

Final Audit Report

Audited Body	
Puro.earth Project Proponent	Aperam Bioenergia Ltda
Name of Contact for Puro.earth Project Proponent	Benone Braga
Production Facility Operator	Aperam Bioenergia Ltda
Name of Contact for Production Facility Operator	Benone Braga
Production Facility Name	Aperam Bioenergia
Production Facility ID	175613
Production Facility Location	Capelinha, Brazil

Audit Description	
Type of Audit	Output Audit
Number of CORCs under Audit	52,885
Tonnes of dry biochar under Audit	36,304
CORC conversion factor under Audit	1.457 tCO ₂ e per tonne of dry biochar
Reporting Period Covered by Audit	1 May 2023 to 29 February 2024
Objective of Audit Engagement	Provide assurance opinion against requirements of Puro.earth Rules v 3.1
Date of Auditor Engagement	19 April 2024
Date of Audit Report Submission	2 July 2024

Reporting Requirements	
Number of eligible CORCs	59,357
Tonnes of eligible dry biochar	35,879
CORC conversion factor	1.654 tCO ₂ e per tonne of dry biochar
Reporting Period Covered by Audit	1 May 2023 to 29 February 2024
Calculation Method	Biochar Methodology

Auditing Body	
Auditor	EnergyLink Services Pty Ltd
Lead Auditor	Rodrigo Pardo Patron
Additional Audit Personnel	Thais Monteiro Voll
Peer Reviewer	Katherine Simmons

This document details the nature and scope of the services provided by a member of EnergyLink Services in respect of the eligibility of the CO₂ Removal Supplier Production Facility under the requirements of Biochar Methodology Edition 2022 v3 and the Puro Standard General Rules v 3.1.

This document is issued to Puro.earth detailing audit procedures conducted and the auditor’s opinion in relation to the eligibility of the Production Facility. It should not be used for any other purpose.

Because of the inherent limitations in any internal control structure, it is possible that fraud, error, or non-compliance with laws and rules may occur and not be detected. Further, the audit was not designed to detect all weakness or errors in internal controls so far as they relate to the requirements set out above as the audit has not been performed continuously throughout the period and the procedures performed on the relevant internal controls were on a test basis. Any projection of the evaluation of control procedures to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

The audit opinion expressed in this report has been formed on the above basis.

Copies of relevant documentation are available on the Puro.earth website: puro.earth

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Version Control Record

Project Number – J0434				
Document File Name	Date Issued	Version	Lead Auditor	Peer Reviewer
20240702 Final Output Audit Report Aperam 2024 vF.0	02 July 2024	vF.0	Rodrigo Pardo	Katherine Simmons

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Abbreviation	Description
'H'	Hydrogen
'O'	Oxygen
CO ₂	Carbon Dioxide
CORC	CO ₂ Removal Certificate
C _{org}	Organic Carbon
GHG	Greenhouse Gas
LCA	Life Cycle Assessment
OC	Overcalculation
UC	Undercalculation
The Puro Rules	the Puro Standard General Rules v 3.1
The New Puro Rules	the Puro Standard General Rules v4.0 (Edition 2024)
The Biochar Methodology	Edition 2022 v3

PART A: Auditor's Report

To: Puro.earth

Dear Sir / Madam,

EnergyLink Services Pty Ltd (EnergyLink Services) were engaged to perform a reasonable assurance audit of Aperam Bioenergia Ltda's CO₂ Removal calculation for the reporting period covered by audit from 1 May 2023 to 29 February 2024 against the eligibility requirements of 'the Puro Standard General Rules v3.1)' (hereafter referred to as "the Puro Rules").

Details of Audited Body

Puro.earth Project Proponent	Aperam Bioenergia Ltda
Production Facility Operator	Aperam Bioenergia Ltda GSRN: 643002406801000527
Production Facility Name	Aperam Bioenergia
Production Facility ID	175613
Production Facility location	Rual Raul Coelho 725, Cidade Nova – Capelinha, Brazil

Responsibility of the Audited Body's Management

The management of the audited body is responsible for the application of the requirements of 'Biochar Methodology' of the Puro Rules Edition 2022 v3 (hereafter referred to as "the Biochar Methodology") in quantifying CO₂ Removal Certificates (CORCs) from the production of biochar, which is reflected in the proof provided to EnergyLink Services.

The management of the audited body is responsible for preparation and presentation of the evidence in accordance with Section 5 the Biochar Methodology. This responsibility includes the design, implementation, and maintenance of internal controls relevant to the preparation and presentation of proofs that are free from material misstatement, whether due to fraud or error.

Our independence and quality control

EnergyLink Services have complied with the relevant ethical requirements relating to assurance engagements, which include independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence, due care, confidentiality, and professional behaviour. These include all the requirements defined in the *Fortum – Supplier Code of Conduct*¹.

Furthermore, EnergyLink Services maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements, in accordance with *ISQC 1 Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information*.

¹ Fortum (2020), Fortum – Supplier Code of Conduct, available at: www.fortum.com/about-us/contact-us/suppliers/code-of-conduct

Our responsibility

EnergyLink Services' responsibility is to express an opinion on the audited body's quantification of CORCs and compliance with the *Puro Rules* based on the procedures we have performed and the evidence we have obtained.

We have conducted a reasonable assurance engagement in accordance with the *Puro Rules* and relevant international standards, as listed below:

- International Standards on Assurance Engagements ISAE 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information.
- ISQC 1 Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, and Other Assurance Engagement.

A reasonable assurance engagement in accordance with relevant international standards involves performing procedures to obtain evidence about the Production Facility process controls and quantification of CORCs in accordance with the *Puro Rules*. The nature, timing and extent of procedures selected depend on the assurance practitioner's judgement, including the assessment of the risks of material misstatement, whether due to fraud or error. In making those risk assessments, we considered internal controls relevant to the audited body's preparation of proofs. We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusion.

Summary of procedures undertaken

The procedures we conducted in our reasonable assurance engagement included:

- reviewing evidence provided by the audited body;
- assessing the audited body against eligibility criteria;
- conducting interviews and a (virtual) site visit to validate the evidence provided;
- analysing procedures that the audited body used to gather data;
- testing of calculations that the audited body performed; and
- identifying and testing assumptions supporting the calculations.

Use of our reasonable assurance engagement report

This audit report has been prepared for use by the audited body and Puro.earth for the sole purpose of reporting on the audited body's quantification of CORCs and compliance with the *Puro Rules*. Accordingly, EnergyLink Services expressly disclaim and do not accept any responsibility or liability to any party other than Puro.earth and the audited body for any consequences of reliance on this report for any purpose.

Inherent limitations

There are inherent limitations in performing assurance audits - for example, assurance engagements are based on selective testing of the information being examined - and because of this, it is possible that fraud, error, or non-compliance may occur and not be detected. An assurance engagement is not designed to detect all misstatements, as an assurance engagement is not performed continuously throughout the period that is the subject of the engagement, and the procedures performed are based on a test basis. The conclusion expressed in this report has been formed on the above basis.

Additionally, non-financial data may be subject to more inherent limitations than financial data, given both its nature and the methods used for determining, calculating, and sampling or estimating such data.

Corrective Action Requests / Recommendations

During the audit process, the auditor issued three corrective action requests, which were addressed during the audit. Further, the auditor issued two recommendations and one suggestion for improvement to be implemented by the next audit.

Corrective Action Request 1: LCA – Lab results

The auditor noted that the values listed in the LCA for a) the organic carbon content, b) the hydrogen content and c) the molar H/C_{org} ratio were not consistent with the laboratory results supplied for the audit period. Subsequently, the auditor requested Aperam Bioenergia to review their LCA and amend it accordingly.

Corrective Action Request 2: LCA – Moisture content

The auditor noted that the moisture contents listed in the LCA were not consistent with the GPS system. Subsequently, the auditor requested Aperam Bioenergia to review their LCA and amend it accordingly.

Corrective Action Request 3: LCA – E_{production}

The auditor noted that the values listed in the LCA for E_{production} for the period from December 2023 to February 2024 were not consistent with the biochar production process (BIO-BIO). Subsequently, the auditor requested Aperam Bioenergia to review their LCA and amend it accordingly.

Recommendation 1: Record Keeping and Quality Assurance

Findings: CORC Calculations – Lab results, Moisture content

Because of the findings described in *Corrective Action Request 1*, *Corrective Action Request 2* and *Corrective Action Request 3*, the auditor has issued the following recommendation.

Recommendation

EnergyLink Services recommends that Aperam Bioenergia augment its record keeping and quality assurance procedures to ensure that data inputs to their LCA and in the calculation of CORCs are correct, accurate, well-documented and consistent across documents.

Recommendation 2: Emission Factors

Finding: Emission Factors in LCA

Aperam Bioenergia adopted a new biochar production model from December 2023, and due to these changes, Aperam updated their GHG Inventory, which was certified by SGS.

The changes in biochar production involved mainly:

- Before December 2023,
 - o The feedstock was mainly logs derived from FSC-certified eucalyptus plantations owned and operated by Aperam Bioenergia.
 - o The charcoal produced on-site was sent to Aperam South America (ASA) for energy production in their steel mill's blast furnace.
 - Before being fed to the furnace, the charcoal was categorised at ASA into coarse and fine char.
 - The coarse char and part of the fine char were used in the furnace.
 - o The remaining fine char was transported back to Aperam Bioenergia (BIO) and incorporated into the soil of eucalyptus crops.

- Since December 2023,
 - o The feedstock, which still comes from FSC-certified eucalyptus plantations, now includes forestry residues, with branches and roots transported to the biochar production facility, instead of cleaning the logs in the field.
 - o The charcoal produced on-site is categorised into coarse and fine char at the production facility.
 - o The coarse char and part of the fine char are sent to ASA for energy production in their steel mill's blast furnace.
 - o The remaining biochar fines are incorporated into the soil of eucalyptus crops at BIO.

Recommendation

EnergyLink Services recommends that Aperam Bioenergia enhance their quality assurance procedures to ensure that emission factors used in the LCA and in the calculation of CORCs are correct, accurate, well-documented and consistent across documents reflecting the biochar production process.

Suggestion for Improvement 1: LCA

To facilitate the identification of any discrepancies in biochar production over time, the auditor suggests that Aperam Bioenergia consolidate the monthly LCAs in a single spreadsheet for the reporting period.

Overall Conclusion

Adverse Conclusion (Production Output Audit)

Production Output Audit

In the lead auditor's opinion, due to the matters discussed in *Basis for Adverse Conclusion* related to the CORCs claim, 6,472 of the 52,885 CORCs calculated are not fairly presented, free of material misstatement and have not been calculated in accordance with the Puro.earth CO₂ Removal Marketplace General Rules version 3.1. The findings represent a material misstatement, and the auditor has in turn formed an adverse audit opinion.

In view of the above, the lead auditor is able to express a reasonable assurance opinion that, in all material respects, the quantification of **59,357 CO₂ Removal Certificates (CORCs)** by the audited body for the period 1 May 2023 to 29 February 2024 was correct. A summary of the CORCs, as calculated by the auditor is provided in Table 1 and a summary of the recalculations performed can be found in Table 8 of Appendix C.

Table 1: Audited CORCs summary

Biochar	CORCs Under Audit	Abs. Error (CORCs)	Net Error (CORCs)	Eligible CORCs	Abs. Error Rate (%)	Net Error Rate (%)
Total	52,885	6,472	6,472 UC	59,357	12.238%	12.238%

*OC = Overcalculation / UC = Undercalculation

Basis for Adverse Conclusion

The auditor identified several errors in the calculation of CORCs completed by the audited body that resulted in an audit error rate exceeding the 5% materiality threshold. Amongst the errors identified are:

- Incorrect organic carbon content, hydrogen content and molar H/C_{org} ratio in the LCA, resulting in a change to the calculated quantity of CORCs;
- Incorrect moisture content in the LCA, resulting in a change to the calculated quantity of CORCs; and
- Inconsistent values considered for E_{production} from December 2023 to February 2024 in the LCA, resulting in a change to the calculated quantity of CORCs.

A detailed breakdown of the changes to the calculation of CORCs associated with these errors can be found in Table 8 of Appendix C.

Ongoing Issuance and Digital Monitoring, Reporting and Verification

Despite the audit being completed under the Puro Rules v3.1 (Edition 2023), the auditor has considered the requirements of Appendix A of the Puro Standard General Rules v4.0 (Edition 2024) (the New Puro Rules). The auditor has considered the Production Facility and the internal processes, controls, and systems to form an opinion over the ongoing issuance and digital monitoring, reporting and verification (dMRV).

In the auditor's opinion, the Aperam Bioenergia Production Facility at Cidade Nova – Capelinha, Brazil has:

- Demonstrated regular industrial operations; and
- Completed a performance verification review (i.e. this audit) for the previous monitoring period with over 3 months of Output.

Nevertheless, the Output Audit Report provided an **Adverse Conclusion** and contained three corrective action requests and two recommendations. Furthermore, Aperam Bioenergia has changed their biochar production process from December 2023 onwards (as outlined in *Recommendation 2*). Consequently, whilst Aperam Bioenergia has the capability for ongoing issuance and dMRV, the auditor recommends for Aperam Bioenergia undertake another Output Audit, under Puro.earth Rules v4.0 prior to be eligible to the ongoing issuance of certificates.

Sincerely,



Rodrigo PARDO PATRON | Director of Engineering
EnergyLink Services Pty Ltd
Lead Auditor
2 July 2024

Part B: Detailed Findings

Audit Findings and Conclusions

Table 2 to Table 5 summarise the findings from the Production Output Audit. As part of the audit procedures, the auditor performed interviews with site representatives and a (virtual) site visit to the Production Facility. Where possible, the findings from these procedures were used to validate that the eligibility criteria under the methodology had been met, that the proofs and evidence provided by the audited body were accurate, and that the metering used to quantify the Output was appropriate and correctly calibrated (for details refer to Appendix C).

Eligibility Assessment

Table 2: Eligibility Assessment

Requirement	Requirement Met?	Verification Remarks	Recommendations
Confirm that the biochar is used in applications other than energy.	Y	<p>Aperam Bioenergia is responsible for every aspect of the life cycle of the biochar produced, from seedlings nursery to end use.</p> <p>Before December 2023, charcoal produced on-site was shipped to Aperam South America (ASA) for energy production in their steel mill's blast furnace. The char was categorised into coarse and fine char at ASA, where the coarse char and part of the fine char were used in the furnace. The remaining fine char was transported back to Aperam Bioenergia's (BIO) and incorporated into the soil of eucalyptus crops.</p> <p>Since December 2023, Aperam Bioenergia has adopted a new biochar production model. This model includes using waste material from plantation timber (e.g., branches and roots) for biochar production. The categorisation of coarse and fine char is now undertaken at BIO. The coarse char and part of the fine char are sent to ASA, while the remaining biochar fines, were used as a soil amendment for on-site BIO's eucalyptus crops and form the basis for the CORC claim.</p> <p>The auditor confirmed that the portion of biochar produced that is under audit was used as a soil amendment for BIO eucalyptus crops.</p>	N/A.

Requirement	Requirement Met?	Verification Remarks	Recommendations
<p>Confirm that the biochar is produced from sustainable forest or waste biomass raw materials.</p>	Y	<p>The auditor confirmed the biochar was produced from sustainable sourced biomass. Before December 2023, the feedstock was derived from FSC-certified eucalyptus plantations owned and operated by Aperam Bioenergia. Aperam Bioenergia’s crops and operations are FSC Forest Management Certified and FSC Chain of Custody Certified. Since December 2023, the feedstock still comes from these eucalyptus plantations but includes forestry residues, with branches and roots transported to the production facilities instead of cleaning wood in the field.</p>	N/A.
<p>Confirm that the producer demonstrates net-negativity with results from a LCA that shows:</p> <ul style="list-style-type: none"> - [A1 Biomass and A2 Transport of biomass] carbon footprint of the biomass production and supply. - [A3 Production] emissions from the biochar production process. - [A4 Transport of biochar to site] carbon footprint of the biochar end use. - [B1 Application and use] cradle to grave. 	Y	<p>The auditor confirmed that the LCA provided by Aperam Bioenergia included all information on the emissions of the different stages of the biochar cradle to grave life cycle.</p>	N/A.
<p>Confirm that measures are taken for safe handling and transport of biochar to prevent fire and dust hazards.</p>	Y	<p>Aperam Bioenergia’s charcoal production operations are batch-based. As such, kilns are filled up with wood, the combustion chamber sealed, and the pyrolysis process undertaken in each kiln. During the cooling phase, heat is dissipated through the walls and the top of the kiln, which is left to cool down. Once cooled, the combustion chamber is open, and the char is handled for transportation. As such, the auditor confirmed that cooling procedures were carried out within the operation to ensure the biochar produced are not hazardous for handling and transport.</p>	N/A.

Requirement	Requirement Met?	Verification Remarks	Recommendations
<p>Confirm that the biochar production process meets requirements 1.1.4 to 1.1.6 of the Biochar Methodology, namely that:</p> <ul style="list-style-type: none"> – It has considered the emissions related to the use of fossil fuels (coal, oil, natural gas). – there is no co-firing of fossil fuels and biomass in the same reaction chamber. – the pyrolysis gases are recovered or combusted. – the molar H/Corg ratio is less than 0.7. 	Y	<p>The kilns used to generate the char are designed with lateral oxygen entrances and underground ducts that provide access to the kiln’s floor, also known as combustion chambers. At the combustion chambers, pieces of wood are placed to ignite the kilns, starting the wood carbonization process.</p> <p>Notably, the LCA showed that biomass was used for ignition of the various kilns, and this was confirmed during the virtual site visit.</p> <p>The auditor confirmed that the biochar was produced in the six charcoal production facilities, namely UPER São Bento, UPER Cruz Grande, UPER Pontal, UPER Palmeiras, UPER Chacara and UPER Lagoa. Each facility has a different number of kilns, and the pyrolysis gases of the several kilns within the facilities are captured by underground ducted system(s) and combusted at high temperatures in a centralised gas burner.</p> <p>The auditor noted that due to maintenance or other operating factors, the gas burner may often be out of service. Aperam Bioenergia measures the time the burners are out of service and records this ‘utilisation factor’. This value, internally called the ‘burner efficiency’, was used to calculate the higher limit of the quantity of biochar produced that is eligible for CORC creation (i.e. the char produced when pyrolysis gases were recovered and combusted). Under this approach, as long as the quantity of biochar applied to land is below the total eligible biochar production it is considered that clause 1.1.5 of the Biochar Methodology has been met and CORCs can be claimed.</p> <p>The auditor confirmed via the LCA report, the virtual site visit, conversations undertaken with Puro.earth personnel during previous audits and remaining project evidence that the biochar production process had met requirements 1.1.4 to 1.1.6 of the Biochar Methodology.</p> <p>The auditor confirmed that the average of molar H/Corg ratio is 0.565, which is less than 0.7.</p>	N/A.

Confirmation of Production Facility Eligibility

Table 3: Production Facility assessment

Requirement	Requirement Met?	Verification Remarks	Recommendations
Confirm the Production Facility Eligibility under the general rules of Puro Standard.	Y	The auditor confirmed that the audited body has already gone through a Production Facility Audit in 2022 and achieved a positive outcome.	N/A.
Confirm that the quantity of biochar produced and sold is documented via appropriate processes.	Y	The auditor confirmed during the virtual site visit that an appropriately calibrated weighbridge was used to quantify the production output, as well as the biochar sent to soil incorporation. This data was documented and tracked using a management software and internal database.	N/A.

Quantification of CO₂ Removal

Table 4: Quantification of CO₂ Removal - Calculation Methodology

Requirement	Requirement Met?	Verification Remarks	Recommendations
Confirm that the quantification of CO ₂ removal is calculated using the Calculation formula of CO ₂ removal.	Y	The auditor examined the CORC calculator provided by the audited body and confirmed that the formula applied in the quantification of CO ₂ removal was as per the Puro.earth CO ₂ Removal Marketplace General Rules.	N/A.
Confirm that the inputs to the Calculation formula of CO ₂ removal are appropriate and consistent with the evidence provided.	Finding	The auditor noted that the values listed in the LCA for a) the organic carbon content, b) the hydrogen content and c) the molar H/C _{org} ratio were not consistent with the laboratory results supplied for the audit period, as part of <i>Corrective Action Request 1</i> . Additionally, the auditor noted that the moisture content listed in the LCA for were not consistent with the GPS system, as part of <i>Corrective Action Request 2</i> . Subsequently, the auditor requested Aperam Bioenergia to review their LCA and amend it accordingly. This error resulted in the under calculation of 3,001 CORCs (refer to Error 1 in Appendix C).	Recommendation 1 Recommendation 2

Requirement	Requirement Met?	Verification Remarks	Recommendations
<p>(CONTINUED) Confirm that the inputs to the Calculation formula of CO₂ removal are appropriate and consistent with the evidence provided.</p>	<p>Finding</p>	<p>The auditor noted that the values listed in the LCA for E_{production} for the period from December 2023 to February 2024 were not consistent with the biochar production process. Subsequently, the auditor requested Aperam Bioenergia to review their LCA and amend it accordingly, as part of Corrective Action Request 3. This error resulted in the under calculation of 3,471 CORCs (refer to Error 2 in Appendix C).</p>	<p>Recommendation 1</p>
	<p>Finding</p>	<p>Due to the following changes in biochar production:</p> <ul style="list-style-type: none"> - Before December 2023, <ul style="list-style-type: none"> o The feedstock was mainly logs derived from FSC-certified eucalyptus plantations owned and operated by Aperam Bioenergia. o The charcoal produced on-site was sent to Aperam South America (ASA) for energy production in their steel mill's blast furnace. <ul style="list-style-type: none"> ▪ Before being fed to the furnace, the charcoal was categorised at ASA into coarse and fine char. ▪ The coarse char and part of the fine char were used in the furnace. o The remaining fine char was transported back to Aperam Bioenergia (BIO) and incorporated into the soil of eucalyptus crops. - Since December 2023, <ul style="list-style-type: none"> o The feedstock, which still comes from FSC-certified eucalyptus plantations, now includes forestry residues, with branches and roots transported to the biochar production facility, instead of cleaning the logs in the field. o The charcoal produced on-site is categorised into coarse and fine char at the production facility. o The coarse char and part of the fine char are sent to ASA for energy production in their steel mill's blast furnace. o The remaining biochar fines are incorporated into the soil of eucalyptus crops at BIO. 	<p>Recommendation 2</p>

Verification of Proofs

Table 5: Verification of proofs and documentation

Requirement	Requirement Met?	Verification Remarks	Recommendations
Confirm that the standing data for the Production Facility meets the requirements of the Biochar Methodology and is consistent with other evidence.	Y	The auditor reviewed and validated the standing data provided by the audited body and confirmed this was consistent with desktop testing and the virtual site visit.	N/A.
Confirm that the necessary proof and evidence documents are maintained by the Production Facility as per Section 5 of the Biochar Methodology ² .	Y	The auditor confirmed all necessary evidence has been provided as per Section 5 of the Biochar Guidelines.	N/A.

² Information in Section 5 of the Biochar Methodology includes:

- Proof of sustainability of raw material for forest and/or waste biomass.
- LCA data for biomass and biochar production.
- Justification on the soil temperature used for the calculation of the biochar sequestration.
- Proof of product quality, production volume, sales and end use of biochar.
- Proof of no double counting/C positive marketing.

Peer Reviewer Conclusion

Name of the peer reviewer	Katherine Simmons
Peer reviewer's credentials	<ul style="list-style-type: none">• Bachelor of Engineering (Honours) in Polymer Engineering (minoring in Chemical Engineering).• Category 1 Registered Greenhouse and Energy Auditor with the Clean Energy Regulator (Australia).• Climate Active Registered Consultant.• Integrated Management Systems Lead Auditor ISO 19011, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018.
Peer reviewer contact details	Email: katherine.simmons@kreaconsulting.com.au Phone: +61 431 612 950
Outcome of the evaluation undertaken by the peer reviewer	I have reviewed the engagement letter, audit report and supporting work papers / source data and am satisfied that the audit has been performed in accordance with the eligibility requirements of General Rules of the Puro.earth CO ₂ Removal Marketplace v 3.1.

Appendix A: Response to Previous Audit Recommendations

The Production Facility and Output audit dated 27 May 2023 (EnergyLink Services Pty Ltd) contained one recommendation. The recommendation and the auditor's response are provided in Table 6.

Table 6: Previous Audit Recommendations

Recommendation	Requirement Met?	Verification Remarks
<p>Recommendation (1): EnergyLink Services recommends that Aperam Bioenergia consistently commissions lab tests to gage changes in results, so that the CORC calculation reflects the feedstock processed by the production facility for the reporting period.</p>	<p>Y</p>	<p>The auditor was able to confirm that Aperam Bioenergia undertook monthly samples for laboratory analyses. As such, the auditor is satisfied this recommendation has been addressed.</p>

Appendix B: Table of Site Visit Findings

Table 7: Site visit summary table

Requirement	Requirement Met?	Verification Remarks	Recommendations
Check that the raw material is of eligible type and sustainably sourced.	Y	The raw material used was sustainably sourced and met eligibility requirements, as it consisted of feedstock from non-native forests.	N/A.
Check that the LCA provided is consistent with observations on site.	Y	The auditor confirmed LCA provided was an accurate representation of the Production Facility and used appropriate assumptions where necessary.	N/A.
Confirm that no fossil fuel is used for heating the pyrolysis reactor, and the pyrolysis gases are recovered or combusted.	Y	The kilns had lateral oxygen entrances and underground ducts that provide access to the kilns floor, also known as combustion chambers. In the combustion chambers, pieces of wood are placed to ignite the kilns, starting the wood carbonization process. The LCA showed that biomass was used for ignition of the various kilns, and this was confirmed during the virtual site visit.	N/A.
Check that the Production Facility's documentation system is accurate and reliable for recording the quantity of biochar produced and sold.	Y	The auditor confirmed that Aperam Bioenergia had appropriate documentation systems in place to accurately and reliably document the quantity of biochar produced and used for soil application.	N/A.
Check that appropriate metering infrastructure is in place and calibrated correctly to quantify the Production Facility output and the energy use of the Production Facility.	Y	The auditor confirmed that appropriate metering infrastructure was present to quantify the Production Facility output. Furthermore, the auditor confirmed based on the evidence provided and additional discussions with Aperam Bioenergia personnel that robust procedures were in place to ensure that the production input and output, as well the quantity of biochar applied on soil were appropriately quantified. The auditor sighted during the virtual site visit that an appropriately calibrated weighbridge was used for the process.	N/A.
Check that appropriate processes are in place to quantify the inputs to the Calculation formula of CO ₂ removal for the purpose of Preparing the Output Report and calculating CORCs.	<u>Finding</u>	The auditor reviewed the evidence provided by the audited body and found a few errors in the inputs to the calculation formula of CO ₂ removal (as outlined in Appendix C and Table 4).	Recommendation 1

Appendix C: Summary of Calculation Errors

A summary of the calculation errors and the associated impacts on CORC calculation is provided in Table 8.

Table 8: Summary of Calculation Errors

Source of Error	CORC calculation	Corrected CORC calculation	Abs. Error (CORCs)	Net Error (CORCs)	Abs. Error Rate (%)	Net Error Rate (%)
Error in the laboratory results and moisture content inputs	52,885	55,886	3,001	3,001 UC	5.675%	5.675%
Errors in the calculation of A4 emissions for the period: <ul style="list-style-type: none"> December 2023 to February 2024 	55,886	59,358	3,471	3,471 UC	6.211%	6.211%
Total	52,885	59,357	6,472	6,472 UC	12.238%	12.238%

*OC = Overcalculation/UC = Undercalculation