

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.

Project ID	2998
Project Name	Brascarbon Methane Recovery Project BCA-BRA-16
Review Type	Verification
Verification Period	01-02-2022 to 31-12-2023
Program(s)	VCS Program
Project Proponent	Brascarbon Consultoria, Projetos e Representação S/A
Methodology	AMS-III.D “Methane recovery in animal manure management systems”, Version 21.0
VVB	ICONTEC
Assessment Criteria	VCS Standard Version 4.7
Date of First Issue	09 August 2024
Review Conclusion	Approved
Date of Final Issue	09 January 2025

FINDINGS

#	Finding Description	VVB Response	Status
1	<p>No compliance with VVB rotation requirement</p>		
	<p><u>Issue</u> The Joint Validation and Verification of the project was conducted by ICONTEC, and the subsequent verification (this one) has also been conducted by ICONTEC.</p> <p>The rotation requirement as per Section 4.1.27.1) of the VCS Standard v.4.7 is not being met.</p> <p><u>Action item</u> 1. The VVB must clarify how the requirements in section 4.1.27.1 of the VCS Standard v.4.7 are complied with.</p> <p><u>Program Rule(s)</u> Section 4.1.27.1 of the VCS Standard v.4.7</p>	<p>Round 1</p> <p><u>VVB Response</u> Icontec considered it appropriate to accept the Project for this verification because it was understood to be the first individual verification after the validation. However, due to an oversight, we failed to recognize that Section 4.1.27.1 of the VCS standard stipulates that the rotation of the VVB is required starting from the subsequent verification, whether or not it was independent of the validation.</p> <p>We are now aware of the mistake made; however, we would like to explain that, considering Icontec's principles of transparency and seriousness in our work, and in accordance with the Validation and Verification Manual of the standard, Verra requires us to provide a reasonable level of assurance in the validation and verification that the GHG assertions are free from material errors, omissions, and misrepresentations. We guarantee that there are no material errors. Therefore, this subsequent verification visit allows us to confirm compliance with Verra's standard and the implemented GHG methodology (Section 3.3.1.1) based on the results of a risk assessment.</p> <p>We understand, therefore, that this project should not be verified by ICONTEC until after 2027 (if Brascarbon so decides), in accordance with Section 4.1.27.2, a measure that corresponds to the compliance with VCS Standard v.7 regarding the Rotation of Validation/Verification Bodies: "...2) A validation/verification body shall not verify more than six consecutive years of a project's GHG emission reductions or carbon dioxide removals. The validation/verification body may undertake further verification for the project only when at least three years of the</p>	<p>Closed</p>

		<p>project's reductions or removals have been verified by a different validation/verification body..."</p>	
		<p><u>Verra Response</u> The VVB and PP have provided the justification, and an exemption has been applied and approved. This finding is closed.</p>	
		<p>Round 2</p>	
		<p><u>VVB Response</u></p>	
		<p><u>Verra Response</u></p>	

2	<p>Missing information on Scope 3 emissions</p> <p><u>Issue</u> Section 1.11.3 of the monitoring report (MR) related to Scope 3 emissions is not properly completed as per the template since the project impacts the indirect emissions from the farms related to the management of their manure.</p> <p><u>Action item</u></p> <ol style="list-style-type: none"> 1. The VVB must ensure that the project proponent demonstrates how the project complies with applicability conditions under Scope 3 emissions as per the applicable template. 2. The VVB must validate this information and update the Validation Report (VR) as needed. <p><u>Program Rule(s)</u> VCS Monitoring Report Template v.4.3, Section 1.11.3</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>The system installed by the Project Participant (PP) at each of the sites that are part of the project is backed by a loan for use contract and an exclusivity agreement for the use of the equipment designated for the development of the project. This implies that, in addition to what is stated by the PP in section 1.11.3 of the Monitoring Report (MR), the physical and contractual boundaries of the project are clearly defined. These contracts establish the commitments and scope of the project in accordance with the established methodology.</p> <p>The loan for use contract ensures that the equipment is provided temporarily for specific use within the project, while the exclusivity agreement ensures that this equipment will be used</p>	<p>Closed</p>
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	<p>VCS Verification Report Template v.4.3, Section 4.1</p>	<p>solely for project activities. This reinforces the PP's control and responsibility over the equipment and the fulfillment of the project's objectives according to local environmental regulations, the Verra standard, and the methodology (AMS.III.D – version 21.0).</p> <p>Within the Project boundary of the project activity, there are emissions regarding the supply chain (scope 3) neither regarding the farm products nor the possible management of the manure as indirect emissions from the farms. That occurs for two reasons, the manure is inside the biodigester which is integrant part of the project boundary hence with management by the PP and not the farms and, secondly and most important, since no manure was managed nor removed from the biodigester, considering the current verification period under assessment. Hence no scope 3 emissions occurred and therefore the project activity has not affected the scope 3 emissions of the farms.</p>	
		<p><u>Verra Response</u></p> <p>The information has been provided. This finding is closed.</p>	
		<p>Round 2</p>	
		<p><u>VVB Response</u></p>	

		<u>Verra Response</u>	
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3 Missing information on on going communication			
	<p><u>Issue</u> Section 2.1.4 of the MR does not demonstrate that the procedure established as per the validated plan for on going communication is easily accessible to stakeholders, as required by the applicable template.</p> <p><u>Action item</u> 1. The VVB must ensure that the project proponent demonstrates that the communication was easily accessible to stakeholders during the monitoring period. 2. The VVB must assess this information and update the VR as needed.</p> <p><u>Program Rule(s)</u> VCS Monitoring Report Template v.4.3, Section 2.1.4 VCS Verification Report Template v.4.3, Section 4.1</p>	<p style="background-color: #1a3d4d; color: white; padding: 2px;">Round 1</p> <p><u>VVB Response</u></p> <p>PP has internal procedures for the management of grievances. If the company receives any grievance from anyone, the PP has fairly demonstrated that he has a dedicated email (info@brascarbon.com.br) which is regularly checked and is within company policy that any grievance should be answered and, if possible, resolved within a period of 10 business days. Revised MR version 3.</p> <p>See the following documents: VCS MR Project ID 2998 01022022-31122023_v3_clean.pdf VCS VerR Project ID 2998 01022022-31122023 _v.3_clean.pdf</p> <hr/> <p><u>Verra Response</u></p> <p>The information on on-going communication has been provided. This finding is closed.</p>	Closed

4 Missing information on no net harm			
	<p><u>Issue</u> Section 2.4 of the MR does not describe if the measures to be taken in order to control the potential negative environmental</p>	<p style="background-color: #1a3d4d; color: white; padding: 2px;">Round 1</p> <p><u>VVB Response</u></p>	Closed

	<p>impacts have been conducted during the monitoring period and their results.</p> <p><u>Action item</u></p> <p>1. The VVB must ensure that the project proponent includes all the required information related to the measures taken in order to control the potential negative environmental impacts during the monitoring period in Section 2.4 of the MR.</p> <p>2. The VVB must assess this information and update the VR as needed.</p> <p><u>Program Rule(s)</u></p> <p>VCS Monitoring Report Template v.4.3, Section 2.4 VCS Verification Report Template v.4.3, Section 4.1</p>	<p>The PP develops its projects in designated areas on properties owned by pig farms, as described in the MR. All farms have environmental licenses and operating licenses, authorized by IMASUL (the environmental authority of the state of Mato Grosso do Sul).</p> <p>The license granted by IMASUL for a pig farm is awarded to those owners whose properties comply with the applicable environmental regulations. This means that the farm meets, among other aspects, the proper management of waste, the protection of water sources, and the minimization of pollution. Obtaining this license ensures that the farm operates sustainably, addressing the proper management of the local ecosystem and its biodiversity, minimizing negative environmental impact, and operating within the parameters established by environmental legislation.</p> <p>Revised MR version 3</p> <p>See the following documents: VCS MR Project ID 2998 01022022-31122023_v3_clean.pdf VCS VerR Project ID 2998 01022022-31122023_v.3_clean.pdf</p> <p><u>Verra Response</u></p> <p>The information on no net harm has been provided. This finding is closed.</p>	
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5 Missing information on status of project activity		
<p><u>Issue</u></p> <p>Section 4.1 does not provide information on the planned installation of gensets.</p> <p><u>Action item</u></p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>The PP has no intention of installing gensets or energy generators. There is a small reference to that possibility, in page</p>	<p>Closed</p>

<ol style="list-style-type: none"> 1. The VVB must ensure that the project proponent includes information related to the implementation status of the planned gensets in Section 4.1 of the MR. 2. The VVB must further validate this information and update the VR as needed. <p><u>Program Rule(s)</u> <i>VCS Monitoring Report Template v.4.3, Section 4.1</i> <i>VCS Verification Report Template v.4.3, Section 4.1</i></p>	<p>4 of the monitoring report version 2 but just has an eventual possibility if and when required but the farm owner, always with previous PP consultation in order to assess the feasibility and without any claims for the biogas which eventually would be directed to a potential genset, which does not occur in any of the farms in the current Monitoring Period.</p> <p>No changes are made, please see section 4.3 of the VR.</p> <p><u>Verra Response</u> Justification has been provided. This finding has been closed.</p>	
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<p>6 Further clarification on project emissions</p>		
<p><u>Issue</u> Project emissions related to electricity consumption and combustion of fossil fuels have been considered as zero. Details are missing on how the energy needs of the project are met.</p> <p><u>Action Required</u></p> <ol style="list-style-type: none"> 1. The VVB must ensure that the project proponent clarifies how the energy needs of the project have been met during the monitoring period in order to ensure that project emissions related to electricity consumption and combustion of fossil fuels are zero. 2. The VVB must further validate and verify this information and update the VR as needed. <p><u>Program Rule(s)</u> <i>VCS Monitoring Report Template v.4.3, Section 5.2</i> <i>VCS Verification Report Template v.4.3, Section 4.3</i></p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>The energy source used at each of the project sites is based on solar panels—self-sufficient and sustainable. This has been mentioned in the project description both in the Monitoring Report (MR) and in the Verification Report (VR)</p> <ol style="list-style-type: none"> 1. No Grid Electricity: The project operates without any electricity from the grid, confirmed by ICONTEC 2. Flare Control System: <ul style="list-style-type: none"> o The flare is enclosed and controlled by a Programmable Logic Controller (PLC). o The PLC logs the combustion temperature every minute to determine flare efficiency. o A thermocouple monitors the combustion temperature, ensuring it remains within specifications. o An automatic sparking system ignites the flare every second. 3. Biogas Flow Control: The biogas flow rate is also monitored by the PLC, with records taken every minute. 	<p>Closed</p>

		<p>4. Power Supply:</p> <ul style="list-style-type: none"> ○ The entire system is powered by a 12V battery. ○ The battery is charged using solar panels, providing all necessary energy for the project. <p>No changes are made, please see section 4.3 of the VR.</p>	
		<p><u>Verra Response</u> Justification for project emissions has been provided. This finding is closed.</p>	

7 Further information on leakage emissions			
	<p><u>Issue</u> As per MR leakage emissions associated with the sludge disposal are not accounted for since sludge from the digesters will be spread aerobically in the surface of the pasture or plantation as fertilizer in a depth less than 0.30 meters (page 5). However, as per the monitored parameter QDM, it is stated that sludge was not removed during this monitoring period. It remains unclear how the sludge generated has been managed and why leakage associated with it have been neglected in line with the applied TOOL14, Section 6.2.</p> <p><u>Action Required</u></p> <ol style="list-style-type: none"> 1. The VVB must require the project proponent to explain how the sludge generated from the digesters has been managed during the monitoring period and further elaborate if leakage emissions are not applicable as per Section 6.2 of TOOL14. 	<p>Round 1 <u>VVB Response</u></p> <p>Regarding Tool 14, the leakage is not measured as mentioned in the same tool in section 6.2, paragraph 25, footnote (If the storage of digestate or the composting of digestate is occurring within the project boundary, these emissions will be considered as project emissions.). This is explained both in the MR and the VR.</p> <p>As mentioned in Finding 2, Icontec confirms that the PP did not handle or remove sludge during the entire monitoring period. Additionally, the PP's design for the treatment facility (biodigester), along with the composition of wastewater from pig farms and the PP's experience in developing this type of project, allows them to have a highly efficient system that rarely requires sludge removal.</p> <p>For this reason, the QDM parameter is included in the general package of parameters covered by the methodology and its tools; however, its implementation has not been necessary in this type of project to date.</p>	<p>Closed</p>

<p>2. The VVB must verify this information and update the VR as needed.</p> <p><u>Program Rule(s)</u> Section 6.2 of TOOL14</p>	<p>You can find mention of these leakage emissions in the PP's PD - MR reports as well as in the Validation and Verification reports of the VVB.</p> <p>See the documents - MR sections 4 and 5.3</p> <p>See the following documents: VCS MR Project ID 2998 01022022-31122023_v3_clean.pdf VCS VerR Project ID 2998 01022022-31122023_v.3_clean.pdf</p> <p><u>Verra Response</u></p> <p>Leakage emissions have been incorporated. This finding is closed.</p>	
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8 2019 IPCC Refinement default values		
<p><u>Issue</u></p> <p>As per Section 4.1 of the MR, values from 2019 IPCC Refinement are being used for MCFj, $VS_{default}$ and $W_{default}$. However, the figures used are different from the ones stated in the 2019 IPCC Refinement.</p> <p><u>Action item</u></p> <ol style="list-style-type: none"> 1. The VVB must ensure that the project proponent uses the 2019 IPCC Refinement values for MCFj, $VS_{default}$ and $W_{default}$. 2. The VVB must further validate this information and update the VR as needed. <p><u>Program Rule(s)</u> 2019 IPCC Refinement</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>For the parameter MCFj, the methodology establishes that a reference factor can be used, but that 'alternatively' the IPCC can be used. In the 2019 refinement of the IPCC, Table 10.17 shows that in the case of projects, the value varies from 42% to 80%, primarily depending on environmental conditions. In this case, Brascarbon has estimated 79% as a conservative value compared to the estimate in the IPCC.</p> <p>The default parameter VSLT, when referring to the PP from the PD - MR, mentions reviewing Tables 10A-7 and 10A-8. However, it actually corresponds only to Table 10A-7 of the IPCC because the 2019 refinement version places the information related to pigs exclusively in that table. Specifically, it mentions that 51% applies if liquid/sludge is used, or there is no data if a digester is used.</p>	<p>Closed</p>

		<p>Reasonably, the PP uses differentiated values such as 30% and 46%, which can be provided according to the age, weight, and condition or productive purpose of the type of pig production.</p> <p>Regarding the third parameter mentioned by Verra Wdefault in Equation 3, it is indicated in the PD-MR that the data comes from the 2019 refinement of the IPCC in Table 10A.5, which refers to weights and states that the information was taken from the FAO statistical system, GLEAM, and is a simplified extract from the model database. Therefore, for this parameter, averaging between 50 kg and 198 kg is valid and conservative concerning the proposed modeling.</p> <p>Revised MR version 3</p>	
		<p><u>Verra Response</u></p> <p>Justification for values applied has been provided. This finding is closed.</p>	

9	Monitoring plan		
	<p><u>Issue</u></p> <p>(a) Some parameters included in the Joint Project Description and Monitoring Report (such as Q_{manure}) have not been included in the Monitoring Report. Please consider the provisions under the project description deviations in order to revise the monitoring plan in line with the methodological choices selected for the ER calculations.</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>(a) All the parameters considered in the validated and registered project are included in the revised version 3 of the Monitoring Report.</p> <p>(b) Regarding the parameter Wsite, the PP does not participate in the weighing of the animals since that is outside the project boundary and is the primary activity</p>	<p>Closed</p>

<p>(b) There is no calibration information on the equipment used to measure W_{site}.</p> <p>Action item</p> <ol style="list-style-type: none"> 1. The VVB must ensure that the project proponent addresses points a and b above. 2. The VVB must further validate this information and update the VR as needed. <p>Program Rule(s) <i>VCS Monitoring Report Template v.4.3, Section 5.2</i> <i>VCS Verification Report Template v.4.3, Section 4.4</i></p>	<p>of the farm owners. However, since swine production is the core operation of the farms involved in the project activity, this information tends to be very thorough, as it is precisely their primary source of income.</p> <p>See the following documents: VCS MR Project ID 2998 01022022-31122023_v3_clean.pdf VCS VerR Project ID 2998 01022022-31122023_v.3_clean.pdf</p> <p>Verra Response</p> <p>Justification for values applied has been provided. This finding is closed.</p>	
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10 Verification Report		
<p>Issue</p> <p>The VR refers:</p> <ol style="list-style-type: none"> (a) to version 4.5 and 4.6 of the VCS Standard whereas v.4.7 was available at the time of completing the verification. (b) To the monitoring period from 02/01/2022-31/12/2023 (in Section 1.1 and page 9) which is not consistent with the rest of the documentation and MR. (c) Report ID information is missing on the cover page of VR <p>Action Required</p> <ol style="list-style-type: none"> 1. The VVB must address points a, b and c above and update the VR as needed. 	<p>Round 1</p> <p>VVB Response</p> <ol style="list-style-type: none"> (a) The versions 4.5 and 4.6 were mentioned because the review of the monitoring report began considering these versions, and it was later confirmed under version 4.7 of the standard – this is corrected in the verification report v.3 attached to this document. (b) A typographical error is corrected in the verification report version 3. It should be from 01-02-2022 to 31-12-2023. (c) The missing information is added to the cover page of 	<p>Closed</p>

	<p><u>Program Rule(s)</u> VCS Monitoring Report Template v.4.3</p>	<p>the report</p> <p>See the VCS VerR Project ID 2998 01022022-31122023_v.3_clean.pdf</p>	
		<p><u>Verra Response</u> Verification report has been corrected. This finding is closed.</p>	