

**JOINT VALIDATION & VERIFICATION REPORT**

**Treatment of non-hazardous organic waste to obtain compost**

**PROJECT ID**

**BCR-AR-763-13-003**



**Asociación de Normalización y**

**Certificación, S.A.de C.V. |**

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| **Validation & Verification Report** | |
| **Project Title** | Treatment of non-hazardous organic waste to obtain compost. |
| **Project ID** | BCR-AR-763-13-003. |
| **Project holder** | Hisoil SRL. |
| **Project Type** | Waste handling and disposal. |
| **Grouped project** | Not a grouped project. |
| **Version number of the Project Document to which this report applies** | Version 1. |
| **Applied methodology(ies)** | AMS.III-F. Avoidance of methane emissions through composting. Version 12. |
| **Project location** | Cardales, Exaltación de la Cruz. Argentina. |
| **Project starting date** | 01/08/2019. |
| **Quantification period of GHG emissions reductions/removals** | 01/08/2019 to 31/07/2029. |
| **Estimated total and average annual amount of GHG emission reductions/removals** | **112,682 t CO2e.**  estimated average annual amount of GHG emission reductions: 11,268 ton CO2e. |
| **Monitoring period** | 01-August-2019 to 31-July-2023. |
| **Total amount of GHG emission reductions/removals achieved by the project in this monitoring period** | **38,783 tCO2e**  Average annual amount of GHG emission reductions: 7,757. |
| **Contribution to Sustainable Development Goals** | SDG 8. Decent work and economic growth.  SDG 9. Industry, Innovation and Infrastructure.  SDG 11. Sustainable Cities and Communities.  SDG 12. Responsible consumption and production.  SDG 13. Climate action. |
| **Special category, related to co-benefits** | No special category. |
| **Version and date of issuing** | Version 1, 18/04/2025. |
| **Work carried out by** | Excalibur Ernesto Acosta. |
| **Approved by** | Joel Miguel Ramirez. |

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# Executive summary

The project is a small-scale waste management initiative implemented by Hisoil SRL in Cardales, Exaltación de la Cruz, Argentina, focused on reducing greenhouse gas (GHG) emissions by composting non-hazardous organic waste that would otherwise decompose anaerobically in landfills. It falls under sector scope 13 and applies methodology AMS-III.F version 12.0, which targets methane emission avoidance through composting.

The scope of the GHG project Validation and Verification is under the BioCarbon Registry includes GHG project boundaries, physical infrastructure, activities, technologies and processes, GHG sources, GHG types and reporting period (01/08/2019 to 31/07/2029). For GHG declarations containing emission reductions it includes the material side effects, project and baseline scenarios described in the Validation and Verification Plan.

The project aims to mitigate methane emissions (CH₄) from untreated organic waste through a controlled aerobic composting process, contributing to a circular economy by transforming waste into valuable compost. It aligns with five UN Sustainable Development Goals (SDGs):

* SDG 8. Decent work and economic growth.
* SDG 9. Industry, Innovation and Infrastructure.
* SDG 11. Sustainable Cities and Communities.
* SDG 12. Responsible consumption and production.
* SDG 13. Climate action.

Hisoil SRL operates over 50,000 m², of which over 41,000 m² are dedicated to composting. Activities include:

* Controlled reception and inspection of organic waste.
* Laboratory testing to ensure suitability.
* Blending materials for optimal C/N ratio and humidity.
* Pile formation, maturation, periodic flipping, and moisture management.
* Monitoring of temperature, humidity, pH, odor, and germination rate.
* Sieving, classification, and reuse of compost residues.
* Use of rainwater pools for watering and environmental control.

ANCE conducted a validation and documentary verification with a duration of nine working days, prior to the site visit of the GHG reduction project prepared by Hisoil SRL, under an approach based on the existing risk analysis of incurring errors, omissions or misrepresentations by the organization. The site visit was conducted between October 3 and 5, 2024.

The activities associated with the documentary verification included: a sampling plan, risk analysis of the sampled sources, verification plan and a reproduction of the emission calculations considering emission factors, global warming potentials, conversion factors and calorific powers; analyzing in turn, the consistency of the energy consumption data collected according to the calculation base and complementary documents provided by the organization, through Hisoil SRL.

Based on the review of documentation, on-site observations, and interviews with project owner and stakeholders, it is concluded that the GHG mitigation project has been implemented in accordance with the applicable methodology AMS.III-F. Avoidance of methane emissions through composting. Version 12 and the BioCarbon Registry (BCR) Standard. The emission reductions reported are deemed to be fair, consistent, and materially correct. Therefore, the project is considered eligible for the issuance of carbon credits corresponding to the verified period.

# Objective, scope and criteria

The main objective of the validation and verification audit was to evaluate the controls associated with the information system and the data related to the Greenhouse Gas (GHG) emission reductions reported by Hisoil SRL. This evaluation was conducted through the review of input data during both the documentary and on-site phases, with the purpose of:

* Confirming that the project, its activities, methods, and procedures, as described in the project documentation and corresponding annexes, comply with the criteria established by the BCR Standard.
* Verifying that the information related to the GHG project declaration and its associated emission sources is properly supported.
* Ensuring that the information on reported GHG emission reductions consistently demonstrates the accuracy and credibility of such reductions.

In summary, the validation and verification audit focused on ensuring the integrity and reliability of the project-related information and its impact on GHG emissions, in full compliance with the BCR Standard.

ANCE developed a validation and verification plan and a sampling plan to ensure that all project information and documentation was reviewed, including procedures and criteria for the project, baseline, quality control and assurance, risk management and verification documents.

Evidence included information on internal management controls, calculation procedures, monitoring, quality assurance procedures, compliance with local laws, as well as methodologies and tools used to calculate reductions, formulas for calculating reductions, monitoring equipment, data management and collection, and qualitative data.

The conformity of the validation and verification criteria was evaluated with respect to the following:

* BCR STANDARD. VERSION 3.4. JUNE 28, 2024.
* Validation and Verification Manual GHG Projects, Version 2.4. MARCH 23 2024;
* Methodology: AMS.III.F, Avoid methane emissions through composting, Version 12.0
* ISO 14064-2 Greenhouse gases. Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements.
* ISO 14064-3 Greenhouse gases. Part 3: Specification with guidance for the verification and validation of greenhouse gas statements.

The scope of this verification includes the evaluation of the implementation and performance of the GHG mitigation project titled “Treatment of Non-Hazardous Organic Waste to Obtain Compost”, developed by Hisoil SRL. The verification covers:

* The verification of project activities as described in the Project Document and its annexes.
* The assessment of GHG emission reductions claimed during the monitoring period from 01/08/2019 to 31/07/2029.
* The review of methodologies and procedures applied, particularly the use of AMS-III.F (Version 12.0) under the BioCarbon Registry (BCR) Standard v3.4.
* The evaluation of data collection systems, monitoring procedures, emission factor selection, and calculation accuracy.
* The verification of compliance with the principles of transparency, completeness, consistency, accuracy, and conservativeness.
* The assessment of stakeholder involvement, legal rights over emission reductions, and alignment with relevant sustainable development goals.

The verification was conducted through document review, interviews, site inspections, and assessment of the monitoring reports and supporting evidence to confirm the credibility of the reported GHG emission reductions

# Validation and verification process

## Level of assurance and materiality

The activities corresponding to the GHG Project Declaration Validation/Verification Body focused on the validation and verification of the Document Project Treatment of non-hazardous organic waste to obtain compost developed by Hisoil SRL, under a reasonable assurance level (≥95%) and a materiality of 5%, complying with the requirements of ISO 14064-3:2019 and standards and the provisions of the BCR Standard Project Validation and Verification Manual version 2.4, point 10.2.5 Assurance level and materiality:

1. The sampling plan was developed on the basis of the period-specific estimates of emission reductions. Both project-scenario emissions and baseline-scenario emissions were duly considered. The provenance of activity data—namely manifests and delivery notes—was verified, and the accuracy of control equipment (weighbridges) was assessed. Verification and validation techniques, including observation, recalculation, statistical sampling, and structured interviews, were applied in accordance with ISO 14064-3:2019, Clause 5.3 “Verification/Validation Activities and Techniques.

The documents reviewed was:

* The GHG emissions estimation from project holder (Calculation HiSoil 111124.xlsx)
* Project Hazardous Waste Log (Total residuos HiSoil 061124.xlsx)
* Sustainable Development Safeguards (SDSs) (BCR\_SDG-HiSoil.doc)
* Monitoring report (Monitoring-Report-Hisoil 14NOV24.doc)
* Document project (PDD-HiSoil 14NOV24.doc)

Following ISO 14064-3:2019 Annex A, the overall reasonable assurance achieved is 96.05 %, calculated as the complement of the aggregated risk of undetected material misstatement. Evidence lines include:

– Re-calculation of the “Calculation HiSoil 111124.xlsx” workbook (100 % of formulas checked).

– Traceability test of 356 waste manifests from “Total residuos HiSoil 061124.xlsx” to weighbridge tickets.

– On-site observation of compost pile temperature and flip records.

– Interviews with the plant manager, environmental officer, and the operator.

Based on the evidence gathered, we conclude that the GHG emission reductions of 112,682 tCO₂e are fairly stated and comply with ISO 14064-3:2019 and the BCR Standard.

1. the material discrepancy of the data supporting the project baseline and the estimated GHG emission reductions is ± 5%, according to GHG PROJECT VALIDATION AND VERIFICATION MANUAL, V.2.4 and was assessed via an error-equation model:

The materiality threshold was determined based on the evidence submitted by the project proponent.

A total of 356 non-hazardous waste manifests were reviewed, and the recorded values for each entry were cross-checked against the ANCE team’s recalculation analysis (Herramientageneral\_Hisoil\_sitio.xlsx). The only discrepancies detected arose from the rounding calculation applied by the project proponent. After aggregation in the total-materiality calculation, the resultant error remained immaterial (0.02 %). No systematic omissions were identified. Consequently, these discrepancies do not materially misstate the GHG assertion nor affect the verification conclusion.

The primary sources of information included the calculation spreadsheet (Calculation HiSoil 111124.xlsx), the database of waste delivery notes and manifests (Total residuos HiSoil 061124.xlsx), and the sample of manifests reviewed during the site visit. Based on the recalculation analysis performed by the ANCE team, the resulting materiality was **0.02%**, which is well below the **5% threshold** established by the applicable verification criteria. Therefore, the materiality requirement is considered to be met.

## Validation and verification activities

### Planning

The ANCE team developed a joint validation and verification plan that incorporates the requirements of ISO 14064-3:2019, ISO 14045:2020, and the GHG Project Validation and Verification Manual, Version 2.4. The purpose of the planning was to confirm the project’s compliance with the applicable criteria and to achieve a reasonable level of assurance (≥95%), with a materiality threshold of ±5%.

1. The validation and verification team was composed of a lead verifier (specialist in GHG and the waste sector), an independent reviewer, and the approver of the joint validation and verification report, whose qualifications are detailed in section 3.3 Audit Team.
2. The validation and verification activities were determined based on the specific characteristics of the GHG project and the client’s needs. As this is a project focused on the treatment of non-hazardous organic waste through composting, with emission reductions generated by avoiding methane emissions from final disposal, the activities prioritized the evaluation of waste traceability, proper implementation of the composting process, and the consistency of the data used for calculating avoided emissions. Additional activities included comprehensive document review, consistency analysis of monitoring data, interviews with technical personnel, direct observation of on-site operations, and recalculation of emission factors and reported quantities. These actions addressed both the requirements set by the applicable standard and the client’s expectations regarding transparency, technical robustness, and assurance of the project's environmental performance.
3. The risks to be assessed (see Table 1) were analyzed both quantitatively and qualitatively, and include the following categories:

* Inherent risk: Refers to the likelihood of errors, misstatements, or deviations resulting from the nature of the data and processes managed by the project facility, prior to the application of any controls.
* Control risk: Refers to the risk that the facility’s internal control system fails to prevent, detect, or correct material errors or omissions in the reported information.
* Detection risk: Refers to the possibility that the verification procedures applied by the audit team may not identify existing material misstatements in the emission reduction data.

These risks were considered during the development of the sampling plan and the determination of the assurance level, in accordance with ISO 14064-3:2019.

Table 1. Risk Assessment

| **Activity** | **Description of risks** | | **IR** | **CR** | **DR** | | **Verification / Validation Risk** | **Mitigation measure** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IR** | **CR** |
| Application of the calculation methodology in accordance with the GHG program | The calculation methodology is applied in accordance with the applicable GHG program. | Quality control processes are in place for the information involved. | **L** | **L** | **H** | **Low** | | a,b,c,d,f,h,i,k |
| Review of production reports from the Information Management System | Errors were identified in data processing during the emissions calculation. | The source is integrated into a GHG information management system. | **L** | **L** | **H** | **Low** | | a,b,c,d,f,h,i,k |
| Review of the application of Program criteria | The Project Document is available and complies with the requirements of the applicable Program documents. | The responsible party effectively identifies and prevents errors or omissions at the source. | **M** | **L** | **M** | **Medium** | | a,b,c,d,f,h,i,k |
| Review of calibration reports for measurement equipment | The original data source is managed externally to the organization. | For the calculation of emissions from this source, are the origin data processed in a controlled manner? | **B** | **B** | **A** | **Low** | | a,b,c,d,f,h,i,k |
| Application of Project Additionality | The methodology established by the Program is followed. | The responsible party effectively identifies and prevents errors or omissions at the source. | **L** | **M** | **M** | **Medium** | | a,b,c,d,f,h,i,k |
| Review of SDG Indicators | The methodology established by the Program is followed. | The responsible party effectively identifies and prevents errors or omissions at the source. | **L** | **L** | **H** | **Low** | | a,b,c,d,f,h,i,k |
| Review of Stakeholder Engagement | Review of Stakeholder Engagement | The responsible party effectively identifies and prevents errors or omissions at the source. | **L** | **L** | **H** | **Low** | | a,b,c,d,f,h,i,k |

|  |
| --- |
| **Mitigation measure** |
| a) The GHG Validation/Verification Body (VVB) team must verify that the emission source is directly related to the organization, requesting supporting documents such as fuel, electricity, steam, input or refrigerant gas consumption invoices, legal documents, agreements, among others.  b) The verification team must request all necessary information until it is deemed truthful and reliable.  c) The GHG VVB team must verify all information related to the emission source or, if applicable, conduct a review of a representative data sample to identify potential transcription errors.  d) The GHG VVB team must apply the methodology applicable to the verified emission source and, in case of uncertainty, resolve it with the support of another lead verifier.  f) Before starting the verification process, the GHG VVB team must confirm that the calculation variables correspond to fuels, electricity, steam, inputs, refrigerant gases, or processes, and that they are updated in accordance with the applicable GHG Program.  h) The GHG VVB team must ensure that appropriate control procedures have been implemented for the management of electronic files.  i) The GHG VVB team requests the ESR/Organization to provide any relevant internal control procedures for analysis and validation.  k) The GHG VVB team ensures that the verified information sources are properly documented and substantiated. |

L: Low; H: High, M Medium

1. Regarding the duration of the Validation and Verification activities, ANCE provided a schedule of activities with the duration of the activities:

Table 2. Activity schedule with durations

|  |  |  |
| --- | --- | --- |
| **Activity** | **Responsible** | **Duration (days)** |
| Elaboration of internal No COI Matrix | ANCE | 3 |
| Request for GHG declaration and supporting information. | ANCE | 1 |
| Submission of supporting information | HISOIL | 3 |
| Documentary verification | ANCE | 7 |
| Development of Risk Analysis/Evidence Gathering Plan (sampling) | ANCE | 2 |
| Preparation and Submission of Verification/Verification/Validation Plan | ANCE | 2 |
| On-site Verification/Validation and Submission of Findings Report | ANCE – HISOIL | 4 |
| Delivery of Findings Report | ANCE | 1 |
| Client's attention to findings | HISOIL | 30 |
| Analysis of findings attention by OVV | ANCE | 30 |
| Preparation and submission of Consolidated Findings Report | HISOIL | 5 |
| Validation/Verification of Findings Report | HISOIL | 3 |
| Elaboration and sending of draft Statement/Opinion and V/V Report | ANCE | 7 |
| Review of the draft by the Client | HISOIL | 3 |
| BioCarbon Registry technical review | BCR | N.D. |
| Signature and delivery of Verification Statement/Opinion and Verification Report (digital) | ANCE | N.D. |

1. The evidence collection was carried out using a risk-based approach, in compliance with the guidelines established in ISO 14064-3:2019 and the BCR Project Validation and Verification Manual. The activities were designed considering the required level of assurance, the scope of the project, the characteristics of the emission sources, and the client’s needs.

The activities conducted to support the conclusions of the validation/verification process included:

* Document review: Key project documents were evaluated, including the Project Design Document (PDD), the monitoring report, the emissions estimation spreadsheets (Calculation HiSoil 111124.xlsx), waste manifests, safeguards reports (SDGs), and operational control records, among others.
* Data traceability verification: Reported data were compared against original sources (e.g., manifests, delivery notes, weighbridge records) to ensure consistency, completeness, and traceability.
* Sampling application: A representative sampling plan was implemented, considering the relevance and significance of each parameter in the reported emission reductions. This plan covered more than 95% of the emission reductions for the evaluated period.
* Independent recalculation: Verification of formulas, emission factors, and calculations submitted by the project proponent was conducted to identify possible transcription, rounding, or formulation errors.
* On-site observation: During the site visit (October 3 to 5, 2024), composting operations, temperature and turning controls, leachate management infrastructure, and proper segregation and storage of waste were observed.
* Interviews with key personnel: Structured interviews were conducted with the plant manager, environmental officer, and system operator to validate the implementation of procedures, internal controls, and data traceability.
* Evaluation of information quality controls: The organization’s procedures for ensuring the integrity of electronic files, data backup, and internal verification mechanisms were reviewed.
* SDG validation: Evidence related to the declared Sustainable Development Goals (SDGs) was reviewed, along with documentation of stakeholder engagement processes and mitigation actions for non-GHG environmental impacts.
* Methodological application assessment: The correct application of methodology AMS-III.F (version 12.0) was confirmed, as well as the consistency between reported data, the monitoring plan, and the applicability conditions established by the program.

All collected evidence was documented in the verification team’s working papers and consolidated in the technical verification file, in accordance with traceability and record-keeping requirements established by the applicable program and standards.

1. A structured evidence collection plan was prepared considering the risks identified in the planning stage (inherent, control, and detection risks), as well as the internal control measures implemented by the project proponent. The plan focused on collecting objective and verifiable evidence to confirm the integrity of activity data and the accuracy of emission reduction calculations. It included document review, recalculation of key parameters, traceability testing, field observations, and interviews with responsible personnel.

### Sampling

A risk-based sampling plan was developed in line with ISO 14064-3:2019, considering the reasonable assurance level (≥95%), a materiality threshold of ±5%, and the scope and criteria established by the BCR Standard v3.4 and methodology AMS-III.F (v12.0).

As previously mentioned, the plan focused on key emission sources and activity data with material impact on reported reductions, such as the mass of organic waste composted, energy and fuel consumption, and baseline methane emissions. Both quantitative and qualitative evidence were considered—ranging from spreadsheets and manifests to interviews and on-site observations.

A sampling approach was applied, prioritizing high-impact parameters. In total, 356 waste manifests, covering more than 95% of the reported waste input, were reviewed and cross-checked (see table 4). Key formulas and emission factors were independently recalculated.

Table 3. Sample size

|  |  |  |
| --- | --- | --- |
| **Documents** | **Size of evidence (record the amount of evidence available to the Organization)** | **Sample size** |
| Manifests | 9476 | 200 |
| CR Chipeado | 495 | 50 |
| CR-Molinos-BorraCafe | 70 | 13 |
| CR-McCain-Papa | 2 | 2 |
| CR-Ingredion | 1134 | 80 |
| CR-Varios | 100 | 20 |

The plan also addressed inherent, control, and detection risks, and incorporated the evaluation of internal controls implemented by the project proponent to prevent errors or omissions. The sampling strategy ensured sufficient and reliable evidence to support the verification conclusion.

Table 4. Percentage of sampled evidence.

| **Activity** | **Period** | **PE**  **t CO2e** | **BE**  **t CO2e** | **Reductions**  **t CO2** | **%** |
| --- | --- | --- | --- | --- | --- |
| **Verification** | 01/08/19 - 31/07/20 | 2,347 | 8,103 | 5,756 | **5.11** |
| 01/08/20 - 31/07/21 | 3,829 | 14,476 | 10,647 | **9.45** |
| 01/08/21 - 31/07/22 | 3,902 | 13,962 | 10,060 | **8.93** |
| 01/08/22 - 31/07/23 | 4,966 | 17,283 | 12,317 | **10.93** |
| **Validation** | 01/08/23 - 31/07/24 | 4,966 | 17,283 | 12,317 | **10.93** |
| 01/08/24 - 31/07/25 | 4,966 | 17,283 | 12,317 | **10.93** |
| 01/08/25 - 31/07/26 | 4,966 | 17,283 | 12,317 | **10.93** |
| 01/08/26 - 31/07/27 | 4,966 | 17,283 | 12,317 | **10.93** |
| 01/08/27 - 31/07/28 | 4,966 | 17,283 | 12,317 | **10.93** |
| 01/08/28 - 31/07/29 | 4,966 | 17,283 | 12,317 | **10.93** |

### Execution

The validation and verification activities were carried out in accordance with the Verification and Validation Plan (V/V Plan), ensuring consistency with the procedures and requirements established under ISO 14064-3:2019 and the BCR Project Validation and Verification Manual.

Prior to the start of evidence collection, an analysis of conflict of interest was conducted for all ANCE team members involved in the process, confirming their independence and impartiality.

A 10-day documentary review period was initiated following the request and receipt of the necessary project documentation. This phase included the planning of the on-site visit and the development of a risk-based sampling strategy, aligned with the materiality threshold and the scope of the project. During both the documentary review and the on-site assessment, the verification team applied appropriate validation and verification techniques, including document review, independent recalculation, interviews with key personnel, traceability testing, and field observations. The review focused on the project’s high-impact activities and associated risks, in accordance with the established sampling plan.

The verifier evaluated each modification to confirm whether the updated information remained in compliance with the applicable criteria and did not compromise the level of assurance. All activities and findings were documented in the findings report and, in this document, both of which contributed to the overall conclusion of the validation and verification process.

#### Onsite inspection

The on-site visit was carried out from October 3 to 5, 2024, at the facilities of Hisoil SRL, as part of the validation and verification process for the GHG mitigation project under the sectoral scope of Waste Handling and Disposal (IAF MD14). The project applies methodology AMS-III.F (version 12.0) for the avoidance of methane emissions through composting of non-hazardous organic waste.

Considering the nature and complexity of the project and the parameters involved, the verification team conducted the following on-site activities:

* Inspection of landfill and reception procedures: Assessment of the facility's control systems for the reception of organic waste, including the verification of weighbridge operations, validation of waste manifests, and identification of accepted material types.
* Observation of composting operations: Direct observation of the waste transformation process, from reception to aerobic treatment. This included the inspection of pile formation, moisture management, turning cycles, and monitoring of key parameters (temperature, pH, C/N ratio).
* Site tour and photo documentation: A complete walkthrough of the composting plant, including leachate control systems, storage areas, and mechanical turning equipment. A photographic registry was compiled to support visual verification.
* Review of laboratory procedures: Evaluation of laboratory testing and process control systems to ensure compliance with aerobic composting standards. This included sampling practices, germination index, conductivity, and quality standards for finished compost.
* Interviews with key personnel: Interviews were conducted with the plant manager, environmental officer, and laboratory technician to verify the implementation of operational protocols, internal data validation mechanisms, and corrective actions.
* Verification of end-use logistics: Evidence was reviewed demonstrating that compost material is distributed to clients promptly, thereby avoiding prolonged storage conditions that could lead to anaerobic degradation and unintended methane emissions.

The combination of these activities allowed for the validation of data accuracy, traceability, and consistency with the applied methodology. Given the sector’s inherent variability and dependence on operational conditions, the on-site visit was essential to confirm the reliability of the emission reduction claim.

#### Interviews

Table 5. Interviews conducted

| **Name** | **Position and/or area** | **Process/activity**  **or associated input** | **Interview in** | **Results** |
| --- | --- | --- | --- | --- |
| Marcos Méndez | environmental consultant | Project Description  Tour of the project facilities  Methodologies  Monitoring plan  Sustainable development  Environmental impact and  Baseline and monitoring | Remote | He is the consultant in environmental topics. He provided the collection of project information through a Google-Drive, through which the calculation of estimated emissions, waste shipments (see table 5), electricity receipts, legal, environmental and social information, and project governance information were obtained. |
| Gabriel Prieto | CEO | Inspection and verification of the facility’s waste reception procedures, including the identification of the types of incoming waste, and assessment of weighing procedures used to record accepted material. | On-site | The waste reception and weighing process was verified through supporting manifests and on-site observation. The weighing system is properly calibrated and in operation. Accepted materials were consistent with the project scope (non-hazardous organic waste), and all entries were traceable through signed manifests. A photographic record was obtained as supporting evidence of the procedures and infrastructure observed. |
| Martin N. | Shareholder | Verification of the procedures implemented for the transformation of organic waste into compost through direct observation of on-site operations and a survey focused on key elements of the composting process. | On-site | It was confirmed that non-hazardous organic waste is subjected to an aerobic composting process in accordance with the parameters established by the applied methodology. The stages of material mixing, pile formation, periodic turning, and temperature and moisture control were observed. This information was supported by a photographic registry and documentary evidence collected during the site visit. |
| Carlos N. | Quality Assurance | Interview with the quality assurance officer (Carlos) and review of laboratory procedures implemented to ensure the aerobic transformation of organic waste into compost. | On-site | It was verified that the quality assurance area has established procedures for controlling critical parameters (temperature, moisture, pH, and conductivity), which ensure appropriate aerobic conditions during the composting process. The information was validated through an interview and review of the operational procedure. |
| Jorgelina López | Manager | Verification of the material management process, focusing on how composted waste is handled, stored, and distributed to clients, ensuring that conditions leading to anaerobic degradation are avoided. | On-site | It was confirmed that the waste management process includes defined procedures for the timely distribution of compost to clients. The process minimizes prolonged storage and prevents anaerobic conditions that could generate methane emissions. This was supported by the review of operational records and the documented waste management procedure. |
| Interview with project personnel regarding the identification and management of environmental, legal, social, and financial risks, as well as the implementation of QA/QC procedures across project operations.  ODS reviewed. | On-site | The project representative provided a detailed explanation of the main risks associated with the project, including environmental exposure, regulatory compliance, stakeholder engagement, and financial sustainability. It was confirmed that QA/QC procedures are in place to ensure data integrity and operational consistency, including routine monitoring, internal reviews, and corrective action protocols. These processes were aligned with the applied methodology and program requirements. |

#### Findings

No FARs were identified as a validation/verification process; all findings were closed.

*The validation and verification of the proposed BCR project activity include the following phases:*

1. *Assessment of the design of the proposed project and its compliance with the relevant BCR requirements, through a desk review of the project document, carried out between 21/11/2024 and 29/11/2024.*
2. *Assessment of stakeholders’ comments via the Global Carbon Trace website and the project document.*
3. *Evaluation of the applicability of the methodology “AMS.III-F. Avoidance of methane emissions through composting. Version 12” and its correct application, including the selection of the baseline and the monitoring plan.*
4. *Evaluation of the project’s additionality argument against the rules and guidance established in “Tool 01: Tool for the demonstration and assessment of additionality, Version 07.0.”*
5. *A site visit was conducted from 02/12/2024 to 05/12/2024 in order to assess the implementation process of the project activity.*
6. *An evaluation of data and calculation of GHG reductions was carried out.*
7. *Issuance of a findings report.*
8. *Issuance of the combined validation and verification report.*
9. *Independent review.*
10. *Approval of the validation report and registration request.*

*During the validation and verification process, a Findings Report (using “Annex 2. Clarification requests, corrective action requests and forward action requests” of this combined report) was employed to submit the findings to the project participants.*

*In accordance with the terminology of the BCR Standard Version 3.4, the team reports non-conformities in the form of Corrective Action Requests (CARs), Clarification Requests (CLs) and Forward Action Requests (FARs). Below is an explanation of when and for which types of non-conformities CARs, CLs and FARs are issued.*

As a result of this evaluation, five (5) Clarification Requests (CL) were identified in the validation process. The CLs were closed based on adequate responses from the project owner, which comply with the applicable requirements; the findings were re-evaluated before formal acceptance and closure. All required changes can be observed in the PD and MR.

*Findings established during validation may be considered as a non-compliance with the validation criteria or as an identified risk to achieving the project objectives. A Corrective Action Request (CAR) should be issued if any of the following occurs:*

* *A non-compliance with program requirements or the applied methodology is found in the project description and/or has not been sufficiently documented by the project participants, or if the evidence provided to demonstrate compliance is insufficient.*
* *Errors have been made in applying assumptions, data, or emission-reduction calculations that will affect the amount of emission reductions.*

*As a result of this evaluation, seven (7) Corrective Action Requests (CARs) were identified in the validation process. The CARs were closed based on adequate responses from the project owner, which comply with the applicable requirements; the findings were re-evaluated before formal acceptance and closure. All required changes can be observed in the PD and in the relevant annexes.*

*Upon resolution of the findings, the ANCE auditor concluded that the PD, the MR, and the spreadsheets are correct and complete, and provide an understanding of the nature of the project and its climate benefits. In addition, the project owner demonstrates how GHG emission reductions are achieved and monitored.*

In Annex 2, below, provide a summary of any CLs, CARs and FARs raised, including the response provided by the project holder, any resulting changes to the project documents and, the final conclusion.

## Audit team

Program applied to the validation/verification of the project: BIOCARBON REGISTRY (BCR).

The project validation and verification process shall be performed in accordance with the requirements set out in ISO 14064-3: 2019 "Greenhouse Gases. Part 3: Specification with guidance for validation and verification on GHG.

The validation/verification team consists of the following personnel:

* Excalibur Ernesto Acosta Miranda

**Lead auditor**

Environmental engineer, Graduated of National Polytechnic Institute, Professional License Number: 9409081.

Verifier/Validator In the follow scopes: He has carried out 110 verifications to various companies, mostly in the Industrial and Energy sector; 4 validations and verifications of GHG mitigation projects, 2 in the energy sector and 2 in the waste sector, accredited in the following sectors Power Generation and Electric Power, Transactions, General Manufacturing (physical or chemical transformation of materials or substances into new products), Oil and Gas Exploration, Extraction, Production and Refining, and pipeline distribution, including Petrochemicals, Metals Production, Mining and Mineral Production, Chemical Production; Transportation and waste handling and disposal.

* Nancy Adriana Barrera Gómez

**Independent Reviewer**

Environmental engineer, gradated of National Polytechnic Institute, Professional License Number: 1328945;

Lead Verifier (GHG Inventories) in sectors associated with IAF MD 14, covering General Manufacturing, Mining and Mineral Production, Metal Production, Chemical Production, and Pulp, Paper, and Printing. I have executed a total of 21 services in accordance with the criteria of ISO 14064-1:2018 and other protocols.

* Joel Miguel Ramirez

**Approver**

Electric engineer, graduated of National Polytechnic Institute, Professional License Number: 2731971.

Conformity Quality Manager in Association for Standardization and Certification (ANCE), with more than 25 years of experience in evaluation of norms and standards related to industry, commerce and services, occupying different positions in the areas of product certification, quality assurance, management systems, infrastructure, management systems certification, inspection units and GHG validation / verification body.

Currently serves as manager of the Systems Certification Body and Validating / Verifying Body of ANCE.

# Validation findings

The finding report is written by the validation and verification team in line with the descriptions above. All CARs, CLs and FARs are listed in a transparent and clear manner.

During the validation and verification period, a finding report was used to submit the findings to the project participants.

In line with BCR Standard version 3.4, the team reports the non-conformities in the forms of Corrective Action Requests (CARs), Clarification Requests (CLs) and Forward Action Requests (FARs). When and for which type of non-conformities CARs, CLs and FARs are issued are explained below.

The Validation team raises a CAR if one of the following occurs:

* The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions
* The BCR requirements have not been met
* There is a risk that emission reductions cannot be monitored or calculated. The Validation team raises a CL if information is insufficient or not clear or not sufficiently transparent to determine whether the applicable BCR requirements have been met.

The validation and verification team no raises FAR’s during the audit.

According to these principles, a total of 7 (seven) CARs, 5 (five) CLs and 0 (zero) FARs were raised; all of which are listed in the finding report.

All specific evidence reviewed are listed in Annex 3.

## Project description

The validation and verification team, adhering to the BCR Project Standard (v.3.4) and BCR Validation and Verification Manual GHG Projects (v.2.4) requirements, checked the accuracy of the information given for the project activity (such as the parts of the project activity, the installed capacities, technical properties of the compost, relevant dates, SDG contributions and so on) with conducting on-site visit, making interviews and reviewing documents.

By looking at the official documents (provisional acceptance document /Organismo de verificación.pdf/, Use Permit /Permiso de uso.pdf/ and so on) of the project, it has been confirmed by the project validation team that the project owner is Grabriel Prieto is the Project representative of this project.

The legal approvals and authorisations, which were received by the project owner, are the following:

* CUIT
* Municipal Permits
* Current CAA (Environmental Compliance Certificate)
* Municipal Authorization
* Municipal Location Certificate
* Environmental Insurance Policy
* SENASA Authorization

The technical features of the installed technology (composting and production) were checked by the provisional acceptance by Resolución 102/2023 (Technical Regulation establishing the conditions for location, conditioning, operation, monitoring, and control for the biological treatment of organic waste through composting).

The numbers and the installed capacity of the implemented technology were confirmed through the commissioning certificate /Procedimiento de residuos organicos.pdf/.

The project activity is an aerobic treatment for composting (including the compost preparation and monitoring and control).

During the audit, it was verified that the project has a total area of 50,000 m², distributed as follows: 8,150 m² allocated to auxiliary services and storage, 9,000 m² for the waste removal area, 2,400 m² for leachate ponds, and 1,000 m² occupied by roads and channels. The composting piles have a truncated pyramidal trapezoidal shape, with a lower base of 4.9 m, an upper base of 1.2 m, and a height of 1.7 m; each pile is 80 m long. Based on these parameters, it was confirmed that the unit volume of each pile is 440 m³ and that its footprint covers 480 m². It was also documented that the average composting time is five months, for which the construction of between 40 and 45 piles is projected, thereby ensuring the required capacity to manage organic material /Procedimiento de residuos organicos.pdf/.

For SDGs, the chosen goals, their estimated contributions and monitoring approaches were found appropriate by the ANCE team.

The validation and verification team confirms that the description of the project activity, as contained in the BCR Template, sufficiently covers all applicable elements in an articulate manner and is accurate.

The validation and verification team focused on identifying, discussing, and justifying the conclusions regarding the following:

* Project type, technologies and measures implemented, and eligibility of the project;
* Project design, including eligibility criteria for grouped projects;
* Project holder and other entities involved in the project;
* Ownership;
* Project start date;
* Project crediting period;
* Project scale and estimated GHG emission reductions or removals;
* Project location;
* Conditions prior to project initiation;
* Project compliance with applicable laws, statutes, and other regulatory frameworks;
* Participation under other GHG programs:
  + Projects registered (or seeking registration) under other GHG program(s)
  + Rejection by other GHG programs
* Emissions trading programs and other binding limits
* Other forms of environmental credit sought or received and eligible to be sought or received;
* Issuance of public statement(s) and;
* Sustainable development contributions.

The ANCE team issues an overall conclusion on whether the description contained in the project document is accurate, complete, and provides an adequate understanding of its nature, as well as whether the project has been implemented as described. In addition, the validation and verification team assessed that the project will achieve the estimated GHG emission reductions /Calculation HiSoil 111124.xlsx/.

## Project type and eligibility

based on observation, interviews and review of Project information.

I. The V/V team identified the methodology applicable to the project as established in the CDM and as stated in the project document.

II. The BCR Standard V 3.2 was considered to review the adherence to the program requirements.

III. The project activity was validated as waste management by composting, and also checked against the methodologies described in the CDM (<https://cdm.unfccc.int/Registry/index.html>).

IV. Scenarios for emission reductions were reviewed, the crediting time declared by the project owner is 10 years.

Table 6. Project type and eligibility

| Eligibility criteria | Evaluation by validation/verification body |
| --- | --- |
| Scope of the BCR Standard | 1. The limits of the Project are limited to the composting of non-hazardous waste from the activities surrounding Hisoil. During the site visit, the waste shipments that have been generated during the existence of the Project were requested, and through interviews with the personnel, it was validated that the waste is not hazardous. The physical infrastructure of Project was visited to validate the composting process. 2. It is worth mentioning that during the site visit to Hisoil, we reviewed the Use Permit in the Registry of Urban Solid Waste Technologies, where the property’s fiscal address was noted, thereby confirming that this Project does not geographically overlap with any other project, as verified during the site visit. 3. During the site visit, the composting operations of the Project were observed, as described in the flow diagrams provided by the Owner. It was observed that the main machinery operating in a backhoe that is responsible for the correct aeration of the compost and the lighting fixtures for illumination. 4. Using a spreadsheet /Calculation HiSoil 111124.xlsx/ the owner identified and calculated the baseline scenario according to the AMS.III.F, Avoid methane emissions through composting, Version 12.0 methodology. 5. The GHGs evaluated for the baseline were the equivalent CO2 that could be generated in an open dump, for the Project scenario the GHGs emitted (CO2, CH4 and N2O) by mobile sources and indirect emissions from electricity use were considered, in addition to emissions from the composting of non-hazardous waste. 6. The application was reviewed of the Project's additionality was reviewed (see section 4.5.5). 7. The Project duration was evaluated considering that the Owner of the project decided the project duration is of 10 years (no opction of renewal). 8. The project owner identified the project stakeholders and assessed their interaction in the project (see section 4.11). 9. The project Owner shown the monitorin plan o the verificaction period (see section 4.6) 10. Compliance with the laws to which the project is committed was reviewed /*EXPEDIENTE N° EX-2023-02018892- -GDEBA-DRYEAIMAMGP, Matriz de legislación aplicable y Cumplimiento Legal BIOCOM de Gabriel Prieto, pag. 60*/. |
| Project type | 1. During the on-site inspection, it was validated that the project corresponds to the Waste Sector, for the treatment of non-hazardous waste by composting. |
| Project activity(es) | 1. It was validated that the project activity corresponds to the Use or Replacement of technology to eliminate or reduce GHG generation in solid waste treatment systems, an activity that corresponds to CDM Sector 13: Waste Management and Disposal. During the interviews and through observation, it was validated that the project has replaced landfill disposal with composting technology, thus contributing to the reduction of GHG emissions. |
| Project scale (if applicable) | 1. Based on the review of project documentation and the calculations of annual GHG emission reductions /Calculation HiSoil 111124.xlsx/, it is confirmed that this project generates less than 60 kt CO₂e per year and therefore qualifies as a small‐scale project under Section 11.3 of the BCR Standard and the Clean Development Mechanism (CDM) booklet. Furthermore, since it falls under methodology AMS-III.F and meets the maximum threshold of 60 kt CO₂e/year, its classification as a Type III small‐scale project is justified. This determination ensures that the specific monitoring, reporting, and verification requirements align with the reduced scope and nature of the activity, thereby allowing for the appropriate application of the simplified controls established for projects of this size. |

## Grouped project (if applicable)

Through ANCE’s evaluation of the project, it was noted that the project is not grouped.

## Other GHG program

*The BCR Double Counting Tool version 2.0 has been correctly applied in the PD, as assessed by the validation team. During the documentary review, it was confirmed that the project is not registered under any other program. The ANCE team verified this by checking the following registries: Cercarbono (*[*https://www.ecoregistry.io/projects-list/cercarbono-co2*](https://www.ecoregistry.io/projects-list/cercarbono-co2)*), VERRA (*[*https://registry.verra.org/app/search/VCS*](https://registry.verra.org/app/search/VCS)*), Gold Standard (*[*https://marketplace.goldstandard.org/collections/projects/renewable-energy*](https://marketplace.goldstandard.org/collections/projects/renewable-energy)*), and CSA (*[*https://www.csaregistries.ca/GHG\_VR\_Listing/CleanProjectProjects*](https://www.csaregistries.ca/GHG_VR_Listing/CleanProjectProjects)*).*

## Quantification of GHG emission reductions and removals

ANCE performed the evaluation of the GHG emissions reduction calculation according to VVM 10.3.2 Means of verification and the methodology AMS.III.F, Avoid methane emissions through composting, Version 12.0., in addition, the analysis of the calculation file used by the project proponent /calculo.xlsx/ was performed. The analysis begins by considering the following equation:

Where:

ERy: Emission reductions in the year y (tCO2e)

BEy: Baseline emissions in year y (tCO2e)

Pey: Project emissions in the year y (tCO2e)

LEy: Leakage emissions in the year y (tCO2e)

The following steps were carried out to evaluate the above equation and calculate the estimated emissions in the Project:

**Step 1. Identification of baseline variables**

For the determination of the baseline, the project proponent used the equation described in the AMS.III.F methodology, Avoid methane emissions through composting, Version 12.0:

Where:

Table 7. Identification of baseline variables

| **Variable** | **Concept** | **Assessment** |
| --- | --- | --- |
|  | Baseline emissions in year y (tCO2e) | The period of the project is of 01/08/2019 to 31/07/2029, in total 10 years with no renewal option.  The owner of the project shown all waste manifest from the start of operations (Residuos Hisoil para Polaris.xlsx), in addition, it is consistent with the granting of the operating license of Hisoil (RESOL-2019-316). |
|  | Annual potential methane generation from solid waste composted by the project activity during years x from the start of the project activity (x=1) to year y (tCO2e). | The project proponent applied the stipulations of the methodological tool "Emissions from solid waste landfills". |
|  | If applicable, baseline emissions of the co-composted wastewater, calculated according to AMS-III.H procedures. (tCO2e) | ANCE observed that the project scope does not contemplate wastewater treatment. |
|  | If applicable, baseline emissions of composted manure from project activities, according to AMS-III.D procedures. (tCO2e). | ANCE observed that the project scope does not include manure treatment. |
|  | Amount of methane that would have to be captured and flared in the year and to comply with current regulations (ton). | ANCE observed that the project scope does not consider methane flaring. |
|  | Global warming potential of methane | 28 |

**Step 2. Determination of the annual methane generation potential.**

The owner calculated the annual methane generation potential according to the Methodological Tool, Emissions from solid waste disposal sites V. 8.1, considering the following constants for the determination of the baseline emissions:

Table 8. Constants for the determination of the baseline emissions.

| **Variable** | **Concept** | **Assessment** |
| --- | --- | --- |
| Qy, Wx | Quantity of waste composted in year y (wet basis) | During the site visit, ANCE validated that the solid waste entering the process must have acceptance criteria, according to internal procedure PE-0.9-01 (Internal Procedure for Waste Entry). |
|  | Years of the time period in which waste is disposed at SWDS, from the first year of the time period (x = 1) to year y (x = y). | ANCE validated what is established in the PDD of the Project regarding the durability of the project, which is 10 years. |
|  | Year of the crediting period for which methane missions are calculated (y is a consecutive 12-month period). |
|  | Fraction of degradable organic carbon (DOC) that decomposes under the specific conditions given in the SWDS for year y (fraction by weight). | To obtain the Determination of the fraction of DOC that breaks down in the SWDS, the project proponent used Application B (0.5) non-monitorable value, ANCE agrees with the value. |
|  | Model correction factor to account for model uncertainties for year y. | The project proponent used option 1 of the calculation options for the Model Correction Factor Determination (0.85), it is considered as a non-monitorable value. ANCE agrees with the value. |
|  | Oxidation factor (reflects the amount of methane in SWDS that is oxidized in soil or other material covering the waste). | The project proponent used the default value of the tool (0.10). ANCE approves with the value. |
|  | Fraction of methane captured in SWDS and flared, flared, or otherwise used in a manner that avoids methane emissions to the atmosphere in year y. | ANCE validated that the Project does not include flaring or any energy use of methane in the scope. |
|  | Fraction of methane in SWDS gas. |
|  | Methane correction factor for year y | The project proponent used the default value for anaerobically managed solid waste landfills (1), a non-monitorable value. ANCE agrees with the value. |
|  | Fraction of degradable organic carbon in waste type j (fraction by weight) | ANCE validated the use of the default value of the all kind of wastes:  Wood and wood products: 43%  Pulp, paper and cardboard (other than sludge): 40% Food, food waste, beverages and tobacco (other than sludge): 15%  Garden, yard and park waste: 20%  Sludge: 5%  Other organic putrescible (non food): 20% |
|  | Decomposition rate of waste type j (1/year) | ANCE validates the use of the default value:  Wood and wood products: 0.03  Pulp, paper and cardboard (other than sludge): 0.06  Food, food waste, beverages and tobacco (other than sludge): 0.185  Garden, yard and park waste: 0.10  Other organic putrescible (non food): 0.10 |
|  | Type of waste or waste types in MSW | The treatment of this type of waste is validated:  Wood and wood products, Pulp, paper and cardboard (other than sludge), Food, food waste, beverages and tobacco (other than sludge), Garden, yard and park waste, sludge, other organic utrescible (non food) /Waste Manifest Folder/. |
|  | Global warming potential of methane | 28 |

**Step 3. Quantification of solid waste**

The project owner keeps track of the amount of non-hazardous solid waste (wet basis) entering the process through manifests and shipments, this activity is part of the Argentine regulation (<https://www.argentina.gob.ar/normativa/nacional/ley-25612-76349>), so these documents have official validity. The project holder files these documents and the quantities are placed in electronic files on a monthly basis with the following name “Residuos Hisoil para Polaris.xlsx” (considering that the accreditation of the project is 01/08/2019 to 31/07/2029). The project proponent uses the monthly summation of the amount of non-hazardous waste from manifests and shipments. This data is subject to constant monitoring.

**Step 4. Quantification of the project's emissions from electricity consumption**

The Project owner does not have direct measurements of electricity consumption; therefore, to determine the Project’s emissions, an estimate was made based on the total quantity of waste treated, in accordance with TOOL13: Project and Leakage Emissions from Composting, Version 02.0. To carry out the quantification, the Tool to Calculate Baseline, Project and/or Leakage Emissions from Electricity Consumption was applied.

For the calculation of emissions from electricity consumption, the project owner used the default emission factor established in the methodological tool Tool 13: Project and Leakage Emissions from Composting, Version 02.0, in accordance with the guidance provided by the applied methodology, rather than using national or grid-specific factors such as those published by CAMMESA. ANCE validated the data used.

**Step 5. Quantification of project emissions from fossil fuel consumption**

The Project owner estimated diesel consumption based on the total amount of waste treated, using TOOL13: Project and Leakage Emissions from Composting, Version 02.0. ANCE validated this estimate to determine diesel consumption. Regarding the emission factor, the value specified in TOOL13, according to the 2006 IPCC Guidelines, was applied.

**Step 6. Quantification of the project's emissions from composting**

The project proponent applied the tool "TOOL04 Methodological tool Emissions from solid waste disposal sites, Version 08.1 for the estimation of project emissions, considering the variable factors described in step 2, with the variable to be monitored being the amount of non-hazardous waste entering the composting plant.

**Step 7. Calculation of GHG emissions reductions**

Considering the equation for calculating emission reductions described in methodology:

The project holder calculated the baseline according to the methodology, where:

The calculation was performed for the years covered by the project accreditation 01/08/2019 to 31/07/2029.

ANCE validated that the Project has not been transferred from another activity nor is the existing equipment being transferred to another activity, furthermore, the compost is not being subjected to anaerobic storage or disposed of in a SWDR. Therefore, for this project there is no leakage.

The project holder calculated the project emissions according to the methodology Project and leakage emissions from composting considering the following equation:

Table 9

|  |  |  |
| --- | --- | --- |
| **Variable** | **Concept** | **Assessment** |
|  | Project emissions associated with composting in year y (t CO2e/year) | ANCE conducted the analysis and calculation to validate the project emissions associated with the composting process. |
|  | Projected emissions from electricity consumption associated with composting in year y (t CO2/year) | ANCE validated the calculation of estimated emissions from estimated electricity consumption as described in Step 4. |
|  | Project emissions from fossil fuel consumption associated with composting in year y (t CO2/year) | ANCE validated the calculation of estimated emissions from estimated diesel consumption as described in Step 5. |
|  | Projected methane emissions from the composting process in year y (t CO2e/year) | The project owner calculated the project emissions estimate using the amount of waste input and recorded through manifests and shipments. The information described in Step 2, 3 and 6 was used. |
|  | Projected nitrous oxide emissions from the composting process in year y (t CO2e/year) |
|  | Projected methane emissions from wastewater runoff associated with co-composting in year y (t CO2e/year) | The project scope does not include wastewater treatment. |

The project proponent performed the emissions estimation calculation considering the steps described above, ANCE proceeded to analyze and replicate the calculation, obtaining the following:

Table 10. Estimated Net GHG Reduction (tCO2e).

| **Period** | **GHG emission reductions/removals in the baseline scenario (tCO2e)** | **GHG emission reductions in the project scenario (tCO2e)** | **GHG emissions attributable to leakages (tCO2e)** | **Estimated Net GHG Reduction (tCO2e)** |
| --- | --- | --- | --- | --- |
| 01/08/19-31/07/20 | 8,103 | 2,347 | 0 | 5,756 |
| 01/08/20-31/07/21 | 14,476 | 3,829 | 0 | 10,647 |
| 01/08/21-31/07/22 | 13,962 | 3,902 | 0 | 10,060 |
| 01/08/22-31/07/23 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/23-31/07/24 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/24-31/07/25 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/25-31/07/26 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/26-31/07/27 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/27-31/07/28 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/28-31/07/29 | 17,283 | 4,966 | 0 | 12,317 |
| TOTAL | 157,522 | 44,840 | 0 | 112,682 |
| (t CO2e) |
| **Materiality** | | | | 0.03% |

### Start date and quantification period

During the validation and verification of the Project, it was confirmed that operations began on 01/08/2019, as evidenced by the non-hazardous waste registration logs and the corresponding shipment manifests on file. Additionally, the operational document (Resolution 0373/19-1) and the Environmental Suitability Certificate (RESOL-2019-316-GDEBA-SSFYEAOPDS) of Hisoil SRL were reviewed; these specify that the activity involves the treatment of non-hazardous solid organic waste. This certificate was issued and signed in La Plata, Province of Buenos Aires, on July 29, 2019.

The Project’s accreditation period runs from 01/08/2019 to 31/07/2029, covering a ten-year duration (with no renewal option).

### Application of the selected methodology and tools

#### Title and Reference

The approved UNFCCC methodology for baseline, project emissions and monitoring are AMS-III.F. " Small-scale methodology Avoidance of methane emissions through composting" (version 12.0) /a/ has been applied by the GHG mitigation project.

In addition, the project activity also uses the following tools:

* Methodological tool - Tool 4. Emissions from solid waste disposal sites. Version 08.1.
* Tool 5. “Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation” Version 03.0.;
* Methodological tool - Tool 13. “Project and leakage emissions from composting”. Version 02.0;

To assess the application of AMS-III.F and Tools 4, 5 and 13 against the validation requirements, we first reviewed each tool’s scope and eligibility criteria to confirm the project fell within its small-scale boundaries. We then examined all variables and constants, such as waste mass, emission factors, degradation rates to ensure they matched the prescribed ranges and definitions in the tool manuals. All calculation spreadsheets were reproduced step-by-step to verify that formulas, emission factors and monitoring provisions were correctly implemented. Finally, documentary evidence (Residuos Hisoil para Polaris.xlsx) was audited to confirm consistency with the data inputs. This comprehensive review confirmed that the methodology and tools were applied accurately, completely and in strict compliance with the applicable validation requirements.

#### Applicability

Describe the steps taken to evaluate the project’s compliance with all the applicability conditions of the methodology and tools used to quantify the GHG emissions reductions/removals.

Table 11. Applicability of AMS.III.F, Avoid methane emissions through composting, Version 12.0

|  | **AMS.III.F, Avoid methane emissions through composting, Version 12.0** | |
| --- | --- | --- |
| **No.** | **Applicability** | **Evaluation by ANCE** |
| 5. | This methodology is applicable to the composting of the organic fraction of municipal solid waste and biomass waste from agricultural or agro-industrial activities, including manure. | Through on-site inspection and interviews, ANCE validated that the project activity receives non-hazardous waste from surrounding grain processing companies, and the evidence reviewed to substantiate the activity included the waste manifests (Residuos Hisoil para Polaris.xlsx, Waste Manifest Folder), the land-use document (DISPOSITION No. 0373/19-4) and the municipal operating permit (FILE No. 4036-20928/7). |
| 6. | This methodology includes the construction and expansion of treatment facilities, as well as activities that increase the capacity utilization of an existing facility. For project activities that increase capacity utilization at existing facilities, project participants shall demonstrate that special efforts have been made to increase capacity utilization, that the existing facility is following all applicable laws and regulations, and that the existing facility is not included in another CDM project activity. The special efforts shall be identified and described. | ANCE validated and verified that during the project period (01/08/2019 to 31/07/2029) there has not been an expansion in the operational limits of the Project, it was validated that the Project activity complies with the environmental regulations of the State (Certificado de aptitude Ambiental, RESOL 2019-316). |
| 7. | This methodology is also applicable to co-composting of wastewater and biomass solid waste, where the wastewater would otherwise have been treated in an anaerobic wastewater treatment system without biogas recovery. The wastewater in the project scenario is used as a source of moisture and/or nutrients for the biological treatment process, e.g., empty fruit bunch composting (EFB), a residue from palm oil production, with the addition of palm oil mill effluent (POME), which is the wastewater co-produced from palm oil production. | ANCE validated during the site visit that the scope of the project does not contemplate wastewater treatment, and through review of the operations manual (EXPEDIENTE N° EX-2023-02018892- -GDEBA-DRYEAIMAMGP, 1.1 - PRODUCTION LINES – FLOW DIAGRAMS, pag. 4) it was observed that the process does not include any wastewater treatment plant. |
| 8. | In case of co-composting, if it cannot be demonstrated that the organic matter would have been left to decompose anaerobically otherwise, the baseline emissions related to such organic matter will be counted as zero, while the project emissions will be calculated according to the procedures presented in this methodology for all co-composted substrates. | ANCE validated during the site visit that the scope of the project does not contemplate co-composting, being non-hazardous waste the only input to the process and these are subject to evaluation prior to incorporation into the composting process (EXPEDIENTE N° EX-2023-02018892- -GDEBA-DRYEAIMAMGP, 1.1 - PRODUCTION LINES – FLOW DIAGRAMS, pag. 4) . |
| 9. | The location and characteristics of the disposal site of biomass, animal manure and co-composting wastewater in the baseline condition shall be known so that their methane emissions can be estimated, using the provisions of AMS-III.G, AMS-III.E (relating to stockpiles), AMS-III.D "Methane recovery in animal manure management systems" or AMS-III.H, respectively. | ANCE validated during the site visit that the scope of the project does not contemplate co-composting. |
| 10. | In the project scenario, blending materials may be added to increase the efficiency of the composting process (e.g., to achieve a desirable C/N ratio or free air space value); however, only the controlled amount of solid waste or manure or wastewater diverted from the reference treatment system is used for the emission reduction calculation. Project activities for animal manure composting shall also comply with the requirements of paragraphs 3 and 4 of the latest version of AMS-III.D. | ANCE validated and verified that only the amount of non-hazardous solid waste registered in the manifests and shipments that are submitted to composting (Residuos Hisoil para Polaris.xlsx, Waste Manifest Folder) is used to calculate the estimated reductions. |
| 11. | In the case of solid waste removed from a solid waste landfill, the following requirement shall be verified ex ante at the beginning of each crediting period:  a. Establish that the identified landfill(s) can be expected to accommodate the wastes to be used for the project activity during the crediting period; or  b. Establish that it is common practice in the region to dispose of waste in solid waste landfill(s). | ANCE validated that the solid waste entering the composting plant is not extracted from a landfill but the plant serves as a final destination for the processed waste. |
| 12. | Project participants shall clearly define the geographical boundary of the region referred to in paragraph 11(b) and document it in the DPDD-MDL. When defining the geographical boundary of the region, the project participants shall consider the origin of the waste, i.e. if the waste is transported up to 50 km, the region may cover a 50 km radius around the project activity. In addition, it should also consider the distance to which the final product will be transported after composting. In any case, the region must cover a reasonable radius around the project activity that can be justified with reference to the circumstances of the project, but in no case shall it exceed 200 km. Once defined, the region must not change during the crediting period(s). | During the audit, the ANCE team verified that the project’s spatial boundaries, as defined in the Buenos Aires Metropolitan Area (AMBA) political map (http://observatorioconurbano.ungs.edu.ar/wp-content/uploads/223-Mapa-politico-RMBA.pdf), and the reported satellite location (J3G3+368 Fátima, Province of Buenos Aires) correspond to coordinates within the declared area. Additionally, by consulting the GIS layers available from IGN (https://www.ign.gob.ar/NuestrasActividades/InformacionGeoespacial/CapasSIG), it was confirmed that the project is situated within the AMBA and that the influence radius does not exceed 200 km. During the on-site verification, waybills and manifests were reviewed, and their addresses strictly match the AMBA perimeter. The additional documentation, specifically Resolution RESOL-2019-316-GDEBA-SSFYEAOPDS, corroborates that the project activity operates within this boundary. Finally, ANCE cross-checked the distribution of waste origins against the statistics published by the Observatorio del Conurbano (http://observatorioconurbano.ungs.edu.ar/), thereby comprehensively validating the project’s geographic definition and stability. |
| 13. | In case the compost produced is handled aerobically and subjected to land application, appropriate conditions and procedures (not leading to methane emissions) must be ensured. | ANCE validated that during the site visit that the non-hazardous waste is subjected to a proper composting process such that the project owner has complied with the State's environmental regulations. |
| 14. | In case the compost produced is handled aerobically and subjected to land application, appropriate conditions and procedures (not leading to methane emissions) must be ensured. | ANCE validated that, during the on-site inspection, the process does not contemplate thermal or mechanical treatment. |
| 15 | In case the produced compost is stored under anaerobic conditions and/or delivered to a landfill, emissions from residual organic content shall be considered and calculated according to the latest version of the methodological tool "Emissions from solid waste landfills". | During the site visit, ANCE validated and verified that the compost is not stored in anaerobic conditions nor is it delivered to a landfill, this was observed and reviewed in the operational process. |

Table 12. Applicability tool 4

|  | **Tool 4. Emissions from solid waste disposal sites. Version 08.1.** | |
| --- | --- | --- |
| **No.** | **Applicability** | **Evaluation by ANCE** |
| 3. | The tool can be used to determine emissions for the following types of applications:  a) Application A: The CDM project activity mitigates methane emissions from a specific existing SWDS. Methane emissions are mitigated by capturing and flaring or combusting the methane (e.g. “ACM0001: Flaring or use of landfill gas”). The methane is generated from waste disposed in the past, including prior to the start of the CDM project activity. In these cases, the tool is only applied for an ex ante estimation of emissions in the project design document (CDM-PDD). The emissions will then be monitored during the crediting period using the applicable approaches in the relevant methodologies (e.g. measuring the amount of methane captured from the SWDS);  b) Application B: The CDM project activity avoids or involves the disposal of waste at a SWDS. An example of this application of the tool is ACM0022, in which municipal solid waste (MSW) is treated with an alternative option, such as composting or anaerobic digestion, and is then prevented from being disposed of in a SWDS. The methane is generated from waste disposed or avoided from disposal during the crediting period. In these cases, the tool can be applied for both ex ante and ex post estimation of emissions. These project activities may apply the simplified approach detailed in 0 when calculating baseline emissions. | In accordance with Application b), the project document review confirmed that the activity’s scope consists of treating non-hazardous waste through composting, with the baseline scenario established as disposal of such waste in a Solid Waste Disposal Site (SWDS) in the absence of the project. During the on-site verification, it was confirmed that the waste originates from municipal sources, as detailed in Table 3, evidenced by the review of manifests (Residuos Hisoil para Polaris.xlsx, Waste Manifest Folder) and direct observation of waste piles in the operations area. Based on this assumption, the project proponent applied the Tool to calculate baseline, project and/or leakage emissions from waste handling and disposal (Tool 4), as reflected in their calculation model. No evidence of disposal in a SWDS was found during the site visit; additionally, by evaluating the internal transport and storage process for raw materials and inputs (INTERNAL PROCEDURE FOR WASTE INTAKE, Nº PE.09.01), the proper recording of waste flows into the composting system was validated, confirming compliance with the conditions for both ex ante and ex post emissions estimation. |

Table 13. Applicability of tool 5.

|  | **Tool 5. “Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation” Version 03.0.** | |
| --- | --- | --- |
| **No.** | **Applicability** | **Evaluation by ANCE** |
| 5. | If emissions are calculated for electricity consumption, the tool is only applicable if one out of the following three scenarios applies to the sources of electricity consumption:  (a) Scenario A: Electricity consumption from the grid. The electricity is purchased from the grid only, and either no captive power plant(s) is/are installed at the site of electricity consumption or, if any captive power plant exists on site, it is either not operating or it is not physically able to provide electricity to the electricity consumer;  (b) Scenario B: Electricity consumption from (an) off-grid fossil fuel fired captive power plant(s). One or more fossil fuel fired captive power plants are installed at the site of the electricity consumer and supply the consumer with electricity. The captive power plant(s) is/are not connected to the electricity grid; or  (c) Scenario C: Electricity consumption from the grid and (a) fossil fuel fired captive power plant(s). One or more fossil fuel fired captive power plants operate at the site of the electricity consumer. The captive power plant(s) can provide electricity to the electricity consumer. The captive power plant(s) is/are also connected to the electricity grid. Hence, the electricity consumer can be provided with electricity from the captive power plant(s) and the grid. | In accordance with the tool’s applicability criteria for electricity‐related emissions, the project meets Scenario A: all electricity is procured exclusively from the public grid, as confirmed by on-site inspection. Therefore, the project proponent used the grid emission factor published by CAMMESA to estimate both baseline and project emissions under this scenario.  No captive power plants are installed or, if present, they are non-operational and incapable of supplying electricity to the facility. Consequently, Scenario B (off-grid fossil fuel generation) and Scenario C (grid plus captive generation) do not apply. Therefore, the tool may be applied under Scenario A for calculating baseline and project emissions. |

Table 14. Applicability of Tool 13.

|  | **Tool 13. “Project and leakage emissions from composting”. Version 02.0.** | |
| --- | --- | --- |
| **No.** | **Applicability** | **Evaluation by ANCE** |
| 3. | The following sources of project emissions are accounted for in this tool:  (a) CH4 and N2O emission from composting;  (b) CO2 emissions from consumption of fossil fuels and electricity associated with composting; and  (c) CH4 emissions from run-off wastewater associated with co-composting. | The evaluation confirmed that the project’s emission sources have been correctly accounted for using the tool. Specifically, (a) CH₄ and N₂O emissions from the composting process were quantified (Calculation HiSoil 111124.xlsx); (b) CO₂ emissions associated with fossil fuel use and electricity consumption for compost operations were included (Calculation HiSoil 111124.xlsx); and (c) CH₄ emissions from runoff wastewater associated with co-composting were determined not to apply to this activity. |
| 4 | The following sources of leakage emissions are accounted for in this tool:  (a) CH4 emissions from the anaerobic decay of the residual organic content of compost disposed of in a landfill or subjected to anaerobic storage. | The project team confirmed that the tool properly accounts for the following leakage emission source: (a). Through review of waste disposition records and emission factor calculations, it was validated that these CH₄ emissions are included in the project’s leakage estimates (Calculation HiSoil 111124.xlsx). |

In conclusion, ANCE concurs with the application of Methodology AMS-III.F “Avoidance of Methane Emissions through Composting” (Version 12.0) and Tools 4, 5, and 13, as the project proponent has satisfactorily met all applicability criteria.

#### Methodology deviations (if applicable)

Not applicable because there is no methodology derivations.

### Project boundary, sources and GHGs

The ANCE audit team executed the following procedures to assess and confirm compliance with the requirements for the project’s geographic boundary, the composting process operation, and GHG quantification, incorporating a detailed review of the operations manual and the inputs-and-outputs control procedure:

Step 1. Definition and Verification of Spatial Boundary

The reported coordinates (J3G3+368 Fátima, Province of Buenos Aires) were compared against the AMBA political map (http://observatorioconurbano.ungs.edu.ar/wp-content/uploads/223-Mapa-politico-RMBA.pdf) and the IGN GIS layers (https://www.ign.gob.ar/NuestrasActividades/InformacionGeoespacial/CapasSIG), confirming that the project lies within the AMBA and that its influence radius is under 200 km.

Step 2. Physical Delimitation of the Project Boundary

It was verified that the geographic boundary effectively covers:

* The reception area where waste is temporarily stored.
* The composting facility where biomass treatment occurs.
* The zones where compost is stored until sale.
* The leachate pond system used to water the compost piles.
* The internal transport routes for waste and compost during regular operations.

Step 3. Document Review of Incoming and Outgoing Materials

The formal “Inputs and Outputs” procedure for raw materials and supplies was examined, and waybills and manifests were verified to ensure all entries and dispatches remain within the defined boundary.

Step 4. On-Site Process Inspection

During the site visit, the reception area, compost piles, leachate ponds, and storage zones were walked through; manifests were matched to waste piles, and the internal material flows were observed.

Step 5. Review of the Hisoil Operations Manual

The operations manual was analyzed to confirm that the procedures described (waste reception, pile turning, leachate irrigation, sampling) align with observed practices and do not include activities outside the geographic boundary.

Step 6. Greenhouse Gas Emissions Analysis

Using the applied methodology (AMS-III.F and Tools 4, 5, and 13), CH₄ and N₂O emissions from composting and CO₂ emissions from fuel and electricity consumption were quantified, while CH₄ from wastewater was determined not applicable, see Table 15.

Table 15. Greenhouse Gas Emissions Analysis

|  |  |  |  |
| --- | --- | --- | --- |
| **Source** | **GHG** | **Included**  **(Yes/No)** | **Assessment by ANCE** |
| Baseline scenario- landfill site | CO2 | No | During organic matter decomposition reactions in landfills, CO2 emissions are considered zero, ANCE validates this confirmation. |
| CH4 | Yes | Methane is the main GHG produced in the decomposition of organic matter in a landfill, ANCE validates this confirmation. For the estimation, the amount of treated waste was used (Residuos Hisoil para Polaris.xlsx, Waste Manifest Folder). |
| N2O | No | During organic matter decomposition reactions in landfills, N2O emissions are considered to be zero, ANCE validates this confirmation. |
| Project scenario –  -Composting site  TAGRAM compost turner, model FD500  -SEM943 front loader  -Rotary screen  -Pile irrigation pump  -Shredder mill  -Generator set  -Centrifugal pumps  -Offices and laboratories | CO2 | Yes | During the audit, the team quantified indirect emissions from the relevant electrical equipment, rotary screen, pile irrigation pump, shredder mill, generator set, and centrifugal pumps, as well as from lighting in offices and laboratories, and direct emissions from the TAGRAM FD500 compost turner and the SEM943 front loader, physically verifying the presence of all these sources during the on-site visit. To ensure that only sources associated with the composting process were included, Tool 13 was applied, precisely defining the scope and boundaries for emissions accounting. |
| CH4 | Yes | Product derived from the composting process. The amount of waste treated (Residuos Hisoil para Polaris.xlsx, Waste Manifest Folder) was used for the estimation.  Direct emissions from combustion in mobile sources. |
| N2O | Yes | Product derived from the composting process. The quantity of treated waste (Residuos Hisoil para Polaris.xlsx, Waste Manifest Folder) was used for the estimation.  Direct emissions from combustion in mobile sources. |

All project elements (boundary, sources, processes, and records) are duly justified and comply with the validation requirements, ensuring the project’s integrity and the accuracy of its emission estimates.

#### Eligible areas in the GHG project boundaries (for AFOLU projects)

This criteria is not applicable.

### Baseline or reference scenario

The project activity involves the operation of composting for the treatment of non-hazardous solid waste, therefore, the methodology applied, "the baseline scenario is in the absence of the project activity, biomass and other organic matter (including manure, if applicable) are allowed to decompose within the project boundary and methane is emitted to the atmosphere. Baseline emissions are the amount of methane emitted from the decomposition of degradable organic carbon from biomass solid waste or manure".

The Owner of the project identify correctly the baseline scenario and the development of the variables and parameters used is noted in the calculation tool (Calculation HiSoil 111124.xlsx)

Step 1. The baseline scenario was evaluated in accordance with Methodology AMS-III.F, “Avoidance of Methane Emissions through Composting” (Version 12.0). Estimated emissions from waste treatment were calculated using the Methodological Tool for Emissions from Solid Waste Disposal Sites (Version 08.1), assessing the following parameters:

|  |  |
| --- | --- |
| : | The model correction factor, applied to account for model uncertainties in year y, was set to the default value for the baseline scenario. |
| : | The Oxidation factor, was set to the default value for the baseline scenario. |
| : | The Fraction of methane in the SWDS gas, was set to the default value for the baseline scenario. |
| : | The Fraction of degradable organic carbon in the waste type j, was set to the default value for the baseline scenario (There are not residual waste treatment). |
| : | The Methane correction factor for year y, was set to the default value for the baseline scenario (based on SWDS type of the project). |
| : | The Decay rate for the waste type j, was set to the default value for the baseline scenario (based on SWDS type of the project). |
| : | monitored data (Residuos Hisoil para Polaris.xlsx, Waste Manifest Folder). |
| : | The Fraction of degradable organic carbon in the waste type j, was set to the default value for the baseline scenario (based on SWDS type of the project). |

ANCE validated that the parameters and measurements were properly applied according to the methodology. It was observed that the data obtained, such as emission factors, heating rates and other constant, were obtained from the Tool04 Emissions from solid waste disposal sites Version 08.1 and by means of ANCE recalculation and IPCC values, the application was validated.

Step 2. ANCE validated that all parameters for the baseline equation were sourced directly from the approved methodology. The project proponent assessed overall uncertainty as low (see Section 4.5.6). During the review of the input activity data (Wj) for the baseline calculation, the audit team requested evidence of measurement equipment calibrations process. All other parameter values (as detailed in Step 1) were adopted unchanged from the methodology, rendering the application of the discount‐factor percentages from the uncertainty‐management guidelines unnecessary.

Step 3. The ANCE team reviewed the national and sectoral policies declared in the Project Document (Section 4). Furthermore, it examined the supporting documents demonstrating compliance, as well as the Applicable Legislation and Legal Compliance Matrix (EXPEDIENTE N° EX-2023-02018892- -GDEBA-DRYEAIMAMGP, pag. 60). Nevertheless, this analysis was carried out in Section 4.7, “Compliance with Laws, Statutes and Other Regulatory Frameworks,” of this report.

Step 4. In accordance with the requirement, the ANCE audit team verified that the procedures used to identify the baseline scenario remain fully consistent with the chosen emission factors, activity data, GHG projection variables, and all other relevant parameters. To do so, the team examined Section 3.7 (“Mitigation Results”) of the Project Document and carried out an independent recalculation of the estimated emission reductions using the project’s calculation tool. The recalculated values matched those originally reported, thereby confirming the internal coherence and reliability of the baseline‐setting procedures;

Step 5. It was observed that the project proponent implemented a procedure (established in PDD) to ensure data quality in accordance with ISO 14064-2 and the requirements of the selected methodology.

Where applicable, the baseline scenario was reassessed by cross-checking all emission factors, decay rates and model parameters sourced from the Methodological Tool for Emissions from Solid Waste Disposal Sites (Tool 04, Version 08.1) against IPCC default values and the project’s own calculation model. Input activity data (Wj) were validated through review of waste manifests, residue records (Residuos Hisoil para Polaris.xlsx, Waste Manifest Folder) and the waste acceptance process, with records from calibrated weighbridges (INTERNAL PROCEDURE FOR WASTE INTAKE, Nº PE.09.01). National and sectoral policy requirements were confirmed via the Applicable Legislation and Legal Compliance Matrix, while the integrity of the baseline-setting procedures was further reinforced by an independent recalculation of the estimated emission reductions in Section 3.7 of the Project Document. In all cases, the documentation and data sources underpinning the baseline scenario were found to be directly relevant, consistent with the approved methodology and fully justified.

### Additionality

ANCE reviewed the materiality analysis applied by the project owner, validated and verified the application of the guidelines for the demonstration of additionality methodologies and tools that the owner has applied:

* TOOL01 Methodological tool: Tool for the demonstration and assessment of additionality, Version 07.0.0;
* Guidelines for objective demonstration and assessment of barriers, version 01;
* Guidelines on common practice, version 01.

It is worth mentioning that during the validation of additionality, the Argentinean legislation on financing of environmental programs was reviewed, in order to rule out that the Project has not arisen from a financing of this nature. The website of the Ministry of Economy of Argentina was reviewed and a list of environmental and social projects was found in which the participation or registration of Hisoil SRL was ruled out. The legislation on composting was reviewed, which only specifies the operation and quality of the compost[[1]](#footnote-1), and the constitution (DISPOSITION No. 0373/19-4) was reviewed and ruled out any public governmental investment. In this way, it was validated that the Project's reductions are not attributable to the implementation of legal requirements.

**Step 0: Demonstration whether the proposed project activity is the first-of-its-kind.**

During the on-site validation, the project proponent confirmed that within the Buenos Aires Metropolitan Area (AMBA), private and public entities, such as the North III Environmental Complex Composting Plant (Benito Roggio Ambiental) and the CEAMSE Composting Plant, are already engaged in non-hazardous waste composting; therefore, this project is not the first of its kind;

**Step 1: Identification of alternatives to the project activity consistent with current laws and regulations.**

1. **Sub-step 1a: Definition of Credible Alternatives**

The ANCE team applied the guidelines of TOOL01 (v. 07.0.0) to identify and document the following credible alternatives to the proposed CDM composting project:

1. Project activity without CDM registration

* Description: Operating the composting process for non-hazardous waste without registering as a CDM project.
* Justification: Technically and economically feasible; regulated by Joint Resolution 1/20191, which establishes the framework for compost production and registration in Argentina.

1. Transport to a treatment facility (CEAMSE Norte III SWDS)

* Description: Delivering waste to the Buenos Aires Norte III Environmental Complex, operated by CEAMSE.
* Justification: Represents common practice in the AMBA; compliant with Law 25.916[[2]](#footnote-2), which recognizes landfill disposal as the “correct” treatment and non-mandatorily encourages valorization systems.

1. Alternative composting technology (vermicomposting)

* Description: Using vermiculture to produce compost with comparable final characteristics.
* Justification: Meets the requirements of Joint Resolution 1/20191, which focuses on the quality of the end product rather than the specific technology used.

All three alternatives are technically viable and relevant to a similar developer, covering scenarios of status quo (landfill disposal), the same activity without CDM incentives, and alternative valorization methods.

**Sub-step 1b: Consistency with Mandatory Laws and Regulations**

The audit verified that each alternative complies with the applicable mandatory legal and regulatory framework:

Table 16. Consistency with Mandatory Laws and Regulations

|  |  |  |
| --- | --- | --- |
| **Alternative** | **Joint Resolution 1/2019 (Composting)** | **Law 25.916 (Landfill Disposal)** |
| 1) Composting without CDM registration | Applicable | – |
| 2) Transport to CEAMSE Norte III (SWDS) | – | Correct treatment |
| 3) Vermicomposting | Applicable | – |

* Alternatives 1 & 3: Both composting methods satisfy the Annex 1 requirements of Joint Resolution 1/2019.
* Alternative 2: Landfill disposal is compliant with Law 25.916 as the legally mandated waste treatment.

During the site visit to the CEAMSE landfill, the audit team observed operational practices consistent with regulatory requirements and found no evidence of systematic non-compliance. Documentary review confirmed that the project’s municipal and provincial permits are in place for the composting facilities.

All considered alternatives fully comply with the mandatory laws and regulations in force, thereby meeting the requirements of Sub-step 1b of TOOL01.

**Step 3: Barrier analysis**

**Sub-step 3a: Identify barriers that would prevent the implementation of the proposed CDM project activity**

The audit team identified a **credible investment barrier**, as waste treatment and valorization activities of comparable scale have **only** been funded through **grants or non-commercial financing**. Key evidence includes that between 2019 and 2022, the **National Public Investment Plan (PNIP)[[3]](#footnote-3)** financed four projects (BAPIN 42338 – Jujuy; 64347 – Catamarca; 64352 – Río Negro; 101972 – “El Borbollón” in Mendoza; 111891 – Corrientes), all in provinces outside the AMBA and managed as public initiatives. Additionally, it was confirmed that **IDB Loans No. 3249/OC-AR[[4]](#footnote-4) and 5567/OC-AR[[5]](#footnote-5)** are directed exclusively to municipalities and government entities, with no commercial financing options available to private actors. This evidence demonstrates that, without BCR registration and its incentive mechanisms, a private project like Treatment of non-hazardous organic waste to obtain compost would be unable to secure capital on commercial terms, thereby satisfying Sub-step 3a.

**Sub-step 3b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity)**

The audit team compared the three defined alternatives against the identified investment barrier (non-commercial financing available exclusively to public entities). It was found that private operations (composting without VCC and vermicomposting) would be impeded, whereas the alternative of transporting waste to the CEAMSE Norte III facility—managed by a public body—remains viable due to its ability to access PNIP funding and IDB loans. Consequently, because at least one alternative is not hindered, Sub-step 3b is fulfilled, confirming that the investment barrier does not eliminate all alternative scenarios to the BCR project.

The analyses under Sub-step 3a and 3b have confirmed a credible investment barrier affecting private composting operations but not the public CEAMSE alternative. Because at least one realistic alternative remains viable, the requirements of both sub-steps are met, and the assessment can now proceed to Step 4: Common Practice Analysis.

**Step 4: Common practice analysis**

In accordance with Annex 12’s stepwise approach to common practice, the audit team carried out the following evaluation:

Step 1. Output range: The ±50% output range around HiSoil’s design capacity was calculated and two installations were found to fall within it.

Step 2. Identification of existing plants: Within the AMBA, two non-CDM composting facilities meet the criteria of comparable geographic location, feedstock type, operational activity, commercial application, capacity range, and having commenced commercial operation prior to the preparation of the document Project, namely, CEAMSE Norte III and the network of Buenos Aires City composting centers. Consequently, Nₐₗₗ = 2.

Step 3 – Different technologies: Both identified installations operate under different investment and financing conditions (public subsidies and public-sector investment climate) compared to HiSoil’s private-sector model. Therefore, Ndiff = 2.

Step 4 – Calculation of F and common practice test:

The thresholds for common practice require .

With and , neither criterion is met. The proposed composting activity is therefore not common practice in the AMBA, satisfying the requirements to proceed with Step 4 Common Practice Analysis so the proposed project activity is additional.

### Conservative approach and uncertainty management

The GHG Project Holder has implemented mechanisms for the management of uncertainty in both the baseline quantification and the calculation of GHG emission reductions. These mechanisms include the application of conservative assumptions, the use of credible and verifiable data sources, and the establishment of robust data validation and control procedures.

1. Application of Uncertainty Management Mechanisms

The project holder has adopted a conservative approach by prioritizing the use of measured and verifiable activity data. A specific procedure titled “Recepción y Validación de Cantidad de Residuos Ingresados (Nº PE.09.01)” governs the process of receiving and validating the amount of waste entering the composting plant. According to this procedure:

* All trucks delivering waste must present a weighbridge ticket—either from the generator’s facilities or a public scale—indicating the tare weight and total weight of the vehicle.
* In the case of tankers or skip loaders without access to scales, visible indicators of content level are required.
* For every waste delivery, a manifest is filed and attached to the weighbridge ticket, and the plant manager or designated officer validates the real weight through signature for traceability and confirmation.

During the on-site verification, the validation team conducted a visit to one of the waste suppliers’ facilities, where the calibration of the weighbridge was reviewed. The team also observed the procedure for recording and completing waste delivery manifests, confirming alignment with the uncertainty management and data integrity protocols established by the project.

1. Consistency with National Inventories and Reference Scenarios

The emission factors and activity data used for the estimation of GHG emission reductions are consistent with the default values and methodological guidelines set forth by:

* The CDM methodology AMS-III.F (version 12.0);
* The Tool 4: Emissions from Solid Waste Disposal Sites (version 08.1);
* The national GHG inventory and reference scenarios applied by Argentina under the UNFCCC framework.

Given this consistency, and in accordance with the BCR Guidelines for Managing Uncertainty, it is concluded that there is no need to apply the discount percentages defined for uncertainty compensation, as the project has demonstrated the robustness of its baseline and project emission data.

The project has adequately applied a conservative approach and effective uncertainty management mechanisms by:

* Implementing standardized procedures for data collection and validation;
* Ensuring traceability and transparency through weighbridge ticketing and signed manifests;
* Verifying the calibration of weighing equipment and supplier compliance during site visits;
* Aligning emission factors and assumptions with national reference values and approved methodologies.

Therefore, the validation team concludes that the approach to uncertainty is conservative and aligned with ISO 14064-3 and BCR Standard requirements, and no discount factors need to be applied under the current estimation scenario.

### Leakage and non- permanence

*ANCE reviewed the project proponent’s leakage and non-permanence analysis and confirmed compliance with the BCR “PERMANENCE AND RISK MANAGEMENT” Tool (Version 2.0) and Section 12.3 of the BCR Standard.*

*The proponent applied Section 5.5, paragraph 27 of the AMS-III.F Methodological Tool (Version 12.0), which states: “If the project technology is equipment transferred from another activity or if existing equipment is transferred to another activity, leakage effects (Lₑᵧ) shall be considered.”*

*This requirement aligns with the “Project and Leakage Emissions from Composting” Methodological Tool (Version 01.0.0), Procedure III – Leakage Emissions. ANCE verified that this condition is not applicable: the composting operation is permanent and located at Calle 20 de Junio S/N, Almirante Irízar, Exaltación de la Cruz, Buenos Aires Province. HiSoil SLR uses dedicated on-site equipment with no transfers from other activities, and operates strictly under its Environmental Suitability Certificate (RESOL-2019-316-GDEBA-SSFYEAOPDS), with any deviations subject to penalty or suspension.*

*Regarding paragraph 28: “In case compost is stored under anaerobic conditions or disposed in a SWDS, leakage will be calculated to account for methane emissions from anaerobic decomposition of compost. The relevant procedures in the leakage part of the methodological tool ‘Compost Leakage Project and Emissions from Composting’ shall be followed.”*

*This scenario also does not apply. During the site visit, all solid waste was observed in an open-air composting area following the “Procedures Manual for Composting Plant Capilla.” Temperature controls confirm pile stabilization, after which material is turned to promote aeration and prevent anaerobic conditions. The resulting compost is classified into three grades (A, B, C) for sale, with no disposal in a SWDS.*

## Monitoring plan

### Description of the monitoring plan

The project’s Monitoring Plan was reviewed in accordance with the provisions established in the Monitoring, Reporting and Verification (MRV) Tool, Version 2.0 (June 23, 2025) of the BioCarbon Standard. The review confirmed that the document includes a clear description of the monitoring approach, the methods and technologies applied, as well as a complete list of parameters to be monitored in accordance with the applicable methodology, specifying data sources, measurement units, frequency, and quality assurance and quality control (QA/QC) procedures. The Plan also properly defines the project boundaries, spatial, temporal, and sectoral, and describes how these will be monitored. The personnel responsible for implementing the monitoring activities are clearly identified, along with their assigned roles. Procedures for data collection, processing, storage, and traceability were also evaluated, as well as provisions to detect and manage deviations from the monitoring plan or from the expected performance of the mitigation activity. The Plan includes references to standardized tools issued by BioCarbon, and it was confirmed that it complies with the requirements for validation prior to project registration, ensuring its applicability throughout the entire quantification period.

Provide a summary of the compliance as follows:

1. *The Monitoring Plan includes all necessary data and parameters required to estimate GHG reductions during the quantification period, as per the MRV guidelines of the BioCarbon Registry. The data is categorized into two types: parameters fixed at the time of registration and parameters monitored throughout the project implementation.*

**Fixed Parameters:**

*These are established at registration and not monitored during the quantification period. They include:*

* *Emission factors for electricity generation (EFEF,j,y): Based on national statistics, values are provided per year and averaged for each monitoring period.*
* *Technical transmission and distribution losses (TDLj,y): Defaulted at 15% based on World Bank data.*
* *Electricity consumption and fossil fuel default factors for composting (SECcomp,default, EFFC,default).*
* *Methane and nitrous oxide emission factors (EFCH4,y, EFN2O,y) and their respective GWPs (GWPCH4, GWPN2O).*
* *Solid waste parameters for baseline emissions, including:*
* *Model correction factor (φ\_y), oxidation factor (OX), methane fraction (F), DOC fraction (DOCf,y), and decay rate (kj).*
* *Default DOC values and decay constants for different waste types (e.g., wood, paper, sludge).*

**Monitored Parameters:**

*These are measured during the crediting period and directly inform the estimation of project and baseline emissions.*

* *Quantity of waste composted per year (Qj / Wj,x): Monitored through calibrated weighbridges and validated using delivery documentation (manifests, entry records).*
* *Waste categorization: Based on official European Waste List (LER codes), verified by the project holder.*

***Data Monitoring and QA/QC:***

*The project has implemented comprehensive QA/QC procedures, established in the project document, aligned with ISO 14064-2. These include:*

* *Daily measurement and documentation of waste intake.*
* *Categorization protocols.*
* *Internal checklist procedures for verifying emission factors, data consistency, calculation accuracy, and uncertainty estimates.*
* *Document archiving to ensure traceability and repeatability.*

1. *During the audit, the project’s technical documentation related to the determination of the baseline scenario was reviewed to confirm compliance with the CDM methodological tool 004 (*Emissions from Solid Waste Disposal Sites*, version 08.1), as well as the requirements of the BioCarbon Standard and its MRV Tool version 2.0.*

*The auditor verified that the baseline scenario assumes that, in the absence of the project, the waste managed through composting would have been disposed of in a solid waste disposal site (SWDS). Waste entry records, delivery manifests, and truck entrance documents were reviewed. These were categorized according to the European Waste List (LER codes) and validated by the project proponent based on the specifications provided by each waste supplier.*

*The use of default parameters established by the methodological tool was confirmed, including:*

* + *Methane capture fraction (fy = 0), justified by the absence of methane destruction systems at the SWDS.*
  + *Methane correction factor (MCFy = 1.00) applicable to unmanaged anaerobic disposal conditions.*
  + *Degradable organic carbon content (DOCj) and fraction decomposed (DOCf = 0.5), differentiated by waste type (paper, food, wood, etc.).*
  + *Decay rate (kj), determined based on waste type and site-specific climatic conditions.*
  + *Additional parameters reviewed included: methane fraction in landfill gas (F = 0.5), oxidation factor (OX = 0.1), model uncertainty correction factor (φ\_y = 0.85), and Global Warming Potentials (GWP) for CH₄ (28) and N₂O (265), all selected from official sources such as IPCC AR5 and the GHG Protocol.*

*The auditor also confirmed that the assumptions and parameters applied were conservatively selected and transparently documented, and that quality control procedures were implemented to verify the consistency, completeness, and traceability of the data used in baseline emission calculations*;

1. *As part of the audit, the potential for leakage emissions was reviewed in accordance with the M*ethodological Tool 13: Project and Leakage Emissions from Composting (Version 02.0)*, which was applied by the project proponent. The methodology includes provisions for estimating fossil fuel and electricity consumption associated with the composting process as potential leakage sources.*

*The auditor verified that the project properly included the following default parameters to quantify leakage emissions:*

* + Electricity consumption for composting (SECcomp,default = 0.01 MWh/t) and its associated emission factor (EFEF,j,y, adjusted annually based on national grid data).
  + Fossil fuel consumption for composting (EFFC,default = 0.0207 tCO₂e/t).

*These values were applied as per the tool’s conservative defaults and supported by the emission factor sources: Tool 05 for electricity emissions and Tool 13 for composting-related emissions. No other sources of leakage, such as upstream transportation or material handling outside the composting facility, were considered significant or applicable under the selected approach.*

*Additionally, it was confirmed that no displacement of emissions to other facilities or jurisdictions occurred as a result of the implementation of the composting project. The auditor concluded that the estimation of leakage emissions was consistent with the applicable methodology and transparently documented, and that leakage was conservatively accounted for in the total project emissions.*

1. ANCE team reviewed the information provided by the project proponent regarding the environmental and social effects associated with the implementation of the project activities. Based on the documentation assessed and the findings from the on-site audit, it is concluded that the project complies with the applicable requirements for the assessment of environmental and social impacts.

In relation to environmental aspects, the project has identified and implemented appropriate monitoring and mitigation measures to address potential impacts on air, water, and soil. These include groundwater quality monitoring through periodic sampling of phreatic wells, air quality control via installed volatile organic compound detectors, and the construction of lixiviation pools and runoff lines to prevent soil contamination. These measures are in line with the national environmental legislation and support compliance with the periodic environmental audit required for the annual environmental authorization in Argentina. Furthermore, the environmental safeguards described in the SDS’s tool, including laboratory analyses and compost quality controls, reinforce the project’s commitment to continuous environmental performance.

Regarding social aspects, the project has demonstrated effective mechanisms for community and worker engagement. As detailed in section 9 of the PDD, the project owner has conducted meetings with the local community and has documented concerns (Meeting minutes with neighbors, in pdf), such as the deteriorated condition of the access road due to traffic and weather conditions. These meetings are formally recorded in signed minutes, which include the actions that HiSoil has committed to implementing in response. In this case, corrective actions to improve the road have already been undertaken.

In addition, the project has received and addressed several comments from its workforce aimed at improving working conditions and internal operations. These include the installation of battery-operated lighting in the chemical bath area, the implementation of shared transportation initiatives, the provision of financial support for vehicle acquisition, and organizational improvements in shared spaces such as the canteen. These actions reflect an ongoing commitment to occupational health, safety, and employee well-being.

Although no formal complaints have been received to date, the existence of an active grievance mechanism and the implementation of measures derived from comments submitted by both community members and employees demonstrate that the project has the necessary structures in place to identify, evaluate, and respond to social concerns. Moreover, the project enjoys a positive reputation among neighboring municipalities, academic institutions, and governmental bodies, further indicating a high level of social acceptability and alignment with national and local development priorities.

In view of the above, the verification team concludes that the project has adequately assessed and addressed both environmental and social effects resulting from its activities, in line with the applicable standards and best practices for stakeholder engagement and sustainable development.

1. The ANCE team reviewed the procedures established by the project proponent for the management of GHG emission reductions and quality control of monitoring activities, in accordance with the applicable requirements of ISO 14064-2 and the CDM methodology AMS-III.F (version 12.0).

ANCE verified that the project has defined and implemented documented procedures for the handling, transport, storage, and registration of organic waste, as part of the monitoring framework. The following documents were examined during the validation process:

* “Procedimientos de residuos orgánicos BIOCOM” (EXPEDIENTE N° EX-2023-02018892- -GDEBA-DRYEAIMAMGP):
  + Page 3 details the procedures related to quality control of waste operations (dated 01 September 2023).
  + Page 58 includes protocols for the transportation and storage of waste.
* “PROCEDIMIENTO ESPECÍFICO PE.09.01 – Procedimiento Interno de Ingreso de Residuos” (dated 09 April 2023):  
  This document defines the internal process for receiving waste at the composting site, including verification steps, registration, and traceability, which ensure the reliability of input data used in GHG calculations.

The ANCE validation team assessed the quality assurance and quality control (QA/QC) procedures documented in the PDD and confirmed their alignment with good practices under ISO 14064-2. The project proponent established a QA/QC checklist to be applied for each verification period, which includes:

* Review of assumptions, activity data, and emission factors for proper documentation and consistency.
* Verification of transcription accuracy and bibliographic references.
* Cross-checking of units and conversion factors throughout emission reduction calculations.
* Validation of calculation models, database integrity, and labeling of data fields.
* Consistency checks across data sources and process stages.
* Evaluation of uncertainty estimates and documentation of expert judgment.
* Adequate archiving of monitoring data and documentation from both internal and external sources.
* Recalculation protocols in response to methodological or data changes.
* Temporal and methodological consistency across reporting periods.
* Review of completeness and identification of potential data gaps.
* Comparison with previous GHG reduction estimates to justify any deviations.

ANCE confirmed that these procedures are sufficiently robust to ensure the accuracy, transparency, and consistency of the monitored data.

The ANCE team verified that the project proponent committed to performing emission reductions and leakage calculations every three years, as defined by the monitoring period. These calculations will be based on the most recent versions of CDM methodology AMS-III.F and all applicable methodological tools.

ANCE confirmed that the project proponent established a procedure to ensure that methodologies, tools, and standards are reviewed and updated prior to each calculation cycle, thereby complying with the methodological requirements and supporting the credibility of emission reductions reported.

1. The ANCE team assessed the assignment of roles and responsibilities related to the monitoring and reporting of variables used in the calculation of GHG emission reductions, as outlined in the monitoring plan provided by the project proponent. According to the information described in Monitoring Plan –PDD, point 16.1, the general management of Hisoil assumes primary and overall responsibility for the implementation of the monitoring system and for ensuring data integrity. However, the validation team verified that the monitoring responsibilities are further distributed among various functional units within the organization.

The assignment of responsibilities is structured as follows:

* General Management of Hisoil: Acts as the main authority responsible for supervising the correct implementation of the monitoring plan, ensuring that all data are collected, recorded, and reported in accordance with the applicable methodology and internal procedures.
* Reception Area (Hisoil Plant): Tasked with providing the quantitative data on the amount of waste received, which is a key parameter in calculating baseline and project emissions.
* Administrative Unit (Hisoil Office):
  + Responsible for recording and verifying the type and weight of incoming waste, and for submitting this information to the Oficina Provincial de Desarrollo Sostenible (OPDS), in compliance with local environmental regulations.
  + Oversees the communication of results from environmental audits to the Dirección de Medio Ambiente Municipal and manages the receipt of the Certificado de Aptitud Ambiental (CAA) (EXPEDIENTE N° EX-2023-02018892- -GDEBA-DRYEAIMAMGP).
  + Manages stakeholder relationships, ensuring transparency and communication with relevant external parties.
* Hisoil Laboratory:
  + Responsible for quality control of both the input waste and the final composted product.
  + Conducts environmental analyses required by the monitoring methodology and local environmental authority.

The validation team confirmed that the responsibilities are clearly allocated to relevant technical and administrative personnel, and that the defined structure allows for effective implementation of the monitoring plan and reporting of key variables. Furthermore, the roles align with the data requirements established by the CDM methodology AMS-III.F and its associated tools.

During the audit, ANCE verified that the organizational structure and responsibilities described in the Monitoring Plan (in PDD) are consistent with internal documents reviewed on-site, including staff descriptions, process flow diagrams, and records of internal reporting procedures.

1. The ANCE team reviewed the procedures established by the project proponent to assess and monitor the project’s contribution to the SDGs, in accordance with the requirements of the BCR Standard and the Sustainable Development Safeguards tool.

Based on the documentation provided and interviews conducted, ANCE confirmed that the project includes a structured framework to evaluate, monitor, and report on its positive contributions to the following SDGs:

* SDG 8 – Decent Work and Economic Growth:

The project monitors the number of training courses and safety programs implemented to improve occupational safety and promote decent working conditions within its facilities. These actions aim to reduce the risk of workplace accidents and support continuous workforce development.

* SDG 9 – Industry, Innovation and Infrastructure:

The project promotes public-private collaboration in the field of waste treatment, through the implementation of cooperation programs with public research and educational institutions. These initiatives aim to drive innovation and the development of sustainable industrial practices.

* SDG 11 – Sustainable Cities and Communities:

The project contributes to sustainable urban waste management by ensuring the proper separation and composting of solid urban waste, thus avoiding its disposal in landfills. These actions improve environmental conditions in surrounding communities and reduce pressure on municipal waste systems.

* SDG 12 – Responsible Consumption and Production:

The project guarantees the recycling of all suitable waste collected through composting processes, reducing the environmental impact of organic residues and promoting the circular use of resources in line with sustainable production practices.

* SDG 13 – Climate Action:

The project monitors and controls the greenhouse gas emissions avoided by diverting organic waste from landfills and processing it through aerobic composting. These avoided emissions are quantified using the approved CDM methodology AMS-III.F and verified under a documented QA/QC system.

The validation team verified that the procedures for evaluating these contributions are described in the PDD and supported by operational records, training logs, collaboration agreements, and environmental monitoring data. These procedures enable transparent reporting and facilitate the tracking of SDG-related performance indicators over the project’s crediting period.

1. Based on the review of the PDD, supporting documentation, and interviews conducted during validation, ANCE verified that the project has identified specific SDGs to which it contributes (SDGs 8, 9, 11, 12, and 13), and has defined measurable indicators for each of them. These indicators are coherent with the SDG targets defined by the United Nations Statistical Commission and are adapted to the local context of project implementation.

The following table summarizes the SDG criteria and indicators reviewed:

Table 17. SDG analysis

|  |  |  |
| --- | --- | --- |
| SDG | UN Indicator | Project-Specific Measurement |
| SDG 8 – Decent Work and Economic Growth | 8.8.1 – Frequency rates of fatal and non-fatal occupational injuries | Number of fatal and non-fatal occupational injury reductions |
| SDG 9 – Industry, Innovation and Infrastructure | 9.5.1 – R&D expenditure as % of GDP | Number of visits and collaborative programs developed |
| SDG 11 – Sustainable Cities and Communities | 11.6.1 – Proportion of urban waste collected and properly treated | Tons of organic urban solid waste treated |
| SDG 12 – Responsible Consumption and Production | 12.5.1 – National recycling rate | Tons of waste reused in the composting process |
| SDG 13 – Climate Action | 13.2.1 – Countries reporting climate strategies or mitigation actions | Tons of CO₂e emissions avoided by the project activity |

These indicators are tracked through internal monitoring records, operational logs, and periodic evaluations. The validation team verified that the project has established mechanisms to collect the required data, including:

* Occupational safety records and training reports (SDG 8);
* Collaboration records with academic institutions (SDG 9);
* Weighing logs and waste reception documentation (SDGs 11 and 12);
* Emissions calculations based on CDM methodology AMS-III.F (SDG 13).

The indicators are quantitative, traceable and verifiable, allowing for transparent reporting during the crediting period. In addition, the project proponent demonstrated the capacity to update and improve the indicators in line with methodological or regulatory changes.

1. This criterion was assessed by the validation team from ANCE and classified as Not Applicable.  
   According to Section 4 of the PDD, the project is located in an area where no indigenous or traditional communities are present. This information is supported by official data from the Instituto Nacional de Asuntos Indígenas (INAI), the governmental authority in Argentina responsible for regulating and overseeing matters related to indigenous peoples and traditional territories.

The documentation includes a territorial map published under Law 26.160, which identifies areas of actual occupation, traditional territories, and public indigenous lands. The map clearly confirms that no indigenous territories or populations are located within or near the project area or its boundaries.

Based on this official information, the validation team concluded that the participation of indigenous or traditional communities was not required in the project’s design or implementation, as no such communities exist within the area of influence of the project.

1. The ANCE team reviewed the availability and quality of detailed information necessary to monitor project activities, evaluate the effectiveness of mitigation and preventive measures, and ensure the quality and consistency of the data used in the SDSs assessment, as required by the SDS Tool v1.1 of the BioCarbon Registry.
2. The project proponent has identified key environmental and social risks potentially associated with its activities (e.g., air and water pollution, inefficient resource use, flooding, gender inequality, stakeholder exclusion).
3. For each risk, the project established specific mitigation and monitoring procedures, which are documented and include responsible parties, measurement frequency, and verification methods. Examples include:
   * Annual laboratory analyses of air and water quality (phreatic wells and air monitoring stations).
   * On-site inspections of lixiviation pools to control flood risk.
   * Routine laboratory controls on compost (humidity, temperature, pH) to optimize resource efficiency.
   * Social indicators, such as the percentage of women hired and the number of training programs and visits with high female participation.
   * Stakeholder engagement protocols, including annual consultations and maintenance of communication channels.
4. The validation team verified that data collection methods are consistent, traceable, and supported by internal procedures, including:
   * Sampling protocols,
   * Laboratory reporting formats,
   * Staff responsibilities for data recording and communication,
   * Archives of results from monitoring campaigns.
5. The quality control (QA/QC) framework applied to SDS indicators aligns with the broader QA/QC system described in the Project Design Document (PDD), and follows general principles under ISO 14064-2.
6. This criterion was assessed by the validation team and classified as Not Applicable (N/A), as the project does not claim any co-benefits under a special category defined by the BioCarbon Registry Standard. Therefore, no monitoring procedures specific to special category co-benefits are required or applicable to this project.

The ANCE team evaluated the steps taken by the project proponent to ensure that the monitoring plan is based on an approved methodology, in accordance with the provisions outlined in Section 8 of the BCR Standard, and with consideration of:

* national circumstances and project context;
* monitoring good practices; and
* data quality assurance procedures under ISO 14064-2.

1. National circumstances and project context

The monitoring plan was developed considering Argentina’s regulatory framework, technical capacity, and waste management practices. Specifically, the project is implemented in a facility authorized under Resolución 102/2023 (Buenos Aires Province), which establishes technical requirements for composting installations. The plan reflects the actual operational conditions of the facility, including:

* The types and volumes of organic waste managed,
* The use of on-site infrastructure such as weighbridges, leachate pools, and composting areas,
* The absence of indigenous communities or traditional territories, confirmed through INAI (Instituto Nacional de Asuntos Indígenas) mapping.

1. Monitoring good practices

The monitoring plan is aligned with the CDM methodology AMS-III.F (version 12.0) and related tools, which have been approved under the BCR framework. The plan incorporates:

* A detailed allocation of responsibilities for data collection, processing, and reporting (PDD, Monitoring Plan, Section 4),
* The use of standardized procedures for recording key parameters (e.g., waste weight, compost quality),
* Periodic monitoring of environmental indicators (e.g., water and air quality) to track indirect impacts,
* Stakeholder communication practices and gender-sensitive indicators under the Sustainable Development Safeguards (SDSs) assessment.

1. Data quality under ISO 14064-2

To ensure the reliability and consistency of the monitored data, the project proponent has implemented a structured QA/QC procedure in line with ISO 14064-2, which includes:

* A checklist to verify the traceability, correctness, and completeness of input data and emission factors,
* Independent review of calculations, including reproduction of a sample of emission reduction estimations,
* Cross-checking of units, conversion factors, and database integrity,
* Archiving procedures for internal and external data, ensuring auditability throughout the crediting period.

The validation team reviewed the monitoring plan, internal procedures, and supporting evidence, and confirmed that the monitoring system is consistent with good international practices, technically sound, and suitable for ensuring the accuracy and credibility of GHG reduction reporting.

### Data and parameters determined at registration and not monitored during the quatification period, including default values and factors.

The ANCE team carried out the assessment of the project’s baseline, project emissions, and monitoring plan in strict accordance with the requirements established by:

* The BioCarbon Registry Standard,
* The BCR Monitoring, Reporting and Verification Tool,
* The BCR Validation and Verification Manual, and
* The approved CDM methodologies and methodological tools referenced in Section 8 of the BCR Standard.

1. Use of Approved Methodologies and Tools  
The project applies the small-scale CDM methodology AMS-III.F (version 12.0), “Avoidance of methane emissions through composting,” along with the following tools approved under the BCR framework:

* Tool 4: Emissions from solid waste disposal sites (version 08.1),
* Tool 5: Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation (version 03.0),
* Tool 13: Project and leakage emissions from composting (version 02.0).

The validation team reviewed the applicability conditions and verified that the project complies with the scope and requirements of each tool.

2. Application of Default Parameters and Data at Registration  
As part of the methodological application, the project uses default values and parameters not monitored during the crediting period, as permitted by the tools. These include emission factors, global warming potentials, and decomposition parameters, among others.

The following key parameters were reviewed and confirmed by the validation team:

* Emission factors for electricity generation (EF\_EF,j,y) sourced from national official statistics (CAMMESA and Secretaría de Energía Argentina), and applied as yearly averages per monitoring period.
* Transmission and distribution loss factor (TDLj,y), specific electricity consumption (SECcomp), and default fossil fuel emissions factor (EFFC), applied in line with Tool 13.
* Methane and nitrous oxide emission factors (EFCH4,y and EFN2O,y) used for project emissions calculations, sourced from Tool 13 and selected conservatively based on literature review.
* Model correction factor (φ\_y), oxidation factor (OX), and methane fraction (F), used in Tool 4 for landfill baseline estimation.
* Methane capture rate (fy) conservatively set to zero due to lack of verifiable and recent data for the Norte III landfill, despite CDM project references and public reports suggesting low efficiency in methane recovery.
* Global Warming Potentials (GWPCH4 and GWPN2O) from the IPCC Fifth Assessment Report (AR5), consistent with GHG Protocol guidelines.
* DOC, decay rate (kj), and DOCf per waste category, applied according to IPCC 2006 and Tool 4 tables.

ANCE verified that all parameter values and justifications are consistent with the relevant methodological tools and that conservative choices were made where uncertainty exists, such as the methane capture fraction.

3. Consistency with BCR MRV Tool and Verification Manual  
The validation team confirmed that the monitoring plan is in full alignment with the MRV Tool requirements, including:

* The identification and documentation of all monitored and fixed parameters,
* The clear definition of roles and responsibilities,
* The appropriate selection of default values where permitted, with supporting justification.

The validation process followed the principles of the BCR Validation and Verification Manual, including document review, plausibility checks, consistency with historical data, and evaluation of the quality control procedures under ISO 14064-2, ensuring data reliability and transparency.

4.6.3. Data and parameters monitored

The validation team from ANCE carried out an assessment of the data and parameters monitored by the project, in accordance with the requirements of the applied CDM methodology AMS-III.F (version 12.0), the associated methodological tools, the BCR Standard, the BCR Monitoring, Reporting and Verification (MRV) Tool, and the BCR Validation and Verification Manual.

* 1. Assessment of Monitored Parameters in Line with Methodological Requirements

The project monitors the parameter Wj,x or Qj (i.e., the amount of solid waste composted), which is a key variable used for both baseline and project emission calculations. The validation team verified that:

The waste is weighed upon entry into the composting facility using an on-site weighbridge, as required by Tool 13, paragraph 14 (option 1), and Tool 4, Table 11 (for application B).

Monitoring is carried out continuously, with daily data recording, supported by delivery notes, cargo manifests, and entry documentation.

Waste types are categorized based on the LER code (Lista Europea de Residuos) and specifications of the waste provider, consistent with the IPCC 2006 Guidelines.

All data are recorded, processed, and archived by the project holder, as defined in the monitoring plan section of the PDD.

* 1. QA/QC Procedures and Consistency with ISO 14064-2

The validation team confirmed that a comprehensive QA/QC checklist has been established by Hisoil and applied during each verification period. These procedures are consistent with ISO 14064-2 and include:

* Verification of units, emission factors, and transcription errors;
* Reproduction of emission calculations using sample datasets;
* Database integrity checks and labeling verification;
* Consistency reviews across reporting periods and emission sources;
* Evaluation of uncertainty estimates and expert assumptions;
* Archiving protocols and traceability of external data sources.

These procedures were reviewed and found to be robust, well-documented, and aligned with good GHG inventory practices.

* 1. SDG Contribution – Criteria and Indicators

The project defines and monitors specific indicators to assess its contribution to the following Sustainable Development Goals (SDGs):

SDG 8, SDG 9, SDG 11, SDG 12, and SDG 13.

For each SDG, the project has identified quantitative indicators (e.g., tons of waste composted, tons of CO₂e avoided, number of training courses or collaboration programs) and monitors these indicators through routine operational and administrative data collection. The validation team verified the consistency of these indicators with the SDS Tool v1.1 and the UN SDG framework.

* 1. Monitoring of Risks and Preventive Measures – SDS Tool Assessment

The project has also identified potential social and environmental risks, such as air/water pollution, resource inefficiency, flood risks, and limited stakeholder engagement. For each identified risk, the project established a monitoring or mitigation measure, including:

* Annual laboratory analysis of air and water quality;
* Routine inspection of compost quality and leachate pool levels;
* Social indicators such as gender inclusion and university collaborations;
* Annual stakeholder consultations.

The validation team reviewed these procedures and confirmed that the project has provided detailed and verifiable information for monitoring its safeguards performance.

5. Monitoring of Special Category Co-benefits

This criterion was assessed and considered Not Applicable, as the project does not claim any co-benefits under a special category defined by the BCR Standard. Therefore, no specific procedures for monitoring such co-benefits are required

The ANCE team concludes that the monitoring plan is fully consistent with the requirements of the applied CDM methodology, the associated tools, and the BioCarbon Registry framework. The data and parameters monitored are well defined, appropriately measured, and subject to documented quality control procedures. The project has also demonstrated compliance with the MRV requirements related to SDG contributions, safeguards monitoring, and methodological integrity.

4.6.3 Changes in the monitoring plan

4.6.3.1 Temporary deviations

As part of the validation process, ANCE evaluated whether there has been any temporary deviation from the monitoring plan proposed in the PDD, the applied methodologies, or other relevant regulatory frameworks.

Based on the review of project documentation, interviews with project personnel, and consistency checks of monitored data and procedures, no evidence of temporary deviations from the approved monitoring plan, the CDM methodologies (AMS-III.F, Tools 4, 5, and 13), or applicable regulatory requirements were identified.

Furthermore:

* No alternative monitoring arrangements were proposed or implemented by the project proponent.
* All data and parameters were monitored in accordance with the specifications established in the PDD and referenced methodologies.
* Measurement systems, data sources, QA/QC procedures, and emission calculations remain consistent with the methodology and the BioCarbon Registry Standard Operating Procedures.

4.6.3.2 Permanent changes to the monitoring plan, BCR program methodologies in use, or other regulatory documents related to BCR program methodologies

Based on the review of the PDD, monitoring procedures, applied CDM methodologies (AMS-III.F and related tools), and supporting documentation:

* No permanent deviations from the approved monitoring plan or from the requirements of the applied methodologies and tools have been identified.
* The monitoring approach remains consistent with the original methodological framework, including the parameters to be measured, measurement methods, QA/QC procedures, and frequency of data collection.
* No modifications to default values, emission factors, or data sources have been introduced that would affect the structure or integrity of the monitoring system.

Accordingly:

* The CAB confirms that there is no evidence of permanent deviations that would compromise the accuracy of the GHG emission reduction estimates.
* Therefore, no application of conservative assumptions or discount factors is necessary.
* The monitoring plan continues to meet the requirements established in the BCR Standard Operating Procedures for validated methodologies and registered projects.

The ANCE team concludes that the monitoring plan has not undergone permanent changes or deviations. The monitoring system remains fully aligned with the applied methodologies and the BCR regulatory framework, and no modifications have been made that would affect the environmental integrity of the reported emission reductions.

## Compliance with Laws, Statutes and Other Regulatory Frameworks

The ANCE team conducted an assessment of the project’s compliance with all applicable local, regional, and national laws, as well as relevant international frameworks related to GHG mitigation activities and the protection of human rights, including the rights of indigenous peoples.

1. Legal Compliance Framework

The project holder has implemented a documented legal compliance procedure through its Environmental Management Manual, which establishes responsibilities and processes for identifying, maintaining, and reviewing all legal requirements applicable to the operation of the Hisoil plant. The scope of this procedure includes:

* National, provincial, and municipal regulations relevant to industrial activities, waste management, air and water emissions, and environmental licensing;
* Permits, registrations, and authorizations, such as transportation manifests, treatment certificates, industrial zoning approvals, and emissions control documentation;
* Documentation control, with all original permits and records organized and updated in a dedicated filing system according to their regulatory category.

The legal register and compliance matrix were reviewed by the validation team and found to be complete and up to date. The matrix is subject to periodic internal audits, and was most recently updated and reviewed under EXPEDIENTE N° EX-2023-02018892-GDEBA-DRYEAIMAMGP (dated 01/09/2023).

1. Ongoing Legal Monitoring and Responsibilities

* Advisors in Environmental and Occupational Safety are responsible for continuously monitoring relevant legislation and informing company management of any new legal requirements or changes. Their role includes identifying compliance gaps and communicating them to plant management and company leadership.
* The Environmental and Safety Advisor ensures that all applicable legal obligations in their area are met. Although their responsibility is limited to detection and reporting, the system ensures that appropriate corrective actions can be taken by the responsible parties.
* The project’s compliance review process is ongoing and integrated into the broader management system to ensure continued alignment with evolving legal requirements.

1. Compliance with Human Rights and Indigenous Peoples' Rights

The validation team confirmed that the project is located in an area where there are no indigenous or traditional communities, as verified through official maps from the Instituto Nacional de Asuntos Indígenas (INAI), in accordance with Law 26.160. Therefore, there is no risk of infringement on the rights protected under the United Nations Declaration on the Rights of Indigenous Peoples or ILO Convention 169.

## Carbon ownership and rights

As part of the validation process, the Conformity Assessment Body (ANCE) carried out a detailed review of the documentation related to carbon rights ownership, land tenure, and stakeholder participation, in accordance with the requirements of the BioCarbon Registry (BCR) Standard and relevant international frameworks such as the United Nations Declaration on the Rights of Indigenous Peoples and ILO Convention 169.

Ownership of Carbon Rights

The project proponent, Hisoil SRL, declared that 100% of the carbon rights generated by the project will remain within the company. The validation team reviewed the Municipal Provisional License Certificate (Expediente N° 4036-20928/7), where Mr. Gabriel Prieto is identified as the legal representative of Hisoil and responsible for the composting operation.

Additional documentation supporting legal recognition of the activity includes:

* Certificate of Zoning, issued under Law N° 11.459,
* Applicable regulatory frameworks including Decree N° 531/19 and its amendment MOD 973/20,
* Declared activity: Composting of Municipal Solid Waste (RSU).

The project does not involve land leasing, third-party rights transfers, or partnerships with external project participants. As such, no additional contractual agreements were required to establish carbon rights ownership.

Assessment of Indigenous and Local Community Rights

The project location was assessed with respect to the presence of indigenous or traditional communities. According to official territorial maps issued by the Instituto Nacional de Asuntos Indígenas (INAI) and based on Law 26.160, there are no indigenous territories or traditional occupation areas in or near the project boundaries (as referenced in Figure 6 of the PDD).

Therefore:

* No indigenous peoples or traditional communities are affected by the project.
* No additional stakeholder consent processes (e.g. free, prior and informed consent – CPLI) were required.
* This condition is consistent with Section 5.3 of the PDD, where Hisoil confirms sole land ownership and operational responsibility.

Transparency and Stakeholder Engagement

Although the project does not require specific community consent or shared carbon rights agreements, Hisoil has expressed its intent to continue collaborating with stakeholders through social engagement and environmental education activities.

## Risk management

The project proponent completed the risk analysis using the BCR Tool v1.1, identifying and scoring risks across environmental, financial, and social categories. The validation team reviewed the completed tool and verified that:

* All identified risks were scored as “low”, meaning their potential impact is estimated to be less than 5% of the cumulative carbon benefits.
* In accordance with the tool, no mitigation measures or ongoing monitoring are strictly required for low-risk items; however, the project has defined preventive measures in case risk levels change in future verification periods.
* No medium or high risks were identified. Therefore, the conditions for mandatory mitigation or discount factors were not triggered.

1. Environmental Risks

The validation team confirmed that the project holder has considered a range of environmental risks, including floods, wind, fire, air and water pollution, and transportation incidents. The project has implemented or planned infrastructure and operational controls, such as:

* Lixiviation pools designed to manage rainwater and prevent flooding,
* Vegetative wind barriers,
* Dust suppression and air quality monitoring (VOC detectors),
* Fire prevention systems and emergency response plans,
* Road signage and traffic safety protocols.

These measures are consistent with the preventive approach described in the BCR tool and are integrated into the Environmental Management Manual and operational documentation.

1. Financial Risks

Two potential financial risks were identified: increases in operating costs and low cash flow. Mitigation measures include:

* Supplier diversification to reduce exposure to material transport costs,
* Expansion of the client base to increase financial resilience and cash inflows.

These actions are considered adequate given the project’s current scale and operational maturity.

1. Social Risks

Social risks were assessed as low and focused on:

* Policy changes at the government level,
* Communication issues with local stakeholders.

The project has implemented a Communication and Consultation Plan, and maintains collaboration with municipal authorities, which was verified during document review. Although no indigenous or traditional communities are present in the project area (as confirmed through INAI and Law 26.160), the project still maintains open stakeholder channels to ensure alignment with local interests.

1. Leakage and Non-Permanence

The project implements control measures to reduce leakage risks and ensure environmental integrity, including:

* Screening and classification of incoming waste (must be organic and non-hazardous),
* Complete traceability of waste received and composted,
* Avoidance of landfill disposal and associated methane emissions,
* Ongoing compliance with Annual Environmental Authorization (Resol-2019 316) requirements under Argentine legislation.

The validation team verified that these procedures are consistent with the leakage prevention requirements outlined in Methodological Tools 4 and 13, and support the reliability of the GHG reduction claims.

1. Monitoring Frequency and Integration with Verification

The project holder stated that monitoring for risk and permanence will be conducted in coordination with the GHG verification cycles (every three years). The data required for this process overlaps with the operational monitoring already implemented for regulatory and environmental compliance, which is an efficient and consistent approach.

## Sustainable development safeguards (SDSs)

During the validation process, ANCE confirmed that the project holder conducted a comprehensive environmental and social assessment using the most recent version of the BCR Tool “Sustainable Development Safeguards (SDSs), version 1.1”. This assessment included a systematic identification of potential negative impacts on biodiversity, ecosystems, natural resources, and local communities within the geographical boundaries of the project.

The assessment was structured according to the thematic areas defined in the SDSs tool: Land Use, Water, Biodiversity and Ecosystems, Climate Change, Labor and Working Conditions, Gender Equality, Land Acquisition and Displacement, Community Health and Safety, Corruption, Economic Impact, and Governance and Compliance. For each area, the project holder evaluated whether the project could potentially generate negative impacts and, if applicable, described the preventive or mitigation measures implemented to manage such risks.

The validation team confirmed that the assessment was based on recent and verifiable references (EXPEDIENTE N° EX-2023-02018892- -GDEBA-DRYEAIMAMGP), including field inspections, environmental monitoring reports, technical specifications of the composting process, and regulatory compliance documents (e.g., municipal permits, CAA, and legislative matrix). In addition, the location of the project was cross-checked against INAI’s official cartography to verify the absence of indigenous or traditional territories, as required by national legislation and international instruments (e.g., ILO Convention 169).

The evaluation also confirmed that no activities resulting in net harm to the environment or local communities have been identified. On the contrary, the project provides benefits through improved waste management, reduction of GHG emissions, generation of local employment, and promotion of sustainable practices. The tool concluded that all identified risks were low and none of them exceeded the threshold of 5% of accumulated carbon benefits, which aligns with the SDSs risk tolerance criteria. No medium or high risks were reported.

The process of environmental and social due diligence was conducted in accordance with the BCR Standard and consists of:

* Implementation of a legal compliance system, including a documented Environmental Management Manual and a legal matrix audited under official procedures (EXPEDIENTE N° EX-2023-02018892- -GDEBA-DRYEAIMAMGP).
* Periodic monitoring of environmental parameters (e.g., phreatic wells, air quality, lixiviation pools).
* Public notification mechanisms included in the municipal permitting procedures (Doc. 4036-20288/7).
* Preventive actions for occupational health and safety, gender equity, and grievance mechanisms (Internal Occupational Safety Manual, approved).

## Stakeholder engagement and consultation

During the validation process, ANCE, the stakeholder consultation for the Hisoil project was conducted through a comprehensive and participatory approach. The project holder identified and mapped all relevant stakeholder groups, including:

* Local communities
* Local authorities
* National and regional governmental bodies
* Workers
* Suppliers
* Customers
* Professional associations
* Universities

This mapping was accompanied by a socio-economic baseline study, confirming that the nearest population center is located over 2 km from the project facilities, with no nearby indigenous communities or traditional territories (according to INAI and Law 26.160).

* + 1. Stakeholder Interests, Risk Identification, and Mitigation Measures

Stakeholder interests were considered through various engagement mechanisms such as:

* Annual meetings with local authorities and neighbors
* Guided visits to the facility
* On-site suggestion box and complaint registry
* Communication via website and social media
* Internal feedback channels for workers and customers
  + 1. Risks were identified and mitigated as follows:
* Road conditions: Concerns raised by local communities regarding the road to the premises were addressed through maintenance and improvement actions initiated by Hisoil.
* Worker feedback: Several workplace improvement actions were taken following internal consultations.
  + 1. Summary of comments received

During the consultations, the following concerns and suggestions were raised:

From the local community:

* Concern about road conditions due to increased traffic and meteorological effects.

From workers:

* Insufficient lighting in the chemical bath area.
* Need for better transport options to reach the facility.
* Request for an extra mobile phone to improve interdepartmental communication.
* Concerns regarding behavior and order in the employee canteen.

Additional comments were positive and encouraged Hisoil to continue its environmental and social efforts.

All comments were documented and appropriately addressed:

* Road maintenance: Hisoil has taken steps to improve the road to the facility, as reflected in meeting minutes signed by both parties.
* Lighting improvement: Battery-operated lighting was installed in the chemical bath area.
* Transport to the facility: Due to the absence of public transport, the company now promotes carpooling and offers loans for vehicle purchases.
* Interdepartmental communication: A new mobile phone was purchased for internal coordination.
* Canteen behavior: Lockers were installed, and awareness campaigns and meetings were held to reinforce workplace norms.

The project maintains open communication channels and regularly engages stakeholders to ensure continued alignment with environmental and social goals.

* + 1. Invitation to comment and documentary evidence

The project has provided evidence that invitations to participate and comments were issued through:

* Direct meetings
* Social media and website publication
* Ongoing communication with stakeholders and authorities
* Documented meeting minutes and attendance lists

No formal complaints or grievances have been recorded to date.

The stakeholder consultation process has been robust, transparent, and inclusive. It demonstrates conformance with the BCR Standard and the principles outlined in the “Sustainable Development Safeguards” (SDSs) tool. Stakeholders have had multiple opportunities to express concerns, all of which were properly addressed. The consultation documentation, including a list of comments and response actions, confirms that stakeholder engagement was meaningful and ongoing. No unresolved complaints remain, and the project continues to be supported by local, regional, and national institutions.

## Public consultation

During the official public consultation period, held from August 22, 2024, to September 21, 2024, no public comments were received through the established channels.

The project holder ensured that information about the project and the public consultation process was made available through appropriate platforms, including the BCR website and the project’s communication channels (website and social media). The mechanisms for submitting comments remained open and accessible throughout the consultation period.

# Verification findings

The verification of the GHG mitigation project was conducted in accordance with the applicable requirements of the BioCarbon Registry (BCR) Standard, version 3.4, and the Validation and Verification Manual (VVM). The verification process included a comprehensive review of the Project Design Document (PDD), supporting technical documentation, site visit observations, stakeholder consultation, and interviews with key personnel.

The verification team employed a risk-based sampling approach and reviewed the application of approved CDM methodology AMS-III.F (version 12.0) and its associated tools. The assessment included a thorough evaluation of the baseline scenario, additionality, monitoring plan, GHG emission reduction calculations, stakeholder consultation, social and environmental safeguards, and legal and regulatory compliance.

As a result of the verification, a total of eight Corrective Action Requests (CARs) and four Clarification Requests (CLs) were issued. These findings were duly addressed by the project proponent, and all were satisfactorily closed based on the submission of additional evidence and/or revision of documentation. The evidence reviewed and the corresponding responses are detailed in Annex 3 of this report.

The closure of all CARs and CLs confirms that the project complies with the applicable verification requirements of the BCR Standard and VVM. The verification team concludes that the project meets the necessary criteria for registration under the BCR program and that the emission reductions are real, measurable, and verifiable.

## Project and monitoring plan implementation

### Project activity implementation

The assessment of the implementation and operational status of the project was conducted in accordance with the validated Project Design Document (PDD), the validated Monitoring Plan, and the applicable verification requirements established under the BioCarbon Registry (BCR) Standard and its associated Monitoring, Reporting and Verification (MRV) Tool (version 2.0).

The verification team confirmed that the project has been fully implemented and is operational as of the current monitoring period. Site visits, document reviews, and interviews with project personnel provided sufficient evidence that the composting facility is functioning in accordance with the technical specifications outlined in the PDD. The physical infrastructure, including the waste reception area, calibrated weighbridge, composting piles, leachate management systems, and laboratory, was observed to be in place and actively used in the composting operations.

The implementation of the monitoring system, as described in the validated Monitoring Plan, was verified through a review of operational records, data logs, and QA/QC documentation. The key monitored parameter, quantity and type of organic waste treated, was confirmed to be recorded continuously, with traceable documentation through delivery manifests, LER codes, and weighing system logs. The verification team also reviewed the calculation of baseline and project emissions, leakage, and SDG contributions, and confirmed that these were performed in compliance with the validated methodologies (AMS-III.F and associated tools).

Furthermore, the roles and responsibilities for monitoring and data management, as outlined in the Monitoring Plan, were verified through organizational charts and interviews. Evidence confirmed that staff have been trained and that data collection, storage, and reporting procedures are consistently followed. The project has also complied with environmental and social safeguards, and has maintained its operational permits and environmental authorizations as required by local regulations.

The process for assessing discrepancies between project implementation and the validated project description involved a systematic and multi-step verification approach, conducted in accordance with the BioCarbon Registry (BCR) Standard, the BCR Validation and Verification Manual (VVM), and the approved monitoring methodologies.

1. Document Review: The verification team performed a comprehensive review of the validated Project Design Document (PDD), the Monitoring Plan, applied methodologies (AMS-III.F and associated tools), and supporting technical documentation. This allowed for a clear understanding of the planned implementation, expected operational procedures, and defined monitoring parameters.
2. Site Visit and Observation: A physical site inspection was conducted to assess the actual implementation status of the project. The team observed key infrastructure and operational systems (e.g., composting areas, waste reception and weighing stations, leachate management, and monitoring instruments) and verified that they align with the descriptions in the PDD.
3. Interviews with Project Personnel: Personnel responsible for the day-to-day operations and monitoring activities were interviewed to confirm roles and responsibilities, internal procedures, and operational practices. These interviews were used to cross-check the implementation status with the validated project documentation.
4. Review of Monitored Data and Records: Data on waste quantities, LER codes, manifests, and emission reduction calculations were reviewed for completeness and accuracy. The QA/QC systems in place were also assessed to verify consistency with ISO 14064-2 and the PDD.
5. Discrepancy Identification and Resolution: Any apparent discrepancies between the validated project description and field observations or documentation were flagged. In particular, findings were raised where inconsistencies existed (e.g., with respect to waste types or technology descriptions), and project proponents were asked to provide clarifications or additional evidence. This included submission of updated or supporting documents such as operational protocols, manifests, third-party reports, and photographic evidence.
6. Corrective Actions and Clarifications: Where necessary, corrective action requests (CARs) and clarification requests (CLs) were issued. The project proponent responded with evidence and revised statements to resolve inconsistencies. A total of 8 CARs and 4 CLs were closed prior to finalizing the verification.

The verification team conducted a comprehensive assessment of the project implementation by evaluating multiple sources of information and performing structured cross-checks, in accordance with the BioCarbon Registry (BCR) Standard, the Validation and Verification Manual (VVM), and the document project. The assessment aimed to determine whether the actual implementation of project activities was consistent with the validated design, methodologies, and monitoring plan.

The following categories of information were reviewed:

* Project Document
* Monitoring report
* Applicable CDM methodology AMS-III.F (version 12.0) and tools (Tools 4, 5, and 13)
  + Calculation HiSoil 111124.xlsx
* Operational Records:
  + Residuos Hisoil para Polaris.xlsx
* Susntentable Develoment Goals
  + BCR\_SDG-HiSoil.xlsx
* Supporting Evidence:
  + Verification of units, emission factors, and transcription errors;
  + Reproduction of emission calculations using sample datasets;
  + Database integrity checks and labeling verification;
  + Consistency reviews across reporting periods and emission sources;
  + Evaluation of uncertainty estimates and expert assumptions;
  + Archiving protocols and traceability of external data sources.
  + PROCEDIMIENTO ESPECÍFICO PE.09.01 – Procedimiento Interno de Ingreso de Residuos” (dated 09 April 2023)
  + Certification documents (Certificado de Aptitud Ambiental)
* Stakeholder Engagement:
  + Minutes of meetings with community members
  + Records of internal feedback and implemented worker safety measures
* Visual and On-site Observations:
  + Composting infrastructure
  + Leachate management facilities
  + Waste reception and weighing areas

To ensure data integrity and consistency with the validated design, the following cross-checks were applied:

* DataTriangulation: Monitored data (waste quantities, types) were cross-checked against delivery manifests, entry logs, weighbridge records, and inventory sheets to confirm accuracy and consistency.
* Methodological Consistency: Emission reduction calculations were reproduced using selected data samples and compared with results presented by the project proponent, to verify consistency with AMS-III.F and associated tools.
* On-site Confirmation: Physical infrastructure (e.g., leachate pools, compost windrows, monitoring equipment) was visually inspected to confirm existence, location, and operation in accordance with the validated description.
* Stakeholder Claims Verification: Social and environmental engagement claims were cross-checked with meeting minutes, photographic evidence, and interviews with project staff and community members.
* Regulatory Compliance: Compliance with national regulations was verified through review of licenses, provincial resolutions (e.g., Resolución 102/2023), and documents submitted to government agencies.

Based on the assessment and evidence gathered, the implementation of the project activities is consistent with the validated activities described in the PDD and monitoring plan. All key aspects, waste types and quantities, composting procedures, emission reduction calculations, stakeholder engagement, environmental safeguards, and QA/QC systems, were implemented as described, and verified through documentation, direct observation, and cross-referenced data.

The conclusion was reached through:

* Closure of all Corrective Action Requests (CARs) and Clarification Requests (CLs) raised during validation and verification;
* Alignment of monitored parameters with those validated, both in terms of methodology and frequency;
* Consistent findings across all data sources and evidence reviewed, including site visit results;
* Confirmation that no temporary or permanent deviations occurred from the validated methodologies or monitoring procedures.

The project is therefore deemed compliant with the BCR Standard and applicable verification requirements, and its implementation has been robustly verified.

### Monitoring plan implementation and monitoring report

The validation and verification team from ANCE carried out a comprehensive assessment of the implementation of the monitoring plan and the monitoring report in accordance with the validated version of the Project Design Document (PDD), the CDM methodology AMS-III.F (version 12.0), and the BioCarbon Registry (BCR) tool “Monitoring, Reporting and Verification (MRV)” version 2.0. The assessment involved a thorough review of technical documentation, including the monitoring plan and internal procedures, complemented by a site visit to the composting facility. During the site visit, the team verified the operational status of key infrastructure such as the weighbridge, composting areas, leachate pools, and environmental monitoring systems, and conducted interviews with the personnel responsible for data collection, processing, and reporting. The monitoring responsibilities were confirmed to be distributed among qualified staff as described in the validated PDD. In parallel, ANCE reviewed the monitoring report to evaluate consistency with the validated project boundaries, project activities, QA/QC procedures, and data and parameters reported. The reported data, including the amount of waste composted, were cross-checked against physical records such as delivery manifests, entry logs, and weighbridge data. Emission reductions were recalculated using sample datasets to verify the correct application of emission factors, formulas, and assumptions in line with the approved methodologies and tools. The implemented QA/QC procedures were also examined, including document traceability, uncertainty assessment, and data validation protocols, confirming their alignment with ISO 14064-2. The validation and verification team found no deviations from the validated monitoring plan or methodologies, and concluded that the monitoring system had been correctly implemented and the monitoring report was accurate, consistent, and in full compliance with the requirements of the BioCarbon Registry MRV Tool.

The monitoring report was assessed in detail to ensure consistency with:

* The validated project boundaries (geographical, sectoral, and temporal);
* The project activities and technologies described in the validated PDD;
* The methodologies and tools applied (AMS-III.F, Tool 4, Tool 5, and Tool 13);
* The MRV requirements of the BCR Standard.

The assessment included the following steps:

* Cross-check of monitored data: The reported quantity of composted waste was verified against delivery manifests, weighbridge logs, and entry records. These were categorized by LER code and matched to the relevant DOC and kj values per methodology.
* Review of emission calculations: Emission reduction estimates were recalculated using sample data, confirming the consistency and correctness of formulas, emission factors, and baseline assumptions.
* Assessment of QA/QC implementation: Procedures for checking emission factors, uncertainty evaluations, and archiving documentation were reviewed. The checklist for QA/QC as required by ISO 14064-2 was applied and confirmed during the audit.
* Evaluation of project boundary: The project boundary was defined and respected, with no changes detected. The physical area, time frame, and activities included were consistent with the validated documents.
* SDG and safeguards review: Contributions to SDGs and safeguards monitoring were also reviewed based on evidence such as environmental test reports, training logs, and stakeholder engagement documentation.

ANCE confirmed that the GHG project holder fully complied with the requirements of the BCR tool “Monitoring, Reporting and Verification (MRV)” version 2.0. Specifically:

* The project distinguishes fixed and monitored parameters and applies approved methodologies and tools.
* QA/QC procedures are aligned with ISO 14064-2 and integrated into the project’s monitoring system.
* Emission reductions and leakage estimates are calculated according to the required frequency (every three years), and using the most recent applicable methodologies.
* Documentation is traceable, verifiable, and transparently presented.

#### Data and parameters

##### Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors

The Conformity Assessment Body (CAB) assessed whether the parameters specified at registration but not monitored during the quantification period were applied in accordance with the approved methodologies. This assessment included a detailed cross-check of default values and fixed parameters used in the emissions estimation spreadsheet titled "Calculation HiSoil 111124.xlsx".

All parameters were verified against the latest versions of the applicable methodological tools (AMS-III.F v12.0, Tool 4 v08.1, Tool 13 v02.0), and compliance was confirmed for each case. For IPCC-based default values, the most recent available data were applied, in accordance with ISO 14064-3 clause 7.1.4.13 and the BCR Standard. The following parameters were reviewed and confirmed:

* EFEF,j,y: Emission factor for electricity generation (CAMMESA/Argentina Government data).
* TDLj,y: Technical distribution losses (15% from IEA/World Bank).
* SECcomp,default: Specific electricity consumption for composting (Tool 13).
* EFFC,default: Emission factor for fossil fuel used in composting (Tool 13).
* EFCH4,y: Methane emission factor per tonne of waste composted (Tool 13).
* EFN2O,y: Nitrous oxide emission factor per tonne of waste composted (Tool 13).
* GWPN2O: Global Warming Potential for N₂O (265, IPCC AR5).
* GWPCH4: Global Warming Potential for CH₄ (28, IPCC AR5).
* φ\_y: Model correction factor (0.85, Tool 4).
* fy: Fraction of methane captured (assumed 0 based on lack of verifiable evidence for Norte III).
* OX: Oxidation factor for SWDS (0.1, Tool 4).
* F: Methane fraction in landfill gas (0.5, Tool 4).
* DOCf,y: Fraction of DOC that decomposes (0.5, Tool 4).
* DOCj: Degradable Organic Carbon per waste type (Tool 4 & IPCC).
* kj: Decay rate per waste type (Tool 4).
* MCFy: Methane correction factor (1.0 for managed SWDS, Tool 4).
* y: Year of crediting period (1 to 10, defined at registration).

All values were transparently applied in the spreadsheet and consistent with the registered monitoring plan and methodological guidance. No discrepancies were identified, and therefore, the CAB concludes that the use of these parameters complies with applicable verification requirements.

##### Data and parameters monitored

The methodology used to assess the data and parameters monitored for the project included a comprehensive evaluation of the key monitored parameter Wj,x or Qj, representing the amount of waste composted and avoided from disposal in a solid waste disposal site (SWDS).

(a) The monitored values for each period used to calculate emission reductions are summarized below:

Table 18. Data and parameters monitored

|  |  |
| --- | --- |
| **Monitoring Period** | **Wj,x or Qj (tonnes)** |
| 01/08/2019 – 31/07/2020 | 17,679.67 |
| 01/08/2020 – 31/07/2021 | 28,818.17 |
| 01/08/2021 – 31/07/2022 | 29,359.75 |
| 01/08/2022 – 31/07/2023 | 37,470.71 |
| Total | 113,328.30 |

(b) Measurement was conducted using an on-site calibrated weighbridge, as established in paragraph 14 of Tool 13 and Tool 4 (version 08.1). Calibration certificates were reviewed and confirmed as valid during the verification visit, and the equipment meets industrial standards for legal metrology with documented accuracy class.

(c) Measurement is carried out at the time of each truck’s entrance, with data recorded daily in electronic logs. Classification by waste type was conducted using the European Waste Code (LER), supported by provider documentation and verified by the project holder during cargo inspection.

(d) The primary data sources include delivery notes, cargo manifests, and access records into the Hisoil composting facility. Each document was archived and linked to specific entries in the monitoring spreadsheet (“Calculation HiSoil 111124.xlsx”).

(e) No calculation method was applied to determine the parameter’s value, as it was directly measured. However, conversion and classification procedures were verified to ensure consistency with IPCC 2006 guidelines.

(f) The project holder implemented a QA/QC checklist aligned with ISO 14064-2. It includes verification of data transcription, unit consistency, cross-checks of emission calculations, and assessment of data aggregation and storage. The validation team confirmed the application of all QA/QC procedures and the traceability of the parameter across time periods.

(g) Relevant IPCC default values and emission factors were cross-checked against the latest versions of Methodological Tools 4 and 13. These include values for DOC, DOCf, EFCH4, EFN2O, and model correction factors (φy, fy), which were applied consistently and are referenced in the respective calculation files.

In conclusion, the parameter Wj,x or Qj was monitored in accordance with the validated monitoring plan and applied methodologies. The measurement process, QA/QC controls, equipment calibration, and classification criteria were verified and found to be accurate, consistent, and reproducible. Cross-checking of data sources and documentation confirmed the integrity of the data used to estimate GHG emission reductions.

#### Environmental and social effects of the project activities

The verification team assessed the monitoring of environmental and social effects of the project activities based on the documentation submitted by the project proponent and findings gathered during the on-site audit. The assessment included a review of the project’s application of the SDS tool, compliance with national environmental legislation, and the implementation of mitigation and engagement measures as outlined in the validated PDD.

For environmental aspects, the project was found to have implemented effective monitoring and mitigation practices, including groundwater sampling through phreatic wells, air quality monitoring with VOC detectors, and infrastructure such as leachate retention pools and runoff management systems to prevent soil contamination. These practices are consistent with regulatory requirements and are verified during the annual environmental audits required for project authorization in Argentina. Supporting documentation, including laboratory results and monitoring records, were cross-checked during the verification to confirm compliance, observed in “Controles ambientales 08-2019 a 08-2024” folder:

Table 19, Resume of environmental management 08-2019 a 08-2024

|  |  |  |
| --- | --- | --- |
| **Inform** | **Laboratory** | **Conclusion** |
| Environmental monitoring of phreatic wells | Labca, 20-20913567-2 | Comply. |
| Environmental air quality monitoring | Labca, 20-20913567-2 | Comply. |
| Quality monitoring monitoring | Labca, 20-20913567-2 | Comply. |
| Soil informs | Labca, 20-20913567-2 | Comply. |

For social aspects, the project demonstrated stakeholder engagement through periodic community meetings and internal feedback mechanisms. The verification team reviewed meeting minutes signed by project representatives and local stakeholders, which recorded concerns—such as access road conditions—and documented corrective actions implemented by the project. Additionally, worker suggestions were addressed through workplace improvements (e.g., lighting, transport support, and communal facility enhancements), all of which were evidenced through photographs, invoices, and internal communications.

No formal grievances were reported during the monitoring period; however, the project maintains an active grievance mechanism and communication channels with community members and workers. These were confirmed through interviews and document reviews.

Based on this evidence, the verification team concludes that the monitoring of environmental and social effects has been effectively implemented in accordance with the BCR Standard and the validated monitoring plan. The project demonstrates ongoing compliance with applicable safeguards and maintains appropriate systems for stakeholder engagement and risk mitigation.

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#### Procedures for the management of GHG reductions or removals and related quality control for monitoring activities

The assessment of the procedures implemented for managing GHG reductions and the associated quality control of the monitoring activities confirmed that the project holder has established and maintained a robust system in line with the validated monitoring plan and applicable verification requirements. The estimation of GHG reductions is based on the methodology AMS-III.F and its associated tools, and is calculated every three years as per the monitoring period. The project has implemented documented procedures (INTERNAL PROCEDURE FOR WASTE INTAKE, Nº PE.09.01) to ensure accurate tracking of the amount of composted waste (Qj) through continuous daily measurement using a calibrated weighbridge, with supporting documentation including delivery notes and cargo manifests. The QA/QC system, aligned with ISO 14064-2, includes internal checklists, double verification of operational and laboratory data, and an annual environmental audit to ensure data integrity and compliance. Additionally, compost quality is regularly verified through laboratory analyses, and the application of compost is monitored through buyer engagement and quality feedback mechanisms. Based on the cross-checking of documents, field evidence, and the verification of calculation models, the validation and verification team concludes that the procedures implemented are adequate, effective, and fully consistent with the validated monitoring plan and applicable verification requirements..

#### Description of the methods defined for the periodic calculation of GHG reductions or removals, and leakage

The assessment of the monitoring of the defined methodologies for the periodic calculation of GHG reductions, removals, and leakage was conducted in accordance with the validated monitoring plan, the applied methodology AMS-III.F (version 12.0), and the relevant tools. The project participant has implemented procedures to ensure that the calculation of emission reductions follows the latest applicable versions of the methodology and associated tools. As verified, the project emissions are calculated every three years based on the equation ERy = BEy – (PEy + LEy), as specified in paragraph 29 of AMS-III.F.

The calculation of project emissions includes emissions from fossil fuel and electricity consumption, as well as composting activities. While actual monitoring of energy consumption is under development, default values have been correctly applied following Tool 13 and Tool 5, with justification based on official sources such as the Government of Argentina, IPCC, and the World Bank. Baseline emissions are determined using Tool 4, with parameters such as DOCj, kj, φ\_y, fy, MCFy, and others applied according to IPCC 2006 Guidelines and methodology specifications. The parameter Wj/Qj is monitored on a daily basis through weighbridge systems and validated documentation (manifests, LER codes, and waste entry records).

The verification team cross-checked the calculations using the file "Calculation HiSoil 111124.xlsx" and verified the consistency and accuracy of the values applied, the sources used, and the implementation of QA/QC procedures, including double verification and traceability protocols in accordance with ISO 14064-2.

The verification team concludes that the monitoring and application of the methodologies for the periodic calculation of GHG reductions and removals, and the assessment of leakage (which is not applicable in this project), have been conducted in line with the requirements of the BCR Standard and the applied methodologies. The procedures implemented by the project participant are considered adequate, consistent, and reliable.

#### Assignment of roles and responsibilities for monitoring and reporting the variables relevant to the calculation of reductions or removals

The verification process included a detailed review of the roles and responsibilities assigned for monitoring and reporting the variables relevant to the calculation of GHG reductions or removals. As described in the validated monitoring plan and confirmed during the on-site audit, the project holder has established a clear internal organizational structure that defines responsibilities for data collection, equipment operation, record-keeping, data verification, and reporting.

The personnel involved in monitoring activities are trained in the procedures related to the operation of the weighbridge, classification of waste types, documentation of incoming loads, compost pile control, and laboratory analyses. The Environmental Management team is responsible for ensuring the traceability and consistency of the data used for calculating emission reductions, while the Quality Assurance team oversees internal controls and performs cross-checks to detect inconsistencies or deviations.

The assignment of responsibilities is supported by internal procedures, such as the “Internal Procedure for Waste Reception” and “Compost Quality Control Protocol,” which detail the monitoring frequency, documentation requirements, and QA/QC measures aligned with ISO 14064-2 and the BCR MRV Tool. The verification team confirmed through interviews and documentation review that responsibilities are clearly assigned and implemented in practice.

The verification team concludes that the responsibilities related to monitoring and reporting have been adequately assigned and implemented. The project demonstrates a sound organizational structure and internal procedures that ensure the reliability and consistency of the data relevant to the calculation of emission reductions or removals..

#### Procedures related whit the assessment of the project contribution whit the Sustainable Development Goals (SDGs)

The V&V team assessed the monitoring procedures implemented to demonstrate the project's contribution to the SDGs, in accordance with the BCR Standard and its “SDG Tool.” The review included the validated PDD, the annexed SDG Tool, operational records, interviews, and evidence collected during the on-site visit.

The project aligns with five SDGs: 8, 9, 11, 12, and 13. For each of these goals, the project proponent defined verifiable indicators and specific monitoring procedures. During the first ex-post verification period (01/08/2019–31/07/2023), data were collected on metrics such as the number of occupational injuries, collaboration programs developed, tons of urban solid waste treated and reused through composting, and tons of CO₂e emissions avoided. The indicators were supported by documentation including safety logs, production records, and GHG calculation reports.

The use of the BCR SDG Tool enabled a structured and consistent approach aligned with the global targets, with clear, traceable, and reliable data collection and verification processes.

The verification team concludes that the monitoring procedures and the selected indicators were implemented appropriately, consistently, and in line with BCR requirements. The project’s contribution to the SDGs is properly justified and has been monitored based on verifiable evidence.

#### Procedures associated with the monitoring of co-benefits of the special category, as applicable

This requirement is not applicable to the project activity, as declared by the project proponent. No additional benefits or co-benefits beyond those reported under the SDG Tool were identified or monitored. Therefore, no specific criteria, indicators, or categories related to co-benefits have been established or assessed.

## Quantification of GHG emission reductions and removals

To assess the consistency of the GHG emission reductions quantification, the verification team followed a structured process based on the applicable requirements of the applied methodology AMS-III.F, the associated methodological tools (Tool 4 and Tool 13), and the BCR Validation and Verification Manual (VVM). The steps included:

1. Document review: The verification team assessed the Monitoring Report, the PDD, and the emission reduction calculation file ("Calculation HiSoil 111124.xlsx"). All calculations were cross-checked against the equations and parameters prescribed in AMS-III.F and associated tools. This included verifying that the baseline emissions, project emissions, and leakage were calculated using the correct formulas and default values.
2. Verification of parameters: Each monitored and default parameter used in the emission reduction estimation was reviewed to ensure it matched the validated monitoring plan and the most recent versions of the applicable methodologies. For monitored data (e.g., Wj,x or Qj), the verification team confirmed consistency with source documentation such as weighbridge records, cargo manifests, and internal control systems. For default values (e.g., DOCj, φy, EFCH4,y), the latest values from the applicable methodological tools and IPCC 2006 Guidelines were confirmed and applied appropriately.
3. Consistency of assumptions and calculations: A representative sample of the emission reduction calculations was reproduced by the verification team to confirm mathematical accuracy. Unit conversions, time periods, and parameter application were cross-checked for consistency. Data trends were reviewed across all quantified years to detect anomalies or deviations from expected patterns.
4. Assessment of QA/QC procedures: The implementation of internal quality control procedures (aligned with ISO 14064-2) was evaluated. These included checks on data entry, consistency across datasets, internal audits, and the treatment of uncertainty.
5. On-site verification and interviews: During the site visit, the team confirmed with operational staff how the data is collected, processed, and stored. The implementation of monitoring practices and internal validation of the data flows were verified to be in accordance with the monitoring plan.

### Methodology deviations (if applicable)

This requirement is not applicable, as no deviation from the selected methodology has been applied or approved by the Technical Committee of BioCarbon. All procedures and calculations were carried out in accordance with the validated methodology without modification.

### Mitigation results

The evaluation of the mitigation results was conducted through a comprehensive assessment of the data sources, calculation methods, and evidence provided by the project proponent to ensure that the GHG emission reductions are accurately calculated and solely attributable to the project activities. The validation and verification team reviewed the calculation file “Calculation HiSoil 111124.xlsx” and verified that the methodology AMS-III.F (Version 12.0) was correctly applied using Equation 2:

ERy = BEy + (PEy – LEy),

where:

ERy represents emission reductions, BEy baseline emissions, PEy project emissions, and LEy leakage emissions, which in this case were confirmed to be zero.

The reliability of the monitored data and parameters was confirmed through cross-checks with supporting documentation such as waste delivery records, cargo manifests, calibrated weighbridge data, and internal control procedures. The total quantity of solid waste composted (Qj/Wj) per period was confirmed to be measured daily and recorded using appropriate QA/QC procedures aligned with ISO 14064-2. The verification team confirmed the traceability of each entry and its classification by waste type using the European Waste List (LER) and supplier documentation.

Default values used in the calculations, such as DOCj, kj, MCFy, OX, and φy, were sourced from the most recent versions of the methodological tools referenced in AMS-III.F, including Tools 4 and 13. Emission factors related to fossil fuel use, electricity consumption, and composting process emissions (CH₄ and N₂O) were taken from official sources such as IPCC 2006 Guidelines, the CDM methodology tools, and national statistics from the Government of Argentina and the World Bank.

The review of project emission calculations, which were estimated based on solid waste processed due to the unavailability of direct fuel and electricity consumption data, found that the assumptions are conservative and in line with Tool 13. Moreover, cross-verification was performed between the composting activity records, monitoring of pile turning, and reports from equipment suppliers to estimate machinery use.

In conclusion, the calculation of GHG emission reductions (112,682 tCO₂e from 01/08/2019 to 31/07/2029) is deemed reliable and conservative. The evidence reviewed supports that the mitigation results are based on credible data sources and consistent application of the selected methodology without deviation, thus confirming the validity of the reported emission reductions.

#### GHG baseline emissions

The quantification of GHG baseline emissions for the project was conducted in accordance with the methodology AMS-III.F “Avoidance of methane emissions through composting,” Version 12.0, and the associated Tool 04 “Emissions from solid waste disposal sites,” Version 08.1. According to the provisions of the methodology, baseline emissions represent the amount of methane that would have been generated from the anaerobic decomposition of organic waste in a solid waste disposal site (SWDS), had the project activity not been implemented.

During the verification period, the baseline emissions (BEy) were calculated using Equation 1 of the methodology:

However, the terms **BEww,y**, **BECH₄,manure,y**, and **MDy,reg** were excluded from the final equation, as the project activity does not involve wastewater or manure treatment and no methane capture is required by national regulation. Therefore, the applicable equation used is:

**BEy = BECH₄,SWDS,y**

The BECH₄,SWDS,y was estimated using the first-order decay model established in Tool 04. The following parameters and assumptions were applied in accordance with the methodology:

* **Wj**: Quantity of each waste type prevented from being disposed at the SWDS (total: 113,328.30 tonnes during the period 01/08/2019 to 31/07/2023), determined from weighbridge records, cargo manifests, and LER codes.
* **DOCj and kj**: Degradable organic carbon fraction and decay rate values were applied for each waste type as per Tool 04 and IPCC 2006 Guidelines.

Table 20. Types of waste or waste types in MSW.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Types of waste or waste types in MSW (Municipal Solid Waste)** | **Wood and wood products** | **Pulp, paper, cardboard...** | **Food, food waste, beverages and tobacco (other than sludge)** | **Garden, yard and park** | **Sewage sludge** | **Other organic putrescible (non food)** |
| Degradable organic carbon fraction in waste type j (weight fraction) | 43% | 40% | 15% | 20% | 5% | 20% |
| Decay rate (decomposition index) for waste type j (1/year) | 0.03 | 0.06 | 0.19 | 0.10 | 0.19 | 0.10 |

* **MCFy = 1**, **F = 0.5**, **OX = 0.1**, **DOCf = 0.5**, and **φ = 0.85**: Default values consistent with “Application B” of the tool.
* **fy = 0**: No methane capture was considered due to lack of available monitoring data from the Buenos Aires Norte III landfill and evidence of poor capture performance.
* **GWPCH₄ = 28 tCO₂e/tCH₄**: As per the IPCC AR5 report.

The total waste avoided from landfilling was classified by type (food waste, sewage sludge, yard waste, paper, etc.) and the respective DOCj and kj were applied accordingly.

Table 21. Results of the quantification

| **Period** | **Baseline Emissions (tCO₂e)** |
| --- | --- |
| 01/08/2019 – 31/07/2020 | 8,103 |
| 01/08/2020 – 31/07/2021 | 14,476 |
| 01/08/2021 – 31/07/2022 | 13,962 |
| 01/08/2022 – 31/07/2023 | 17,283 |
| 01/08/2023 – 31/07/2024 | 17,283 |
| 01/08/2024 – 31/07/2025 | 17,283 |
| 01/08/2025 – 31/07/2026 | 17,283 |
| 01/08/2026 – 31/07/2027 | 17,283 |
| 01/08/2027 – 31/07/2028 | 17,283 |
| 01/08/2028 – 31/07/2029 | 17,283 |
| Total (10 years) | 157,522 tCO₂e |
| **Annual Average (10 years)** | **15,752.2 tCO₂e/year** |

The quantification is considered robust and consistent with the applied methodology. The data and parameters used are justified with references to default values or obtained from verifiable sources such as official weighbridge data, LER codes, and government-published climate data. No deviations or adjustments to the methodology were applied. Therefore, the verification team concludes that the procedures implemented for estimating baseline emissions are adequate and in line with the methodological provisions.

#### GHG project emissions

The GHG project emissions (PEy) have been calculated following the methodological procedures established in Tool 13 “Project and leakage emissions from composting”, Version 2. The total project emissions result from the sum of emissions from electricity consumption (PEEC,y), fossil fuel consumption (PEFC,y), methane emissions from composting (PECH4,y), and nitrous oxide emissions from composting (PEN2O,y). Since the project does not involve co-composting, emissions from run-off wastewater (PERO,y) are not applicable.

The calculations for each emission source are based on the application of default emission factors and equations from Tool 13 and Tool 5 (for electricity emissions), and the waste quantity monitored through an on-site calibrated weighbridge. The quantity of waste composted (Qy) is identical to the waste quantity used in the baseline scenario, and is supported by delivery notes, cargo manifests, and verified LER codes.

Default values used:

* **Electricity emission factor (EFEF):** Annualized average per year based on official national statistics.
* **Electricity transmission losses (TDL):** 15% (World Bank data).
* **Default SEC for electricity consumption:** 0.01 MWh/t.
* **Default EF for fossil fuels:** 0.0207 tCO2e/t.
* **Default EF for CH₄:** 0.002 t CH₄/t.
* **GWP for CH₄:** 28 tCO₂e/t CH₄.
* **Default EF for N₂O:** 0.0002 t N₂O/t.
* **GWP for N₂O:** 265 tCO₂e/t N₂O.

The verifier has reviewed the input data sources, methodology application, default factors, and equations used, and confirms that they are consistent with the methodological requirements.

Table 22 Total project emissions and average

|  |  |
| --- | --- |
| **Year** | **PEy (tCO₂e/year)** |
| 01/08/2019 – 31/07/2020 | 2,347 |
| 01/08/2020 – 31/07/2021 | 3,829 |
| 01/08/2021 – 31/07/2022 | 3,902 |
| 01/08/2022 – 31/07/2023 | 4,966 |
| 01/08/2023 – 31/07/2029 (est.) | 29,796 (4,966/year) |
| Total (10 years) | 44,840 |
| **Average per year** | **4,484** |

The verification team concludes that the project emission calculations have been carried out accurately and in line with the applied methodology. The use of conservative default values and reliable waste data contributes to the robustness of the quantification process. The estimated total project emissions over the 10-year period are 44,840 tCO₂e, with an annual average of 4,484 tCO₂e/year.

#### GHG leakage

As part of the verification process, we assessed the potential for GHG leakage emissions in accordance with the provisions of the applied methodology AMS-III.F (version 12.0), the BCR Standard, and the BCR tool Permanence and Risk Management. Based on the documentation reviewed and the findings of the on-site audit, we confirm that no leakage emissions are attributable to this project activity for the monitoring period or the overall crediting period.

Our assessment verified that:

* The project does not involve the transfer of technology or equipment from or to other activities.
* Compost produced by the project is not stored under anaerobic conditions nor disposed of in a SWDS.
* The project is retroactive, and all emission reductions are calculated post-commissioning, ensuring permanence as per the criteria outlined in the applied tools.

As such, we conclude that leakage emissions have been correctly reported as zero (**LEy = 0**) for all years.

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We also assessed the application of the selected methodology and referenced tools for the quantification of GHG emission reductions. The project applied AMS-III.F, version 12.0, in conjunction with the supporting tools:

* Tool 04: Emissions from solid waste disposal sites, version 08.1
* Tool 05: Baseline, project and/or leakage emissions from electricity consumption, version 03.0
* Tool 13: Project and leakage emissions from composting, version 02.0

All equations, assumptions, and default parameters used in the emission calculations were cross-checked against the latest applicable versions of these tools and found to be correctly applied. The sources of information and supporting evidence, such as weighbridge records, emission factors, and official waste classification codes, were appropriate and consistently documented.

Table 23. Estimated Net GHG Reduction

| **Period** | **GHG emission reductions in the baseline scenario (tCO2e)** | **GHG emission reductions in the project scenario (tCO2e)** | **GHG emissions attributable to leakages (tCO2e)** | **Estimated Net GHG Reduction (tCO2e)** |
| --- | --- | --- | --- | --- |
| 01/08/19-31/07/20 | 8,103 | 2,347 | 0 | 5,756 |
| 01/08/20-31/07/21 | 14,476 | 3,829 | 0 | 10,647 |
| 01/08/21-31/07/22 | 13,962 | 3,902 | 0 | 10,060 |
| 01/08/22-31/07/23 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/23-31/07/24 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/24-31/07/25 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/25-31/07/26 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/26-31/07/27 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/27-31/07/28 | 17,283 | 4,966 | 0 | 12,317 |
| 01/08/28-31/07/29 | 17,283 | 4,966 | 0 | 12,317 |
| **TOTAL (tCO2e)** | **157,522** | **44,840** | **0** | **112,682** |
| **Materiality** | | | | **0.03%** |

Based on the verification activities performed, including document review, site visit, interviews and data cross-checks, we conclude that the calculation of baseline emissions, project emissions, leakage, and resulting GHG emission reductions has been carried out in full compliance with the requirements of the applied methodology and the BCR Standard. No significant deviations were identified, and the methodology has been applied accurately and transparently throughout the quantification period.

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## Sustainable development safeguards (SDSs)

*It was verified that the project proponent applied the Sustainable Development Safeguards (SDSs) tool of the BioCarbon Registry Standard (formerly known as the No Net Harm Tool) to assess potential social, environmental, and biodiversity impacts within the project boundary. The assessment presented includes a clear and detailed description of each aspect required by the tool, covering categories such as land use, water resources, biodiversity and ecosystems, climate change, labor conditions, gender equality, governance, and other relevant risks. The information is organized according to the potential impacts, their nature, the project proponent’s response, and, where applicable, the preventive or mitigation measures implemented.*

*Regarding the results of the environmental and social analysis, it was confirmed that no significant net negative impacts were identified. In cases where environmental impacts may occur (e.g., water pollution, atmospheric emissions, leachate generation, noise), the project proponent has implemented control and mitigation measures, such as leachate ponds, vegetative barriers, internal road irrigation, and strict control of incoming waste. Additionally, the air quality, soil quality, and groundwater monitoring reports conducted by the accredited laboratory LABCA (CUIT 20-20913567-2) were reviewed, which show that the monitored environmental parameters are within the limits established by current environmental regulations.*

*For the biodiversity and ecosystems component, it was verified that the analysis is comprehensive and addresses issues such as potential habitat fragmentation, introduction of invasive species, impacts on migratory species, soil and water contamination, loss of genetic diversity, and ecosystem services. As supporting evidence, the project’s Environmental Impact Assessment (EIA) was reviewed, which was approved by resolution of the Provincial Agency for Sustainable Development (Organismo Provincial para el Desarrollo Sostenible – OPDS) of Buenos Aires Province, Argentina, under file number 2019-316. The EIA concluded that the project does not involve deforestation, does not require the use of agrochemicals or hazardous substances, and does not significantly interact with critical habitats or protected species.*

*Finally, the project proponent’s declaration regarding the absence of indigenous communities or traditional territories within the project area was also reviewed, supported by cartographic analysis from the National Institute of Indigenous Affairs (INAI) of Argentina.*

## Sustainable Development Goals (SDGs)

To evaluate the project's compliance with the criteria and indicators established to demonstrate its contribution to sustainable development, we reviewed the application of the “SDG Tool” provided by BioCarbon Registry (BCR), as required by the latest version of the standard. The project holder submitted a completed version of the SDG Tool, annexed to the PDD, which covers an ex-post monitoring period from 01 August 2019 to 31 July 2023.

The tool includes a description of the project's alignment with five Sustainable Development Goals (SDGs):

* SDG 8 – Decent work and economic growth

The project contributes to target 8.8 by implementing occupational health and safety measures aimed at protecting workers and reducing accidents. The verification team reviewed the safety procedures manual that outlines best practices for a secure workplace and the accident tracking matrix, which records fatal and non-fatal occupational injuries. For the period under review, the reported number of occupational injuries is five (indicator 8.8.1).

* SDG 9 – Industry, innovation, and infrastructure

The project supports scientific research and innovation through collaborations with public universities. We verified the existence of cooperation agreements and records of site visits by students, confirming the project’s support for target 9.5. For the period under review, two such collaborative programs were implemented (indicator 9.5.1).

* SDG 11 – Sustainable cities and communities

The project contributes to target 11.6 by improving the management of organic solid waste. It treats and transforms urban waste into compost, increasing the proportion of waste with adequate final disposal. For the 2019–2023 period, the project treated 113,328.30 tons of organic waste (indicator 11.6.1).

* SDG 12 – Responsible consumption and production

Aligned with target 12.5, the project reduces waste generation by reusing and recycling organic non-hazardous material through composting. For the period 2019–2023, 113,328.30 tons of waste were reused in the composting process (indicator 12.5.1).

* SDG 13 – Climate action

The project supports target 13.2 by avoiding greenhouse gas emissions through the aerobic treatment of organic waste. For the period 2019–2023, it is estimated that 38,780 tCO₂e were avoided thanks to project activities (indicator 13.2.1).

Based on the evaluation, we conclude that the project has appropriately applied the SDG Tool provided by BCR to assess its contribution to sustainable development for the monitoring period 2019–2023. The five SDGs selected are clearly justified, and the indicators are measurable and backed by verifiable evidence. The latest version of the tool was used, and supporting documentation, such as safety procedures, collaboration records, and monitoring data, was reviewed to confirm compliance. Therefore, the project’s adherence to the Sustainable Development Goals Tool is confirmed for the ex-post period evaluated.

## Climate change adaptation

In accordance with the requirements of the BioCarbon Registry (BCR) Standard, the verification team assessed whether the project has established and applied appropriate criteria and indicators to demonstrate its contribution to climate change adaptation.

The evaluation was based on a review of the Sustainable Development Goals (SDG) Tool submitted by the project proponent, as well as supporting evidence documented in the Project Design Document (PDD), internal procedures, and monitoring reports.

The project aligns with SDG 13: Climate Action, specifically target 13.2, which focuses on integrating climate change measures into national policies, strategies, and planning. The selected indicator is 13.2.1 – "Tons of CO₂ equivalent emissions avoided thanks to the project activity." This indicator is directly linked to mitigation, but the project also demonstrates indirect adaptation benefits by reducing the environmental pressure from organic waste disposal, improving soil quality through compost use, and contributing to ecosystem resilience.

While the indicator used is primarily mitigation-focused, the composting process can also be considered an adaptive strategy. By transforming organic waste into compost, the project contributes to:

* Enhancing soil fertility and water retention capacity, which improves resilience to climate-induced droughts.
* Reducing the dependence on chemical fertilizers, lowering vulnerability to supply chain disruptions.
* Promoting sustainable land management practices in the surrounding agricultural context.

## Co-benefits (if applicable)

This requirement is not applicable to the project activity, as declared by the project proponent. No additional benefits or co-benefits beyond those reported under the SDG Tool were identified or monitored. Therefore, no specific criteria, indicators, or categories related to co-benefits have been established or assessed.

## REDD+ safeguards (if applicable)

This requirement is not applicable.

## Double counting avoidance

The verification team conducted a comprehensive evaluation of the procedures implemented by the project owner to comply with the requirements of the BioCarbon Registry (BCR) Standard version 3.4 regarding the prevention of double counting, double issuance, and double claiming of GHG mitigation outcomes. This assessment included the application and review of the Avoiding Double Counting (ADC) Tool version 2.0, and was based on the following verification steps:

1. Review of project boundaries and serialized identification

The project area, which corresponds to the Hisoil composting facility, was confirmed to be uniquely defined and georeferenced in the BCR Registry. During the document review and on-site visit, the project boundaries were cross-verified against the coordinates and site maps included in the Project Description Document (PDD) and the registry data. The emission reductions to be issued are serialized by vintage year and are exclusively associated with the composting of non-hazardous organic waste within the defined operational area. This ensures traceability and prevents overlapping claims with other project activities or geographic areas.

1. Cross-check with other registries

A due diligence review was performed to confirm that the project is not registered in any other carbon credit system or international registry. This included:

* A review of the ReNaMi (Registro Nacional de Proyectos de Mitigación) as of [fecha revisada].
* A search in international public registries such as Verra, Gold Standard, ACR and the Clean Development Mechanism (CDM).
* Validation of a signed declaration from the project owner asserting exclusive registration under BCR, which was corroborated during stakeholder interviews and supported with legal and administrative documentation.

1. Alignment with National Registry or NDC-related systems

The project is not listed in Argentina’s ReNaMi and does not report or claim GHG emission reductions under the country’s Nationally Determined Contributions (NDC). Consequently, no Corresponding Adjustment (CA) or Host Country Attestation (HCA) is required at this stage. The project owner also confirmed that the mitigation outcomes will not be used for CORSIA or any compliance markets under Article 6 of the Paris Agreement.

Based on the documents assessed, the interviews conducted, and the application of the Avoiding Double Counting (ADC) Tool version 2.0, the verification team concludes that the Hisoil composting project complies with the BCR Standard’s requirements for the prevention of double counting, double issuance, and double claiming. No material risk has been identified regarding the potential for duplicated issuance, retirement, or attribution of GHG mitigation outcomes.

# Internal quality control

ANCE reviewed the monitoring documentation, described in the project document, considered that they conform to the procedures described in the validated monitoring plan and monitoring report and checked for differences that could cause an increase in GHG emission reduction estimates in the actual monitoring periods.

ANCE has confirmed that there are no significant material discrepancies between the actual monitoring system and the monitoring plan established in the PDD and the applied methodologies, so there is no overestimation of the requested reductions. The project owner monitors the parameters required to determine the project reductions in accordance with the monitoring plan and the applicable methodology.

The reported parameters, including their source, monitoring frequency and review criteria, indicated in the document project, were verified to be correct. The required management system procedures, including responsibility and authority for monitoring activities, were verified to be consistent with the document project. The knowledge of the personnel associated with the project activities was considered satisfactory by the ANCE verification team.

Finally, in ANCE's quality management process, there is an independent internal review of the validation and verification process, which ensures the scope, program standards and how the validation and verification report manages to gather this evidence and its proper management to present the final statement.

# Validation and verification opinion

As the ANCE Conformity Assessment Body, contracted by Hisoil SRL, we have reviewed and verified the design of mitigation measures for the project "Treatment of non-hazardous organic waste to obtain compost ". We confirm that it fully complies with the BCR Standard, addressing various aspects:

* The project meets all criteria of the BioCarbon Registry standard version 3.4 | June 28, 2024;
* The project is in accordance with AMS.III-F. Avoidance of methane emissions through composting. Version 12;
* The Monitoring Plan is transparent and adequate;
* The additionality of the project is justified in the document project;
* Verification has reached a reasonable level of assurance: 95%;
* The project has been evaluated with a Materiality of less than 5%;
* Based on the processes and procedures performed, the GHG statement is materially correct and a true representation of the GHG data and information and is prepared per the applicable standard;
* The project was assessed on the basis of its contribution to the Sustainable Development Goals (SDG8, SDG9, SDG11, SDG12 and SDG13).

Based on the risk-based validation approach and the evidence obtained as a result of the activities associated with the validation process and the attention to findings, the CAB ANCE has reached the following conclusion:

The Greenhouse Gas Emissions reductions of the Treatment of non-hazardous organic waste to obtain compost prepared by Hisoil SRL for the crediting period 01/08/2019 to 31/07/2029, and the monitoring period 01/08/2019 to 31/07/2023 are substantially correct and the validated and verified emissions reductions are a faithful representation of the information and emissions data referenced below:

Total amount of GHG emissions reductions: **112,682 tCO2e**

Total amount of GHG emissions reductions (during the monitoring period): **38,780 tCO2e**

This Validation and Verification Report is issued, based on the stipulated in the BCR Standard Version 3.4 | June 28, 2024, the Validation and Verification Manual and based on the criteria of ISO 14064-3:2019, with a reasonable level of assurance, the above is guaranteed at a materiality level of less than 5%, between the net emission reductions reported by the Project and the net reductions validated and verified by the CAB ANCE.

In conclusion, the CAB ANCE issues a positive opinion because there is sufficient or appropriate evidence to support a claim; considering that there are no material misstatements, there is sufficient and appropriate evidence to support the emissions and the necessary controls are in place for data management for emission reduction reporting.

# Validation statement

The validation statement is attached to this document.

# Verification statement

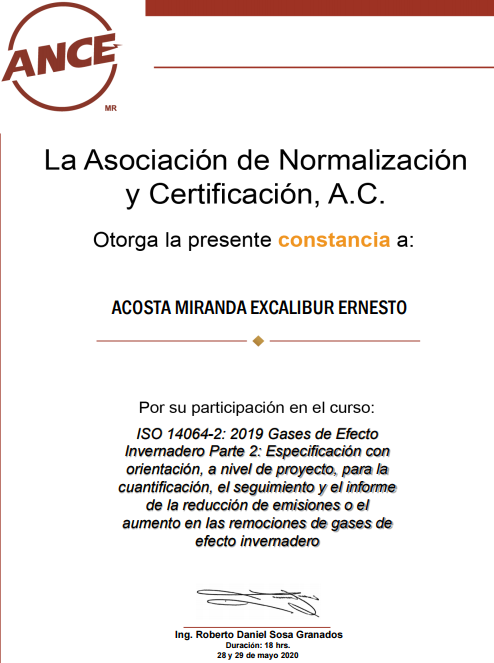
Attached to this document is the verification statement.

# Facts discovered after verification/validation

Not applicable.

# Annex 1. Competence of team members and technical reviewers

Juan Carlos Caycedo González holds an MSc in Environmental Administration and Policy and is a Chemical Engineer specializing in economics, administration, and environmental policy. He has extensive experience in environmental impact assessments, economic evaluation of environmental policies, and the implementation and monitoring of economic instruments for sustainable development. His expertise includes climate change mitigation, flexible mechanisms for carbon pricing, and a strong focus on the Clean Development Mechanism (CDM). With over 20 years of experience, he has worked on industrial emission mitigation projects, forestry and reforestation initiatives, adaptation measures for climate change, pollution charges (retributive fees), environmental liabilities, and contingent valuation. He is dedicated to identifying, formulating, and commercializing emission reduction initiatives and driving investment toward clean energy generation in Latin America.

**Excalibur Ernesto Acosta Miranda** holds a Bachelor's degree in Environmental Engineering from the Instituto Politécnico Nacional, Unidad Profesional Interdisciplinaria de Biotecnología, Mexico. Since 2019, he has worked as a verifier of GHG emission inventories in the Industry, Energy, Waste, Transportation, and Commerce and Services sectors. He has served as a lead verifier in major reporting programs such as the National Emissions Registry in Mexico and the Carbon Disclosure Project, with over 10 services executed. In the validation and verification of mitigation projects, he has participated in the voluntary programs of CERCARBONO and BioCarbon Registry in the energy and waste sectors.

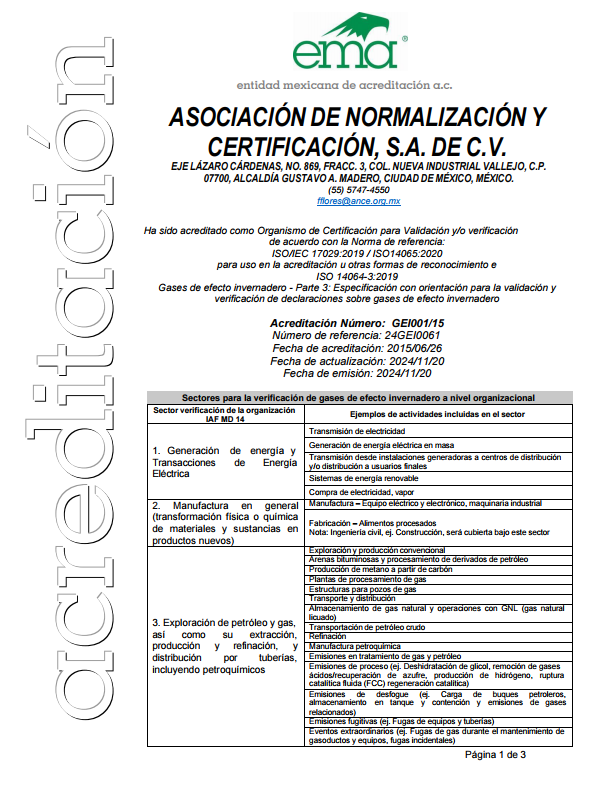


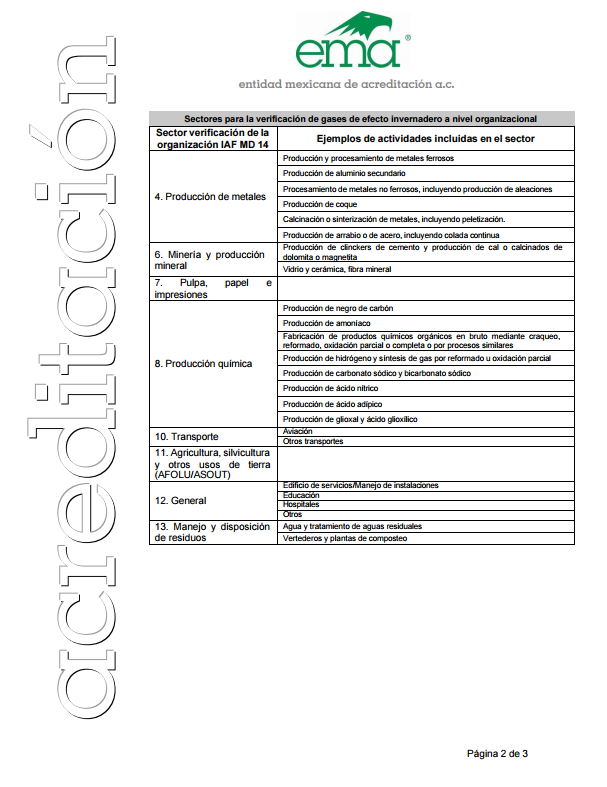
**Nancy Adriana Barrara Gomez** is an Environmental Engineer, graduated from the National Polytechnic Institute, holding Professional License Number 13289456. She is a Lead Verifier for GHG Inventories in sectors associated with IAF MD 14, including General Manufacturing, Mining and Mineral Production, Metal Production, Chemical Production, and Pulp, Paper, and Printing. With extensive experience in emissions verification, she has executed a total of 21 services in compliance with the criteria of ISO 14064-1:2018 and other relevant protocols.



**Joel Miguel Ramirez** is an Electrical Engineer, graduated from the National Polytechnic Institute, holding Professional License Number 2731971. He is the Conformity Quality Manager at the Association for Standardization and Certification (ANCE), with over 25 years of experience in evaluating norms and standards across industry, commerce, and services. Throughout his career, he has held various positions in product certification, quality assurance, management systems, infrastructure, management system certification, inspection units, and GHG validation/verification. Currently, he serves as the Manager of the Systems Certification Body and the Validating/Verifying Body at ANCE, overseeing the final approval processes.









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# Annex 2. Clarification requests, corrective action requests and forward action requests

Should the need arise, copy the table and complete it with the findings raised. In the ¨Finding Type¨ field, indicate whether it is clarifying, corrective or forward action oriented.

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| **Finding ID** | 1 | **Type of finding** | **CL** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| Section 1.1: Scope in the BCR Standard. GHG projects using a methodology developed or approved by BioCarbon, applicable to activities in the energy, transportation and waste sectors. | | | | |
| **Description of finding** | | | | |
| Not marked. Project proponents should consider marking this item since the mitigation activity considers an approved CDM methodology. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| The mitigation activity was specified in the Project Design Document (PDD) that corresponds to the waste sector. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent specified in the Project Design Document (PDD) that the mitigation activity corresponds to the waste sector. The document will be updated to mark the corresponding item as indicated in the BCR template. | | | | |

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| **Finding ID** | 2 | **Type of finding** | **CL** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| CLEAN DEVELOPMENT MECHANISM. AMS-III.F. Small-scale methodology. Avoidance of methane emissions through composting. Version 12.0. Sectoral scope(s): 13. | | | | |
| **Description of finding** | | | | |
| Section 1.1. of the PDD states: “otherwise would have been left to decompose anaerobically in a solid waste disposal site (SWDS).” No mention of which SWDS of the two SWDSs wastes for composting are diverted from. Neither are mentioned what general and operative characteristics of the SWDS are involved in this PDD. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| The final destination of the waste has been modified to the Buenos Aires Norte III landfill.  This is reflected in the PDD in various sections. Specifically, in the applicability section, this destination is specified in the applicability table of the methodology.. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent specified the types of waste directed to composting and their characteristics. The PDD states that the Hisoil project does not involve any of the following activities: recovery or combustion of landfill gas, controlled combustion of untreated waste, biogas recovery from wastewater treatment, co-digestion of organic matter, co-composting of wastewater and solid biomass waste, or animal manure treatment. The PDD will be updated to identify the specific SWDS(s) from which the waste is diverted and to include their general and operational characteristics, in compliance with paragraph 11 of AMS-III.F version 12.0. | | | | |

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| **Finding ID** | 3 | **Type of finding** | **CL** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| CLEAN DEVELOPMENT MECHANISM. AMS-III.F. Small-scale methodology. Avoidance of methane emissions through composting. Version 12.0. Sectoral scope(s): 13. | | | | |
| **Description of finding** | | | | |
| As stated in the project participant’s PDD: “As BCR Standard version 3.4 established, the project does NOT involve any of the activities below:  o Burning, oxidation, or use of gas in a landfill.”  Text in PDD doesn’t follow the BCR standard statement. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| According to the glossary included in the BioCarbon Registry Standard, a project activity is understood as a “specific set of technologies, measures and/or outcomes applied in a project to change the conditions of the baseline scenario and reduce or remove GHG emissions.”  Since the Hisoil project does not include gas flaring, the description of the project activity is considered accurate. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent clarified in the Project Design Document that the implemented activities fall under the scope of “Waste handling and disposal,” and explicitly confirmed that the project does not involve burning, oxidation, or use of gas in a landfill, in accordance with Section 1.5 of the BCR Standard version 3.4. The corresponding text in the PDD has been aligned with the exact language of the Standard. | | | | |

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| **Finding ID** | 4 | **Type of finding** | **CAR** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| CLEAN DEVELOPMENT MECHANISM. AMS-III.F. Small-scale methodology. Avoidance of methane emissions through composting. Version 12.0. Sectoral scope(s): 13. “2.2. Applicability. 5. This methodology is applicable to the composting of the organic fraction of municipal solid waste and biomass waste from agricultural or agro-industrial activities including manure. | | | | |
| **Description of finding** | | | | |
| As stated in PDD in section 1.1. Scope in the BCR Standard: “Although the company does manage animal manure, the required data to correctly apply the calculations specified by the methodology have not been properly collected so far, therefore to ensure data traceability and reduce uncertainty it has not been included in the project. The statement in PDD contradicts the one stated in meth ASM-III.F. On the other hand, this evaluator couldn't have further details in PDD to clarify how manure was discounted. The onsite visit required HiSoil to bring a sample of 200 “Manifiestos” among 9000+ invoices. A “Manifiesto” is the written proof of the amount of material included in the project activity; we found Manifiesto No. 8208190 that explicitly describes incoming material as: “Heces de animales, orina y estiercol” (which translated means: Animal faeces, urine and manure). The evidence contradicts what is stated in PDD. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| The main waste category is selected by the transporter based on the waste streams authorized by the OPDS. These categories are updated, added, or removed annually. Therefore, the transporter chooses the most appropriate category when an exact match is not available, which is why the specific composition of the waste being transported is clarified under “Composition.”  In the case of the cited manifests, there is no specific category for "pig hair" or "viscera," so the transporter selects the most suitable available category. The manifests labeled as "manure" specify that the waste is "pig hair," and all come from the same supplier, "Campo Austral S.A." The organic waste originates from pig slaughter, during which the animal’s hair and viscera are discarded. Furthermore, with each truck entry, a visual inspection is conducted to ensure that the hair and viscera are not mixed with feces or urine. Photos and videos are attached.  Once this information and the treated waste have been verified, these waste entries from Campo Austral S.A., although categorized under LER code 020106, are confirmed to be pig hair and animal viscera, as indicated in their composition. Therefore, since these are residues unrelated to feces or urine and are by-products of a food processing activity, they are considered to fall under the category “Food, food waste, beverages and tobacco (other than sludge).” As such, the reported quantities of these wastes are deemed accurate and are included in the total.  Nevertheless, the project owner has discussed with the suppliers the need to improve the categorization process and requested that they change the LER code used, so the waste is no longer labeled as "manure," since it does not correspond to that category. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated.  Sanitary Landfilling in the Area of Influence of the Company Biocom - Hi Soil, Pamela Compost”\* (dated January 22, 2025) | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent presented the referenced “Manifiestos” during the onsite visit, clarifying that the materials described as “Heces de animales, orina y estiércol” were not directed to the composting process, but to other waste treatment methods handled by the company. Additionally, the proponent submitted the report titled “Enterramiento sanitario en la zona de influencia de la empresa Biocom - HiSoil, Pamela Compost (01/22/2025)”, which outlines the three types of treatments carried out by HiSoil: composting, recycling, and biological treatment. This evidence supports the exclusion of manure from the project boundary as defined in the PDD and aligns with the applicable conditions of methodology AMS-III.F. | | | | |

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| **Finding ID** | 5 | **Type of finding** | **CAR** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| CLEAN DEVELOPMENT MECHANISM. AMS-III.F. Small-scale methodology. Avoidance of methane emissions through composting. Version 12.0. Sectoral scope(s): 13. 5.1. Project Boundary, 21. The project boundary is the physical, geographical site: (a) Where the solid waste would have been disposed of and the methane emission occurs in the absence of the proposed project activity; | | | | |
| **Description of finding** | | | | |
| Figure 1 doesn’t depict the project boundary. In addition, Refusal of material might cause GHG emissions. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| The project is a new project, not an expansion. This was incorrectly stated in the PDD, and the phrase may lead to misunderstanding; therefore, it has been decided to remove this statement from the PDD. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent clarified that Figure 1 is intended solely to illustrate the composting activities within HiSoil’s facilities. The project boundary, including its physical limits and the greenhouse gases involved in emission reductions, is described in detail in Section 3.2.2 of the PDD. Additionally, the proponent has provided clarification regarding the handling and documentation of refused materials to ensure that such refusals do not lead to unintended GHG emissions within the project boundary. | | | | |

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| **Finding ID** | 6 | **Type of finding** | **CAR** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| CLEAN DEVELOPMENT MECHANISM. AMS-III.F. Small-scale methodology. Avoidance of methane emissions through composting. Version 12.0. Sectoral scope(s): 13. 2.2. Applicability, 6. [...] project participant(s) shall demonstrate [...] that the existing facility meets all applicable laws and regulations and that the existing facility is not included in a separate CDM project activity. The special efforts should be identified and described. | | | | |
| **Description of finding** | | | | |
| As stated in PDD in section 3.1.1.: “the disposal of this waste in landfills is mandatory” opposes to §6 in AMS-III.F since if it is mandatory to send Wastes to SWDS | | | | |
| **Project holder response (02/05/2025)** | | | | |
| The project is a new project, not an expansion. This was incorrectly stated in the PDD, and the phrase may lead to misunderstanding; therefore, it has been decided to remove this statement from the PDD. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent corrected the wording of the statement in the PDD to clarify that the HiSoil project operates independently of any mandatory regulation requiring the disposal of waste in landfills. The project activity is voluntary and not subject to legal obligations mandating landfill disposal, thereby aligning with the applicability conditions outlined in paragraph 6 of AMS-III.F. | | | | |

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| **Finding ID** | 7 | **Type of finding** | **CL** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| BIOCARBON CERT. 2024. BCR STANDARD. VERSION 3.4. JUNE 28, 2024. 78 p.  http://www.biocarbonstandard.com, 11.5 Project length and quantification periods [...]  (b) for projects in sectors other than AFOLU  (i) A maximum of seven years which may be renewed at most two times, provided that, for each renewal, a Conformity Assessment Body determines and informs that the original project baseline is still valid or has been updated taking account of new data where applicable; or,  (ii) A maximum of 10 years with no option of renewal.  Project holder shall select the type of quantification period (fixed or renewable), where applicable, for the GHG project as follows: [...]  (c) other than AFOLU projects ▪ renewable quantification period may be at most seven years and shall be renewed two, for a maximum total length of 21 years; ▪ nonrenewable quantification period of ten years; The project holder shall define the lifespan of the project activity and this statement shall be validated by the CAB at registration time. | | | | |
| **Description of finding** | | | | |
| The PDD states: “As BCR Standard establishes, the quantification period “for activities in the energy, transport and waste sector projects” is ten years without renovation. So, the time limits for Hisoil’s project are from 01/08/2019 to 31/07/2029”  No evidence of a rule limiting the crediting period in projects other than AFOLU to 10 years was found in BCR Standard version 3.4. Please clarify. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| It was decided to establish a 10-year duration. The wording of the paragraph on page 23 has been modified. The PDD now specifically states:  “The project has a duration of 10 years without renewal, which is allowed by the BCR Standard for activities in the energy, transport, and waste sector projects. The time limits for Hisoil’s project are from 01/08/2019 to 31/07/2029.” | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project owner decided to register the project for a maximum of 10 years with no option for renewal. The project proponent clarified that the project has been registered under the fixed quantification period option, as established in the BCR Standard version 3.4, selecting a maximum duration of 10 years with no option of renewal. The chosen crediting period for the HiSoil project is from 01/08/2019 to 31/07/2029. | | | | |

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| **Finding ID** | 8 | **Type of finding** | **CAR** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| BIOCARBON CERT. 2024. BCR STANDARD. VERSION 3.4. JUNE 28, 2024. 78 p. http://www.biocarbonstandard.com  11.4 Start Date  Project holders can only certify and register, with the BCR STANDARD projects whose start date is defined within the five (5)10 years prior to the start of validation11 . | | | | |
| **Description of finding** | | | | |
| The PDD states: “This was the first day of reception of waste by Hisoil, so it’s when the project’s activities started. As mentioned in BCR Standard, the project begins less than five years before the start of validation”  It is required to demonstrate the commercial agreement between ANCE and HISOIL/Polaris was signed before 01/08/2024. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| The ANCE-Hisoil contract was attached. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated.  Organismo de Verificación/Validación de GEI, Contrato de prestación de servicios.pdf” dated 03/06/2024 | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project owner retained the document titled GHG Verification/Validation Body, Service Provision Contract dated June 3, 2024. | | | | |

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| **Finding ID** | 9 | **Type of finding** | **CAR** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| CLEAN DEVELOPMENT MECHANISM. Tool 01: Methodological tool: Tool for the demonstration and assessment of additionality. Version 07.0.0, 22 - For the purpose of identifying relevant alternative scenarios, the project participant should include the technologies or practices that provide outputs or services (e.g. electricity, heat) with comparable quality, properties and application areas as the proposed CDM project activity and that have been implemented previously or are currently being introduced in the relevant country/region. | | | | |
| **Description of finding** | | | | |
| No comparable alternatives to the chosen project activity were presented in the PDD. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| The description of project alternatives has been added following the instructions of the methodological tool Tool for the Demonstration and Assessment of Additionality, version 07.0.0, and has been included in the PDD. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent conducted an analysis of three alternative scenarios to demonstrate additionality, as required by the Tool for the demonstration and assessment of additionality (Version 07.0.0):  •Alternative 1: Implementation of the proposed project activity without CDM registration. This alternative is consistent with current legislation, specifically Resolution 1/2019 (RESFC-2019-1-APN-SECCYMA#SGP), which regulates the production, registration, and application of compost in Argentina. However, without the support of carbon finance, the project would not be financially viable.  •Alternative 2: Transport of waste to traditional treatment facilities (e.g., Buenos Aires Norte III by CEAMSE). This is considered a plausible baseline, as CEAMSE facilities are the closest authorized landfills and are aligned with national waste management laws (Law No. 25.916). These laws promote final disposal but do not mandate composting or valorization, making landfilling a credible baseline alternative.  •Alternative 3: Implementation of other composting technologies such as vermiculture. This alternative is technically feasible and in line with Resolution 1/2019. However, it involves different operational requirements and cost structures. The final compost product may be similar, but the technology pathway differs significantly, and this option is not commonly practiced in the region.  These alternatives were analyzed based on technical feasibility, regulatory compliance, and financial viability, in line with paragraph 22 of the Additionality Tool. | | | | |

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| **Finding ID** | 10 | **Type of finding** | **CAR** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| CLEAN DEVELOPMENT MECHANISM. EB 50 Report Annex 13 Page 1. Annex 13. GUIDELINES FOR OBJECTIVE DEMONSTRATION AND ASSESSMENT OF BARRIERS.(Version 01), 5. Guideline 2: The barrier test in Step 3 of the Tool for the demonstration and assessment of additionality states that If the CDM does not alleviate the identified barriers that prevent the proposed project activity from occurring, then the project activity is not additional. | | | | |
| **Description of finding** | | | | |
| There’s not supporting background enough to assess barriers nor demonstrating additionality. Proponents may use the GUIDELINES FOR OBJECTIVE DEMONSTRATION AND ASSESSMENT OF BARRIERS at https://cdm.unfccc.int/Reference/Guidclarif/meth/meth\_guid38.pdf. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| The explanation of the identified barriers has been expanded, along with their analysis in relation to the proposed alternatives, in order to meet the requirements of Step 3 of the methodological tool Tool for the Demonstration and Assessment of Additionality, version 07.0.0. For the justification of the barriers, the guidelines outlined in the Guidelines for Objective Demonstration and Assessment of Barriers have been used. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated.  8.1 Tabla resumen Pnip  8.2 Pnip\_2019-21  8.3 Pnip\_2020-22  8.4 Reglamento Operativo Préstamo BID N°3249/OC-AR  8.5 Reglamento Operativo Préstamo BID N° 5567/OC-AR | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent revised the barrier analysis in accordance with the Guidelines for Objective Demonstration and Assessment of Barriers. The assessment identified a credible investment barrier, given that comparable-scale waste treatment and valorization initiatives in Argentina have only been implemented through public funding or non-commercial financing mechanisms. Evidence provided includes the financing of multiple composting and waste management projects between 2019 and 2022 by the National Public Investment Plan (PNIP) and loans IDB No. 3249/OC-AR and 5567/OC-AR, all directed exclusively to government-managed initiatives.  In Sub-step 3a, it is demonstrated that private projects such as HiSoil’s cannot access these funding mechanisms, confirming that this barrier would prevent implementation without the support of carbon revenues through BCR registration.  In Sub-step 3b, the audit team confirmed that only the public sector alternative (e.g., disposal via CEAMSE Norte III) is unaffected by this barrier, while other private composting options remain financially unfeasible under current market and regulatory conditions.  Therefore, the revised barrier analysis satisfies the requirements of the barrier test in Step 3 of the Additionality Tool and aligns with Guideline 2 of the referenced UNFCCC guidelines. | | | | |

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| **Finding ID** | 11 | **Type of finding** | **CAR** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| CLEAN DEVELOPMENT MECHANISM TOOL24 Methodological tool Common practice Version 03.1, 18. The proposed project activity is a “common practice” within a sector in the applicable geographical area if the factor F is greater than 0.2 and Nall-Ndiff is greater than 3. | | | | |
| **Description of finding** | | | | |
| In the opposite sense of 18, project activity is NOT COMMON PRACTICE as F is lesser than 0,2 , and Nall-Ndiff is less than 3. Cases are ambivalent, with one clause being affirmative and the other negative.  This is the case for this project activity: F is higher than 0,2 (which makes it common practice), but Nall-Ndiff=2-1=1 results in a value less than 3. The project proponent must state a clear position on whether Common Practice will support additionality for the project. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| A new analysis of common practices has been conducted, taking into account both the Tool 24 “Common practice”, version 03.1, and the Guidelines on Common Practice, version 02.0. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent revised the **Common Practice Analysis** in accordance with CDM Tool 24: Common Practice (Version 03.1). The updated assessment provides the following results:   * **F = 1 - Ndiff / Nall = 0**, and * **Nall - Ndiff = 0**   Based on Paragraph 18 of the tool, for a project activity to be considered **common practice**, both of the following conditions must be met:   * F > 0.2, and * Nall - Ndiff > 3   Since **F = 0** and **Nall - Ndiff = 0**, the proposed project **does not qualify as common practice**.  Furthermore, the proponent confirmed that the most feasible alternative to the project under current legal frameworks is the **transport of waste to Buenos Aires Norte III**, operated by CEAMSE. However, the implementation of this and other alternatives does not negate the investment and implementation barriers faced by private composting projects like HiSoil. | | | | |

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| **Finding ID** | 12 | **Type of finding** | **CAR** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| CLEAN DEVELOPMENT MECHANISM. AMS-III.F. Small-scale methodology. Avoidance of methane emissions through composting. Version 12.0. Sectoral scope(s): 13. 24. Baseline emissions shall exclude emissions of methane that would have to be captured, fuelled or flared to comply with national or local safety requirement or legal regulations. | | | | |
| **Description of finding** | | | | |
| PDD states in section 3.7.3.: “The project does not involve manure, co-composting or waste water. Also, the existing landfill does not contain a methane recovery system: in order to comply with the prevailing regulations, it’s not required to capture or combust methane for the project activity”  Firstly, the project activity do involve manure as stated before. During the Onsite visit, when visiting the Buenos Aires Norte III SWDS, the watchman informed about the LFG facility operating into the Landfill site. Visitors are not allowed to visit the LFG gas powered Power plant. Project participant is required to demonstrate any use of landfill gas. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| As explained, the project does not involve the management of manure but rather of pig hair.  Regarding the data on methane flaring (MDy,reg) according to the AMS-III.F methodology, it refers to the amount of methane that must be captured and flared in the year, in line with applicable regulations. In the case of Argentina, there is no applicable legislation mandating methane flaring in landfills, nor is flaring mandatory in such sites. | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent clarified that the baseline scenario includes methane generation from solid waste disposal sites (SWDS), as there is insufficient evidence to confirm that methane capture or flaring is systematically implemented at the Buenos Aires Norte III landfill.  In support of this, the proponent submitted a technical report indicating the lack of updated and verifiable information on the actual operation of landfill gas (LFG) combustion systems. Although the site reportedly incorporates partial methane capture technologies, no publicly available data or official emissions reports confirm the effectiveness or extent of methane flaring.  Furthermore, a scientific publication (Maasakkers et al., 2022, Science Advances)—based on satellite data—estimates that the Norte III complex emits 28 tons of methane per hour, which suggests that methane is not being adequately recovered or combusted at the site.  Given that over 90% of the incoming waste at Norte III is landfilled without valorization and that no national authority conducts official GHG monitoring at such sites, the assumption that methane is emitted in the absence of the project is considered conservative and appropriate. Therefore, the project proponent justifiably excluded methane flaring from the baseline emissions, in line with Paragraph 24 of AMS-III.F. Version 12.0 | | | | |

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| **Finding ID** | 12 | **Type of finding** | **CAR** | **Date**  **09/06/2025** |
| **Section No.** | | | | |
| BIOCARBON CERT. 2024. BCR STANDARD. VERSION 3.4. JUNE 28, 2024. 78 p. http://www.biocarbonstandard.com  10.2 | | | | |
| **Description of finding** | | | | |
| During the document review, no QA/QC procedure was observed. | | | | |
| **Project holder response (02/05/2025)** | | | | |
| The data quality procedure has been incorporated, and the table for parameter Wj has been updated (page 101). | | | | |
| **Documentation provided by the project holder** | | | | |
| Project Design Document updated. | | | | |
| **CAB assessment (09/06/2025)** | | | | |
| The project proponent included the procedures in the PDD. | | | | |

# Annex 3. Documentation review

Use the table to list all documents reviewed and referenced during the validation process, including BCR or CDM documents. For each document, provide the following information:

1. Title: provide the title of the document. Include the version number, if applicable;
2. Author: provide the name(s) of the author(s). If the author(s) belong(s) to the organization(s) that issue the document, provide only the name(s) of the organization(s);
3. References to the document: when applicable, provide the relevant reference to the document, including the dates of completion/publication and URL;
4. Provider: select one of the following options to indicate who provided the document to the CAB for its review.

| **Document Title / Version** | **Author** | **Organization** | **Document provider (if applicable)** |
| --- | --- | --- | --- |
| PDD-HiSoil 24MRZ25.doc, v.1 | Hisoil SRL | Hisoil SRL | Marcos Mendez |
| Monitoring-Report-Hisoil 24MRZ25.doc, v.1 | Hisoil SRL | Hisoil SRL | Marcos Mendez |
| Calculation HiSoil 111124.xlsx, v.1 | Hisoil SRL | Hisoil SRL | Marcos Mendez |
| BCR\_SDG-HiSoil.xlsx, v.1 | Hisoil SRL | Hisoil SRL | Marcos Mendez |
| Permiso de uso.pdf, 0373/194 | Organismo provincial para el desarrollo sostenible (OPDS) | OPDS | Marcos Mendez |
| Total residuos HiSoil 061124.xlsx | Hisoil SRL | Hisoil SRL | Marcos Mendez |
| Environmental Aptitude Certificate Renewal Audit, Law 11.459, FILE No. EX-2023-02018892- -GDEBA-DRYEAIMAMGP | Hisoil SRL | Hisoil SRL | Marcos Mendez |
| Internal Occupational Safety Manual, 2022 | Hisoil SRL | Hisoil SRL | Jorgelina |
| Applicable Legislation and Legal Compliance Matrix BIOCOM by Gabriel Prieto, FILE No. EX-2023-02018892- -GDEBA-DRYEAIMAMGP, p. 60 | Gabriel Prieto | Hisoil SRL | Marcos Mendez |
| Environmental Management Manual, FILE No. EX-2023-02018892- -GDEBA-DRYEAIMAMGP, p. 67 | Gabriel Prieto | Hisoil SRL | Marcos Mendez |
| PROCEDURE FOR THE RECEPTION AND VALIDATION OF THE AMOUNT OF INCOMING WASTE, INTERNAL PROCEDURE FOR WASTE ENTRY No. PE.09.01, v.1 | Gabriel Prieto | Hisoil SRL | Marcos Mendez |
| RECEPTION PROCEDURE IN DRUMS AND/OR BINS TO ENSURE THE ABSENCE OF SPECIAL WASTE No. PE.09.02, v.1 | Gabriel Prieto | Hisoil SRL | Marcos Mendez |
| Environmental Aptitude Certificate (CAA), 2019-316 | OPDS | OPDS | Marcos Mendez |
| CAA Resolution,, RESOL-2019-316-GDEBA-SSFYEAOPDS | Gobierno de la provincia de Buenos Aires | OPDS | Marcos Mendez |
| Annex 1 Environmental Impact Assessment, 2019-316 | OPDS | OPDS | Marcos Mendez |
| Municipal Operating Permit Certificate, 4036-20928/7 | Municipalidad Exaltación de la Criz | Municipalidad Exaltación de la Criz | Marcos Mendez |
| Zoning Certificate, Decree 531/19 | Municipalidad Exaltación de la Criz | Municipalidad Exaltación de la Criz | Marcos Mendez |
| ENVIRONMENTAL DAMAGE LIABILITY INSURANCE POLICY, 181007 | TESTIMONIO COMPAÑIA DE SEGUROS S.A, | TESTIMONIO COMPAÑIA DE SEGUROS S.A, | Marcos Mendez |
| Contract, FOROVV-P01-04-10 (ANCE-HISOIL) | ANCE | ANCE | Faustino Flores |
| Municipal Environmental Aptitude Certificate, Registration No. 12/2023 | Municipalidad Exaltación de la Criz | Municipalidad Exaltación de la Criz | Marcos Mendez |
| 4.1. Informe Pamela Natan.pdf, v.1 | pamelacompost@gmail.com | N.A. | Marcos Mendez |
| 8.1TablaResumenPnip.xlsx | Investment Bank (BAPIN in Spanish) | N.A. | Marcos Mendez |
| 8.4 Operating Regulation, RESOL-2020-202-APN-MAD | MINISTERIO DE AMBIENTE Y DESARROLLO SOSTENIBLE DE LA NACIÓN | N.A. | Marcos Mendez |
| 8.5 Operating Regulation  INTEGRATED URBAN SOLID WASTE MANAGEMENT PROGRAM II, Loan BID N° 5567/OC-AR | MINISTERIO DE AMBIENTE Y DESARROLLO SOSTENIBLE DE LA NACIÓN | N.A. | Marcos Mendez |
| ENVIRONMENTAL MONITORING, groundwater wells (2019 - 2023) | LABCA | N.A. | Jorgelina |
| ENVIRONMENTAL MONITORING, Air Quality (2019 - 2023) | LABCA | N.A. | Jorgelina |
| Folder 3.1. Campo Austral Photographs | Hisoil SRL | Hisoil SRL | Marcos Mendez |
| Hi Soil - Carbon Footprint Report – 2021, 2022.pdf | Kolibri | Hisoil SRL | Marcos Mendez |
| Sampled Manifests and Delivery Notes, wetransfer\_auditoria-ance-manifiestos-y-remitos\_2025-03-28\_1358 | Jorgelina | Hisoil SRL | Marcos Mendez |

# Annex 4. Abbreviations

| .**Abbreviations** | **Full texts** |
| --- | --- |
| AFOLU | Agriculture, Forestry and Other Land Use |
| BCR | BioCarbon |
| CAB | Conformity Assessment Body |
| Carbon Dioxide | Carbon Dioxide |
| Carbon Dioxide Equivalent | Carbon Dioxide Equivalent |
| CAMMESA | Wholesale Electricity Market Administration Company Limited |
| CDM | Clean Development Mechanism |
| CH4 | Methane |
| GHG | Greenhouse gases |
| IAF | International Accreditation Forum |
| N2O | Nitrous oxide |
| N.A. | Not applicable |
| PDD | Project Document Design |
| SDGs | Sustainable Development Goals |
| SDSs | Sustainable Development Safeguards |
| VCC | Verified Carbon Credit |

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NOTE: This format shall be completed following the instructions included. However, it is important to highlight that these instructions are complementary to the BCR Standard, and the BioCarbon Validation & Verification Manual, in which more information on each section can be found.

1. Argentina.gob.ar. (2019, 10 enero). Argentina.gob.ar. https://www.argentina.gob.ar/normativa/nacional/resoluci%C3%B3n-1-2019-318692/texto [↑](#footnote-ref-1)
2. https://www.argentina.gob.ar/normativa/nacional/ley-25916-98327/texto [↑](#footnote-ref-2)
3. <https://www.argentina.gob.ar/dnip/publicaciones/otros-periodos> [↑](#footnote-ref-3)
4. [Préstamo BID 3249/OC-AR - Estudios de Impacto Ambiental | Argentina.gob.ar](https://www.argentina.gob.ar/interior/ambiente/control-y-monitoreo/gestion-de-residuos-solidos-urbanos/prestamo-bid-3249oc-ar) [↑](#footnote-ref-4)
5. [Financiamiento Internacional / BID | Argentina.gob.ar](https://www.argentina.gob.ar/interior/ambiente/control-y-monitoreo/gestion-de-residuos-solidos-urbanos/financiamiento) [↑](#footnote-ref-5)