

Validation report form for renewal of GS programme of activities period

BASIC INFORMATION

Title and GS reference number of the programme of activities (PoA)	African Biogas Carbon Programme (ABC) GS Ref No: GS 2747
Duration of the programme of activities (PoA)	06/11/2009 — 05/11/2030
Version number of the validation report	02
Completion date of the validation report	18/05/2020
Version number of PoA-DD to which this report applies	1.4
Coordinating/managing entity (CME)	Hivos
Host Parties	Kenya, Tanzania and Uganda
Applied methodologies and standardized baselines	Technologies and practices to displace decentralized thermal energy version 3.1
Mandatory sectoral scopes	Scopes: 1: Energy industries (renewable - / non-renewable sources) and 15: Agriculture
Conditional sectoral scopes, if applicable	N/A
Estimated amount of annual average GHG emission reductions or GHG removals by sinks in the next programme of activities period	N/A
Name of the GS-VVB	AENOR INTERNACIONAL S.A.U

SECTION A. Executive summary

AENOR has been contracted by Hivos International, to undertake the validation for the renewal of the crediting period for the GS programme of Activities “African Biogas Programme (ABC)”. The validation has been performed through a process of document review based on the PoA-DD version 1.2, initially submitted for validation and the subsequent revisions, follow-up email interviews with the stakeholders, resolution of outstanding issues and issuance of the validation report for RCP.

The GS Programme of Activities, “African Biogas Carbon Programme (ABC)” promotes the installation of biogas systems with stoves in households, small and medium dairy farms with agricultural and livestock practices, that typically use non-renewable biomass (NRB) and fossil fuels as their main source of energy for cooking and lighting in Kenya, Tanzania and Uganda. It will reduce greenhouse gas emissions (CO₂, CH₄ and N₂O) by replacing the use of NRB (and fossil fuels) with biogas produced as a result of the anaerobic GS programme of Activities digestion of manure and organic waste. Hivos will disseminate different types and sizes of biogas systems, depending on the needs and preferences of the users. It includes amongst others fixed dome biodigesters; and polypropylene bag / Flexible Balloon biodigesters.

The scope of the validation is defined as an independent and objective review of the revised PoA design document including revised VPA inclusion criteria, project’s baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against the following documents:

- GS4GG Principles & Requirements version 1.2 /1/
- GS4GG Programme of Activity Requirements version 1.2 /2/

The report is based on the assessment of the PoA design document undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to desk review, follow up actions (e.g., electronic (telephone or e-mail) interviews) and also the review of the applicable approved methodological and relevant tools, guidance and GS decisions. This report validates the requirements of Gold Standard for the renewal of crediting period of a PoA.

Scope of the Validation

The validation scope is defined as an independent and objective review of the PoA-DD and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, GS rules and associated interpretations. AENOR, based on the Specific Instruction for the Validation, verification and certification of clean development mechanism (CDM) project activities (IE/DTC/0039) /3/, has used a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of ERs.

The validation is not meant to provide any consultancy services to the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the PoA-DD.

Validation Process

The project validation assessment for renewal of crediting period aims to be a risk-based approach and is based on the Certification Procedures & Requirements for Validation/Verification Bodies (VVBs) version 1.0 /4/, which aims to harmonise the approach and quality of all such assessments.

The validation for the renewal of the crediting period was performed in the manner of an audit, where, a desk review of the PoA-DD was undertaken against the latest version of the approved methodology and GS and other relevant criteria applying to the project.

As a final step of the validation, the validation report for RCP and the protocol have to undergo internal quality control by means of a technical review following the procedures of AENOR. The technical reviewer is a competent person from AENOR, independent of the team that carried out the validation of the project activity.

In order to ensure transparency, a validation protocol was customised for the project, according to Specific Instruction IE-DCT-039. The protocol shows, in a transparent manner, criteria (requirements), means of validation and the results derived from validating the identified criteria.

The validation protocol serves the following purposes:

- It organises, provides details and clarifies the requirements a GS Programme of Activities 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 Programme Design Document submitted by the CME was reviewed against the approved methodology and against GS4GG and other relevant criteria. Additional background documents related to the project design, rules and regulations issued by the government and baseline were also validated.

The project participant was requested to address all validation findings and finally provided the validation team with sufficient evidence to determine that the applicable GS4GG requirements have been met. The project participant modified the initial updated PoA-DD /5/ to resolve the validation team concerns and resubmitted a final version of the updated PoA-DD /6/. AENOR has prepared this report based on the final updated PoA-DD.

All Corrective Action Requests (CAR) and Clarification Actions (CL) have been checked by the validation team and have been adequately resolved.

All the validation findings are summarized in section C.5 below and documented in more detail in Appendix 3.

In AENOR's opinion, the Programme of Activities meets all relevant GS4GG criteria, and all relevant host countries criteria for the renewal of the PoA period. Hence AENOR requests the renewal of the PoA period of the programme of activities.

SECTION B. Validation team, technical reviewer and approver

B.1. Validation team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interview(s)	Validation findings
1.	Team Leader	IR	Pellitero Martinez	Marcelino	AENOR	Yes	No	Yes	Yes

B.2. Technical reviewer and approver of the validation report for renewal of PoA period

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Llorente Perez	Elena	AENOR
2.	Approver	IR	Fuentes Perez	Jose Luis	AENOR

SECTION C. Means of validation

C.1. Desk/document review

The desk review involved:

- Project documentation: registered PoA-DD, Gold Standard for the Global Goals Transition Annex /8/, Transition Review /22/, initial version of updated PoA-DD and final version of updated PoA-DD.
- Gold Standard for the Global Goals. Principles & Requirements version 1.2
- Gold Standard for the Global Goals. Programme of Activity Requirements version 1.2
- Gold Standard for the Global Goals. Key Programme Information & Programme Design Document (PoA-DD) /9/.
- ODA declaration /10/ and warranty certificate /11/
- Technologies and practices to displace decentralized thermal energy, version 3.1 /16/
- The monitoring plan and the applied monitoring methodology, paying close attention to the frequency of measurements, the quality of metering equipment and the quality assurance and quality control procedures.
- The data and information presented to verify their completeness, including the monitoring report and the measuring records of the different monitored parameters.
- The influence of data management and the quality assurance and quality control system on the generation and reporting of emission reductions.

A complete list of all documents reviewed is attached in Appendix 2 of this report.

C.2. On-site visit

A deviation request was submitted to SustainCERT for allowing AENOR not to conduct an on-site visit as a means of validation due to the characteristics of the PoA, the fact that this is a Design Certification Renewal and that document review of project documentation and telephone or e-mail interviews will be sufficient for the purpose of validation of the compliance of the PoA design with GS rules. The deviation request was approved on 20/03/2020 /12/

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Buyzman	Eric	Carbon Consultant	20/04/2020	Changes in the Project as related to the General Eligibility Criteria Incorporation of any relevant updates to the Gold Standard Requirements Re-definition of Baseline Scenario and any impact of change on the Eligibility Principles, Criteria and	Marcelino Pellitero
2.	Clemens	Harry	Hivos	20/04/2020		

					Requirements Any Gold Standard activity, product and methodology- specific Requirements	
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C.4. Sampling approach

N/A

C.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Area of validation findings	No. of CL	No. of CAR	No. of FAR
Programme of activities			
Compliance with PoA-DD form			
Coordinating/managing entity and the project participants			
Application and selection of methodologies and standardized baselines			
Additionality of the PoA			
Validity of original baseline or its update			
Estimated emission reductions or net anthropogenic removals		CAR 2	
Validity of monitoring plan		CAR 1 CAR 3	
Eligibility criteria for inclusion of VPAs	CL 2		
Safeguarding principles			
SDG outcomes	CL 1		
Stakeholder Consultation			
Others (please specify)			
Total	2	3	0

SECTION D. Validation findings

D.1. Programme of activities

D.1.1. Compliance with PoA-DD form

Means of validation	The assessment team has checked all sections of the updated GS4GG PoA Design Document and confirms by means of comparison with the valid version of the applicable PoA-DD form /9/ listed in GS website. The assessment team also checked the information transferred to the updated PoA-DD against the initial registered PoA-DD /7/ and the Transition Annex /8/ to confirm whether the information transferred is materially the same.
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Findings	No CARs/CLs/FARs raised in this section.
Conclusion	Due to the corrective actions requested during the validation process, the project participants made a final version of the PoA-DD which includes corrections to all issues raised, so AENOR validation team confirms that final GS4GG PoA-DD is completed using the valid version of the applicable GS4GG PoA-DD form at the time of submission.

D.1.2. Coordinating/managing entity and the project participants

Means of validation	AENOR checked the names of the CME and project participants included in the updated PoA-DD against the names included in the GS Impact Registry available at GS website.
Findings	No CARs/CLs/FARs raised in this section.
Conclusion	AENOR validation team confirms that the information of the CME and PPs has been correctly indicated in the PoA-DD.

D.1.3. GS Additionality of the PoA

Means of validation	It has been indicated in section B.1 of the PoA-DD it is not necessary to re-assess additionality at Design certification renewal. On-going financial need will be demonstrated at VPA level.
Findings	N/A
Conclusion	N/A

D.1.4. Eligibility criteria for inclusion of VPAs

Means of validation	AENOR has assessed that each eligibility criterion, including the conditions that corresponding VPAs, meet the requirement pertaining to the demonstration of additionality, and are verifiable as well as sufficiently objective and comprehensive to permit the assessment of the inclusion of corresponding VPAs in the PoA.			
Findings	The managing entity employs clear and unambiguous criteria for the inclusion of the VPAs. The eligibility criteria for including VPAs to this PoA are as follows:			
	No.	Requirement	Eligibility criteria	Document or evidence
	1.	The geographical boundary of the VPA including any time-induced boundary consistent with the geographical boundary set in the PoA	All biogas systems included in the VPA will demonstrate they fall within the geographical boundary of the PoA through: <ul style="list-style-type: none"> Recording the address/location of the system in the Sales agreement or equivalent document Physically marking unique identification code on the Biogas 	One of the following documents shall be provided: <ul style="list-style-type: none"> Business plan Implementation document Annual plan Contractual agreement between CME and VPA Implementer Declaration from VPA

		Plant which identifies it as being part of the African Biogas Partnership Programme on a national scale.	<p>implementer and confirmation check by CME</p> <ul style="list-style-type: none"> • Sales agreement or equivalent document
2.	Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations	<p>The VPA shall demonstrate that it does not double-count any of its appliances for the ERs estimation by confirming that:</p> <ul style="list-style-type: none"> • The complete address of each biogas system will be recorded • the biogas systems have unique serial numbers (not relevant for the retroactive digesters) the VPA implementer has not included these biogas systems in another VPA or carbon project. 	<p>The following documents shall be provided:</p> <ul style="list-style-type: none"> • Contractual agreement between CME and VPA implementer • Declaration from VPA implementer • Sales agreement or equivalent document
3.	The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	The biogas systems disseminated are renewable energy generation units to provide thermal energy and will be required to conform to any applicable national standards.	<p>The following documents shall be provided:</p> <ul style="list-style-type: none"> • Technical documentation describing the operation of the biogas system • Evidence of compliance with national standard (if applicable).
4.	Conditions to check the start date of the VPA through documentary evidence	The VPA implementer will demonstrate the start date of the VPA is on or after the start date of the PoA. The start date of the VPA will be defined as the date on which the first Sales Agreement or equivalent document is signed under the VPA.	<p>The following documents shall be provided:</p> <ul style="list-style-type: none"> • Sales agreement or equivalent documents and Project Database for the first digester included under the VPA.
5.	Conditions that ensure compliance with applicability and other requirements of single	The VPA complies with the baseline and monitoring methodology requirements of the	The following documents shall be provided:

	or multiple methodology applied by VPAs	'Technologies and Practices to Displace Decentralised Thermal Energy Consumption' (version 3.1). and should meet its eligibility criteria as discussed in Section B.2 of the PoA-DD.	<ul style="list-style-type: none"> • Electronic database • KPT reports • Sales agreement or equivalent document
6.	The conditions that ensure that VPAs meet the requirements pertaining to the demonstration of additionality	The VPA will prove additionality as per the CDM's approved Positive List /13/ and Tool 32 /14/ and demonstrate that Biogas system have a rated capacity is less than 100 kW each	<p>The following documents shall be provided:</p> <ul style="list-style-type: none"> • Calculation showing the capacity of the biogas system(s) in KW • Business plan / Implementation document
7.	The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis	<p>The VPA, organised a local stakeholder consultation (LSC)</p> <p>The VPA, or a group of VPAs, got environmental clearance for the project related activities, if applicable.</p>	<p>The following documents shall be provided:</p> <ul style="list-style-type: none"> • Local Stakeholder Report including comments of stakeholders and how the comments were taken into account by the VPA implementer • Environmental clearance letter and/or EIA if required
8.	Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance	The VPA will demonstrate that any Official Development Assistance received for the VPA has not occurred on the condition that the resulting credits are transferred to the donor country	<p>The following documents shall be provided:</p> <ul style="list-style-type: none"> • ODA Declaration
9.	Where applicable, target group (e.g. domestic / commercial / industrial, rural / urban, grid connected / off-grid) and distribution mechanisms (e.g. direct installation)	<p>The VPA will demonstrate which target group(s) is/are to be targeted by the VPA and the distribution mechanism. Target groups shall include:</p> <ul style="list-style-type: none"> – Households – Small/Medium 	<p>One of the following documents shall be provided:</p> <ul style="list-style-type: none"> • Sales forecast • Marketing plan • Description of technology (e.g. domestic or

		Enterprises – Communities	institutional biogas system) • Implementation document
10.	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	The VPA Implementer will agree to support the sampling and survey activities of CME in accordance with section B.3 of the PoA-DD.	The following document shall be provided: • Contractual agreement between CME and VPA Implementer
11.	Where applicable, the conditions that ensure that every VPA in aggregate meets the small-scale threshold criteria and remains within those thresholds throughout the crediting period of the VPA	The VPA Implementer will ensure that each VPA remains below the small scale limits. For activities falling under Type, each VPA in aggregate will remain below 15 MW (45MW _{th}) per year. For activities falling under Type III each VPA will achieve below 60,000 tCO _{2e} in emission reductions annually.	One of the following documents shall be provided: • Contractual agreement between CME and VPA Implementer • Sales forecast • Calculation showing the capacity of the biogas system(s) • Project Database
12.	Where applicable, the requirements for the debundling check, in case VPAs belong to small-scale (SSC) or microscale project categories.	The VPA implementer will demonstrate that the VPA is not a de-bundled component via the following approach: • The biogas systems are less than 1% of the SSC threshold (as per paragraph 10 EB54 Annex 13 /15/)	The following documents shall be provided: • Calculation showing the capacity of the biogas system(s) • Project Database showing size of systems
13.	The proposed VPA must ensure that sufficient training has been carried out to ensure the construction / installation of the biogas system is done by competent persons	The VPA implementer will provide sufficient evidence of training or qualification to implement the proposed VPA.	One of the following documents shall be provided: • Training records • Training certificates • Planned training schedules
14.	Transfer of rights to carbon credits.	The end user of each biogas digester has been properly informed on the transfer of credit ownership and agreed	The following documents shall be provided: • Sales agreement

			to transfer all rights to any carbon credits to the VPA Implementer or CME of the PoA.	or equivalent document <ul style="list-style-type: none"> • Contractual agreement between CME and the VPA Implementer • Local Stakeholder report and/or Passport
	15.	Prior consideration on carbon revenues	For retroactive VPAs, prior consideration of carbon revenues shall be checked at the time of inclusion by checking that carbon revenues are considered in early project documentation before the date of VPA inclusion (e.g. in a feasibility report, a programme implementation document or similar documentation).	The following documents shall be provided: <ul style="list-style-type: none"> • Feasibility study • Business plan • Implementation document • Any other such document demonstrating compliance
The clarification request CL 2 was closed. For details refer to the respective tables in Appendix 3.				
Conclusion	AENOR validation team confirms that the eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion VPAs in the PoA. The eligibility criteria will be checked at each VPA inclusion by the CME and shall be confirmed by the VVB to be fulfilled during VPA inclusion. The eligibility criteria are consistent with the first crediting period			

D.1.5. Application and selection of methodologies and standardized baselines

Means of validation	The assessment team has checked whether the selected baseline and monitoring methodology applied is applicable to the Programme of Activities. This assessment was based on a review of the updated PoA-DD for the 2 nd crediting period, associated documentation, previous validation and telephone calls.								
Findings	<p>At the time of registration, the CME has used the approved methodology TPDDTEC version 1.0 “Technologies and practices to displace decentralized thermal energy”.</p> <p>The revised PoA-DD for the 2nd crediting period applies a valid version of the same methodology, that is TPDDTEC version 3.1 “Technologies and practices to displace decentralized thermal energy”. The assessment of the relevant information contained in the revised PoA-DD against each applicability condition is described below:</p> <table border="1"> <thead> <tr> <th>#</th> <th>Applicability criteria</th> <th>VVB Assessment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>The project boundary needs to be clearly identified, and the technologies counted in the project are not included in any other voluntary market or CDM project activity (i.e. no double counting</td> <td>The project boundary is the physical, geographical site of the methane recovery and combustion systems. Section C of the PoA-DD describes in the management plan</td> </tr> </tbody> </table>			#	Applicability criteria	VVB Assessment	1	The project boundary needs to be clearly identified, and the technologies counted in the project are not included in any other voluntary market or CDM project activity (i.e. no double counting	The project boundary is the physical, geographical site of the methane recovery and combustion systems. Section C of the PoA-DD describes in the management plan
#	Applicability criteria	VVB Assessment							
1	The project boundary needs to be clearly identified, and the technologies counted in the project are not included in any other voluntary market or CDM project activity (i.e. no double counting	The project boundary is the physical, geographical site of the methane recovery and combustion systems. Section C of the PoA-DD describes in the management plan							

	<p>takes place). In some cases, there may be another similar activity within the same target area. Project proponents must therefore have a survey mechanism in place together with appropriate mitigation measures so as to prevent any possibility of double counting.</p>	<p>how double counting is avoided.</p> <p>Hence, project complies with this condition and methodology is applicable.</p>
2	<p>The technologies each have continuous useful energy outputs of less than 150kW per unit (defined as the total useful energy delivered from start to end of operation of a unit divided by time of operation).</p>	<p>The maximum energy output of the Biodigesters implemented in the project activities is 44.77 kWth, below the indicated 450 kWth limit per unit as demonstrated in the updated PoA-DD</p> <p>Hence, project complies with this condition and methodology is applicable.</p>
3	<p>Using the baseline technology as a backup or auxiliary technology in parallel with the improved technology introduced by the project activity is permitted as long as a mechanism is put into place to encourage the removal of the old technology (e.g. discounted price for the improved technology) and the definitive discontinuity of its use.</p>	<p>As per criteria 3 in chapter 1.0 of the applied methodology: If an old technology remains in use in parallel with the improved technology, the corresponding emissions must be accounted for as part of the project emissions.</p> <p>The monitoring plan in the PoA-DD includes an assessment of the continued use of the baseline stove through survey methods and biennial Kitchen Performance Tests in case the baseline technology remains in use.</p> <p>Hence, project complies with this condition and methodology is applicable.</p>
4	<p>The project proponent must clearly communicate to all project participants the entity that is claiming ownership rights of and selling the emission reductions resulting from the project activity. For technology producers and the retailers of the improved technology or the renewable fuel in use, this must be communicated by contract or clear written assertions in the transaction paperwork. If the claimants are not the project technology end users, the end users will need to be informed and notified that they cannot claim for emission reductions from the project</p>	<p>As set out in the operational and management plan explained in Section C of the PoA-DD, each end user of a biodigester will be asked to confirm that they transfer the right and title to VERs to the VPA Implementer as part of the Sales agreement or equivalent document. Copies of these signed contracts will be kept by the VPA Implementer and made available to the CME/a VVB on request.</p> <p>A blank warranty certificate has been provided to the VVB /11/. Hence, project complies with this condition and methodology is applicable.</p>
5	<p>Project activities making use of a new biomass feedstock in the project situation (e.g. shift from non-renewable to green charcoal, plant oil or renewable biomass briquettes)</p>	<p>Not applicable.</p>

		must comply with relevant Gold Standard specific requirements for biomass related project activities, as defined in the latest version of the Gold Standard rules	
	a	Adequate evidence is supplied to demonstrate that indoor air pollution (IAP) levels are not worsened compared to the baseline, and greenhouse gases (as listed in section 2.1) emitted by the project fuel/stove combination are estimated with adequate precision ⁸ . The project fuel/stove combination may include instances in which the project stove is a baseline stove.	A study conducted in Cambodia at a sister program of those supported in this PoA found that biogas reduces PM2.5 levels, with a reduction of around 36% reduction in exposure and 88% reduction in kitchen concentrations. CO levels are also much lower, but in most cases, including the baseline households lower than the 24-hour WHO guidelines /17/. The study also found that biogas kitchens are the cleanest areas in a village, which support the argument that the combustion of biogas does not result in indoor air pollution. Hence, project complies with this condition and methodology is applicable.
	b	Records of renewable fuel sales may not be used as sole parameters for emission reduction calculation, but may be used as data informing the equations in section 2.0 of this methodology	Not applicable
	No CARs/CLs/FARs raised in this section.		
Conclusion	AENOR validation team confirms that the application of the baseline methodology is transparent and conservative, and that the chosen baseline and monitoring methodology i.e. TPDDTEC version 3.1 is applicable to the PoA.		

D.1.6. Validity of original baseline or its update

Means of validation	The audit team assessed the validity of the original baseline or its update by means of comparison of the updated PoA-DD with (i) the applied GS4GG methodology (ii) all applicable GS requirements.
Findings	<p>The baseline scenario consists of 2 components as described the updated PoA-DD are:</p> <ul style="list-style-type: none"> a) Consumption of non-renewable biomass and fossil fuels for cooking. b) Methane emissions from manure handling (AWMS) <p>Thus, the project baseline scenario is the CO₂ and CH₄ that are released into the atmosphere through burning of biomass and fossil fuels for cooking purpose that contribute to CO₂ emissions, whilst manure handling practices contributes to CH₄ emissions from the anaerobic decomposition.</p> <p>The baseline scenario could be confirmed through desk review and telephone interviews. In the project scenario, CH₄ is emitted from the physical leakage of the bio digesters and bio slurry. The CO₂ emissions are from the continued usage of biomass (firewood & charcoal) and fossil fuel (LPG). All the emission sources and GHGs are within the boundary of the PoA described in the updated PoA-DD.</p>

Conclusion	AENOR validation team confirms that the original baseline, as defined in the first crediting period is still valid at the renewal of crediting period.
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D.1.7. Estimated emission reductions or net anthropogenic removals

Means of validation	<p>The validation team checked whether the equations and parameters proposed to calculate GHG emission reductions or net anthropogenic GHG removals for VPAs are in accordance with the applied methodology.</p> <p>Validation team checked section B.3 of the PoA-DD to confirm whether all formulae to calculate baseline emissions, project emission and leakage have been applied in line with the underlying methodology</p> <p><u>Displacement of non-renewable biomass and fossil fuels</u></p> <p>In accordance with the methodology, the emission reductions are calculated as follows:</p> $ER_y = \sum_{b,p} N_{p1,y} * U_{p,y} * (f_{NRB,b,y} * ER_{b,p,y,CO2} + ER_{b,p,y,non-CO2}) - \sum LE_{p,y}$ <p>Where:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="vertical-align: top;">$\sum_{b,p}$</td> <td>Sum over all relevant (Baseline b/project p) couples</td> </tr> <tr> <td style="vertical-align: top;">$N_{p,y}$</td> <td>Cumulative number of biodigesters months¹ included in the project database for project scenario p in against baseline scenario b in year y. $N_{p,y}$ applied is the value of last month to allow for a 1 month period for digester starting up. This is conservative because in most cases within 2 weeks biogas is being produced</td> </tr> <tr> <td style="vertical-align: top;">$U_{p,y}$</td> <td>Cumulative usage rate for technologies in project scenario p1 in year y, based on cumulative adoption rate and drop off rate (fraction)</td> </tr> <tr> <td style="vertical-align: top;">$ER_{b,p,y,CO2}$</td> <td>Specific CO₂ emission savings for an individual technology of project p against an individual technology of baseline bin year y, in tCO₂/year, and as derived from the statistical analysis of the data collected from the field tests</td> </tr> <tr> <td style="vertical-align: top;">$ER_{b,p,y,non-CO2}$</td> <td>Specific non-CO₂ emission savings for an individual technology of project p² against an individual technology of baseline b in year y, converted in tCO₂/year, and as derived from the statistical analysis of the data collected from the field tests</td> </tr> <tr> <td style="vertical-align: top;">$f_{NRB,b,y}$</td> <td>Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass</td> </tr> <tr> <td style="vertical-align: top;">$LE_{p,y}$</td> <td>Leakage for project scenario p in year y (tCO₂e/yr)</td> </tr> </table> <p>The overall GHG reductions achieved by the project activity are then calculated as follows:</p> $\sum ER_y = \sum BE_{b,y} - \sum PE_{py} - \sum LE_{p,y}$ <p>Where:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="vertical-align: top;">ER_{Cy}</td> <td>Emission reduction for total project activity in year y (tCO₂e/yr)</td> </tr> <tr> <td style="vertical-align: top;">$BE_{b,y}$</td> <td>Baseline emissions for scenario b in year y (tCO₂e/yr) as calculated below under formula (5)</td> </tr> </table>	$\sum_{b,p}$	Sum over all relevant (Baseline b/project p) couples	$N_{p,y}$	Cumulative number of biodigesters months ¹ included in the project database for project scenario p in against baseline scenario b in year y. $N_{p,y}$ applied is the value of last month to allow for a 1 month period for digester starting up. This is conservative because in most cases within 2 weeks biogas is being produced	$U_{p,y}$	Cumulative usage rate for technologies in project scenario p1 in year y, based on cumulative adoption rate and drop off rate (fraction)	$ER_{b,p,y,CO2}$	Specific CO ₂ emission savings for an individual technology of project p against an individual technology of baseline bin year y, in tCO ₂ /year, and as derived from the statistical analysis of the data collected from the field tests	$ER_{b,p,y,non-CO2}$	Specific non-CO ₂ emission savings for an individual technology of project p ² against an individual technology of baseline b in year y, converted in tCO ₂ /year, and as derived from the statistical analysis of the data collected from the field tests	$f_{NRB,b,y}$	Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass	$LE_{p,y}$	Leakage for project scenario p in year y (tCO ₂ e/yr)	ER_{Cy}	Emission reduction for total project activity in year y (tCO ₂ e/yr)	$BE_{b,y}$	Baseline emissions for scenario b in year y (tCO ₂ e/yr) as calculated below under formula (5)
$\sum_{b,p}$	Sum over all relevant (Baseline b/project p) couples																		
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ER_{Cy}	Emission reduction for total project activity in year y (tCO ₂ e/yr)																		
$BE_{b,y}$	Baseline emissions for scenario b in year y (tCO ₂ e/yr) as calculated below under formula (5)																		

¹ Contrary to the methodology NBP measures this in months and not days as it takes 2 weeks before biogas is produced. In each case, the next month after installation is taken as the technology starting date of operation which is conservative.

² Project j in equation 2 of the methodology, this is a typo as it is referred to project p in parameter $ER_{b,p,y,CO2}$

	<p>$PE_{p,y}$ Project emissions for project scenario P (tCO₂e/yr) calculated below under formula (6)</p> <p>$LE_{p,y}$ Leakage emission for project scenario p in year y (tCO₂e/yr)³</p> <p><u>Baseline emissions:</u></p> <p>$BE_{b,y} = B_{b,y} * ((f_{NRB,y} * EF_{b,fuel, CO_2}) + EF_{b,fuel, nonCO_2}) * NCV_{b, fuel}$</p> <p>Where:</p> <p>$BE_{b,y}$ Emissions for baseline scenario b during the year y in tCO₂e</p> <p>$B_{b,y}$ Quantity of fuel consumed in baseline scenario b during year y, in tons, as per by-default factors (cases with project performance field test only)</p> <p>$f_{NRB,y}$ Fraction of biomass used during year y for the considered scenario that can be established as non-renewable biomass (drop this term from the equation when using a fossil fuel baseline scenario)</p> <p>$NCV_{b,fuel}$ Net calorific value of the fuel that is substituted or reduced (IPCC default for wood fuel, 0.015 TJ/ton)</p> <p>$EF_{b,fuel,CO_2}$ CO₂ emission factor of the fuel that is substituted or reduced. 112 tCO₂/TJ for Wood/Wood Waste, or the IPCC default value of other relevant fuel</p> <p>$EF_{b,fuel,nonCO_2}$ Non-CO₂ emission factor of the fuel that is substituted or reduced</p> <p><u>Project emissions:</u></p> <p>The project scenario is defined by the fuel consumption of end users within the targeted population that adopts the biodigester technology. This formula calculates the project emissions per household (as per equation 5 of TPDDTEC v3.1)</p> <p>$PE_{p,y} = B_{p,y} * ((f_{NRB,y} * EF_{p,fuel, CO_2}) + EF_{p,fuel, nonCO_2}) * NCV_{p, fuel}$</p> <p>Where:</p> <p>$PE_{p,y}$ Emissions for project scenario p during year y in tCO₂e</p> <p>$B_{p,y}$ Quantity of fuel consumed in project scenario p during year y, in tons, and as derived from the statistical analysis conducted on the data collected during the project performance field tests (cases when no baseline performance field test are performed, e.g. by-default baseline factors)</p> <p>$f_{NRB,y}$ Fraction of biomass used during year y that can be established as nonrenewable biomass (drop this term from the equation when using a fossil fuel baseline scenario)</p> <p>$NCV_{p,fuel}$ Net calorific value of the project fuel (IPCC default for wood fuel, 0.015 TJ/ton). This is equal to the baseline fuel NCV in projects which use the same fuel.</p> <p>$EF_{p,fuel,CO_2}$ CO₂ emission factor of the project fuel. This is equal to the baseline fuel EF in projects which use the same fuel, 112 tCO₂/TJ for Wood/Wood Waste, or the IPCC default value of</p>
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³ Technologies and practices to displace decentralized thermal energy – v3.1 p.20

other relevant fuel

$EF_{p,fuel,non\ CO_2}$ Non-CO₂ emission factor of the project fuel. This is equal to the baseline fuel EF in projects which use the same fuel.

Avoidance of methane emissions from AWMS.

Baseline emissions:

The baseline emissions from the handling of animal waste can be determined by using one of the following approaches, as appropriate:

- IPCC TIER 1 approach
- IPCC TIER 2 approach

IPCC TIER 1 approach

$$BE_{awms,h} = GWP_{CH_4} * \sum_T (EF_{awms(T)} * N_{(T),h})$$

Where:

- $BE_{awms,h}$ The baseline emission from handling of animal waste in premise h (tCO₂e per year)
- GWP_{CH_4} Global Warming Potential (GWP) of methane (tCO₂e per tCH₄): 21 for the first commitment period. It shall be updated according to any future COP/MOP decision
- $N_{(T),h}$ The number of animals of livestock species per category T
- $EF_{awms,T}$ Emission factor for the defined livestock population category T, (tonCH₄ per head per year). The relevant *Default methane emission factor for livestock* for default animal waste methane emission factors by temperature and region can be found in tables 10.14, 10.15 & 10.16 in Chapter 10: Emissions from Livestock and Manure Management, Volume 4 - AGRICULTURE, FORESTRY AND OTHER LAND USE, 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

IPCC TIER 2 approach

$$BE_{awms,h} = GWP_{CH_4} * \sum_T (EF_{awms(T)} * N_{(T),h})$$

Where:

- $BE_{awms,h}$ The baseline emission from handling of animal waste in premise h (tCO₂e per year)
- GWP_{CH_4} Global Warming Potential (GWP) of methane (tCO₂e per tCH₄): 21 for the first commitment period. It shall be updated according to any future COP/MOP decision
- $N_{(T),h}$ The number of animals of livestock species per category T

The emission factor ($EF_{awms(T)}$) for tier 2 approach is calculated as follows:

$$EF_{awms(T)} = VS_{(T)} * 365 * \left[Bo_{(T)} * D_{CH_4} * \sum_k \frac{MCF_{BL,k}}{100} * MS_{(T,s,k)} \right]$$

Where:

- EFawms(T) = CH4 emission factor for livestock category T, (tCH4 per animal per year)
- VS(T) = Daily volatile solid excreted for livestock category T, kg VS.animal⁻¹
- 365 = Basis for calculating annual VS production, days yr⁻¹
- Bo(T) = Maximum methane producing capacity for manure produced by animal T m³ CH4 kg⁻¹ of VS
- DCH4 = CH4 density (0.00067 t per m³ at room temperature (20 °C) and 1 atm pressure)
- MCF(BL,k) = Methane conversion factors for the animal waste handling system in the baseline situation by climate zone k, (%)
- MST(T,s,k) = Fraction of livestock category T's manure treated in the animal waste management system, in climate region k (dimensionless)

Project emissions:

The next equation from the methodology is used to calculate the project emissions from the biodigester system, the emission resulting from physical leakage (PL_y) and resulting from incomplete combustion.

$$PE_{awms,h,y} = GWP_{CH4} * \sum (N_{(T),h,y} \cdot EF_{awms_T}) \cdot PL_y + \sum (N_{(T),h,y} \cdot EF_{awms_T}) \cdot (1 - \eta_{biogasstove}) (1 - PL_y)$$

Where:

- N(T),h,y = Number of animals of livestock category T in year y in premise h
- EFawmsT = Emission factor for the defined livestock category T, (ton CH4 per animal per year).
- PL_y = Physical leakage of the biodigester in year y (10 %) Where project participants use lower values or percentage of physical leakage, they should provide measurements proving that this lower value is appropriate for the project activity.
- GWPCH4 = Global Warming Potential (GWP) of methane (tCO₂eq per tCH₄): 25 for the second commitment period. It shall be updated according to any future COP/MOP decisions.
- η_{biogasstove} = Combustion efficiency of the biogas stove to account for incomplete combustion resulting in emission of methane post-combustion.

Project emissions from the animal waste not treated in the bio-digester in project scenario shall be calculated using equation 9 of the methodology and with the following changed definition of parameters:

- MCF_(P,S,k) = Methane conversion factors for the animal waste handling system used in addition to bio-digester in the project scenario by climate zone k, (%)

	<p>$MS_{(P,s,k)}$ = Fraction of livestock category T's manure not treated in bio-digester, in climate region k, (dimensionless)</p> <p>Leakage emissions</p> <p>The methodology states that the following potential sources of leakage are to be considered:</p> <ul style="list-style-type: none"> • The displaced baseline technologies are reused outside the project boundary in place of lower emitting technology or in a manner suggesting more usage than would have occurred in the absence of the project. • The non-renewable biomass or fossil fuels saved under the project activity are used by non-project users who previously used lower emitting energy sources. • The project significantly impacts the NRB fraction within an area where other CDM or VER project activities account for NRB fraction in their baseline scenario. • The project population compensates for loss of the space heating effect of inefficient technology by adopting some other form of heating or by retaining some use of inefficient technology • By virtue of promotion and marketing of a new technology with high efficiency, the project stimulates substitution within households who commonly used a technology with relatively lower emissions, in cases where such a trend is not eligible as an evolving baseline. • Physical leakage emissions • Emissions due to continued use of baseline fuels <p>A leakage investigation shall be conducted every two years using relevant survey methods and will be part of the existing user surveys.</p>
Findings	The corrective action request CAR 2 was closed. For details refer to the respective tables in Appendix 3.
Conclusion	In AENOR's opinion, the CME has documented in the final version of the PoA-DD that information of the modalities for estimating GHG emission reductions in accordance with the requirements of the latest approved version of the methodology and tools applied to the determination of the emission reductions and the project emissions and leakage emissions.

D.1.8. Validity of monitoring plan

Means of validation	<p>AENOR checked the monitoring plan of the updated PoA-DD against the applied methodology. In addition, changes due to editorial updates have been checked.</p> <p>In detail all parameters, ex-ante values and applicable formulae have been checked to determine the required changes for the next crediting period. Based on the conducted desk review and interviews with related personnel the validation team has assessed the feasibility of the required changes.</p>
Findings	<p><u>Ex-Ante Parameters</u></p> <p>The ex-ante parameters are compared with the original registered PoA-DD and updated to be compliance with GS4GG requirements as described in Section B.3.2 of revised PoA-DD.</p> <p><u>Ex-Post Parameters</u></p> <p>The ex-post monitored parameters as described in section B.3.3 of revised PoA-DD and there are no changes with the exception of the inclusion of SDG requirements.</p> <p>The validation team has duly assessed all the required changes due to the upgraded methodological requirements and found that all necessary changes have</p>

	<p>been appropriately reflected in the updated PoA-DD, the monitoring plan in the updated PoA-DD is in compliance with the applied monitoring methodology and the monitoring arrangements described in the updated PoA-DD can be implemented and are feasible within the VPAs.</p> <p>The corrective action requests CAR 1 and CAR 3 were closed. For details refer to the respective tables in Appendix 3.</p>
Conclusion	<p>AENOR validation team confirms that:</p> <ul style="list-style-type: none"> • The Monitoring plan is in line with the requirements of the applied methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” version 3.1. • CME has provided a description of the sampling applied for monitoring which is consistent with the registered PoA-DD, Transition Annex and applied methodology. • After relevant corrections made, all necessary changes have been appropriately reflected in the monitoring plan in the updated PoA-DD is in compliance with the applied monitoring methodology, and the monitoring arrangements described could be implemented and are feasible within the VPAs.

D.1.9. Assessment of safeguarding principles

Means of validation	It has been indicated in section E.1 of the PoA-DD that safeguarding principles and SDG outcome assessment will be undertaken at VPA level
Findings	N/A
Conclusion	N/A

D.1.10. Assessment of SDG outcomes

Means of validation	It has been indicated in section E.1 of the PoA-DD that safeguarding principles and SDG outcome assessment will be undertaken at VPA level
Findings	The clarification requests CL 1 was closed. For details refer to the respective tables in Appendix 3.
Conclusion	N/A

D.1.11. Stakeholder Consultation

Means of validation	The validation team has performed desk review of the PoA-DD and interviews with CME representatives.
Findings	<p>It has been indicated in section F.1 of the PoA-DD that the local stakeholder consultation (LSC) is done at VPA level. However, in section F.2 appears that accordance to paragraph 6.1.3 of the GS4GG. Programme of Activity Requirements version 1.2 is required to request feedback from stakeholders in case of a multi-country PoA.</p> <p>According to the instruction provided by GS to the CME through skype, email communication is sufficient for fulfilling the requirement. The validation team checked the list of stakeholders invited /18/, email invitation /19/ and the website announcement /20/ and deemed it appropriate. In the summary of the comments received during the consultation is complete and CME has taken appropriate steps to address each query/concern and gathered feedback. 5 responses were received and no negative impacts at PoA level design were identified by the stakeholders /21/.</p>

	No CARs/CLs/FARs raised in this section
Conclusion	<p>The validation team of AENOR reviewed all relevant information of local stakeholder consultation meeting and confirms that:</p> <ul style="list-style-type: none"> • The stakeholder consultation meets the Gold Standard requirements • The CME conducted the stakeholders" consultation process in transparent and unbiased manner. • The PoA has not received any adverse comment during stakeholders" consultation process. • The process for conducting the local stakeholders meeting is adequate and credible.

SECTION E. Internal quality control

Following the completion of the assessment process by the validation team, all documentation undergoes an internal quality control through a technical review before submission to Gold Standard. The Technical reviewer is a qualified member of AENOR, independent from the team that carried out the validation of the project activity. The technical reviewer or the team appointed for the technical review are qualified in the technical area(s) and sectoral scope(s) of the project activity.

SECTION F. Validation opinion

AENOR has performed the validation (renewal of crediting period) of the Programme of Activities "African Biogas Carbon Programme (ABC)" in Kenya, Tanzania and Uganda. The validation process was performed on the basis of the latest versions of the GS4GG Principles & Requirements, GS4GG Programme of Activity Requirements and related Standards/Guidance, the host country criteria and also on the criteria given for the Programmes of Activities to provide for consistent project operations, monitoring and reporting. The conclusions of this report show that the Programme of Activities, as it was described in the PoA documentation, is in line with all criteria applicable for the validation.

The validation consisted of the following four phases: i) Review of data and information; ii) Cross checks between information provided in the PoA-DD and information from sources; iii) Review new relevant national and/or sectoral policies; iv) the resolution of outstanding issues and the issuance of the final validation report and opinion. In the course of the validation process, 3 corrective actions and 2 clarifications were raised; all have been successfully closed.

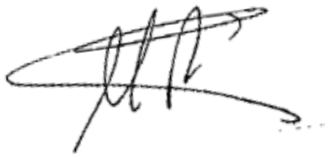
The review of the programme design documentation and additional documents related to baseline and monitoring methodology, and the subsequent background investigation, follow-up interviews and review of comments by parties and stakeholders have provided AENOR with sufficient evidence to validate the fulfilment of the stated criteria.

The conclusions can be summarised in detail as follows:

- The current baseline of the project is in line with the national and/or sectoral policies and circumstances at the time of requesting renewal of crediting period.
- The project meets all requirements of procedures set by the Gold Standard Procedures for the Renewal of a Crediting Period.
- The monitoring plan of GHG parameters is transparent and adequate and in line with the applicable GS methodology. (TPDDTEC version 3.1)
- The updated monitoring plan of SDG parameters is transparent and adequate.

In AENOR's opinion, the Programme correctly applies and meets the relevant GS4GG requirements for the renewal of the PoA period. Hence AENOR requests the renewal of the PoA period of the programme.

Madrid, 18/05/2020



Marcelino Pellitero Martinez
Team leader



José Luis Fuentes
Authorized person

Appendix 1. Abbreviations

Abbreviations	Full texts
AWMS	Animal Waste Management Systems
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Action
CME	Coordinating and Managing Entity
CO ₂	Carbon dioxide
CO _{2e}	Carbon dioxide equivalent
DR	Desk review
ER	Emission reduction
EF	Emission factor
FAR	Forward action request
GHG	Greenhouse Gases
GS	Gold Standard
GS4GG	Gold Standard for the Global Goals
GS PoA-DD	Gold Standard Programme of Activities Design Document
IPPC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
RCP	Renewal of Crediting Period
SDG	Sustainable Development Goals
SFR	Stakeholders Feedback Round
tCO _{2e}	Carbon dioxide equivalent tonnes
TPDDTEC	Gold Standard's "Technologies and practices to displace decentralized thermal energy" version 3.1
TJ	Terajoule
UNFCCC	United Nations Framework Convention on Climate Change
VER	Voluntary emission reductions
VPA-DD	Voluntary Programme Activity Design Document

Abbreviations	Full texts
VVB	Validation/Verification Bodies

Appendix 2. Documents reviewed or referenced

No.	Title	Author/Competent Authority
1	GS4GG Principles & Requirements version 1.2	GS
2	GS4GG Programme of Activity Requirements version 1.2	GS
3	Specific Instruction for the Validation, verification and certification of clean development mechanism (CDM) project activities(IE/DTC/0039)	AENOR
4	Certification Procedures & Requirements for Validation/Verification Bodies (VVBs) version 1.0	GS
5	PoA-DD version 1.2	CME
6	PoA-DD version 1.4	CME
7	Registered PoA-DD	CME
8	Gold Standard for the Global Goals Transition Annex of the PoA and VPAs	CME
9	Gold Standard for the Global Goals. Key Programme Information & Programme Design Document (PoA-DD)	CME
10	ODA declaration	CME
11	Warranty certificate	CME
12	Deviation request Approval dated 20/03/2020	SustainCERT
13	Methodological tool: Demonstration of additionality of small scale project activities version 13.0	UNFCCC
14	Methodological tool: Positive lists of technologies version 2.0	UNFCCC
15	Methodological tool: Assessment of debundling for small-scale project activities version 4.0	UNFCCC
16	Technologies and practices to displace decentralized thermal energy, version 3.1	GS
17	Biogas and Household Air Quality: Study on Household Air Quality and Estimated Health Improvement of users of Biogas Stoves versus Wood-fired Stoves in Rural Cambodia	Eric Buysman, Hivos
18	PoA Renewal Stakeholder Invitees	CME
19	Email Invitation for SFR Renewal of PoA	CME
20	Website announcement regarding the Renewal of PoA.	CME

21	Responses to email invitations	CME
22	African Biogas Carbon Programme (GS 2747) Transition Review	GS

Appendix 3. Clarification requests, corrective action requests and forward action requests

Table 1. CL from this validation

CL ID	1	Section no.	D.1.10	Date: 20/04/2020
Description of CL				
According to the PoA-DD, the SDG outcomes assessment is undertaken at VPA level. However, the current PoA-DD included an assessment in section E.3 which is for assessing SDG Outcomes if undertaken at PoA level. Please clarify.				
Project participant response				Date: 06/05/2020
This is now deleted; it was included for completeness with the justification that the outcome applies to all VPA's as per transition Annex				
Documentation provided by project participant				
PoA-DD v1.4				
DOE assessment				Date: 11/05/2020
CME updated the PoA-DD correctly. CL 1 is closed out				

CL ID	2	Section no.	D.1.5	Date: 20/04/2020
Description of CL				
The ODA declaration and a warrantee certificate shall be provided to the VVB.				
Project participant response				Date: 06/05/2020
The ODA letter and the warrantee certificate template is included in the reply package. The template is a little bit different in other countries as the implementer is different and in Tanzania the certificate is in Swahili. The content however is the same.				
Documentation provided by project participant				
ODA declaration and warranty certificate				
DOE assessment				Date: 11/05/2020
The required evidence has been provided and it is considered correct and appropriate. CL 2 is closed out				

Table 2. CAR from this validation

CAR ID	1	Section no.	D.1.8	Date: 20/04/2020
Description of CAR				
According to the instructions for completing the form, section B.3. of the PoA-DD shall include a description of the sampling plan applied for monitoring.				

Project participant response	Date: 06/05/2020
The sampling plan is now included after section B.3.3. in section B.3.4	
Documentation provided by project participant	
PoA-DD v1.4	
DOE assessment	Date: 11/05/2020
CME updated the PoA-DD correctly. CAR 1 is closed out.	

CAR ID	2	Section no.	D.1.7	Date: 20/04/2020
Description of CAR				
The methodology of the PoA-DD has been updated to the methodology entitled 'Technologies and practices to displace decentralized thermal energy' version 3.1. However, formulas, nomenclature of parameters appearing in sections Section B.2, B.3.1, B.3.2 and B.3.3. are not in accordance with the updated version of the methodology.				
Project participant response				Date: 06/05/2020
The formulas, nomenclature of the parameters have been updated and made consistent with the applied methodology				
Documentation provided by project participant				
PoA-DD v1.4				
DOE assessment				Date: 11/05/2020
CME updated the PoA-DD correctly. CAR 2 is closed out.				

CAR ID	3	Section no.	D.1.8	Date: 20/04/2020
Description of CAR				
SDG indicators in section B.3.1 are not consistent with SDG indicators in section B.3.3.				
Project participant response				Date: 06/05/2020
This is made consistent, and some minor change in the naming of parameters				
Documentation provided by project participant				
PoA-DD v1.4				
DOE assessment				Date: 11/05/2020
CME updated the PoA-DD correctly. CAR 3 is closed out.				

Table 3. FAR from this validation

FAR ID	xx	Section no.		Date: DD/MM/YYYY
Description of FAR				
N/A				
Project participant response				Date: DD/MM/YYYY
N/A				
Documentation provided by project participant				

N/A	
DOE assessment	Date: DD/MM/YYYY
N/A	