099-3305-01 - ERs calculation sheet for two typical CPAs (Appendix 04) - 121114] 	<p>See CL56</p> <p>Both facilities used as generic CPA for the ERs calculation purposes have been visited during the site visit.</p> <p>The ERs calculation spreadsheet has been provided with details information on the data sources. ERs Calculations have been checked for both CPAs types. They are correct and consistent with the used values in the PoA-DD.</p> <p><u>CAR33 is closed</u></p>
CAR34: the ACM0009 methodology referred to in section B.1 is not the latest	PART II- Type (2) Generic	PoA-DD has been modified (Version 04), where the version number of methodology ACM0009 is updated ("04.0.0" instead of "3.2").	The version of the the referred methodology ACM0009 is updated from V03.2 to the latest version of V04.0.

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
version of the methodology.	CPA Section B.1		<u>CAR34 is closed</u>
CAR35: in Table 9 (Applicability study of Type 2 CPAs - applying AMS-III.Z methodology - under this PoA) correct to refer in to refer, as appropriate, to CPA, CPAs or each facility of the CPA.	PoA-DD PART II Type (2) Generic CPA Section B.2	<p>PoA-DD has been modified (Version 2.1), where the compliance level is modified and it is specified whether the requirement is to be met on the CPA or CPA Facilities level.</p> <p>PoA-DD (criteria 5 in the applicability tables of Type 1 and Type 2) has been modified (Version 03), where the compliance requirement is further specified in accordance with the guidelines.</p>	<p>Response 1: Should specify further the response to the applicability criteria 5 with reference to the "General Guidelines for SSC CDM methodologies"</p> <p>Response 2: Criteria 5 compliance has been specified with reference to the conformity with the guidelines.</p> <p><u>CAR35 is closed</u></p>
CAR36: Referring to table 9 of the PoA-DD (V3.0) , specify how the compliance to the following methodology requirement is to be met: Prior three-year historical production data (excluding abnormal years) for the existing facility, shall be used to determine an average annual historical baseline brick production rate in units of weight or volume.	PoA-DD PART II Type (2) Generic CPA Section B.2	PoA-DD has been modified (Version 03), where the criteria and the compliance method are included in the table.	<p>An additional criteria was added to the applicability criteria complain with the following methodology requirement:</p> <p><i>For projects that involve replacing, modifying or retrofitting systems in existing facilities, the average of the immediately prior three-year historical fossil fuel consumption data, for the existing facility, shall be used to determine an average annual baseline fossil fuel consumption value. Similarly, prior three-year historical production data (excluding abnormal years) for the existing facility, shall be used to determine an average annual historical baseline brick production rate in units of weight or volume.</i></p> <p><u>CAR36 is closed</u></p>

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CAR37: in conformity of the methodology AMS.III.Z requirement add compliance to the the following eligibility criteria: "No renewable biomass has been used in the existing project facility during the last three years prior to the start of the project"	PoA-DD PART II Type (2) Generic CPA Section B.2	PoA-DD has been modified (Version 2.1), where it is specified in the compliance requirements that the historical use of biomass makes the CPA Facility not eligible for inclusion under the PoA.	Criteria 6 of Table 9 (PoA-DD V3.0) specifies that for a CPA to be eligible for inclusion in the PoA, no renewable biomass has been used in any of the existing CPA Facilities during the last three years prior to the start of the CPA. <u>CAR37 is closed</u>
CAR38: Insert flow diagram physically delineating the generic CPA presented	PoA-DD PART II Type (2) Generic CPA Section B.3	PoA-DD has been modified (Version 2.1), where schematic flow diagrams physically delineating type (2) of generic CPAs is included under Part II, section B.3.	Process flow diagram physically delineating Type (2) CPAs has been added in section B.3 as per Guidelines for completing the SSC-PoA-DD form version 02.0 (EB 67 Annex 30) <u>CAR38 is closed</u>
CAR39: section II B.6. CPAs applying AMS-III.B methodology, should be corrected.	PoA-DD PART II Type (2) Generic CPA Section B.6.1	PoA-DD has been modified (Version 2.1), where reference to AMS-III.B methodology under the section discussing Type (2) CPAs is corrected into AMS-III.Z.	The correction is made and the updated version of the PoA-DD refers to the correct methodology AMS-II.Z <u>CAR39 is closed</u>
CAR40: The following statement referring to AMS III Z (v4): "Project activity emissions consist of those	PART II B.6.1	PoA-DD has been modified (Version 2.1), where the text is updated to become in accordance with the applied methodology.	The sentence " <i>Project activity emissions consist of those emissions associated with the use of electricity or fossil fuel or both</i> " has been suppressed and the paragraph 22 on the project emissions of the methodology has been added: 22-

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
emissions associated with the use of electricity or fossil fuel or both." Cannot be found in the used version of the methodology			<p><i>The project emissions include fossil fuel consumption (including auxiliary use) $PE_{fossilfuel,y}$, associated with the operation of the manufacturing process and the biomass treatment and processing, calculated as per the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion".</i></p> <p><u>CAR40 is closed</u></p>
CAR41: the Project activity emission equation for the Type 2 CPA does not include the emissions associated with the use of electricity as specified in the methodology. Please correct	PART II B.6.1	<p>The project activity emissions calculation for Type 2 CPAs includes only the fossil fuel emissions, since only fuel is consumed for the production of brick at all CPA Facilities. Whether the brick kiln is located at a grid-connected region or off-grid area, there is no electricity consumption neither in the baseline nor project scenario (see the figure in Section B.3, Part II of the PoA-DD, for a schematic diagram of how brick is manufactured in Egypt.</p> <p>PoA-DD has been modified (Version 04), where the section discussing the project emissions is updated in accordance with the latest approved version of the methodology; AMS-III.Z (V-04).</p>	<p>The correct and complete equation of the project ERs calculation of the AMS.III.Z has been used and discussed with respect of the specific operations of brick manufacturing plants that are targeted by the Type 2 CPA of the PoA. The brick manufacturing process uses fossil fuel and no electricity use is required for the process. This is specified in eligibility criteria 14.2 : <i>CPA Facilities Owners burning heavy or light fuel oil to produce brick in brick manufacturing facilities</i></p> <p>The emissions associated with electricity use specified in the equation are thus taken accordingly as null.</p> <p><u>CAR41 is closed</u></p>
CAR42: Specifications of the brick quality produced before the project activity are not included in the Type 2 CPA	PART II B.6.1 Table 11 Page:44	PoA-DD has been modified (Version 2.1), where the quality of brick in the baseline is added to the data list for Type (2) CPAs.	The compressive strength and/or density of the bricks produced at the baselines and in the project activity have been added the data list for Type (2) CPAs (Table 13 of the



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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
baseline data list			POA-DD V3.0) CAR42 is closed
CAR43: Correct to ensure that the data/information on the baseline produced brick quality and raw materials used by each facility of Type 2 CPA is determined before validation	PoA-DD, Part II – Section B6.2 Page 50	<p>PoA-DD has been modified (Version 2.1). Note that only brick quality (through testing the compressive strength) has been added to the baseline and monitoring parameters, since changes in raw material is permitted under the methodology provided that the service level of project brick (demonstrated by the compressive strength) is the same or comparable to baseline brick (paragraph 2 of the methodology).</p> <p>PoA-DD has been modified (Version 04), where the parameter table for the quality of baseline brick is described as “Compressive strength of produced bricks” – while reference to brick density is removed.</p>	<p>Brick quality has been added to the baseline and monitoring parameters. The change of raw material is allowed by the methodology as long as the quality of the brick of the project activity is comparable or better than the one of the baseline. It should be noted that the methodology specifies in §11 that:</p> <p><i>This methodology is applicable under the following conditions:</i></p> <p><i>(a) The service level of project brick shall be comparable to or better than the baseline brick, i.e. the bricks produced in the brick production facility during the crediting period shall meet or exceed the performance level of the baseline bricks (in terms of, for example dry compressive strength, wet compressive strength, density). An appropriate national standard shall be used to identify the strength class of the bricks; bricks that have compressive strengths lower than the lowest class bricks in the standard are not eligible under this methodology. Project bricks are tested in nationally approved laboratories at six-month intervals (at a minimum) and test certificates on compressive strength are made available for verification;</i></p> <p><i>An ex-ante parameter table was added in the PoA-DD for the quality of baseline bricks</i></p>

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
			<p>Correct in the table the description to be specific to a unique parameter not two</p> <p>The table has been corrected to refer to one parameter i.e Compressive strength of produced bricks.</p> <p><u>CAR43 is closed</u></p>
CAR44: According to the requirements of methodology AMS-III.Z. the quantity of raw and additive materials should be also monitored.	PoA-DD, Part II Type (2) Generic CPA Section B7.1	PoA-DD has been modified (Version 04), where a table is added for the parameter "Principle raw and additive materials purchases".	<p>See CAR43</p> <p><u>Response 1:</u> Review the list of the monitored parameters as per § 28 of the AMS.III.Z V4.0, and complete the list of the parameters to be monitored for the Type 2 generic CPA.</p> <p><u>Response 2:</u> Brick quality has been added to the baseline and monitoring parameters. The change of raw material is allowed by the methodology as long as the quality of the brick of the project activity is comparable or better than the one of the baseline.</p> <p>An ex-ante parameter table was added in the PoA-DD for the quality of baseline bricks expressed as Compressive strength of produced bricks</p> <p><u>CAR44 is closed</u></p>

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CAR45: As stated in the monitoring plan, the FO consumption should also be included in the parameters to be monitored during the crediting period	PoA-DD, Part II Type (2) Generic CPA Section B7.2	<p>Response 1: PoA-DD has been modified (Version 2.1), where FO consumption is included under section B.7.1.</p> <p>- <u>Further Clarification of the circumstances of possible use of FO as backup:</u> Fuel Oil use in the project scenario will be limited to the possibly NG supply disturbance.</p> <p>- <u>How FO consumption is monitored:</u> FO will be used only in emergencies and will be recorded as part of the Quality Assurance and Quality Control (QA/QC) procedure of the monitoring plan.</p> <p>- <u>How FO use will affect the ER calculations:</u> The FO consumption value will not affect the ERs calculations, and is not a monitoring parameter according to the applied methodology. FO consumption records will be used merely to explain any incoherence or abnormality in the project fuel (NG) consumption.</p> <p>Therefore, the PoA-DD has been modified (Version 03) to better represent the purpose of referring to the FO consumption in the monitoring plan, and specify it under section B.7.2, rather than section B.7.1.</p> <p>Response 2: PoA-DD has been modified (Version 04), where a table is added for the parameter "Backup</p>	<p>Response 1: Clarify further the circumstances of possible use of FO as backup in a CPA facility, how its consumption could be monitored and how it will affect the ER calculations</p> <p>As per the requirement of methodology AMS.III.Z (V 4.0), § 28 e) : Project emissions due to the fossil fuels consumption shall be monitored as per the "Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion";</p> <p>Response 2: As requested by the methodology (paragraph 28) the FO backup consumption has been added as a parameter to be monitored. The PP has specified that the consumption of FO will be limited to disruptions in NG supply. This parameter does not affect the ex-post ERs calculation based on the NG consumption only.</p> <p><u>CAR45 is closed.</u></p>

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
		fossil fuel consumption".	
CAR46: Include in the monitoring reports templates all monitored data	Part II Type (2) Generic CPA Section B.7.2	<p>The monthly and quarterly monitoring reports' templates in the CME Database have been updated:</p> <ul style="list-style-type: none"> • [00-100099 - Fuel Switch PoA - CME Database 120817] <p>These changes have also been made in accordance with the modifications in the monitoring plan of the PoA-DD (Version 03)</p> <p>The monthly and quarterly monitoring reports' templates in the CME Database have been updated:</p> <ul style="list-style-type: none"> ➤ [00-100099 - Fuel Switch PoA - CME Database 121114] <p>Where Type 2 CPAs including the newly added monitored parameters (backup fossil fuel consumption and the raw and additive materials purchases).</p>	<p>The monthly and quarterly monitoring reports' templates in the CME Database have been updated:</p> <ul style="list-style-type: none"> • [00-100099 - Fuel Switch PoA - CME Database 120817] <p>These changes have also been made in accordance with the modifications in the monitoring plan of the PoA-DD (Version 03)</p> <p>Moreover the FO consumption is now included in the parameters to be monitored during the crediting period (CAR45 above)</p> <p><u>CAR45 has been closed, CAR46 is then closed</u></p>
CAR47: The MoC should be completed	PART II C.1.1 MoC	<p>Updated MoC is provided:</p> <p>[100099-02 - F-CDM-MOC - UNFCCC]</p>	<p>An updated MOC has been provided. It is signed by Mr. Ahmed Medhat head of the CDM-APU acting as CME of the PoA. It includes the CDM-APU as CME and sole project participant and the employment status of the focal point. The MOC has been validated</p> <p><u>CAR47 is closed</u></p>



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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CAR48: Provide a notarized MoC or a written statement from CME on the accuracy of the undersigned personal details	PART II C.1.1 MoC Document	<p>- A letter confirming that the undersigned person is authorized to sign on behalf of the CDM APU (CME) is provided:</p> <ul style="list-style-type: none"> • [CME authorized signatory notarization letter] <p>The accuracy of the undersigned personal details of the MoC can be confirmed from the CDM-APU website (http://www.eeaa.gov.eg/english/main/cdmapu_org.asp). The following pages are saved and provided:</p> <ul style="list-style-type: none"> • [CDM-APU Team Profile] • [CDM-APU Contact Information] 	<p>See also validation of CAR47</p> <p>The Signature of Mr.Ahmed Medhat has been validated at the site visit.</p> <p><u>CAR48 is closed</u></p>



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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL01: please define what CDM-APU/EEAA is.	PART I A.2.1	PoA-DD has been modified (Version 04), where the CDM-APU/EEAA is defined as the CDM Awareness & Promotion Unit under the Egyptian Environmental Affairs Agency.	The CDM-APU/EEAA has been defined as the CDM Awareness & Promotion Unit under the Egyptian Environmental Affairs Agency. <u>CL01 is closed</u>
CL02: please provide the evidence translated in English of the newspaper references N9, 10, 11 and 12 (all proof need to be translated in English as the official language)	PART I A.2.1	The reference mentioned in footnote 11 is provided with the exact translation of the relevant text: ➤ [CL02 - Fnote 11 - Al-Masry Al-Youm Newspaper - May 2012]	Response 1: The translation of ref 9, 10, 11 and 12 has been provided by the PP. The translation for the references 9, 10 and 12 has been validated. The translation of ref 11 should be limited the the exact text not adding additional explanation of the PP Response 2: The translation of the text has been corrected and validated to reflect the exact original text. <u>CL02 is closed</u>

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL03: please provide the law (141/2004) and Law 4/1994 and make reference to it in the PDD	PART I A.2.1	Law 4/1994 is provided, and the online source is included in the PoA-DD (Version 04) as a footnote: ➤ [CL03 - Executive Regulation of Law 4 of 1994 - EGYPT]	The cited law 141/2004 has been provided by the PP. Provide the law 4/1994 referenced in Section A2.1 under the National goal 4 paragraph The text of law 4/1994 has been provided and reference to text has been added to the updated PoA-DD <u>CL03 is closed</u>
CL04: please describe the meaning of the table 2.	PART I A.2.1	PoA-DD has been modified (Version 04), where it is clarified that table 2 shows a sample of funds directed to environmental development at M/SMEs in Egypt. This is to demonstrate the efforts already made towards sustainability in the M/SMEs sector.	The PP specified in the updated PoA-DD that table 2 shows a sample of funds directed to environmental development at M/SMEs in Egypt for the purpose to show the financial initiatives in the M/SMEs sector. <u>CL04 is closed</u>
CL05: Referring to the Framework for the implementation of the proposed PoA, provide background information on CDM activities in Egypt developed/registered under the same category and technology/measure of the current PoA	PART I A.2.2	PoA-DD has been modified (Version 2.1), such that section A.2 includes background information on CDM activities in Egypt, i.e. the registered projects and PoA, and the sectoral scopes they fall under.	Background information on CDM projects registered under the same category and technology/measure of the current PoA has been described in the updated PDD. <u>CL05 is closed</u>

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL06: Specify the Contribution of the PoA CERs revenues to the EPF	PART I A.2.6	<p>Evidence on the contribution of the PoA CERs revenues to the EPF is provided.</p> <ul style="list-style-type: none"> [EPF deductions of CERs - Egyptian DNA Statement] <p>The contribution has been included in the modified PoA-DD (Version 2.1), which is equal to 3% of the generated CERs.</p>	<p>Evidence of the contribution of the POA CERs revenues to the EPF has been reviewed by the DOE validation team. The contribution has been included in the modified PoA DD (Version 2.1), which is equal to 3% of the generated CERs.</p> <p><u>CL06 is closed</u></p>
CL07: Specify the Boundary of a typical CPA provided the defined possible locations of its facilities	PART I A.3.2	<p>PoA-DD has been modified (Ver. 2.1) in accordance with practices in registered PoAs, where the CPA boundary is clarified further in the case of CPAs consisting of a single CPA Facility and CPAs involving multiple CPA Facilities under section A.3</p>	<p>A CPA could be composed of a single CPA Facility, or it can constitute multiple CPA Facilities. Boundaries of the CPA have been defined as Facility location, and uniquely identified using GPS coordinates in the case of the single facility. For CPA consisting of multiple CPA Facilities, the CPA boundary has been defined by the locations of all the CPA Facilities involved in the CPA.</p> <p><u>CL07 is closed</u></p>
CL08: Clarify the fuel type condition that apply to facilities under the same CPA	PART I A.3.2	<p>PoA-DD has been modified (Version 2.1), where it is specified that only one type of baseline fuel is permitted for each CPA (CPA Facilities submitting for inclusion under one CPA must be switching from the same type of fuel to NG).</p>	<p>The PP has specified in the updated PoA-DD that CPA Facilities under a single CPA must be switching from the use of only one type of fuel (either HFO or LFO) to NG, i.e. only one type of baseline fuel per CPA is permitted for inclusion under this PoA.</p> <p><u>CL08 is closed</u></p>



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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL09: Describe how environmentally safe and sound technology(ies) applied in the CPAs and know-how to be used are transferred to the host Party(ies)?	PART I A.6.3	PoA-DD has been modified (Version 2.1), where description of the environmental and safety soundness of the fuel switching activities and the transfer of know-how to CPA Facilities Owners involved in the implementation of these project activities is included.	<p>The following has been added in the POA-DD in section A.6: <i>“NG is the most environmentally sound fossil fuel available today. It has the lowest emissions of GHG and pollutants among fossil fuels. NG pipelines also eliminate the risk of fuel spills and accidents whether in transportation or storage. Similarly, since there are no high-pressure fluids or components as in fuel oils, there is a greatly reduced risk to those working in CPA Facilities burning NG.</i></p> <p><i>Transfer of the know-how to CPA Facilities Owners: The implementation of the CPAs will give the CPA Facilities Owners’ experience in the operation and maintenance of their activities with exposure to MRV (monitored, reported, verifiable) practices. This is anticipated to raise the general awareness of Facilities Owners and allow them to achieve a higher level of sustainability. “</i></p> <p>This additional is validated and correctly described how environmentally safe and sound technology(ies) applied in the CPAs and know-how to be used are transferred to the host Party.</p> <p><u>CL09 is closed</u></p>



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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL10: Provide source and evidence of the national values of the EF provided for HFO, LFO and NG.	PART I A.6.3	<p>Evidence of the EF for each type of fuel is listed under Part II, Section B.6.2. The reference is provided with the PoA References:</p> <ul style="list-style-type: none"> [EPAP-EEAA Self-monitoring Report] <p>PoA-DD has been modified (Version 03), where the reference is included as a footnote in section A.6.</p> <p>PoA-DD has been modified (Version 04), where it is explained in Section A.6 that the emission factor values are obtained from the national values provided for the NCV and C-content of each type of fuel. Section A.6 also refers to that the detailed calculation is provided in Section B.6.2, Part II of the same document.</p>	<p>Response 1: Specify the source of the national values of fuels EF as cited first in the PoA-DD in section A6-Page 12. The values specified in red boxes in the EPAP-EEAA Self-monitoring Report.pdf document are related to the Heating Values (KJ/Kg) and not the Emission Factors of fuel (tCO₂E/TJ). The referenced NCV and carbon content are used to calculate the EFs.</p> <p>Please provide the explanation of the EF calculation as made in table B6.2.</p> <p>Response 2: The PP has specified in the updated PoA-DD that the emission factor values are obtained from the national values provided for the NCV and C-content of each type of fuel and reference is made to calculation details provided in Section B.6.2, Part II and in the ERs spreadsheet. The calculations of the EFs have been validated.</p> <p><u>CL10 is closed</u></p>

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Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL11: clarify the meaning of <i>Project</i> in the Project Boundary presented in the diagram and explain how the drawn boundary in the figure is related to a CPA boundary	PoA-DD A-6 page 12	<p>The figure in the PoA-DD has been modified (Version 2.1), where the figure has been updated to correspond to the modified description of CPA boundary introduced under section A.3.</p> <p>PoA-DD has been modified (Version 03), where the figure is modified further and the caption is updated to represent its purpose.</p>	<p>Response 1: As defined the CPA boundary is not well represented in figure 6.</p> <p>Response 2: The figure has been corrected to better reflect the CPA boundary clarifying the project concept as a single facility where the fuel switching is implemented.</p> <p><u>CL11 is closed</u></p>
CL12: The PoA-DD states that access to financing is an important barrier for the CPAs implementation. The 2004 reference provided is outdated. Provide a recent reference to substantiate this statement (footnote 27)	DD PoA-Stand PoA-DD Section B1- Page 15 Section B.1.1 of table 1	<p>More recent references used for the same topic (justification of the access to finance barrier for M/SMEs) are listed in the PoA References:</p> <ul style="list-style-type: none"> Footnote 01 (Oct. 2011) [01.37 - <i>Quarterly newsletter - Ministry of Planning & International Cooperation</i>], Footnote 02 (Nov. 2008) [02.39 - <i>EGYPT Book - CICR</i>], Footnote 05 (2009) [05.06.41.42 - <i>Egypt Private Sector Country Profile - AfDB</i>], and Footnote 30 (Nov. 2011) [30.40 - <i>Challenges of Egypt's Economic Transition - Carnegie</i>]. 	<p>The PP has provided various recent and reliable evidence to support the financing barriers for investment in Egypt.</p> <p><u>CL 12 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL13: Provide more information and evidence on the large capital investment required for a typical CPA	PoA-DD B1 page 18 Section B.1.1 of table 1	<p>PoA-DD has been modified (Version 2.1), where it refers to an average value for the capital investment required by Type 2 CPA Facilities (while Type 1 CPAs will always be automatically additional). The figure used is obtained from the following sample contract for one of the brick kiln in Egypt:</p> <ul style="list-style-type: none"> [CONFIDENTIAL - Sample NG Network Construction Contract (Brick Factory)]. 	<p>The PP has explained in the PoA-DD that for bakeries and similar CPA Facilities submitting for inclusion as Type 1 CPAs, being micro-scale they are exempt them from the detailed additionality demonstration. However, for brick kilns (Type 2 CPAs for which demonstration of additionality is applicable), the capital investment, consists mainly of the construction costs of NG piping networks. To illustrate the high investment required for Type 2 CPAs, the PP provided a sample NG piping construction contract. The contract cost is 2.1 million EGP.</p> <p>This is considered an important barriers for SME to invest in fuel switching</p> <p><u>CL13 is closed</u></p>
CL14: Please refer correctly to the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Programme of Activities throughout the POA-DD (eg. Section B.2)	Part I, Section B.2	PoA-DD has been modified (Version 04), where reference to the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (EB 65, Annex 03, Version 01) is corrected throughout the document.	<p>Corrections has been made throughout the PoA-DD document to refer to the exact right title to the <i>Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (EB 65, Annex 03, Version 01)</i></p> <p><u>CL14 is closed</u></p>



VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL15: Please specify explicitly what the ODA is in the Table 3 criteria #10	Part I, Section B.2	PoA-DD has been modified (Version 04), where ODA is defined as Official Development Assistance. Consistent changes are applied to the same table in Part II.	The ODA abbreviation has been specified as Official Development Assistance in conformity with CDM used terminology. <u>CL15 is closed</u>
CL16: Explain in the context that CME could be CPAs implementer, how the debundling check criteria of Table 4, option 3.1 could be applied	PoA-Stand Part I Section B2; Table 4 Option 3 criteria 1	PoA-DD has been modified (Version 2.1), where the term “CPA Implementer” is replaced throughout the PoA-DD with “CPA Developer”, while the debundling check is applied on the “activity implementer” level – referred to throughout the PoA-DD as the “CPA Facility Owner”. A figure has also been added under section B.2 to further illustrate how the de-bundling check would be applied to CPAs and CPA Facilities.	Corrections were made to the PoA-DD to better clarify how the debundling check is made at the facility and CPA levels In particular the application of the option 3 of table 4 related to criteria on the distance between CPAs facilities has been corrected and clarified. The explanation is accepted and validated. <u>CL 16 is closed</u>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL17: Explain the meaning given to the CPA Boundary with the context of the application of the debundling check criteria of Table 4, option 3 criteria 3. Check the coherence of the CPA boundary as applied in Table 4 with the conditions applied to the CPA localizations provided in section A.6 of the PoA-DD (See also CL07)	PoA-Stand Part I Section B2; Table 4 Option 3 criteria 3	PoA-DD has been modified (Version 2.1), where the CPA boundary is defined in section A.3 and used accordingly throughout the PoA-DD.	<p>The CPA boundary has been specified as the boundary of each of the facility part of the CPA. The formulation of the criteria 3 of option 3 (Table 4) is well specified and conform with the debundling guidelines</p> <p>The explanation is accepted and validated.</p> <p><u>CL 17 is closed</u></p>
CL18: For the verification of eligibility criteria number 5, provide clarifications on what kind of evidence will be used during the CPA site visit to verify a consistent past use of either one of the eligible fuels: HFO or Diesel.	Part I Section B2; Table 3 criteria 5	PoA-DD has been modified (Version 2.1), where the verification method of Eligibility Criteria #5 in Table 3 is further elaborated.	<p>The verification method has been specified to include evidence of past use of fuel (baseline situation) at each facility of the CPA</p> <p><u>CL 18 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL19: For each criteria of table 3, provide clarifications on how the criteria will be verified at the facility level	PoA-Stand §15 Part I - Section B2; Table 3	<p>PoA-DD has been modified (Version 2.1), where the level of the verification method is specified for all criteria in the table, e.g. CPA or CPA Facility level.</p> <p>PoA-DD has been modified (Version 03), where it is demonstrated that criterion 7 in table 3, and criterion 5 in tables 8 and 9, should be met on the CPA Facility level.</p>	<p>Details on the verification approach and the type of evidence that will be used has been specified for each one of the eligibility criteria. Also the CPA boundary has been clarified and the level at which the verification will be done has been defined.</p> <p><u>CL19 closed</u></p>
CL20: Clarify the specific meaning given to the <i>element process</i> of the micro scale threshold when applied to the PoA CPAs.	PoA-Stand §15 Part I - Section B2; Table 3 – criteria 12.1	PoA-DD has been modified (Version 2.1), where a definition of the element process has been included in section A.6, and is reflected in the eligibility criteria table.	<p>An element process, defined for the purpose of this PoA as each single burner or combustion chamber burning fossil fuel to produce heat. This definition has been included in section A.6</p> <p><u>CL20 is closed</u></p>
CL21: In the statement : <i>AMS-III.B will be applied for bakeries, smelters, and other facilities whose ERs per element process would not exceed 600 tCO2 annually</i> , specify if other facilities refer also to brick facilities	Part I- Section B3- 2 -Page 25 of the PDD.	PoA-DD has been modified (Version 2.1).	<p>Section B.3 of the POA-DD now specifies that the AMS-III.B will be used for facilities where element processes are producing heat and the ERs are within the micro-scale threshold (20,000 tCO2e per year and 600 tCO2e per element process per year), excluding brick manufacturing facilities</p> <p><u>CL21 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL22: Specify if Type 1 CPA will all be limited to the micro scale threshold of a total ER of 20kt CO ₂ /year	Part I Section B3 Page 25 of the PDD	The PoA-DD has been modified (Version 2.1) to state that all CPAs submitting for inclusion under Type (1) CPAs of this PoA will be micro-scale projects.	The PP has specified in the PoA-DD that AMS-III.B will be applied for Type 1 CPA, for bakeries, smelters, and other facilities (except for brick manufacturing facilities), where the ERs per element process would not exceed 600 tCO ₂ annually, and also not exceeding 20,000 tCO ₂ annually for the whole CPA <u>CL22 is closed</u>
CL23: please clarify if the CME wishes to have all CPAs verified or not. If the CME does not wish to have all CPAs verified, the PoA-DD should include a description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the amount of reductions of anthropogenic emissions by sources or removals by sinks of greenhouse gases achieved by CPAs under the PoA (EB55 Annex 38)	Part I- Section B3- 3	PoA-DD has been modified (Version 04), where it is specified that each CPA under this PoA will be verified.	It has been specified in the updated PoA-DD section B3 related to the application of the methodologies that each CPA under the proposed PoA will be verified. <u>CL23 is closed</u>



VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL24: In the context of CME being a CPA implementer, clarify how its responsibilities/obligations as implementer are to be formalized and to be met	PoA-DD Part I- Section C Page 28	PoA-DD has been modified (Version 2.1), where it is clarified that in case the CME is the CPA Developer, the CME Head would sign the CPA Development Authorization with the CPA Facilities Owners directly.	In the case when the CME is authorized by CPA Facilities Owners to act as the CPA Developer for their CPA, the head of the CME will sign the CPA Development Authorization with the CPA Facilities Owners, and his team (members of the CME) will be responsible for undertaking the responsibilities. <u>CL24 is closed.</u>
CL25: Clarify in the PoA-DD (section C page 28) the meaning of CPAs owners	PoA-DD Part I- Section C Page 28	Throughout the PoA-DD, “CPA Facilities Owners” is used instead of “CPA Owners”. Also “CPA Developers” is used instead of “CPA Implementers”. Definitions for both are listed under section A.3. Section C and the schematic diagram it includes have been modified in the PoA-DD (Version 2.1) accordingly.	CPA Facilities Owners” is used instead of “CPA Owners”. Also “CPA Developers” is used instead of “CPA Implementers”. <u>CL25 is closed</u>
CL26: Referring to Section C page 28, specify the responsibilities of the CPA implementers that will be captured in the authorization.	PoA-DD Part I- Section C Page 28	PoA-DD has been modified (Version 2.1), where the responsibilities of the CPa Developers, to be captured in the CPA Development Authorization, are listed.	The responsibilities of the CPA implementers have been specified in the POA-DD in section C. <u>CL26 is closed</u>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL27: referring to the supervision of the monitoring plan by the CPA implementer, clarify if the monitoring plan envisioned is to cover each individual facility of the CPA	PoA-DD Part I- Section C §b Page 28	<p>PoA-DD has been modified (Version 2.1), where it is specified that the monitoring would be on the CPA Facility level.</p> <p>PoA-DD has been modified (Version 03), such that the role of each of the CPA Facilities Owners, CPA Developers, and CME in the monitoring plan is better defined.</p>	<p>The setting, implementation and supervision responsibilities of the monitoring plan at the facility level should be further clarified between the facility owner-CPA developer and the CME.</p> <p>The updated version of the PoA-DD (V 03), specifies in section C the role of each of the CPA Facilities Owners, CPA Developers, and CME in the supervision and implementation of the proposed monitoring plan. The modification is validated. <u>CL27 is then closed</u></p>
CL28: Referring to Section C Management System of the PoA-DD document, specify the responsibilities of the CPA implementer/developer and how the CME will ensure that he has the management and the technical capacities to meet these responsibilities	PoA-DD, Part I Section C C1.1 Page 28	PoA-DD has been modified (Version 2.1), where it is mentioned that the CME would check the technical capabilities of the person/firm to be acting as CPA Developer (whether one of the CPA Facilities Owners or a third party).	<p>Please explain how the CME will ensure that he has the management and the technical capacities to meet these responsibilities.</p> <p>The monitoring plan has been modified to include a capacity implementer/developer capacity check. This check includes investigating the technical capacities and project plan offered by the CPA Developer to the CPA Facilities Owners, <u>CL28 is closed</u></p>

VALIDATION REPORT



Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL29: Clarify if the CDM expert is also an environment expert and make appropriate change to ensure the consistency in the CDM management system description	Part I Section C	PoA-DD has been modified (Version 03), where the reference to the CDM Expert being an Environmental Expert has been modified throughout the document. This is because the CME is under EEAA, which already contain a separate department for EIA. Therefore, Environmental Experts would be readily outsourced as needed for each CPA.	Reference to the CDM Expert being an Environmental Expert has been corrected. When needed the Environment Expertise will be outsourced. <u>CL29 is closed</u>
CL30: Referring to Assignment of carbon rights responsibility of the CPA developer, specify whether this responsibility is limited to the owners share or it concerns all the CPA carbon credits	Part I Section C	PoA-DD has been modified (Version 03), where it is specified that the assignment of carbon rights include the different obligations to third parties, i.e. the CME, UNFCCC, etc.	The PP has confirmed in the PoA-DD that the Assignment of all the CPA's Carbon rights is the responsibility of the CPA developer(s). The explanation is accepted and validated. <u>CL30 is closed</u>
CL31: Referring to section C §d of the PoA-DD, page 29, define the <i>Geographic coordinates of the CPA</i>	PoA-DD Part I- Section C §d Page 29	PoA-DD has been modified (Version 2.1), where the location coordinates is specified to refer to each individual CPA Facility.	Location coordinates of each of the CPA facilities will be checked against existing CDM projects and other CPAs in the region. <u>CL31 is closed</u>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL32: In the PoA DD it is stated that <i>The Technical Expert and CDM Expert of the CME must have an onsite due diligence visit to the CPA location, where they would confirm the type of activity and product, as well as assess the exact fuel switching activity implementation requirements (Part I, Section C §C page 29)</i> . Define the CPA location within the context of its composed facilities	PoA-DD PartI- Section D §c page 29	Reference to “CPA location” has been corrected into “CPA Facilities locations” throughout the PoA-DD (Version 2.1).	<p>The CPA location within the context of its composed facilities has been clearly defined.</p> <p>It is specified in the new updated PoA-DD document that the technical Expert and CDM Expert of the CME must have an onsite due diligence visit to the CPA Facilities locations and the CPA boundary, where they would confirm the type of activity and product, as well as assess the exact fuel switching activity implementation requirements. They would also be able to inspect the element process(s) involved in the CPA.</p> <p><u>CL32 is closed</u></p>
CL33: Clarify how the proposed recording system allow for precise identification and codification for each facility of the CPA/PoA	PoA-DD Part I- Section C §e Page 29	The CME Database will include information on each CPA, each CPA Facility, and each CPA Facility Owner. Also a unique identification code has been developed on the CPA Facility level, the description of which is included in the updated PoA-DD (Version 2.1).	<p>The Data base structure has been checked by the DOE Validation team. The coding system has been specified to allow for unique specification of each of the facilities part of each CPA of the PoA. The excel sheet of the data base structure has been provided and validated to include codification at the facility level</p> <p>The explanation is accepted and validated.</p> <p><u>CL33 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL34: Clarify how the proposed codification system accounts for possible various facilities' activities within Type 1 CPA	PoA-DD Part I- Section C §e Page 29	Each CPA is permitted to include only one type of activity. Text in the PoA-DD (Version 2.1) has been modified to become clearer (section A.3, page 10).	As a CPA involving a mix of bakeries and smelters is ineligible for inclusion under this PoA. The proposed codification system allows to include only one type of activity. The explanation is accepted and validated. <u>CL34 is closed</u>
CL35: Clarify how start date was determined	PoA-DD PART I D.1.1	<p>Response 01: PoA-DD has been modified (Version 2.1). The date is selected as a plausible date for registration of the PoA.</p> <p>Response 02: PoA-DD has been modified (Version 03), where the description is included as a footnote.</p> <p>Response 03: The PoA-DD has been modified (version 7.0) where the date is identified as "26/06/2012" being "the date of publication of the PoA documents for Global Stakeholder Consultation (GSC) on UNFCCC website" in accordance with the definition in the latest version of the glossary of terms</p>	<p>Response 1: Specify in the PoA-DD how the start date of the CPA is determined in conformity with the Guidelines for completing the programme design document form for small-scale CDM programmes of activities (eb 66 repa 13)</p> <p>Response 2: The PoA Start date has been determined as 5 months from the date of webhosting the PoA documents for GSC on UNFCCC website.</p> <p><u>Following the ITR a request was issued to the PP to update the start date of the PoA in line with the definition of PoA start date- glossary of CDM terms V07 –EB70.</u></p> <p><u>Response 03: The start date in the PoA-DD has been modified to the date of the publication of the PoA-DD on the UNFCCC website for the GSC: 26/06/2012.</u></p> <p><u>CL35 is closed</u></p>



VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL36: please explain what the different category A, B, or C are related to and give reference in the POA-DD in section E.1.	PART I E.1	PoA-DD has been modified (Version 04), where the classification of the categories A, B and C are detailed as per the EIA guidelines (2 nd edition). The footnote is updated to specify the exact pages in the reference.	<p>The categorization of projects as per law 4/1994 has been explained in the updated version of the PoA-DD document, as follows:</p> <ul style="list-style-type: none"> • Category A project: The project which meets all criteria of lowest level. • Category B project: The project which meets at least one criterion of the medium level and the rest is of the lowest level. • Category C project: The project which meets at least one criterion of the highest level. <p>It was specified that the Guidelines of Principles and Procedure for EIA, 2nd Edition defined “lowest”, “medium”, and “highest” levels, as well as a positive list of activities that do not require an EIA at all. It has been verified that bakeries are in the positive list and thus they are exempted from performing EIAs.</p> <p><u>CL36 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL37: Justify that M/MSE require form (A) for the EIA and explain what is the level of analysis required for this category	PoA-DD, Part I – Section E1.2 page 31	<p>PoA-DD has been corrected (Version 2.1) to refer to that some projects may not require developing an EIA. This is justified based on the EIA guidelines available on EEAA website.</p> <ul style="list-style-type: none"> [<i>Guidelines of Principles and Procedures for EIA (2nd Edition)</i>]. <p>PoA-DD has been modified (Version 03), where the reference is included as a footnote.</p>	<p><u>Response 1:</u> Add the source as reference in the PoA-DD document</p> <p><u>Response 2:</u> The source reference of the positive list of the guidelines has been specified. CL36 is closed.</p> <p><u>CL36 is closed, therefore CL37 has been closed.</u></p>
CL38: Please specify in the PoA-DD section G the issuing entity and the status of the LoA.	PART I, Section G	PoA-DD has been modified (Version 03), where it is specified that the LoA authorizes the CDM-APU/EEAA to act as CME for the PoA.	<p>The LoA has been provided by the Ministry of state for Environment Affairs, dated June 2012 (code: LoA EC-CDMO017 / 4) has been validated. It fulfils all CDM requirement including the authorization of CDM-APU/EEAA to act as CME for the PoA.</p> <p>The POA-DD section G has been updated accordingly.</p> <p><u>CL38 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL39: Clarify how the letter of no objection is required as authorization for the PoA registration (table 7 of the PoA-DD) in the context that it expires on 6/11/2012. Please correct the issuing entity as specified in the letter .	PART I, Section G	<p>The validity of the letter of no objection refers to the period during which PPs are allowed to submit a request for issuance of LoA for the same project. For confirmation, we wrote to the Egyptian DNA inquiring about the validity of the LoN:</p> <p>➤ [CL39 - Validity of the letters of no objection – Egyptian DNA]</p> <p>PoA-DD has been modified (Version 04), where:</p> <ul style="list-style-type: none"> - The issuing entity of the letter of no objection is corrected; the Egyptian Bureau for CDM. - A note has been added to specify the meaning of the validity clause in the letter of no objection. 	<p>The PP has clarified that the validity of the letter of no objection refers to the period during which PPs are allowed to submit a request for issuance of LoA for the same project. The DNA confirmed that the validity of the Letter of No Objection (LoN) extends until the issuance of the Letter of Approval (LoA), and that upon Issuance of Letter of Approval (LoA), the (LoN) is not taken in consideration from the Egyptian DNA point of view.</p> <p>Correction has been made to the issuing entity of the LoN as the Egyptian Bureau for CDM.</p> <p><u>CL39 is closed.</u></p>
CL40: Specify if the LoA authorizes the CDM-APU/EEAA to act as CME for the PoA in conformity with the guidelines for completing SS PoA-DD documents	Part I Section G	PoA-DD has been modified (Version 03), where it is specified that the LoA authorizes the CDM-APU/EEAA to act as CME for the PoA in conformity with the guidelines for the PoA-DD	<p>The reference to LoA related to the CME authorization has been specified in the updated PoA-DD</p> <p><u>CL40 is closed</u></p>
CL41: please provide the communication evidence between the CME and the DNA for getting the letter of approval.	Part I Section G	<p>The letter sent from the CME (CDM-APU/EEAA) to the Egyptian DNA requesting the issuance of the LoA is provided:</p> <p>➤ [CL41 – Letter from the CME to the DNA requesting the issuance of the LoA - May 2012]</p>	<p>The letter sent by CME (CDM APU/EEAA) manager to the Egyptian DNA requesting the issuance of the LoA, dated May 16, 2012, has been provided and validated.</p> <p><u>CL41 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL42: In part II, section A.1, please provide evidence that LFO is known locally as solar/gaz and that Mazout is HFO.	PART II, Type (1) Generic CPA Section A.1	<p>- The term “mazout/mazut” is commonly used to refer to heavy fuel oil.</p> <p>- The terms “solar” and “gaz/gas” are used to refer to LFO.</p> <p>The reference used to obtain the national calorific value and carbon content (from which the emission factor is calculated) of different fuels uses these terms (table of contents and pg. 12):</p> <p>➤ [CL42 - EPAP-EEAA Report - Proof of fuel naming]</p> <p>PoA-DD has been modified (Version 04), where a footnote is added referring to this source.</p>	<p>The explanation is accepted and validated regarding the term Mazout/mazut , Solar and Gaz</p> <p>The provided references used to obtain the national calorific value and carbon content (from which the emission factor is calculated) refer to the both terms as <i>Fuel Oil (Mazout)</i> and <i>Gas Oil (Solar)</i>.</p> <p>Reference to source has been added in section A.2, Part I, of the PoA-DD document</p> <p><u>CL42 is closed</u></p>
CL43: in part II, please correct the “CPA entity” wording as in Part I of the PoA-DD.	PART II, Type (1) Generic CPA Section A.1	<p>PoA-DD has been modified (Version 04), where the term CPA Facility is used instead of CPA entity throughout the PoA-DD.</p> <p>Consistent modifications are applied in all sections of Type (2) Generic CPA.</p>	<p>Corrections have been made in Part II replacing entity with facility to be coherent with the wording of Part I</p> <p><u>CL43 is closed</u></p>



VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL44 : Specify whether the selected methodologies are approved for application to CPAs under PoAs by the Board	PoA-DD, Part II Type (1) Generic CPA – Section B1	<p>PoA-DD has been modified (Version 2.1), where links to the latest versions of each of the methodologies applied in the PoA have been included, as well as links to the EB meeting annexes where each methodology was approved to be applied for CPAs under a PoA.</p> <p>Consistent modifications are applied in Section B.1 of Type (2) Generic CPA.</p>	<p>Specification that the three methodologies used are approved for application to CPAs under PoAs by the Board has been added in the last version of the POA-DD.</p> <p><u>CL 44 is closed</u></p>
CL45 : In Table 8 and Table 9 (Applicability N°5, PoA-DD V3.0) please indicate to which requirement the CPA has to comply with (In case of replacement of existing equipment, project participants shall estimate the point in time where the existing equipment would be replaced in the absence of the project activity in accordance with the latest version of “Tool to determine the remaining lifetime of equipment”).)	Table1, Part II Type (1) Generic CPA Section B2 And Table 2, 3.5	<p>PoA-DD has been modified (Version 04), where the verification method for criterion 5 in tables 8 specifies that in case of equipment replacement, the point in time when the existing equipment would be replaced in the absence of CDM must be identified. This can be made using the lifetime in the equipment specification and the date of commissioning, or using a letter from industry expert.</p> <p>Consistent modifications are applied in the verification method of criterion 5 in the applicability table in Section B.2 of Type (2) Generic CPA.</p>	<p>The following clarification has been added to the verification method of criterion 5 in Table 8 and Table 9: <i>For replaced equipment, the date at which it would have been replaced in absence of the CPA must be provided. This can be evidenced by one of two ways:</i></p> <ul style="list-style-type: none"> - <i>Manufacturer statement stating the lifetime and documentation showing the commissioning date, i.e. by subtracting the years of operation of the existing equipment from its lifetime, the duration remaining before replacement (without CDM) is obtained; or</i> - <i>Letter from an industry expert estimating the remaining lifetime of the equipment, i.e. a letter stating the point in time when the existing equipment would be replaced in the absence of the CPA.</i> <p>The explanation is accepted and validated.</p> <p><u>CL45 is closed</u></p>



VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL46: Specify how the compliance to the AMS-III.B methodology requirement 8 as presented in the Table 6 (Table 8 in V-03) of the PoA DD will be met at the facilities.	PoA-DD, Part II Type (1) Generic CPA Section B2 page 34 And Table 2, 3.8	<p>Compliance of CPAs with applicability requirement #8 in Table 6 has been modified in the PoA-DD (Version 2.1).</p> <p>PoA-DD has been modified (Version 04), where the verification method of criterion 8 in table 8 specifies that billed natural gas consumption, measured by the natural gas suppliers' meters, provide a direct measurement and record of the energy consumption in each CPA Facility.</p>	<p>Response 1: The updated PoA-DD specifies that within each of the CPA Facilities, it will be possible to directly measure and record at least the energy consumption in the element process (e.g. fossil fuel input) after project implementation. Proof will be provided by provision of fuel receipts or similar documentation.</p> <p>Show how the provided proof will ensure the compliance with applicability measurement requirement as specified in the AMS-III.B applicability condition # 8</p> <p>Response 2: The verification method of criterion 8 in table 8 has been specified as the billed natural gas consumption, measured by the natural gas suppliers' meters.</p> <p><u>CL 46 is close</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
<p>CL47: As per the applicability criteria N°12 in Table 8, please clarify :</p> <ul style="list-style-type: none"> ✓ what tests will be used to specify the quality/type of the manufactured product produced and the raw material used before the project implementation ✓ How the quality of products manufactured after the project implementation will not be affected by the fuel switch change and how the consumption per quality of products manufactured will be monitored, 	, Part II Type (1) Generic CPAs Section B2 And Table 2, 3.12	<p>PoA-DD has been modified (Version 04), where the verification method of criterion 12 in Table 8 is modified to state that:</p> <ul style="list-style-type: none"> - <i>CME will ensure that in conformity with the methodology requirement, the CPA does not result in integrated process change in the CPA Facilities, (e.g. change in operational conditions, type of raw material processed, use of non-energy additives, or change in type or quality of products manufactured, etc).</i> - <i>An assessment of the CPA Facilities with respect to this requirement will be carried out by the technical expert of the CME before the CPA inclusion in the PoA. The assessment made, including a detailed description of the process before the implementation of the project activity, will be documented and made available for reference during the CPA verification.</i> 	<p>The PP has specified in the updated version of the PoA DD as verification method for criterion 12 of Table 8 that CME will ensure that the CPA does not result in integrated process change in the CPA Facilities as required by the used methodology (AMS.III.B).</p> <p>This will be ensured by ex ante assessment of the CPA carried out by the technical expert of the CME as part of the CPA inclusion check by the CME. It is specified that <i>assessment made, including a detailed description of the process before the implementation of the project activity, will be documented and made available for reference during the CPA verification.</i></p> <p><u>CL47 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL48: Clarify how the national and/or sectoral policies including E+/E- policies might affect the CPAs baseline scenarios	PoA-DD, Part II Type (1) Generic CPAs Section B4	<p>PoA-DD has been modified (Version 2.1). According to the CDM Project Standard (EB 65, Annex 05, Version 01) , section VII-B, paragraph 44: 44- When establishing the baseline scenario, project participants shall take into account the following two types of national and/or sectoral policies:</p> <p>(a) National and/or sectoral policies or regulations that give comparative advantages to more emissions-intensive technologies or fuels over less emissions-intensive technologies or fuels - Such policies, which increase GHG emissions, are called type E+.</p> <p>(b) National and/or sectoral policies or regulations that give comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programmes) - Such policies, which decrease GHG emissions, are called type E- .</p> <p>The vast majority of Egypt's energy consumption is in the form of fossil fuels. The World Bank reports that in 2009 this as 96.29% of Egypt's total energy consumption. Egypt's general policy of subsidizing fossil fuels in general has reduced incentives to increase the efficiency of use or seek alternatives, and therefore has acted as an E+- policy.</p>	<p>As per the VVS paragraph 93, "National and/or sectoral policies or regulations that give comparative advantages to more emissions-intensive technologies or fuels over less emissions-intensive technologies or fuels, otherwise known as policies that increase GHG emissions, and are called type E+.</p> <p>National and/or sectoral policies or regulations that give comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programmes), otherwise known as policies that decrease GHG emissions, are called type E-.</p> <p>The following website: http://www.tradingeconomics.com/egypt/fossil-fuel-energy-consumption-percent-of-total-wb-data.html was verified in order to check the Egyptian energy consumption.</p> <p>It is specified that the Fossil fuel energy consumption (% of total) in Egypt was 96.29 in 2009, according to a World Bank report, published in 2010. Fossil fuel comprises coal, oil, petroleum, and natural gas products. It is also specified that the fossil fuel consumption increased from 95.3% of total energy consumption in 2002 to 96.3 % of the total energy consumption in 2009</p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
		<p>The government has also made introduced some initiatives to encourage switching to NG as discussed in section A.2 of Part I of this document. However, for M/SMEs in particular, access to the capital investment remains to be a main obstacle to switching to natural gas. The government has not been able to resolve these difficulties and barriers, discussed in section B.1 of Part I of this document, and therefore the initiatives do not alleviate the barriers to switching for a large portion of the consumer base.</p> <p>Consistent modifications are applied in the verification method of criterion 5 in the applicability table in Section B.2 of Type (2) Generic CPA.</p>	<u>CL48 is closed</u>
CL49: Table 9- Section IIB5- Clarify if Criteria 8 and 10 are limited to bakeries.	PoA-DD, Part II Type (1) Generic CPAs Section B5	The reference to Bakeries in this table is an error. This is corrected in the PoA-DD (Version 2.1) so that the generic template applies to all activities under either type of CPAs to be included under the PoA.	<p>The reference to bakeries has been corrected and applicability criteria 8 and 10 refer now to all facilities types.</p> <p><u>CL49 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL50: please clarify how it is estimated that the the ERs of the CPA implementers burning fuel oil to generate heat for their operation using AMS.III.B fall below 600 tCO ₂ e per element process. (Also please write correctly CO ₂ e)	Part II Type (1) Generic CPAs Section B5	PoA-DD has been modified (Version 04), where the wording is corrected to be in accordance with the methodology; "600 tCO ₂ e per year per element process". Also tCO ₂ e is now written correctly.	The PP has in the PoA-DD explained that Type 1 CPAs using the methodology AMS.III.B targets CPAs with ERs below the threshed of 600 tCO ₂ e per year per element process. tCO ₂ e has been corrected. <u>CL50 is closed</u>
CL51: Please refer to the latest version of the ACM0009 methodology.	Part II Type (1) Generic CPAs Section B6	PoA-DD has been modified (Version 04), where the version number of methodology ACM0009 is updated ("04.0.0" instead of "3.2"). Minor modification to the monitoring of NCV of NG (Section B.7.1) is made in accordance with the new methodology version.	The version number of methodology ACM0009 has been updated from 3.2 to 4.0.0. The change of the methodology requires making reference to IPCC default values to lower or upper values as appropriate in order to be conservative for the ER calculations. The PP uses national values for the NCV of NG. The change did not affect the appendix 4 ER calculations but the NCV table of NG in section 7.1 has been updated according to the requirements of the new version of the methodology ACM0009. <u>CL51 is closed</u>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL52: Referring to project emissions used in section B.6, define the project concept used in the context of Type 1 CPAs	PoA-DD, Part II Type (1) Generic CAPs Section B6	PoA-DD has been modified (Version 2.1), where the concept used for the calculation of the emissions reduction for each type of CPAs is described.	Detailed description of the project concept of the CPA type 1 under the PoA has been provided in Section B6 <u>CL52 is closed</u>
CL53: please indicate the the temperature and pressure at which the natural density is provided	Part II Type (1) Generic CPAs Section B6	PoA-DD has been modified (Version 04), where the temperature and pressure at which the Natural Gas density is provided by EGPC are specified (60 F and 1 atm). Consistent modifications are applied in Section B.6 of Type (2) Generic CPA.	The temperature and pressure at which the density of natural gas is provided by EGPC has been added to the density table in section B6.2 <u>CL53 is closed</u>
CL54: please provide the EF calculation for upstream fugitive methane emissions.	Part II Type (1) Generic CPAs Section B6	The calculation of the EF for upstream fugitive methane emissions is provided in the ER calculation spreadsheet and in the PoA-DD, Section B.6.2. PoA-DD has been modified (Version 04), where the calculation is also included in Appendix 4. Consistent modifications are applied in Section B.6 of Type (2) Generic CPA.	The EF calculation for upstream fugitive methane emissions has been specified in appendix 4 and the detailed calculation provided in the ERs calculation spreadsheet. The calculation of the EF for upstream fugitive methane emissions has been checked. <u>CL54 is closed</u>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL55: Referring to the parameter FCBL table (Average annual baseline fossil fuel consumption value); clarify if the data source is to be determined at the CPA level or the facility level	PoA-DD, Part II Type (1) Generic CPAs Section B6.2	<p>Response 1: PoA-DD has been modified (Version 2.1), where it is specified that the parameter's value is to be determined on the CPA Facility level.</p> <p>Response 2: PoA-DD has been modified (Version 04), where:</p> <ul style="list-style-type: none"> - The Unit is corrected to become only "Mass or Volume" - The Description in the tables refer to that the parameter is to be obtained on the CPA Facility Level. - The Additional comments specify that the ERs will be calculated for each CPA Facility based on its independent consumption, and that the total ERs of a CPA is the summation of ERs at all CPA Facilities it includes. <p>Consistent modifications are applied in Section B.6.2 of Type (2) Generic CPA.</p>	<p>Response 1: It has been specified that data value is to be determined at the CPA Facility level</p> <p>Correct the unit as mass or volume only. The reference to the CPA level could be confused with the level of the fuel consumption</p> <p>Specify the facility or CPA level in the description of the parameter</p> <p>Add in the comments how the CPA consumption will be derived from the consumption of the individual facilities</p> <p>See Also CAR 31</p> <p>Response 2: The Unit has been corrected as "Mass or Volume". The parameter description in the table specifies that the parameter is to be obtained on the CPA Facility Level.</p> <p>Additional comments have been provided on the ERs calculation specify that the CPA ERs calculations based on the ERs of the individual CPA's facilities.</p> <p>CL 55 is closed</p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL56: in conformity with the Guidelines for completing PoA-DD for small-scale CDM programmes of activities, provide for each type of CPA, a transparent ex ante calculation of project emissions, baseline emissions(or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the selected methodology.	PoA-DD, Part II – Section B6.3	<p><u>Response 1:</u> ERs calculation sheets for each of the two types of eligible under this PoA have been provided, i.e. calculation sheet for the specific CPA-DD (Type 1) and a prototype calculation sheet for the brick factory visited during the validation onsite visit (Type 2).</p> <p>The ex-ante ER calculation for one typical CPA Facility of each type of CPAs is provided in Appendix 04, and referred to in Section B.6.3.</p> <p><u>Response 2:</u> An ERs calculation sheet is provided for the two typical examples for CPAs of Type 1 and Type 2 (presented in Appendix 04 of the PoA-DD):</p> <ul style="list-style-type: none"> ➤ [100099-3305-01 - ERs calculation sheet for two typical CPAs (Appendix 04) - 121114] <p>Also the PoA-DD has been modified (Version 04), where:</p> <ul style="list-style-type: none"> - The version of ACM0009 in Appendix 04 is specified as Version 04.0.0. - Units of the baseline, leakage and project emissions, as well as the emission reductions is corrected (tCO₂e/yr) 	<p>See CAR33</p> <p><u>Response 1:</u> Emissions reductions calculations have been provided in appendix 4 using the equations of section B.6. The baselines emissions were based on the fuel consumptions calculated on the basis of a specific ratio of 12 l/100kg of used flour that has been validated during the site visit. As for the brick factory, the fuel consumption was based on the declaration of the owner of the brick plant. Both the bakery and the brick plant were visited during the site visit.</p> <p>Leakage has been calculated using ACM0009 as specified by the applied methodologies (AMSIII.B and AMSIII.Z). The leakage emissions were found negative for both CPAs and a 0 value was used as leakage.</p> <p>The project emissions were evaluated in conformity of the methodologies applied as the emission associated with the NG that would have been used to ensure the same energy consumed in the baseline by respectively the bakery and the brick factory</p> <p>The emissions reductions have been evaluated at 74.26 t CO₂e/year for the bakery and 1,447.38 t CO₂e/year for the brick plant.</p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
			<p>For the ER calculations in Appendix 4, please:</p> <ul style="list-style-type: none"> • Provide the ER calculation spreadsheet for both CPAs; • Specify the ACM0009 version used; • Specify the correct units of the emissions: baseline, leakage, project and the ER <p><u>Response 2:</u> The requested corrections related to the update of the ACM0009 version and the emissions units have been made in the Appendix 4 of the updated PoA DD document.</p> <p><u>CL56 is closed</u></p>
CL57: For all the monitored data/parameters specify if the monitored parameters will be determined at the facility level and provide estimates of these data/parameters that should be used for the estimations of the emission reductions	PoA-DD, Part II Type (1) Generic CPAs Section B7.1	<p>PoA-DD has been modified (Version 2.1). Estimates of these parameters are presented in the ERs sheets.</p> <p>PoA-DD has been modified (Version 04), where the monitored parameters' tables refer to the values used in the typical examples presented in Appendix 04 of the same document.</p> <p>Consistent modifications are applied in Section B.7.1 of Type (2) Generic CPA.</p>	<p><u>Response 1:</u> The estimated parameters that have been used in the ERs sheets should be reported in the monitoring parameters tables</p> <p><u>Response 2:</u> Reference is made in the monitored parameters' tables refer to the values used in the generic CPA examples presented in Appendix 04 and in the ERs spreadsheet calculations.</p> <p><u>CL57 is closed</u></p>



VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL58: Referring to the section B.7.2 on the Description of the monitoring plan for a generic CPA, it is stated that <i>The Monitoring Report will comprise all required monitoring information in order to allow the DOE to verify the emission reductions for each monitoring period for each individual CPA verify the emission reductions for each monitoring period for each individual CPA</i> . Clarify if the PoA MP envisions a DOE verification at each individual facility of the CPA	PoA-DD, Part II Type (1) Generic CPAs Section B7.2	<p>PoA-DD has been modified (Version 2.1), where it is specified that the monitoring will be on the CPA Facility level.</p> <p>Consistent modifications are applied in Section B.7.2 of Type (2) Generic CPA.</p>	<p>It has been specified in the section B.7.2 of the PoA-DD that the Monitoring Report will comprise all required monitoring information in order to allow the DOE to verify the emission reductions for each monitoring period for each individual CPA Facility.</p> <p>The modification is found satisfactory by the DOE validation team.</p> <p><u>CL58 is closed</u></p>



 VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL59: Specify if the data recording and storage in the CME database will be done on the CPA level only or will include all the information/data collected at the facility level	PoA-DD, Part II Type (1) Generic CPAs Section B7.2	PoA-DD has been modified (Version 2.1), where it is specified that the CME will archive data related to the CPA and the CPA Facilities during the crediting period. Consistent modifications are applied in Section B.7.2 of Type (2) Generic CPA.	It has been specified that the CME database will include information on both the CPA and the CPA Facility levels as described in Section C of the PoA-DD. The data recording and archiving activities will be utilized in the monitoring reports at the CPA Facilities level. Records will be kept for a minimum of two years after the end of the crediting period. <u>CL59 is closed</u>
CL60: please explain why there is no element process described regarding the CPA applying AMS-III.Z methodology.	PART II, Type (2) Generic CPAs Section A.1	PoA-DD has been modified (Version 04), where each brick kiln is identified as a single element process.	Specification of the element process of Type 2 CPA has been specified in the updated PoA-DD as brick kiln that generated the necessary heat for the brick cooking. <u>CL60 is closed</u>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
<p>CL61: As per the applicability criteria N°11 in Table 9, please clarify :</p> <ul style="list-style-type: none"> ✓ what tests will be used to specify the quality/type of the brick produced and the raw material used before the project implementation; ✓ How the quality of brick after the project implementation will not be affected by the fuel switch change, ✓ how the consumption per quality of products manufactured will be monitored, 	<p>Part II Type (2) Generic CPAs Section B2</p> <p>Table 2, F.2</p>	<p>PoA-DD has been modified (Version 04), where the verification method of criterion 11 in Table 9 is modified to state that:</p> <ul style="list-style-type: none"> - <i>Compressive strength test will be made prior to the CPA implementation (to identify the baseline brick quality).</i> - <i>Compressive strength test will be made every 6 months after the CPA implementation (as per the monitoring plan in the methodology) to determine the quality of the product brick.</i> - <i>CME will ensure that in conformity with the methodology requirement, the the service level (compressive strength) of project brick is comparable to or better than that of the baseline brick at each CPA Facility.</i> 	<p>The methodology AMS.III Z has retained the compressive strength as valid standard to specify the CPA level of service i.e. the quality of manufactured bricks.</p> <p>For the verification of this criterion, the PP has specified in the updated table 9 that compressive strength of the bricks will be carried in the baseline and as stated in the methodology every 6 months after the CPA implementation to check the quality of the manufactured bricks.</p> <p><u>CL61 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL62: Please refer to the latest version of the ACM0009 methodology.	Part II Type (2) Generic CPAs Section B6	PoA-DD has been modified (Version 04), where the version number of methodology ACM0009 is updated ("04.0.0" instead of "3.2"). Minor modification to the monitoring of NCV of NG (Section B.7.1) is made in accordance with the new methodology version.	<p>The version number of methodology ACM0009 has been updated from 3.2 to 4.0.0. The change of the methodology requires making reference to IPCC default values to lower or upper values as appropriate in order to be conservative for the ER calculations.</p> <p>The PP uses national values for the NCV of NG. The change did not affect the appendix 4 ER calculations but the NCV table of NG in section 7.1 has been updated according to the requirements of the new version of the methodology ACM0009.</p> <p><u>CL62 is closed</u></p>
CL63: Referring to project emissions used in section B.6, define the project concept used in the context of Type 2 CPAs	PoA-DD, Part II Type (2) Generic CPAs Section B6	PoA-DD has been modified (Version 2.1), where the concept used for the calculation of the emissions reduction for each type of CPAs is described.	<p>Detailed description of the project concept of the CPA type 2 under the PoA has been provided in Section B6</p> <p><u>CL63 is closed</u></p>

VALIDATION REPORT

Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL64: Referring to the parameter PHy table (Bricks production rate in the baseline situation); specify if the data source is the recorded three year brick production of each facility of the CPA	PoA-DD, Part II Type (2) Generic CPAs Section B6.2	PoA-DD has been modified (Version 2.1), where it is specified that the parameter's value is to be determined on the CPA Facility level.	<p>The PP has specified in the Data Source of the Brick production rate table as the data of prior three-year historical production data (excluding abnormal years), at the existing CPA Facility level. The data will be based on the production recorded by each CPA Facility Owner.</p> <p><u>CL64 is closed</u></p>
CL65: Referring to table PPJ,y parameter (Annual net brick production in the project activity in year y) clarify the statement: Brick factories will sign 2 forms (one with the CME, and the other to the brick factory owner) indicating the hours of production, the total brick production on a monthly basis and brick type.	PoA-DD, Part II Type (2) Generic CPAs Section B7.1	PoA-DD has been modified (Version 2.1), and the template reporting tables are provided as part of the CME database.	<p>The PP has specified in the Table related to the brick production that the CPA Developers will prepare a monthly form indicating the hours of production, the total brick production and the quality of produced brick. At each CPA facility.</p> <p>The CME database includes a table reporting template that will be by used by the facilities owners/CPA developers for reporting to the CME.</p> <p><u>CL 65 is closed</u></p>

VALIDATION REPORT



Clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CL66: please indicate in appendix 3 the reference to appropriate section of the PoA-DD	Part II – Appendix 3	PoA-DD has been modified (Version 04), where Appendix 3 in the PoA-DD refers to Section B.2, Part II of the same document	Reference has been made in Appendix 3 of the updated PoA-DD to Section B.2, Part II. <u>CL66 is closed</u>
CL67: Add reference sources for the data used in the brick factory ER calculation spreadsheet	Appendix 4	<u>Response 1:</u> PoA-DD has been modified (Version 03), where the reference source for data in the typical brick kiln ER calculation is included in Appendix 04. <u>Response 2:</u> An ERs calculation sheet is provided for the two typical examples for CPAs of Type 1 and Type 2 (presented in Appendix 04 of the PoA-DD): ➤ [100099-3305-01 - ERs calculation sheet for two typical CPAs (Appendix 04) - 121114]	<u>Response 1:</u> Provide the ER calculation spreadsheet for both generic CPA presented <u>Response 2:</u> The ERs calculation spread sheet of both generic CPAs has been provided. It has been checked and validated. The emissions reductions have been evaluated at 74.26 t CO2e/year for the bakery and 1,447.38 t CO2e/year for the brick plant. <u>CL67 is closed</u>
CL68: Better specify in the MoC and in appendix 1 of the PoA-DD, the personal data of the undersigned	Modalities of Communications (MoC) Section	PoA-DD has been modified (Version 03) where an email address for EEAA is included. - Updated MoC is also provided: • [100099-02 - F-CDM-MOC - UNFCCC]	The email of the head of the CDM/APU acting as CME and the MoC focal point of the PoA has been corrected in appendix 1 of the PoA-DD and in the updated MoC <u>CL68 is then closed</u>