

# PROJECT REVIEW REPORT

This project review report includes findings raised during Verra’s review of the project specified below. The VVB must address the findings before the project request can be considered for approval by Verra. The project review report will be made publicly available on the Verra Registry. Confidential information may be provided in separate attachments.

<b>Project ID</b>	VCS 336
<b>Project Name</b>	Methane Recovery Project Houbensteyn Ysselsteyn, Limburg, The Netherlands
<b>Review Type</b>	Verification
<b>Program(s)</b>	VCS
<b>Verification Period</b>	01-January-2022 to 31-December-2022
<b>Project Proponent</b>	Houbensteyn Milieu BV
<b>Methodology</b>	AMS III.AO : Methane recovery through controlled anaerobic digestion; Ver 1.0 AMS III.D Methane recovery in animal manure management systems, Ver 21 AMS I.C Thermal energy for the user with or without electricity, Ver 21.0
<b>VVB</b>	KBS Certification Services Ltd.
<b>Assessment Criteria</b>	VCS standard, version 4.7
<b>Date of First Issue</b>	25-Sept.-2024 , 20-Nov-2024
<b>Review Conclusion</b>	Approved
<b>Date of Final Issue</b>	10-Jan-2025

## FINDINGS

#	Finding Description	VVB Response	Status
<b>1.</b>	<b>Missing and unclear information for Supply Chain (Scope 3) Emissions</b>		
	<p><u>Issue</u></p> <ol style="list-style-type: none"> <li>1. According to Section 1.11.3 of MR, the PP has selected "Yes" for the question regarding whether the project activity affects the emissions footprint of any product(s) (goods or services) that are part of a supply chain. However, it is unclear why the related question in the same section, concerning whether the PP is a buyer of goods that are part of a supply chain (such as manure), and the associated requirements under Scope 3 emissions, has been marked as "No."</li> <li>2. According to Section 4.1 of the VR (page 21), regarding Supply Chain (Scope 3) emissions and double claiming, the VR states that the grouped project affects the emissions footprint of any product(s) (goods or services) that are part of a supply chain. It is unclear why the VVB has referenced the grouped project in this context.</li> </ol> <p><u>Action Required</u></p> <ol style="list-style-type: none"> <li>1. VVB must ensure the PP includes the correct information required under points 1 and 2 above.</li> <li>2. The VVB must verify this information and update the VR as needed.</li> </ol> <p><u>Program Rule(s)</u></p> <p>Section 1.11.3; VCS Monitoring Report Template, v4.3.</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> <li>1. In Section 1.11.3, the question related to the PP being a buyer or seller of goods that are part of a supply chain (manure) and related requirements under Scope 3 emissions has been changed to "yes". Accordingly, the following information (translated from Dutch here) "Carbon credits may be issued through the Verified Carbon Standard project ID 336 for the greenhouse gas emission reductions or removals associated with manure management by Houbensteyn whose emissions footprint is changed by the project activities" was posted on the PP's website and the corresponding evidence was included in Section 1.11.3.</li> <li>2. The whole section has been updated. Please refer to it</li> </ol> <p><u>Verra Response</u></p> <ol style="list-style-type: none"> <li>1. Section 1.11.3 has been revised now. Hence, no further action is required. This finding is closed.</li> <li>2. Okay, this finding is closed.</li> </ol>	closed
<b>2.</b>	<b>Sustainable Development Contributions</b>		
	<p><u>Issue</u></p> <p>As per Table 1: Sustainable Development Contributions for row</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u></p>	Closed

	<p>number 1 (SDG 7.2) &amp; row number 3 (SDG 13.2), PP has mentioned the same value as per the Contributions Over Project Lifetime column mentioned in the previous monitoring period.</p> <p><u>Action Required</u> VVB must ensure that the PP accurately fills in the correct values in the "Contributions Achieved by Project Lifetime" column. These values should reflect the data up to the current end date of the monitoring period.</p> <p><u>Program Rule(s)</u> Section 1.12: VCS Monitoring Report Template, v4.3</p>	<p>Under “Contribution over the Project Lifetime”, the PP understood the estimated total amount of energy produced (SDG 7.2.1) and the estimated total amount of CO2e (SDG 13.2.2) over the entire crediting periods (01.05.2006-30.04.2026). Therefore, the values stated in the current MR are the same as the values stated in the previous MR for the “Contribution over the Project Lifetime”. The PP has now adapted the values in Table 1 of the MR, reflecting now the data up to the current end date of monitoring period.</p> <p>Values have been updated and checked by the verification team. No discrepancies were identified.</p> <p><u>Verra Response</u></p> <p>Table 1 of the MR has been revised. Hence no further action is required. This finding is closed.</p>	
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3. Missing information under section 2 (Safeguards and Stakeholder Engagement) of MR			
	<p><u>Issue:</u></p> <ol style="list-style-type: none"> <li>Section 2.1.1 of the MR is left blank without providing the justification as required by the VCS Monitoring Report Template filling guidelines (v4.3).</li> <li>In Section 2.1.2 of the MR, the PP has stated that stakeholder consultations occur 10 times per year.</li> <li>Section 2.4 of the MR is left blank without providing the justification as required by the VCS Monitoring Report Template filling guidelines (v4.3).</li> </ol> <p><u>Action Required</u> The VVB must ensure that the PP provides all the relevant information in Section 2 of the MR in accordance with the VCS</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> <li>In Section 2.1.1 of the MR, information on stakeholder identification has been added.</li> <li>With stakeholder consultations, the PP refers to visits on the biogas site. In this frame, stakeholders are directly informed about the project activities in details and have the possibility to give oral feedback to the project owner. Information on stakeholder visits has been included under Section 2.1.2 of the MR. Evidence of stakeholder visits have been provided to the VVB in form of photos. The FVR has been updated accordingly.</li> </ol>	<p>Closed</p>

	<p>Monitoring Report Template filling guidelines (v4.3).</p> <p><u>Program Rule(s)</u> Section 2; VCS Monitoring Report Template, v4.3</p>	<p>3. In Section 2.4 of the MR, information on the project's impact on ecosystem health has been added.</p> <p><u>Verra Response</u></p> <p>Section 2 of MR has been revised now. Hence this finding is closed.</p>	
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<p><b>4.</b></p>	<p><b>Missing calibration information</b></p> <p><u>Issue</u> The MR does not include the calibration information of the weighing scale and heat and electricity meters, such as the dates of calibration and Due dates.</p> <p><u>Action item</u></p> <ol style="list-style-type: none"> <li>1. The VVB must ensure that the project proponent includes the calibration information of all weighing scales, heat, and electricity meters used during the whole monitoring period.</li> <li>2. The VVB must verify this information and update the VR as needed.</li> </ol> <p><u>Program Rule(s)</u> VCS Monitoring Report Template v.4.3, Section 4.3</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u></p> <p><b>1. Weighing scale</b> Calibration information has been added to the MR in Section 4.2 including dates of calibration</p> <p><b>Electricity meters</b> Calibration of electricity meter is conducted by accredited measuring company Fudura B.V, who supply, install, operate and maintain electricity meters. Fudura B.V do not provide calibration details. Since the question of calibration information is raised by each VVB for this project since the very first verification in the first crediting period, the PP finally asked directly Fudura to give evidence that calibration is properly done and certificates with due dates are not necessary. Evidence is shown in form of an email exchange from PP with Fudura provided to the VVB. According to Fudura "there are no calibration certificates available as the meters are compliant to the MID ("Measurement Instrument Directive").</p>	<p>Closed</p>
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		<p>As mentioned in the MR in Section 4.3, Fudura reads, collects and validates the necessary measurement data and send the data to the grid operator. Fudura also takes care of the control and maintenance of the meter. According to Fudura, the electricity measurements fully comply with the European CE-Directive Measuring Instrument Directive (MID). That means, that the meters are operated, maintained and calibrated according to the manufacturer’s instructions. The installation and operation of the electrical meter is regulated by law. The operator has not the possibility access or manipulate the meters as they are sealed by officials (Fudura B.V.). This is a common fact in EU countries. Authorities require meters to be initially qualified (DU: “Eichung”) which is similar to a calibration but can only be conducted by a competent authority. Accuracy is provided and safeguarded by law through the competent authority.</p> <p><b>Heat meters</b> Calibration information of the heat meters has been added to the MR under Section 4.2.</p> <p>According to the registered PD, the heat meters are supplied, installed, and operated by a recognized measuring company Fudura B.V. Fudura reads, collects and validates the necessary measurement data and send the data to the official agencies. Fudura also takes care of the control and maintenance of the meter. The meters are operated, maintained and calibrated according to the manufacturer’s instructions. Moreover, an e-mail from Fudura B.V. confirming that the meters are calibrated and in compliance with the local regulation have been provided. Hence, there is no legal requirement in NL to calibrate meters on a determined frequency as those devices are controlled by an authorized entity only (Fudura B.V.).</p>	
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		2. Information has been verified and the VR has been updated.	
		<u>Verra Response</u> The date of calibration has been provided in section 4.2 of MR. Hence, no further action is required. This finding is closed.	

5. Further information on level of assurance of the audit			
	<u>Issue</u> As per Section 2.3 of the VR, no local stakeholders were interviewed during the audit.  <u>Action item</u> 1. The VVB must further elaborate on how a reasonable level of assurance of the audit has been achieved, considering that no local stakeholders have been interviewed as per Section 2.3 of the VR.  <u>Program Rule(s)</u> VCS Verification Report Template v.4.3, Section 1.3	Round 1	Closed
		<u>VVB Response</u> 1. The on-site visit took place on November 2023 where the new version of the MR (v4.3) and VR (v4.2) template was still not mandatory. It is important to mention that this new version of the template changed significantly compared to previous versions. After several months (3 months), the PP delivered the updated documents and answers to the findings and at that time, the new template was already mandatory. Hence, it was not foreseen to perform several interviews during on site visit. Hence, the VT performed more interviews remotely and included the information in the VT. Please refer to section 2.3 of the VR.	
		<u>Verra Response</u>  PP has revised section 2.3 of VR. Hence no further action is required. This finding is closed.	

6. Need further information for Methodology Deviations			
	<u>Issue</u> VVB must provide his input on the mentioned methodology deviations;	Round 1	Closed
		<u>VVB Response</u>	

<p><u>Action item</u> The VVB shall provide input on the following points;</p> <p><b><u>Biogas production</u></b></p> <ol style="list-style-type: none"> <li>1. How was the accuracy of the biogas production data verified? Are there any checks or validations to ensure that the data reported by Eqwadraat (third party) is reliable?</li> <li>2. How have stakeholders, been informed of this deviation? Are there any communications or approvals required for this change?</li> <li>3. Has VVB compared the new biogas production calculation results with historical data calculated using the PD method? If so, what were the findings, and how were any discrepancies addressed?</li> </ol> <p><b><u>2. Methane content</u></b></p> <ol style="list-style-type: none"> <li>4. How is the accuracy of the electrical energy produced (EEP) and the electric efficiency of the CHP engines (ETACHP-el) measured and verified? Are there any calibration procedures or checks in place?</li> <li>5. how the VT assessed the alternative calculation method for methane content? What specific aspects were reviewed to confirm the method's plausibility?</li> </ol> <p><u>Program Rule(s)</u> Section 2,2 VCS standard ver 4,7</p>	<p><b><u>Biogas production</u></b></p> <ol style="list-style-type: none"> <li>1. 1. In the Netherlands, biogas plants are linked to government subsidies under the SDE+ program, which is designed to support renewable energy production, including electricity and heat from biogas. This subsidy program is tightly regulated, and companies involved in verifying biogas production data for subsidy purposes must follow strict guidelines. For the biogas sector, the verification of energy outputs for subsidy purposes is often supported by engineering consultancies or energy audit firms, which collaborate with firms like Eqwadraat. The key role for firms like Eqwadraat is to ensure that the data they handle is reliable, accurate, and complies with reporting standards. This is crucial since these verified data is the base for governmental subsidies payment. Eqwadraat is recognized as an independent third-party company for preparing, verifying, and submitting monthly and annually measurement reports (see App B - 1 - Meetrapport 2022 - Houbensteyn Milieu) for biogas plants. This measurement report has to be verified in accordance with Dutch law, including the Regulation on Guarantees of Origin and Certificates of Origin. Eqwadraat is involved in verifying whether the energy production from biogas plants originates from pure biomass and complies with the requirements of relevant regulatory bodies like CertiQ. Eqwadraat not only verifies the data reported by the installation but also ensures the reliability and plausibility of the energy production metrics in relation to biomass inputs. Specifically, Eqwadraat assesses and checks whether the amount of energy produced (electricity, biogas, and heat) is consistent with the amount and quality of biomass used. It means that electricity production of the project based on biogas production is already crosschecked and verified by an independent third party, being expert in this field. In</li> </ol>	
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		<p>theory, this is by far more reliable than the calculations of a carbon consultant. However, as already mentioned in the PD and previous monitoring periods, biogas production is neither necessary nor relevant for the calculation of emission reductions, since electricity and heat production are directly measured and verified by an independent company. It was only necessary and relevant for the last crediting period, where biogas production and methane content were the base for calculation of emission reductions.</p> <ol style="list-style-type: none"> <li>2. There is no reason to inform stakeholders from this deviation since this deviation has no impact on the project at all (please refer to 1. above). As background information: the reason why a deviation from the PD was needed in the 2<sup>nd</sup> crediting period to calculate the biogas production is that, when renewing the crediting period of this project, it was not clear to the carbon consultant in charge of it that the biogas production calculation is already given in the verified annual measurement reports (this was not automatically the case in previous versions of the official measurement reports). It means: the only reason why there is a deviation here is that the biogas production is already calculated by an independent reliable third-party and there is zero added value in terms of better accuracy, impact of emission reductions or project quality to bring up the effort to calculate the biogas production (again) as stated in the PD.</li> <li>3. The calculation of biogas production, as outlined in the PD, requires identifying the biogas production potential and the methane content of all substrates processed in the biogas plant, which involved more than 20 different substrates in 2022. This had to be done in the previous</li> </ol>	
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		<p>crediting period, since biogas production was a core parameter to calculate emission reductions. However, to minimize unnecessary effort on parameters that do not influence project results at all, biogas production is taken from verified measurement reports and methane content is only calculated rather than actively monitored or sourced from literature. This approach is intended to avoid excessive calculation effort that offers no added value for project verification—as for the biogas production parameter, it has no impact on accuracy, emission reductions, or the overall quality of the project—and is already performed by independent third -party experts in the field.</p> <p>In this crediting period, the core parameters are manure amounts processed in the biogas plant (which are measured) for CH4 avoidance calculation and quantity of heat produced by the CHP engines and used (which is also measured) for fossil fuel avoidance.</p> <p>As indicated in the PD and mentioned above, biogas production is solely used to cross-check the electricity production (“verifying methane produced and destroyed in the CHP”). This cross-checking is already conducted in by Eqwadraat, as can be seen from the measurement App B - 1 - Meetrapportage 2022 Houbensteyn Milieu, page 3), where a difference of just 1% between the calculated and measured results is observed—a deviation considered negligible. In cases of greater deviations, Eqwadraat requires an explanation from the project owner for the observed deviation between the results. This deviation would need to be addressed and explained to gain approval from Eqwadraat.</p> <p><b>Methane content</b></p> <ol style="list-style-type: none"> <li>4. As already described and verified through different auditors in the monitoring reports of the first crediting</li> </ol>	
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		<p>period, in the renewal PD for the second monitoring period and in the last monitoring reports, the electric meters are supplied, installed, and operated by this recognized measuring company Fudura B.V. Fudura reads, collects and validates the necessary measurement data and send the data to the grid operator. Fudura also takes care of the control, maintenance and calibration of the meters. According to Fudura, the electricity measurements fully comply with the European CE-Directive Measuring Instrument Directive (MID). That means, that the meters are operated, maintained and calibrated according to the manufacturer’s instructions. The installation and operation of the electrical meter is regulated by law. The operator has not the possibility access or manipulate the meters as they are sealed by officials (Fudura B.V.). This is a common fact in EU countries. Authorities require meters to be initially qualified (DU: “Eichung”) which is similar to a calibration but can only be conducted by a competent authority. Accuracy is provided and safeguarded by law through the competent authority.</p> <p>5. As for the biogas production, the methane content was one of the core parameters of the first crediting period, since the calculation of emission reductions were based on it. Literature values of methane content of each substrate processed in the biogas plant were used to calculate emission reductions.</p> <p>But for this crediting period, when drafting the PD renewal, it was not clear to the carbon consultant that all parameter needed to calculate methane content would be available as reliable and verified evidence from third-party for carbon calculation purposes (this was not automatically the case in the previous monitoring periods). The deviation is using the validated equation</p>	
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		<p>from the PD under section 5.2, to calculate biogas production (parameter BGP). Therefore, as for the biogas production, there is no justifiable reason for using a calculation approach for methane content implying intense work efforts, in order to have results that has no influence on the level of accuracy or emission reductions, and that can be calculated using already reliable values.</p>	
		<p><u>Verra Response</u></p> <p>The VVB has addressed the methodology deviations, clarifying that third-party verifications by Eqwadraat and Fudura B.V. ensure reliable biogas and methane content data. These deviations do not impact project emissions reductions or quality, simplifying reporting while meeting compliance standards.</p> <p>Hence, no further action is required. This finding is closed.</p>	

7.	<p><b>other</b></p> <p><u>Issue</u> The VR does not mention the correct methodology name.</p> <p><u>Action item</u> The VVB should clarify why AMS-III.AO: Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories, Version 01, is mentioned in the VR. Please correct the methodology's name throughout the VR.</p> <p><u>Program Rule(s)</u> Section 2.2 VCS standard ver 4,7</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> <li>1. It is the name stated in the PDF document. If you open the file, you can see this name. Hence, the name stated in the web site has been added instead.</li> </ol> <p><u>Verra Response</u></p> <p>Okay, this finding is closed.</p>	closed
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	Finding Description	VVB Response	Status
8.	<p><b>Assessment of Compliance with AMS III.D, Paragraph 27</b></p> <p><u>Issue</u> The VVB has not included an assessment of the compliance of the emission reductions claimed by the PP from the animal waste management system with the requirements of paragraph 27 of the applied AMS III.D methodology, <i>Methane recovery in animal manure management systems</i>, Version 21. Paragraph 27 of AMS III.D requires the PP to consider the minimum of <math>(BE_{y,ex\ post} - PE_{y,ex\ post})</math> and <math>(MD_y - PE_{power,y,ex\ post})</math>.</p> <p><u>Action Required</u> The VVB must verify the above requirement in accordance with the applied methodology and include the assessment in the VR.</p> <p><u>Program Rule(s)</u> Paragraph 27 of AMS III.D, <i>Methane recovery in animal manure management systems</i>, Version 21.</p>	<p><b>Round 1</b></p> <p>N/A</p> <p>N/A</p> <p><b>Round 2</b></p> <p><u>VVB Response</u> The MR and calculation spreadsheet have been updated according to the requirement of Section 4.6 of the AMS.III-D. It shows that PP has already used the conservative approach for calculation of emission reductions, since the amount of emission reductions claimed is lower than with the other approach. The FVR (see page 35) has been also updated to clearly shown the requirements stated in paragraph 27 of AMS III.D.</p> <p><u>Verra Response</u> The updated MR and calculation spreadsheet demonstrate the use of a conservative approach. Additionally, the updates to the FVR (page 35) effectively align with the requirements specified in paragraph 27 of AMS.III-D.</p> <p>No further action is required. This finding is closed.</p>	Closed