



Verification Report

Version 2.5

10-December-2024

Document Prepared by AENOR

AENOR
Confía

Forest Carbon Partnership Facility (FCPF)

Carbon Fund

Verification Report (VER)

ER Program Name and Country	Emission Reduction Program of Chile
Reporting Period Covered In this Report	05-12-2019 to 31-12-2021
Number of FCPF ERs	1,026,024tCO ₂ e
Number of ERs allocated to the Uncertainty Buffer	301,770 tCO ₂ e
Number of ERs allocated to the Pooled Reversal Buffer	684,016 tCO ₂ e
Number of FCPF ERs from enhanced removals through afforestation/ reforestation	85,158 tCO ₂ e
Name of the VVB	AENOR CONFIA S.A.U.
Contact information of the VVB	Génova 6. 28004 Madrid - Spain. Telephone +34 914326000 jfuentes@aenor.com ljavier@aenor.com www.aenor.com
Report Version	2.4
Date of the Verification Report	10-12-2024
Report Approved by	José Luis Fuentes

1. VERIFICATION STATEMENT

The review and cross-check of explanations and justifications included in the Monitoring Report Version 3 dated on 06-09-2024 and supporting documents have provided AENOR with sufficient evidence to determine with a reasonable level of assurance the compliance of the reported information with the applicable verification criteria and materiality set out in the Forest Carbon Partnership Facility (FCPF) Methodological Framework (MF), the Validation and Verification Guidelines (VVG) and other applicable normative documents requirements.

The scope covered by the verification includes the ER Program’s crediting period 01-01-2018 to 31-12-2023, the reporting period (05-12-2019 to 31-12-2021), the accounting area 13,232,401 ha, the REDD Country Participant’s Forest Monitoring System, the national REDD+ Programs and Projects Data Management System and the following GHG sources and sinks (REDD+ activities), carbon pools and type of GHGs:

GHG sources and sinks (REDD+ activities)
Emissions from deforestation – Included
Emissions from forest degradation – Included
Enhancement of carbon stock – Included
Conservation of Carbon Stocks – Included
Sustainable Forest Management—Excluded
Non-anthropogenic emissions— Included
Carbon pools
Above-Ground biomass (AGB) – Included
Below-Ground biomass (BGM) – Included
Dead wood – Included
Soil Organic Carbon (SOC) – Excluded
GHG
CO ₂ – Included
CH ₄ – Included
N ₂ O – Included

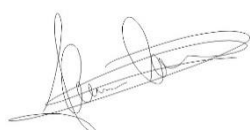
The verification was performed through a combination of document review, interviews, and communications with relevant personnel. Findings were issued, requesting; MAJOR Corrective Action Request (MCAR), MINOR Corrective Action Requests (mCAR) or Observations (OBS) according to the FCPF VVG v2.5 section 11, to ensure compliance with all requirements.

A total of 10 MCAR, 1 mCAR and 1 Observation were raised as part of the verification process. All MCAR and OBS were successfully addressed by the ER Program and closed by the VVB.

AENOR is able to verify with a reasonable level of assurance that the ERP-Chile, quantified in accordance with the verification criteria, amount to 2,011,810 tCO₂e AENOR verified that the uncertainty buffer ERs amount to 301,770 tCO₂e, the ERs generated from enhanced afforestation/ reforestation amount to 85,158tCO₂e and that the ERs allocated to the Pooled Reversal buffer amount to 684,016 tCO₂e. The amount of FCPF Units to be issued would be 1,026,024 tCO₂e. There are no uncertainties associated with the verification conclusion.

Statement Issuing Date: 10- December-2024

Intended User: World Bank Group, FCPF Carbon Fund Participants



Javier Cócera
Team Leader



José Luis Fuentes
Climate Change Manager



Pablo Moreno
Team Leader 2

2. AGREEMENT

2.1 Level of Assurance

The verification audit assessment was conducted to provide a reasonable level of assurance concerning material misstatements, errors, or omissions in conformance with the verification criteria and scope set out in the FCPF requirements, in conformance with paragraph 31 of the VVG v2.5. The provisions undertaken to ensure such a reasonable level of assurance included a risk assessment of the sources and the magnitude of potential errors, omissions, and misstatements, as required by section 4.4.1 of ISO 14064-3:2006, previous to the elaboration of a sampling/evidence-gathering plan.

Based on the previous provisions and considering the findings raised during the audit, a positive evaluation statement reasonably ensures that the FCPF Program GHG assertion is materially correct and is a fair representation of the GHG data and information provided in the ER Monitoring Report and supporting documents.

2.2 Objectives

The objective of audit was to conduct a systematic, independent, and documented process for the evaluation of the GHG assertion made by the Emission Reduction Program in Chile, for the reporting period from 05-12-2019 to 31-12-2021 against the FCPF criteria applicable to verification and to determine if the reported information in the ER Monitoring Report is in compliance to the agreed criteria and free from material errors, omissions, or misstatements.

The general objectives of the verification, as required by paragraph 32 of the VVG v2.5, were:

- Review of the ER Monitoring Report and supporting information to confirm the correctness of presented information;
- Identify if the methodological steps and data are publicly available in accordance with applicable criteria;
- Assess whether the start date of the crediting period proposed by the ER Program is in compliance with the definition provided in the FCPF Glossary of terms;
- Assess the extent to which the reported ERs have been reported with a transparent and coherent step-by-step process that enables reconstruction and have meet the requirements of applicable criteria;
- Assess the extent to which the GHG emissions/Emission Reductions are materially accurate;
- Identify sources of uncertainty due to both random and systematic errors related with any sources of bias that can impact the estimate of the total ERs and determine whether the ER Program has conducted the uncertainty analysis in compliance applicable criteria;
- Assess the National Forest Monitoring System (NFMS) of the ER Program and validate that there are controls for sources of potential errors, omissions, and misstatements in place;
- Identify components of the NFMS that require attention and/or adjustment in future monitoring and reporting or identify areas of risk of future non-compliance.

The specific objectives of the verification, as required by paragraph 34 of the VVG v2.5, were:

- Assess the extent to which the methodologies and methods used to estimate GHG emissions and removals during the Reporting Period are consistent with the Reference Level and with the Monitoring Plan as described in the ER Monitoring Report;
- Assess the extent to which the ER Monitoring Report includes a complete and accurate report, to the extent possible, on the implementation of its strategy to mitigate and/or minimize potential Displacement and on any on changes in major drivers in the ER Accounting Area;

- Assess the extent to which the ER Monitoring Report contains a complete and accurate report on the mitigation, to the extent possible, of significant risks of Reversals identified in the assessment, and addresses the sustainability of ERs;
- Determine whether the ER Program has quantified ERs allocated to the Uncertainty, Reversal, and Pooled Reversal Buffer during the Reporting Period in compliance with the Methodological Framework and other applicable criteria;
- Assess the extent to which systems to avoid that ERs generated under the ER Program have not been counted or compensated for more than once have been adequately implemented and confirm that issuance has not occurred in other known registries;
- Determine whether the national or centralized REDD+ Programs and Projects Data Management System are implemented and operated in compliance with the Methodological Framework and other applicable criteria. For that purpose, a specific audit of the operations of the REDD+ Programs and Projects Data Management System was carried, as per indicator 37.4 of the MF.

2.3 Criteria

The audit assessment was carried against the criteria set for verification by the following documents:

- FCPF Methodological Framework, v3, April 2020.
- Validation and Verification Guidelines v2.5 September 2023.
- Buffer Guidelines v4.2 June 2024.
- Guidelines on the application of the Methodological Framework.
 1. Use of Interpolation of Data in Relation to the Reference Period of an ER Program v1 June 2016.
 2. Technical Corrections to GHG Emissions and Removals Reported in the Reference Period v2 November 2020.
 3. The Definition of Reporting Periods of Emission Reduction Programs v1 November 2018.
 4. Uncertainty Analysis of Emission Reductions v1.0 November 2020.
- Process Guidelines v6.1 March 2024.
- Glossary of Terms v2.2 May, 2022.
- Guidelines contained in the ER Monitoring Report Template (v3.1 July 2024), the Validation Report Template (v1.2, September 2021) and the Verification Report Template (v1.4, August 2024);
- The validated methodologies and methods used to estimate GHG emissions and removals as described in the Reference Level annex of the ER Monitoring Report Annex 4.
- ISO 14064-3:2006
- ISO 14065:2013
- ISO 14066:2011

The following documents will be considered as documents that provide acceptable methods for satisfying requirements provided in the above criteria, as per VVG paragraph 38:

- 2006 IPCC Guidelines;
- 2013 IPCC Wetlands Supplement;
- 2019 refinement to the 2006 IPCC Guidelines;
- GFOI 2016 Methods and Guidance Document;
- FCPF Guidance Notes.

Specifically, the following criteria and indicators of the MF were applicable to the verification, as per paragraph 37 of the VVG 2.5:

Criteria/indicator	Topic
6	Data availability
7, 8, 9.1	Identification and address source(s) of uncertainty
9.2, 9.3	Estimation of residual uncertainty
14.1	Consistency of monitored estimates with RL
17.3, 17.4	Monitoring and reporting of displacement mitigation
18.2	Addressing reversals
19	Account for reversals
22	Calculation of Emission Reductions
23	Double counting
37	REDD projects and programs DMS

2.4 Scope

The scope of verification included, as per section 8.4 of the VVG v2.5:

- The Crediting Period of the ER Program;
- The selected Reporting Period;
- The ER Program Accounting Area as defined in the ER Program’s Final ER Program Document (ER-PD);
- The GHG sources and sinks associated with any of the REDD+ activities accounted for as required by the MF;
- The carbon pools and GHGs to be accounted for as required by the MF;
- The REDD Country Participant’s NFMS as described in the ER Monitoring Report;
- The national REDD+ Program and Projects Data Management System (DMS) as described in the Monitoring Report.

2.5 Materiality

The materiality threshold of the verification, as required section 8.5 of the VVG v2.5, was:

- Quantitative: the threshold for materiality with respect to the aggregate of errors, omissions, and misrepresentations relative to the total reported GHG emission and removals was one percent (1%). (Under-estimation of the Reference Level was not considered a material discrepancy).
- Qualitative: any issue related to management system and controls, poorly managed documentation, and non-compliance with the applicable requirements of the MF and other applicable criteria; and any errors in reporting of factual information in the ER Monitoring Report as required by the FCPF MF.

The verification process based on the desk review and remote found that there are not quantitative nor qualitative material discrepancies affecting the Reference Level and the Reference Level setting.

The verification process based on the desk review and remote audit found that quantitative nor qualitative material discrepancies affecting the GHG assertion and leading to overestimations of the reported ERs.

3. METHODOLOGY AND PLANNING

3.1 Verification team

Name	Role	Activities				
		Desk review	Site visit	Reporting	Supervision	Technical review
Javier Cócera	Team Leader	X		X	X	
Pablo Moreno	Team Leader 2	X		X	X	
Daniel Bermejo	Validator/verifier auditor	X		X		
Adrián Vidal	Validator/verifier auditor	X		X		
Marcos Recio	Validator/verifier auditor	X		X		
Joao Barata	Validator/verifier auditor trainee	X		X		
José Luis Fuentes	Reviewer					X
Luis Otero	Local expert	X	X			

3.2 Verification schedule

Tasks	Deliverable	Date	Responsible
1. Kick-off meeting	Minute of KOM	08-02-2024	All parties
2. Reception of ERMR	ERMR	08-02-2024	FMT
3. Initial Desk Review	Preliminary relevant findings, if applicable	05-02-2024	AENOR
4. Draft Sampling Plan	Preliminary sampling plan	29-02-2024	AENOR
5. Sampling Plan reviewed by FMT	Sampling plan with comments	04-03-2024	AENOR/ FMT
6. Sampling plan	Sampling plan	07-03-2024	AENOR
7. Draft Audit Plan	Preliminary audit plan	02-04-2024	AENOR
8. Audit Plan reviewed by REDD Country and FMT	Audit plan with comments	05-04-2024	AENOR/ Country participant / FMT
9. Audit Plan	Audit plan	08-04-2024	AENOR
10. Country visit / office meetings	Visit	29-04-2024 to 03-05-2024	AENOR/ Country participant/ FMT
11. Issuance of the list of findings	List of findings	10-05-2024	AENOR
12. Review of the country's answer to the list of findings	Response of the Country to the 1 st round of findings	28-06-2024	Country Participant
13. Issuance of the second round of findings	Second round of findings, if applicable.	27-06-2024	AENOR

	If other rounds are needed, two weeks will be added for the review by the country, and two weeks to the review and response by AENOR		
14. Review of the country's answer to the list of findings	Second round of findings, if applicable. If other rounds are needed, two weeks will be added for the review by the country, and two weeks to the review and response by AENOR	07-06-2024	Country participant is responsible to response the round of findings, and after the answer, AENOR is responsible to review the Country participant responses
15. Draft verification report preparation	Preliminary report	08-10-2024	AENOR
16. Technical review	Draft validation and verification reports	21-10-2024	AENOR
17. Draft validation and verification reports revised by Country Participant and FMT	Plan with comments	25-10-2024	Country participant / FMT
18. Issuance of validation and verification report after revision	Final validation and verification reports	08-11-2024	AENOR

3.3 Methodology description

The second verification was performed simultaneously with the validation with extended scope and the first verification of the ER Program, through a combination of document review, interviews, and communications with relevant personnel. The conformity was evaluated against the criteria described in section 2.3.

A sampling/evidence-gathering plan was developed for the validation and both of the ER Program, as required by section 9.4 of the VVG v2.5. A risk assessment of the sources and the magnitude of potential errors, omissions, and misstatements was carried out, as required by section 4.4.1 of ISO 14064-3:2006, previous to the elaboration of the sampling/evidence-gathering plan. The sampling/evidence-gathering plan was developed considering all the criteria set by section 4.4.3 of ISO 14064-3:2006:

- a) Agreed level of assurance;
- b) validation and verification scope;
- c) validation and verification criteria;
- d) amount and type of evidence (qualitative and quantitative) necessary to achieve the agreed level of assurance;
- e) methodologies for determining representative samples; and
- f) risk of potential errors, omissions, or misstatements.

All evidence requested and reviewed was crosschecked in order to evaluate the consistency of information in the ER Monitoring Report. All statements, claims and procedures described within the scope of the verification included in the ER Monitoring Report were part of the assessment of the sampling/evidence-gathering plan and all the reviewed supporting evidence were evaluated against the ER Monitoring Report.

The magnitude of the sampling was based on the previous experience of AENOR as VVB and ensure the achievement of reasonable level of assurance. The sampling/evidence-gathering plan was open to be modified based on any new risks or materiality concerns that could potentially lead to errors, omissions or misstatements identified during the verification process.

The audit team carried out a deep and meticulous review of the calculation spreadsheets to verify the correct application of the used methodology (formulae, equations) and checked that data required to calculate the GHG emission was appropriately provided.

All documentation provided by the Country Participant was assessed against the applicable criteria described in section 2.3. Several MCAR, mCAR and OBS were raised and submitted to the Country Participant to ensure compliance with all requirements, which addressed them either by providing to the audit team with the requested information or by making the appropriate corrections. Updated versions of the documentation were submitted by the Country Participant and the audit team reassessed them against the guidance documentation. This process was repeated iteratively until all MCAR were fully closed (there were no standing mCAR from validation). All findings issued have been successfully closed except for a minor CAR that remains to be solved during the next MP.

The findings issued during the verification process and the inputs for their closure are described in Appendix 1 of this report.

3.4 Review of documentation

A detailed review of all documentation was conducted to ensure consistency with and identify any deviation from FCPF requirements. Initial review focused on the ER Monitoring Report. Specially, in relation to the reported ER, the methodological approach for their determination and its consistency with the Reference Level, the accuracy and availability of data and parameters used for calculations, the estimated uncertainty, the design of the DMS, displacement, reversals, and risk of double counting.

In addition to the ER Monitoring Report, all documentation cited in it was download and reviewed in order to verify its public accessibility and to crosschecked with the statements made in the ER Monitoring Report. These documents include, among others, calculation spreadsheets used for the determination of emission factors (EF) and estimation of the ER, GIS data (satellite images and remote sensing analysis) used for determination of activity data (AD), and additional documents related to monitoring procedures, literature sources of parameters, etc.

As result of the desk review of documents and interviews, the audit team required additional documentation to the Country Participant to verify certain statements or have further clarification regarding GHG assertions, data and parameters used or employed procedures. All the additional documents requested were added to the later versions of the ER Monitoring Report, as required by criterion 6 of the MF.

For a listing of all documents provided by the Country Participant and review for the verification, see Appendix 2.

AENOR confirms that sufficient evidence was presented for all GHG assertions and that there is a clear audit trail that contains the evidence and records that validate the stated figures in this verification report since:

- Sufficient evidence available: the Country Participant has provided the 100% of data used in the calculations to achieve the final estimated amount of GHG emissions and removals.
- Nature of evidence: the raw data were collected from reliable sources. They are detailed in the program documents and have been provided to the audit team.
- Cross-checked evidence: AENOR cross-checked the collected information through interviews with stakeholders and reproducing calculations.

3.5 REDD Country Visit

In accordance with FCPF Carbon Fund Facility Management Team (FMT) and the Country Participant, and provided that a reasonable level of assurance was achievable by other means, AENOR as VVB carried out a “hybrid” audit that ensured the achievement of the assurance level required by the FCPF.

The audit was based on the following auditing techniques:

- Document review and cross checks between the information provided in the ER Monitoring Report and supporting information and evidence provided by the Country Participant.
- Review, based on the selected methodologies, tools and the other applied methodological regulatory documents, of the appropriateness of formulae and accuracy of calculations.
- Meetings, via teleconference and during the onsite visit, with relevant stakeholders and personal responsible for the implementation of the ER Program and the elaboration of the ER Monitoring Report, as identified in section 2 and 9.2 of the ER MR.
- Cross checks between information provided by interviewees to ensure that no relevant information was omitted.

Thus, the Audit Team performed an onsite visit, and many aspects were assessed onsite by the local expert, who visited the Country in April and May 2024. The rest of the team reviewed all documents remotely and they were able to attend the meeting remotely.

Three technical sessions (one for the validation with extended scope and one for each verification 1st and 2nd) were carried on April 30th the two first and 2nd of 2024, with Country Participant’s staff involved in the management of the ER Program and the elaboration of the ER Monitoring Report. The aim of the sessions was to cross-check and verify with the responsible staff of each area the procedures described in the ER Monitoring Report and additional documents, as well as to clarify doubts from the audit team, prior to the issuance of the first round of findings. The following tables include the list of all Country Participant’s staff that participated in the technical sessions.

Nº	Name	Organization
1	Rodrigo Sagardía	INFOR (Instituto Forestal de Chile)
2	Rodrigo Guinez	INFOR (Instituto Forestal de Chile)
3	Marco Barrientos	INFOR (Instituto Forestal de Chile)
4	Georgina Trujillo	CONAF
5	Noelia Espinosa	CONAF
6	Ana Rickmers	CONAF
7	Naikoa Aguilar Amuchastegui	FMT
8	María Michel Fuentes	FMT

The program covered during the audit was the following:

Activity & Information	Date	Location
<p>Opening meeting</p> <p>Introduction and scope of the Audit. Review of meeting agenda. Generalities.</p>	29/04/2024	Predio Rucamanque (38°40'41" S; 72°37'2" O)
<p>Technical meeting 1 (validation with extended scope):</p> <p>1. <u>Carbon pools, sources and sinks</u></p> <p>Sources and sinks associated with the REDD+ Activities. Criterion 3 MF</p> <p>Significant Carbon Pools and greenhouse gases. Criterion 4 MF</p> <p>2. <u>Reference level</u></p> <p>Use of the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines. Criterion 5 MF.</p> <p>Key data and methods detailed and available for reconstruction of the Reference Level. Criterion 6 MF.</p> <p>Clearly documented Forest Reference Emission Level or Forest Reference Level for the ER Program Measures Area. Criterion 10,11, 12 and 13 MF</p> <p>3. <u>Measurement, monitoring and reporting</u></p> <p>Robust Forest Monitoring Systems. Criterion 14 MF.</p> <p>National Forest Monitoring System. Criterion 15 MF.</p> <p>Community participation in Monitoring and Reporting. Criterion 16 MF.</p> <p>4. <u>Uncertainties of the calculation</u></p> <p>Identification and address source(s) of uncertainty (identify, minimize, quantify remaining). Criterion 7, 8, 9.1 MF.</p>	30/04/2024	CONAF offices in Santiago de Chile
<p>Interviews to stakeholders DAY 1</p> <p>Independent agenda.</p>	02/05/2024	CONAF offices in Santiago de Chile

Activity & Information	Date	Location
<p>Technical meeting 2 (1st verification):</p> <p>1. <u>System for measurement, monitoring and reporting emissions and removals occurring within the monitoring period</u> Consistency of monitored estimates with RL 14.1 MF.</p> <p>2. <u>Quantification of emission reductions</u> Calculation of Emission Reductions. Criterion 22 MF</p> <p>3. <u>Uncertainty of the estimate of emission reductions</u> Estimation of residual uncertainty. Criterion 9.2, 9.3 MF.</p> <p>4. <u>Transfer of title to ERs</u> REDD projects and programs DMS. Criterion 37. Double counting. Criterion 23 MF.</p> <p>5. <u>Reversals</u> Addressing and account for reversals Criterion 18.2 and 19 MF</p>	02/05/2024	
<p>Interviews to Stakeholders DAY2</p>	03/05/2024	
<p>Closing Meeting: Remarks, clarifications, questions, following steps.</p>	03/05/2024	CONAF offices in Santiago de Chile

4. SUMMARY OF FINDINGS

4.1 Implementation status of the ER Program and update on drivers

AENOR has reviewed the ER Monitoring, supporting information, procedures, calculations, and supporting documentation of the Emission Reduction Program in Chile. The verification team confirms that sufficient information has been included to explain any changes in major drivers in the ER Accounting Area and the status of the implementation of the strategy to mitigate and minimize potential displacement.

4.2 System for measurement, monitoring and reporting emissions and removals occurring within the monitoring period

4.2.1 Forest Monitoring System

AENOR confirms that the NFMS (National Forest Monitoring System) of the ERP-Chile is functioning and can produce high quality data. The documents reviewed by the verification team demonstrate the necessary controls to address relevant sources of potential errors, omissions, and misstatements are in place. AENOR also confirms that the NFMS has been developed in accordance with the requirements of the FCPF Methodological Framework.

4.2.2 Forest Monitoring approach

Not applicable as the country made no changes to the monitoring plan.

4.2.3 Measurement, monitoring and reporting approach

AENOR assessed section 2.2 of the ERP-Chile Monitoring Report and attests that the monitoring plan has been updated when necessary and the equations and methods used for measuring, monitoring, and reporting are correct and consistent with the Reference Level, as described in Annex 4 of the same document.

In addition, AENOR confirms that the link among the equation parameters and the parameters under fixed data and parameters and monitored data and parameters are appropriate and correct.

4.3 Fixed Data and Parameters

After review of all information, procedures, calculations, and supporting documentation, AENOR confirms that the fixed data and parameters are applied consistently in line with the ER Monitoring Report template (see sections 4.8.1 Activity data and 4.8.2 Emission Factors, in AENOR's Validation Report of the ERP-Chile) and are consistent with the reported fixed data and parameters described in Annex 4 of the ER Monitoring Report.

AENOR confirms that fixed data and parameters are made publicly available according to criterion 6 of the MF, since links to access all sources are provided in the ER Monitoring Report.

4.4 Monitored Data and Parameters

AENOR confirms that all data and parameters subject to monitoring have been reported and are free of errors and material misstatements. Additionally, the verification team confirms that the reported data is in line with the guidelines provided in the ER Monitoring Report template.

AENOR reproduced all spreadsheets' information to check the correctness of each step of monitoring from measurement to data transfer and calculation, and in line with IPCC methods used to estimate emissions and removals for Measurement, Monitoring and Reporting (MMR). AENOR confirms the reliability of the source and nature of the reported evidence justified the selection of the monitored data and parameters; and that have been reported in line with the verification criteria.

AENOR also confirms that methodological steps and data were publicly available in accordance with applicable criteria, and the open links to the multiple sources are provided in the ERP-Chile MR. AENOR confirms that the evidence provided by the ER MR is sufficient and appropriate to determine the GHG reductions and removals.

AENOR confirms that the ERP-Chile monitors emissions by sources and removals by sinks included in the scope using the same methods to those used to set the Reference Level.

AENOR confirms that ER Monitoring Report states as monitoring period from 05-12-2019 to 31-12-2021.

Assessment details are as follows per monitored parameters:

Parameters	ΔATO_OTHERS _{i,t} = Areas of different Forest Types (i) converted to another category of land use during the 2020-2021 period.
Free of Material Misstatement	Yes
Reported Appropriately	Yes
Assessment Details	<p>The activity data used for the reference period was obtained from a sampling approach for estimating areas that incorporates the following characteristics:</p> <p>A sufficiently dense and balanced sample size to capture changes in land cover classes.</p> <p>Hybrid machine (algorithm) / human (visual) interpretation to assign land cover classes and changes: Several change detection algorithms, from several sources of satellite images and/or other spatially explicit information and visual interpretation were used to detect change classes.</p> <p>Cross-validation principle, both for machine interpretation (convergence of evidence) and human interpretation (elimination of subjective bias). This required the formalization of decision rules.</p> <p>Quality control and integrated quality assurance at all stages of the process.</p> <p>ER-MR presented information about data sources for estimating Activity Data, methods for mapping land-use and land-use change (including sampling design and size, assessment and labelling, analysis and Activity Data calculation), QA/QC procedures applied, values applied, and uncertainty associated with these parameters.</p> <p>The verification team conducted an independent analysis of similar remotely sensed data to confirm that the source data was reliable and appropriate. Additionally, the verification team was able to ensure that LULC classification was appropriate and followed the defined classification system.</p> <p>The verification team conducted independent data checks for each step necessary for the quantification of these parameters. Activity data parameters were examined using remotely sense imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary, ensuring that all activity data fell within the Accounting Area and that the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameters was performed correctly. This included an independent review of the literature cited in reference to the applied equations. The uncertainty associated with this parameter was independently calculated after a thorough review of the calculation spreadsheets. An empirical analysis with a reference product (ESA CCI map 2015-2020) shows that a systematic sampling of 1km x 1km over the ERP area is required to capture the changes with a relative sampling error of less than 15% on the land cover change classes. Complementary, the audit team attended during the onsite visit, the explanations from the technical staff of Chile and considers that the explanations and the development of these parameters are correct and are in relation to the information stated in the MR.</p>

Parameters	ADegFF = area of degradation of forests that remain as forests monitored during the 2020-2021 period.
Free of Material Misstatement	Yes
Reported Appropriately	Yes
Assessment Details	<p>ER-MR presented information about data sources for estimating Activity Data, methods for mapping land-use and land-use change (including sampling design and size, assessment and labelling, analysis and Activity Data calculation), QA/QC procedures applied, values applied, and uncertainty associated with these parameters.</p> <p>The verification team conducted an independent analysis of similar remotely sensed data to confirm that the source data was reliable and appropriate. Additionally, the verification team was able to ensure that LULC classification was appropriate and followed the defined classification system. Also, the verification team was able to confirm the correct implementation of the SOP for field measurements during the INFOR’s National Forest Inventory during the site visit.</p> <p>The verification team conducted independent data checks for each step necessary for the quantification of these parameters. Activity data parameters were examined using remotely sense imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary, ensuring that all activity data fell within the Accounting Area and that the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameters was performed correctly. This included an independent review of the literature cited in reference to the applied equations.</p> <p>The verification team has also reviewed the specific manual used to improve the quality of the process and the value. The visual interpretation of the plots uses Collect Earth Online projects to enable the technicians to assess various drivers of forest degradation.</p>

Parameters	ADegNFF = Surface of degradation areas resulting from the conversion of forests into plantations during the 2020-2021 period.
Free of Material Misstatement	Yes
Reported Appropriately	Yes
Assessment Details	<p>The activity data used for the reference period was obtained from the information from forest plantations a sampling approach for estimating areas that incorporates the following characteristics:</p> <p>A sufficiently dense and balanced sample size to capture changes in land cover classes.</p>

	<p>Hybrid machine (algorithm) / human (visual) interpretation to assign land cover classes and changes: Several change detection algorithms, from several sources of satellite images and/or other spatially explicit information and visual interpretation were used to detect change classes.</p> <p>Cross-validation principle, both for machine interpretation (convergence of evidence) and human interpretation (elimination of subjective bias). This required the formalization of decision rules.</p> <p>Quality control and integrated quality assurance at all stages of the process.</p> <p>ER-MR presented information about data sources for estimating Activity Data, methods for mapping land-use and land-use change (including sampling design and size, assessment and labelling, analysis and Activity Data calculation), QA/QC procedures applied, values applied, and uncertainty associated with these parameters.</p> <p>The verification team conducted an independent analysis of similar remotely sensed data to confirm that the source data was reliable and appropriate. Additionally, the verification team was able to ensure that LULC classification was appropriate and followed the defined classification system.</p> <p>The verification team conducted independent data checks for each step necessary for the quantification of these parameters. Activity data parameters were examined using remotely sense imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary, ensuring that all activity data fell within the Accounting Area and that the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameters was performed correctly. This included an independent review of the literature cited in reference to the applied equations. The uncertainty associated with this parameter was independently calculated after a thorough review of the calculation spreadsheets. An empirical analysis with a reference product (ESA CCI map 2015-2020) shows that a systematic sampling of 1km x 1km over the ERP area is required to capture the changes with a relative sampling error of less than 15% on the land cover change classes. Complementary, the audit team attended during the onsite visit, the explanations from the technical staff of Chile and considers that the explanations and the development of these parameters are correct and are in relation to the information stated in the MR.</p>
--	---

Parameters	A = Area burned between 2020-2021 in the ERP Regions.
Free of Material Misstatement	Yes
Reported Appropriately	Yes
Assessment Details	The activity data used for the reference period was obtained from the national information system of forest fires that provides information on all forest fires occurred in the country with its location and extension.

	<p>Quality control and integrated quality assurance at all stages of the process described in the SOP_05</p> <p>ER-MR presented information about data sources for estimating Activity Data, methods for mapping land-use and land-use change (including sampling design and size, assessment and labelling, analysis and Activity Data calculation), QA/QC procedures applied, values applied, and uncertainty associated with these parameters.</p> <p>The verification team conducted an independent analysis of similar remotely sensed data to confirm that the source data was reliable and appropriate. Additionally, the verification team was able to ensure that LULC classification was appropriate and followed the defined classification system.</p> <p>The verification team conducted independent data checks for each step necessary for the quantification of these parameters. Activity data parameters were examined using remotely sense imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary, ensuring that all activity data fell within the Accounting Area and that the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameters was performed correctly. This included an independent review of the literature cited in reference to the applied equations. The uncertainty associated with this parameter was independently calculated after a thorough review of the calculation spreadsheets. An empirical analysis with a reference product (ESA CCI map 2015-2020) shows that a systematic sampling of 1km x 1km over the ERP area is required to capture the changes with a relative sampling error of less than 15% on the land cover change classes. Complementary, the audit team attended during the onsite visit, the explanations from the technical staff of Chile and considers that the explanations and the development of these parameters are correct and are in relation to the information stated in the MR.</p>
--	---

Parameters	$\Delta A_{TOOTHERS_i, t}$ = Area of used non-forest land converted into forest during the crediting period.
Free of Material Misstatement	Yes
Reported Appropriately	Yes
Assessment Details	<p>The activity data used for the reference period was obtained from the implementation of the semi-automatic technique using satellite images. The spectral information available is combined in order to estimate the change in magnitude and type.</p> <p>ER-MR presented information about data sources for estimating Activity Data, methods for mapping land-use and land-use change (including sampling design and size, assessment and labelling, analysis and Activity Data calculation), QA/QC procedures applied, values applied, and uncertainty associated with these parameters.</p>

	<p>The verification team conducted an independent analysis of similar remotely sensed data to confirm that the source data was reliable and appropriate. Additionally, the verification team was able to ensure that LULC classification was appropriate and followed the defined classification system.</p> <p>The verification team conducted independent data checks for each step necessary for the quantification of these parameters. Activity data parameters were examined using remotely sense imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary, ensuring that all activity data fell within the Accounting Area and that the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameters was performed correctly. This included an independent review of the literature cited in reference to the applied equations. The uncertainty associated with this parameter was independently calculated after a thorough review of the calculation spreadsheets. An empirical analysis with a reference product (ESA CCI map 2015-2020) shows that a systematic sampling of 1km x 1km over the ERP area is required to capture the changes with a relative sampling error of less than 15% on the land cover change classes. Complementary, the audit team attended during the onsite visit, the explanations from the technical staff of Chile and considers that the explanations and the development of these parameters are correct and are in relation to the information stated in the MR.</p>
--	---

Parameters	AEnhFF = Areas of non-conservation native forest that remains forest during the 2020-2021 period for the six Region of the ERP.
Free of Material Misstatement	Yes
Reported Appropriately	Yes
Assessment Details	<p>The activity data used for the reference period was obtained from the national forest inventory (IFN) combined with other types of informations such as satellite and spectral imagery. The sampling approach from the IFN is considered to be sufficiently dense and accurate for the estimations it is used.</p> <p>Quality control and integrated quality assurance at all stages of the process described in the SOP_05 and SOP_06</p> <p>ER-MR presented information about data sources for estimating Activity Data, methods for mapping land-use and land-use change (including sampling design and size, assessment and labelling, analysis and Activity Data calculation), QA/QC procedures applied, values applied, and uncertainty associated with these parameters.</p> <p>The verification team conducted an independent analysis of similar remotely sensed data to confirm that the source data was reliable and appropriate. Additionally, the verification team was able to ensure that LULC classification was appropriate and followed the defined classification system.</p> <p>The verification team conducted independent data checks for each step necessary for the quantification of these parameters. Activity</p>

	<p>data parameters were examined using remotely sense imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary, ensuring that all activity data fell within the Accounting Area and that the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameters was performed correctly. This included an independent review of the literature cited in reference to the applied equations. The uncertainty associated with this parameter was independently calculated after a thorough review of the calculation spreadsheets. An empirical analysis with a reference product (ESA CCI map 2015-2020) shows that a systematic sampling of 1km x 1km over the ERP area is required to capture the changes with a relative sampling error of less than 15% on the land cover change classes. Complementary, the audit team attended during the onsite visit, the explanations from the technical staff of Chile and considers that the explanations and the development of these parameters are correct and are in relation to the information stated in the MR.</p>
--	---

Parameters	<p>$\Delta\text{ATO_OTHERS}_{i,t}$ = areas of conservation of native forest that remains as such during the 2020-2021 period in the six Region of the ERP.</p>
Free of Material Misstatement	<p>Yes</p>
Reported Appropriately	<p>Yes</p>
Assessment Details	<p>The data used for the browning affected area was gathered while calculating the yield of native forests and it has been considered to be caused by non-anthropogenic activities.</p> <p>ER-MR presented information about data sources for estimating Activity Data, methods for mapping land-use and land-use change (including sampling design and size, assessment and labelling, analysis and Activity Data calculation), QA/QC procedures applied, values applied, and uncertainty associated with these parameters.</p> <p>The verification team conducted an independent analysis of similar remotely sensed data to confirm that the source data was reliable and appropriate. Additionally, the verification team was able to ensure that LULC classification was appropriate and followed the defined classification system.</p> <p>The verification team conducted independent data checks for each step necessary for the quantification of these parameters. Activity data parameters were examined using remotely sense imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary, ensuring that all activity data fell within the Accounting Area and that the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameters was performed correctly. This included an independent review of the literature cited in reference to the applied equations. The uncertainty associated with this parameter was independently calculated after a thorough review of the calculation spreadsheets. An empirical analysis with a reference product (ESA CCI map 2015-</p>

	2020) shows that a systematic sampling of 1km x 1km over the ERP area is required to capture the changes with a relative sampling error of less than 15% on the land cover change classes. Complementary, the audit team attended during the onsite visit, the explanations from the technical staff of Chile and considers that the explanations and the development of these parameters are correct and are in relation to the information stated in the MR.
--	--

Parameters	Browning = Areas of native forest that remains as such affected by browning during the 2020 – 2021 period in the six Region of the ERP.
Free of Material Misstatement	Yes
Reported Appropriately	Yes
Assessment Details	<p>The activity data used was obtained from a sampling approach for estimating areas that incorporates the following characteristics:</p> <p>A sufficiently dense and balanced sample size to capture changes in land cover classes.</p> <p>Hybrid machine (algorithm) / human (visual) interpretation to assign land cover classes and changes: Several change detection algorithms, from several sources of satellite images and/or other spatially explicit information and visual interpretation were used to detect change classes.</p> <p>Cross-validation principle, both for machine interpretation (convergence of evidence) and human interpretation (elimination of subjective bias). This required the formalization of decision rules.</p> <p>Quality control and integrated quality assurance at all stages of the process.</p> <p>ER-MR presented information about data sources for estimating Activity Data, methods for mapping land-use and land-use change (including sampling design and size, assessment and labelling, analysis and Activity Data calculation), QA/QC procedures applied, values applied, and uncertainty associated with these parameters.</p> <p>The verification team conducted an independent analysis of similar remotely sensed data to confirm that the source data was reliable and appropriate. Additionally, the verification team was able to ensure that LULC classification was appropriate and followed the defined classification system.</p> <p>The verification team conducted independent data checks for each step necessary for the quantification of these parameters. Activity data parameters were examined using remotely sense imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary, ensuring that all activity data fell within the Accounting Area and that the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameters was performed correctly. This included an independent review of the literature cited in reference to the applied equations. The uncertainty associated with this parameter was independently</p>

	<p>calculated after a thorough review of the calculation spreadsheets. An empirical analysis with a reference product (ESA CCI map 2015-2020) shows that a systematic sampling of 1km x 1km over the ERP area is required to capture the changes with a relative sampling error of less than 15% on the land cover change classes. Complementary, the audit team attended during the onsite visit, the explanations from the technical staff of Chile and considers that the explanations and the development of these parameters are correct and are in relation to the information stated in the MR.</p>
--	--

Parameters	Periodic annual increment (PAI) for mixed forest
Free of Material Misstatement	Yes
Reported Appropriately	Yes
Assessment Details	<p>The activity data used was obtained from a sampling approach for estimating areas that incorporates the following characteristics:</p> <p>A sufficiently dense and balanced sample size to capture changes in land cover classes.</p> <p>Hybrid machine (algorithm) / human (visual) interpretation to assign land cover classes and changes: Several change detection algorithms, from several sources of satellite images and/or other spatially explicit information and visual interpretation were used to detect change classes.</p> <p>Cross-validation principle, both for machine interpretation (convergence of evidence) and human interpretation (elimination of subjective bias). This required the formalization of decision rules.</p> <p>Quality control and integrated quality assurance at all stages of the process.</p> <p>ER-MR presented information about data sources for estimating Activity Data, methods for mapping land-use and land-use change (including sampling design and size, assessment and labelling, analysis and Activity Data calculation), QA/QC procedures applied, values applied, and uncertainty associated with these parameters.</p> <p>The verification team conducted an independent analysis of similar remotely sensed data to confirm that the source data was reliable and appropriate. Additionally, the verification team was able to ensure that LULC classification was appropriate and followed the defined classification system.</p> <p>The verification team conducted independent data checks for each step necessary for the quantification of these parameters. Activity data parameters were examined using remotely sense imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary, ensuring that all activity data fell within the Accounting Area and that the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameters was performed correctly. This included an independent review of the literature cited in reference to the applied equations. The uncertainty associated with this parameter was independently</p>

	<p>calculated after a thorough review of the calculation spreadsheets. An empirical analysis with a reference product (ESA CCI map 2015-2020) shows that a systematic sampling of 1km x 1km over the ERP area is required to capture the changes with a relative sampling error of less than 15% on the land cover change classes. Complementary, the audit team attended during the onsite visit, the explanations from the technical staff of Chile and considers that the explanations and the development of these parameters are correct and are in relation to the information stated in the MR.</p>
--	--

5. VERIFICATION OF GHG ASSERTION

5.1 ER Program Reference level for the Reporting Period

The Reference level for the Reporting Period, according to the ER Monitoring Report, and, as reported in AENOR’s Validation Report, is as follows:

Year of Monitoring/ Reporting period <i>t</i>	Average annual historical emissions from deforestation over the Reference Period (tCO _{2-e} /yr)	If applicable, average annual historical emissions from forest degradation over the Reference Period (tCO _{2-e} /yr)	If applicable, average annual historical removals by sinks over the Reference Period (tCO _{2-e} /yr)	Adjustment, if applicable (tCO _{2-e} /yr)	Reference level (tCO _{2-e} /yr)
2020	5,140,727	11,914,436	-10,740,394	NA	6,314,769*
2021	5,140,727	11,914,436	-10,740,394	NA	6,314,770
Total	10,281,454	23,828,872	-21,480,788	0	12,629,539

*Decimals have been adjusted to ensure only full units are recorded in CATS

5.2 ER program emissions by sources and removals by sinks

After the review of all ERP-Chile information, procedures, calculations, and supporting documentation, AENOR confirms that the equations and methods used for measuring, monitoring, and reporting are correct and consistent with the Reference Level, free of material misstatements, errors, and omissions.

The Country Participant presented the estimated emissions by sources and removals by sinks included in the ER Program. The Country Participant also prepared spreadsheets with all the calculation processes. It can be publicly accessed, and the links are provided in the ER Monitoring Report.

AENOR reviewed the entire estimation process to confirm that is in with the MF and the verification criteria. AENOR was able to reconstruct ER estimate with given calculation spreadsheets. The formulae applied were correct to reproduce the final estimate of ER. The reported ERs are materially accurate. AENOR confirms that the ERs have been reported following a transparent and coherent step-by-step process that enables the reconstruction of estimates.

Year of Monitoring/Reporting Period	Emissions from deforestation (tCO _{2-e} /yr)	If applicable, emissions from forest degradation (tCO _{2-e} /yr)*	If applicable, removals by sinks (tCO _{2-e} /yr)	Net emissions and removals (tCO _{2-e} /yr)
2020	1,390,352	27,826,068	-26,452,737	2,763,683
2021	1,390,352	27,826,068	-26,452,737	2,763,683
Total	2,780,704	55,652,136	-52,905,474	5,527,366

And the calculation of emissions reductions results in:

	Deforestation	If applicable, forest degradation	If applicable, enhanced removals from afforestation/ reforestation (A/R)	If applicable, enhanced removals from other activities besides A/R	Total (tCO _{2-e})
Emission or removals in the Reference Level (tCO _{2-e})	10,281,454	23,828,872	-1,084,890	-20,395,898	12,629,539
Emissions or removals under the ER Program during the Monitoring Period (tCO _{2-e})	2,780,704	55,652,136	-1,676,938	-51,228,536	5,527,366
Emission Reductions during the Monitoring Period (tCO _{2-e})	7,500,751	-31,823,264	592,048	30,832,638	7,102,173
Length of the Reporting period / Length of the Monitoring Period (# days/# days)	757/730				
Emission Reductions during the Reporting Period (tCO _{2-e})	7,778,176	-33,000,288	613,945	31,973,024	7,364,856

5.3 Uncertainty of Emission Reductions

5.3.1 Uncertainty analysis

The Country Participant identified and assessed through a stepwise approach, the sources of uncertainty of the Emission Reduction in Activity Data (measurement, representativeness, sampling), Emission Factors (DBH measurement, H measurement, plot delineation, wood density estimation, biomass allometric

model, sampling, and in other parameters such as Carbon Fraction, root-to-shoot ratios, etc.), as well as in Integration. This approach was the same as for the uncertainty analysis of Reference Level.

The audit team recalculated the uncertainty statistics independently to confirm the accuracy of the reported precision, reviewed assumptions and sources associated with parameters used in the quantification, and reviewed uncertainty of the Emission Reductions due to random and systematic errors. AENOR confirms that the sources of uncertainty are systematically identified and correctly assessed in the Measurement Monitoring, and Reporting system, and addressed according to verification criteria, including the Guideline on the application of the Methodological Framework Number 4.

Additionally, AENOR confirms that there is an appropriate process for reducing uncertainty in the activity data and emission factors, where possible: systematic errors are minimized through the implementation of a consistent and comprehensive set of standard operating procedures, including a set of quality assessment and quality control processes; and random errors and other uncertainties are minimized to the extent practical based on the assessment of their relative contribution to the overall uncertainty of the emissions and removals.

5.3.2 Uncertainty of the estimate of Emission Reductions

The Country Participant estimated the uncertainty of aggregated Emission Reductions based on Monte Carlo analysis, same as for the Reference Level. The uncertainty estimate for the Emission Reductions strictly follows the guidelines of Approach 2: Monte Carlo simulation from 2006 IPCC Volume 1 General Guidance and Reporting Chapter 3 as well as the Guideline on the application of the Methodological Framework Number 4. Chile's ER Program applied Monte Carlo methods (IPCC Approach 2) for quantifying the Uncertainty of the Emission Reductions. Because the MC propagation analysis includes 134 parameter values, it has been provided access to uncertainty and emission factor calculation tool to see all parameter values used in the analysis.

The verification team reviewed and confirmed that elements mentioned in 5.3.1 related to the estimation of uncertainty for the ER were all addressed in the provided Uncertainty spreadsheet. AENOR also confirmed that the estimations were correct and that the results matched the Reference Level included in the ER Monitoring Report. Therefore, AENOR concludes that the application of Monte Carlo simulation for the quantification of Uncertainty of the Emission Reductions which results in 15% was performed correctly and free of errors and misstatements.

5.3.3 Sensitivity analysis and identification of areas of improvement of the MRV system

In order to identify the relative contribution of each parameter to overall uncertainty, a sensitivity analysis was conducted by the Country Participant in which the uncertainty of each parameter was selectively removed prior to running Monte Carlo simulations and combining uncertainties. AENOR confirms that uncertainty of AD and EF used in Reference Level setting is quantified in a consistent way.

AENOR confirmed that the underlying sources of error in ERs estimate in forest remaining forest (conserved and non-conserved) contributes in 67.2% of total ERs uncertainty. Other main contribution is coming from ERs' uncertainty in the non-conserved permanent forest (42.5%)

AENOR reviewed and confirmed that above-mentioned (section 5.3.1) elements related to the sensitivity analysis were all addressed in the provided calculation spreadsheets. The verification team also confirmed that the estimations were free of errors and the results matched the sensitivity analysis included in the ER Monitoring Report. Therefore, AENOR concludes that the sensitivity analysis was performed correctly.

5.4 Transfer of Title to ERs

5.4.1 Ability to transfer title

According to the information reported in the ER Monitoring Period and the evidence provided during the audit, Letter No. 99, of February 19, 2014, Issued by the Ministers of Agriculture and Foreign Affairs, In Chile, the owner of the land has no claim on to the ER titles. However they do possess the right to transact the ER titles in the VCM for example which could create a conflict that might lead to double counting if

not properly managed, for this, CONAF is empowered to sign agreements with these individuals preventing them from dealing the ER titles elsewhere and acquiring the transferability of the titles.

In the case of the particular monitoring period covered in this verification event, an independent assessment was performed and shared to the audit team by the FMT confirming that CONAF is able to make use of the ER titles.

AENOR has reviewed the evidence provided in the MR and considers that the information is reliable and correct. Therefore, according to the ERPA, the percentage of ERs transaction between the country and the FCPF is clear and detailed.

5.4.2 Program and Projects Data Management System

AENOR confirms that the CONAF is in charge of supervising REDD+ projects at the national level. To fully play this role, it is necessary to ensure that the REDD+ activities that are implemented in the territory comply with the guidelines and commitments made in the National REDD+ Strategy. AENOR confirms that Operational guidance are in place and comply with the requirements of the MF.

According to the MR and the information gathered during evidence review, one of the roles of CONAF is: to manage the national data management system, communicates all ER information and avoids multiple declarations of ERs or double counting.

Regarding the Data Management System, under CONAF, Chile has a strong and operational system to comply with the control and management requirements basic for avoiding double counting and misrepresentation or lack of transparency in the data provided when registering projects and programs, the main activities for that are standardization of procedures for collecting data, monitoring and setting standards for further development and easiness of use. The following link covers the page in which this system is located. This way, CONAF is able to manage the national Data Management System for REDD+ programs and projects; Communicate all ER information generated by REDD+ Projects; and Avoid multiple declarations of Emissions reductions or double counting. AENOR has reviewed information provided and checked the availability of the aforementioned information. As described in the verification report for MP1, AENOR is raising a minor CAR mCAR 01 to be resolved in the next MP so the country participant includes the information described in MF indicator 37.2 is included in the publicly accessible webpage.

5.4.3 Double counted ERs

AENOR confirms that systems to effectively detect and prevent double counting and/or compensation of ER generated has been properly designed and put in place and that, during the audit, no evidence of ER double-counted or compensated have been found.

No ERs have been sold, assigned or otherwise used by any other entity for sale, public relations, compliance or any other purpose including ERs accounted separately under other GHG accounting schemes nor ERs have been set-aside to meet Reversal management requirements under other GHG accounting schemes. AENOR also checked other projects under other standards in the Country, and confirms that there is not overlapping nor issuance of such projects in the VCM yet.

5.5 Reversals

5.5.1 The occurrence of major events or changes in ER Program circumstances that might have led to Reversals during the Reporting Period compared to the previous Reporting Period(s)

During the monitoring period, anomalous and extreme events that occurred in the PRE accounting area and through a study conducted by the country participant in 2022, the megadrought can be linked to an effect in the Mediterranean and temperate forests of Chile, resulting in browning in these forest areas and resulting in a diminished photosynthetic capacity of this area.

The megadrought and the warming trends of summer temperatures are two current climatological features that are not directly-anthropogenic caused, but it requires further analysis to prove if these phenomena are influencing/impacting at least 25% of the accounting area of the program.

- Forest fires: Reversal risks identified in the 2016 ERPD have not experienced significant changes. Nevertheless, due to the magnitude and dynamics of the event known as Mega Forest Fire which impacted Chile in the summer of 2017, the potential of forests to acting as sinks is estimated to have been affected. Around 500,000 hectares were burnt during this event, of which an important surface corresponded to pastures, scrubs, and forest plantations, excluded by both the ER Program and the FREL/FRL. The impact on the AC Native Forest was 38,000 hectares, being the Maule region the most affected with 28,000 ha, then 10,000 ha in the Biobío region and finally 570 ha in the Araucanía region. Of the 81 million tons of gross CO₂ equivalent emissions estimated for the entire event, 7.45 million tons CO₂ were associated with the native forest of the CA. Fires in Chile are caused by anthropic actions and correspond to one of the main drivers of ecosystem degradation in the world. As such, it was identified as one of the drivers of forest degradation in the ERPD. Fire seasons in Chile are frequent events that occur during the summer season; also, high temperature, low humidity and drought conditions can turn these frequent events into exceptional, barely controllable events.
- Drought: Chile has experienced over a decade of drought nationwide. The precipitation deficit since 2010 is 30%. The center-south of the country, that is, the north of the CA, are those that have experienced the most significant variations. Although the native forest has adapted to short drought periods, the duration of the current scenario is causing a significant increase in the native forest deterioration. In particular, some species and forest types in the CA have displayed a higher sensitivity to precipitations and climate variables, being more affected. While browning is evident in the results, it would not be a new event only specific for the period associated to the mega drought, but would rather be associated to a cycle of recurring drought weather events in the last two decades, which is related to climate change. Then, the peaks showing the largest browning effect in the graph coincide with historical drought events reported in Chile and are possibly related to El Niño/La Niña phenomena. The Chilean experts (GAC-UC) identified areas, by forest type, where vegetation anomalies in the primary productivity variable were frequent between 2001 and 2021. These areas under the impact of the megadrought are the areas affected by browning and correspond to those areas of forest that remain as forests that present phenological anomalies. So, in this study, browning was understood as an abrupt drop in the productivity of trees whose consequences translate into decreased growth or in mortality. The study area was the accountability forestland remaining forestland (FRF) area of the ERP.

5.5.2 Quantification of Reversals during the Reporting Period

There have been no transfers of reduced emissions in a previous period, therefore there are no reversals of ERs that have been previously transferred to the Carbon Fund.

5.5.3 Reversal Risk Assessment and Buffer ERs

Risk Factor	Risk indicators – Assessment by VVB	Resulting reversal risk set-aside percentage
Default risk	10%	10%
Lack of broad and sustained stakeholder support	Reversal Risk is considered medium: 5% discount. AENOR considers that the information provided is appropriate to justify the risk rate and updated to the current Monitoring Period. Moreover, the risk rate is the same as the one declared in the ER-PD.	5%
Lack of institutional capacities and/or ineffective vertical/cross sectorial coordination	Reversal Risk is considered low: 10% discount. AENOR considers that the information provided is appropriate to justify the risk rate and updated to the current Monitoring Period. Moreover, the risk rate is the same as the one declared in the ER-PD.	0%
Lack of long term effectiveness in addressing underlying drivers	Reversal Risk is considered medium-low: 2% discount. AENOR considers that the information provided is appropriate to justify the risk rate and updated to the current Monitoring Period. Moreover, the risk rate is the same as the one declared in the ER-PD.	3%
Exposure and vulnerability to natural disturbances	Reversal Risk is considered high: 0% discount. AENOR considers that the information provided is appropriate to justify the risk rate and updated to the current Monitoring Period. Moreover, the risk rate is the same as the one declared in the ER-PD.	5%
Total reversal risk set-aside percentage		23%
Total reversal risk set-aside percentage from ER-PD or previous monitoring report (whichever is more recent)		23%

In conclusion, AENOR determined that the Buffer Guidelines have been correctly used to calculate the Total reversal risk set-aside percentage, and the conservativeness principle in order to determine the default reversal risk set-aside percentages and the discounts have been applied by the Country Participant. In accordance with the indications for evaluating the risk of reversals established in the Buffer Guidelines, the total risk of reversals calculated for Chile is 23%. The reversals risk assessment was updated with respect what was reported ERPD, in the risk factor Exposure and vulnerability to natural disturbances. In the ERPD this risk factor was assessed as Medium, assigning a percentage of 3%. In this monitoring period assessment, the value was increased to the maximum, considering the High Risk of natural disturbances and disasters. As was observed and explained, 2018-2018 reporting period was heavily affected by drought and climate change. The total reversal risk percentage is then 23%. However, during September and October 2023, through discussions held with the Carbon Fund donors where Chile presented an adjustment to the emissions accounting methodology, it was proposed to apply the maximum risk of possible reversals established in the Buffer Guideline. In this way, applying a completely conservative criterion and given the methodological adjustment in which the occurrence of non-anthropogenic disturbances is assessed, it was decided to apply **40%** as the total risk of reversals.

AENOR verified that enough evidence was provided to justify the default reversal risk set-aside percentages and the discounts. ERs allocated to the Buffer is quantified in the following section.

5.6 Calculation of emission reductions

AENOR confirms that the ERP-Chile has quantified ERs in compliance with the MF, the ER Monitoring Report template, and the rest of applicable criteria, including FCPF Guidelines.

AENOR confirmed that the evidence provided allow to assess the GHG assertion made in the ER Monitoring Report as sufficient, without material discrepancy, and with a reasonable level of assurance, with respect to material misstatements, errors, or omissions.

The results are as follows:

		2020	2021	Total
A	Reference Level (tCO₂-e) (Section 5.1)	6,314,769	6,314,770	12,629,539
B	Net emissions and removals under the ER Program (tCO₂-e) (Section 5.2)	2,763,683	2,763,683	5,527,366
C	Emission Reductions during Reporting Period (tCO₂-e) (A-B)	1,005,905	1,005,905	2,011,810
D	If applicable, number of Emission Reductions from reducing forest degradation that have been estimated using proxy-based estimation approaches (use zero if not applicable)	0	0	0
E	Number of Emission Reductions estimated using measurement approaches (C-D)	1,005,905	1,005,905	2,011,810
F	Percentage of ERs (A) for which the ability to transfer Title to ERs is clear or uncontested (Section 5.4.1)	100%	100%	100%
G	ERs for which the ability to transfer Title to ERs is unclear or contested because they are sold, assigned or otherwise used by any other entity for sale, public relations, compliance or any other purpose (Section 5.4.3)	0	0	0
H	Total ERs (D+E)*F-G	1,005,905	1,005,905	2,011,810
I	Conservativeness Factor to reflect the level of uncertainty from non-proxy based approaches associated with the estimation of	15%	15%	15%

		2020	2021	Total
	ERs during the Crediting Period (Section 5.3.2)			
J	Emission Reductions allocated to the Uncertainty Buffer $(0.15 * D / C * H) + (I * E / C * H)$	150,885	150,885	301,770
K	Total reversal risk set-aside percentage applied to the ER program (Section 5.5)	40%	40%	40%
L	Emission Reductions allocated to the Pooled Reversal Buffer $(H - J) * K$	342,008	342,008	684,016
M	Number of FCPF ERs (H-J-L)	513,012	513,012	1,026,024
N	Percentage of Emission reductions from enhanced removals from afforestation/reforestation as a percentage of the total removals [Optional if the country wishes to generate enhanced removals]	8.3%	8.3%	8.3%
O	Number of FCPF ERs from enhanced removals from afforestation/reforestation $(M * N)$ [Optional if the country wishes to generate enhanced removals]	42,579	42,579	85,158

6. NON-COMPLIANCES AND OBSERVATIONS

To ensure conformance of the ER Program with all requirements set by the FCFC and the audit criteria (section 2.3), the verification team issued findings in accordance with section 11 of the VVG v2.5 in the following cases:

- Major Corrective Action Request (MCAR): i) the evidence provided to demonstrate conformity is insufficient, unclear, or not transparent and may lead to a material error, omission, or misstatement, and/or a breakdown in the systems delivery; ii) underlying assumptions used to develop the reported estimates are not supported by data; iii) material errors, omissions or misstatements have been made in applying assumptions, in data or calculations; or i) non-compliance with validation criteria.
- Minor Corrective Action Requests (mCAR): i) the evidence provided to demonstrate conformity is insufficient, unclear, or not transparent, but does not lead to a material error, omission, or misstatement, and/or a breakdown in the systems delivery; or ii) non-material errors, omissions or misstatements have been made in applying assumptions, in data or calculations;
- Observations (OBS): i) there is no objective evidence to prove that there is a non-conformity, but the VVB observes practices and/or methods that could result in future MCAR and mCAR; or ii) the VVB wishes to identify an area of the Forest Monitoring System that requires attention and/or adjustment in future monitoring and reporting.

The findings were submitted by the verification team in a single document, in which the Country Participant was able to offer answers to each of them and list supporting documents provided.

The Country Participant made the requested corrections and provided the verification team with updated versions of the ER Monitoring Report, which the verification team reassessed against the guidance documentation. The verification team either closed the opened findings when corrections, evidence and answers were satisfactory to comply with the audit criteria or asked for further corrections or clarifications. This process was repeated iteratively until all MCAR were suitably closed, as required by paragraph 62 of the VVG v2.5.

All finding issued by AENOR's audit team during the joint validation and first verification process have been closed except for minor CAR 01 that remains open to be addressed in the next verification event. All MCAR and OBS were successfully addressed by the ER Program and closed by the VVB. The findings are reported in the appendix 1 of this report.

APPENDIX 1: OVERVIEW OF NON-COMPLIANCES & OBSERVATIONS ISSUED DURING THE VERIFICATION BY THE VERIFICATION TEAM

Non Conformities (NCs)

Major Corrective Action Requests (MCARs)

MCAR id.	01	Date: 19/07/2024
MCAR description		
<p>The Template has specific requirements; however, the country does not comply with some of them:</p> <p>Portrait:</p> <ol style="list-style-type: none"> 1. In the initial table the number version is missing. 2. Check the format within the initial table of the portrait. <p>Section 1.1:</p> <ol style="list-style-type: none"> 3. dot is used as thousands separator e.g. 3.720 ha. However, in the rest of the document a comma is used. In addition, in some quantities such in page 2, commas and dots are not correctly used. (i.e. 21,895,786,000 pesos and others.) 4. In table of page 5 about drivers of deforestation and degradation, there are some differences between this table and the ERPD Section 4.1.1 page 42. <p>Section 4.3:</p> <ol style="list-style-type: none"> 5. In section 4.3, some table from the Template are missing. <p>Section 5.1:</p> <ol style="list-style-type: none"> 6. In section 5.1 of MR2, the format of table used for uncertainty sources of page 69 is not the one from the guidelines. 7. In section 5.1 of MR2, according to the template, the measurement has a contribution to overall uncertainty considered High. However, in the MR2 is considered low. Idem for representativeness. 8. In table Source of uncertainty of Section 5.1, the consideration as Bias or Random, is missing. 9. In table Source of uncertainty of Section 5.1, sampling is considered as N/A, however in the guidelines it applies as random. Please explain. 		
Project proponent's response		Date: 09/08/2024

<ol style="list-style-type: none"> 1. <i>Version number has been corrected.</i> 2. <i>The table was updated to the new MR template. Please consider that this template was launched once the MR was sent from the country. Consider excluding it from MCAR.</i> 3. <i>This issue was reviewed and corrected in the document.</i> 4. <i>The table in the ERMR is an update of the ERPD 4.1.1 page 42, but the drivers identified in both are the same. Some corrections was applied in the monitoring report .</i> 5. <i>Section 4 has been updated.</i> 6. <i>Table 5.1 was updated according to the template.</i> 7. <i>The measurement is indicated for data that comes from land use change, and those that come from the measurement of permanent forest. This distinction has been made in the document. The representativeness contribution is considered Low, as it was explained in the table.</i> 8. <i>The table has been corrected by incorporating the missing consideration.</i> 9. <i>In the case of the applied methodology, sampling is not used to estimate areas, which is why the contributions in these points are N/A in the report.</i> 	
<p>Documentation provided by the project proponent</p>	
<p>VVB's evaluation</p>	
<p>Date: 20/08/2024</p>	
<ol style="list-style-type: none"> 1. The version number has been changed and deemed correct 2. The format and the table was updated 3. The issue has not been corrected. There are still some issues with the value of some figures. For example 3.720 hectares 4. No changes have occurred in the response to this report. 5. The tables have been updated. However, in the last table of such section (total reference level emissions/net emissions and removals/emissions reductions during the Mp...) the letters before the emissions (A, B, C...G) are missing 6. The table has been updated, however, some of the contribution categories do not match with the value of the Uncertainty Guidelines. 7. According to the uncertainty guidelines: "The cells labelled without a choice (e.g. H, Yes, No) are prescribed 8. ". Therefore, the table is incorrectly reported some times. 9. The finding has not been addressed 10. The explanation is deemed correct 	
<p>Project proponent's response</p>	
<p>Date: 06/09/2024</p>	

<p>3. Was corrected. The document uses commas for miles and dots for decimals.</p> <p>4. Changes have been applied in tracking changes; the expansion of monoculture driver analysis has been included.</p> <p>5. Ok, was corrected including the missing letters.</p> <p>6. Please, could you indicate which categories are not matching with the guidelines.</p> <p>7. Please could you indicate which categories are incorrectly reported.</p> <p>8. The issue have been corrected</p>	
VVB's evaluation	Date: 27/09/2024
<p>3. Reviewed, Ok.</p> <p>4. Reviewed, ok.</p> <p>5. Reviewed, Ok.</p> <p>6. The table is now complete and correct.</p> <p>7. The table is now complete and deemed correct.</p> <p>8. Reviewed, ok.</p> <p>Thus, MCAR01 is closed.</p>	

MCAR id.	02	Date: 19/07/2024
MCAR description		
<p>The audit team is requiring for the following clarification and information:</p> <p>Section 1.1:</p> <ol style="list-style-type: none"> 1. In first table of section 1.1 of MR22, it is stated there are multiple support activities for productive chains. Please, explain such activities. 2. In first table of section 1.1 of MR2, it is stated that Property planning activities have been conducted in the framework of the ER Program. Please, provide further information about it. <p>Section 1.2:</p> <ol style="list-style-type: none"> 3. In first table of section 1.2 of MR2, the document REDD+ Annex for Chile in 2018. is called different in the ERP. Please, clarify it. 4. In table of section 1.2 of MR2, it is stated there is Deficiency in public policies due to limited oversight capabilities. So, explain which is this one on table 4.1.1 of the ERP. 5. within plagues and diseases it is stated that the degree of relevance of this driver has increased. However, it has been maintained 6. within deficiency in public policies, according to the ERP, this parameter is considered High 7. In section 2.1 of MR2, it is stated the following: CONAF also has a mechanism for receiving citizen complaints either via postal mail or e-mail when there is information of any acts where a violation of the Forest Law of Chile has taken place. Please, provide further information about it. 		
Project proponent's response		Date: 20/08/2024

1. The activities are related to initiatives considering improvements on firewood productive chains focused on reducing market informality and therefore enabling sustainable management. Some of these actions included supporting beneficiaries in order to raise financing the production, processing or commercialization of goods and/or services, associative business development planning, farmer certification and associativity network development.
2. The property planning activities correspond to the different forms of property management for the sustainable management of the forest and natural resources. These activities are carried out as part of the annual programming developed with the CONAF budget, such as forest management and management plans under the Native Forest Law, management actions under the reactivation program and the CONAF Emergency Fund. In addition, other activities financed by the international budget are considered, such as the farm plans developed by the Sustainable Land Management Project and the UN-REDD National Program.
3. When the ERPD was approved, the Technical Annex of Results had not been developed, and this is what is indicated in 18.2.6. What is mentioned there is that the Annex is planned as an Annex to the 2018 BUR, therefore the title is not definitive in said document.
4. The table was corrected in the monitoring report.
5. In table 4.1.1 of the ERPD for pests and diseases an Importance Low appears and in the ERPA RP2 a medium appears, so the increase in importance can be observed.

Forest and Ecology	Low	Medium	The degree of relevance of this table has increased in the order of new pests emerging (this is being confirmed) due to existing forest operations in the area (SOS, 2020).
--------------------	-----	--------	---

Identify causes	Identification and prioritization	Global Effects*	Importance	Uncertainty
Forest fire	DD (Disturbance/ Degradation)	Very high	Low	
Unsustainable use of vegetation resources (excess of sales, removal, etc.)	DD/MAE	Very high	Very high	
Use of the forest for business	DD	High	Very high	
Expansion of monoculture forest plantations	D (Deforestation)	High	Low	
Expansion of agricultural and livestock activity	D	Medium	Low	
Expansion of urban activity	D	Medium	Low	
Effects of Climate Change, Desertification and Drought	D/MAE (Disturbance and loss of management of forest carbon stocks)	Medium	Very high	
Expansion of industrial activity	D	Low	Low	
Pests and diseases	D/MAE	Low	Medium	

6. The table was corrected in the monitoring report.
7. More information about mechanism for receiving citizen illegal logging complaints has been provided in the subsection of Role of communities in the forest monitoring system contained in section 2.1.

Documentation provided by the project proponent

VVB's evaluation

Date: 20/08/2024

1. Please, include such explanation within the MR in the corresponding section.
2. The clarification is deemed correct
3. The clarification is deemed correct
4. The clarification is deemed correct
5. The clarification is deemed correct
6. The correction is deemed right
7. No updated have been done in such section

Project proponent's response

Date: 06/09/2024

<p>1. It was added in the section.7.</p> <p>6. Text in section 2.1 was updated. Please read again.</p>	
VVB's evaluation	Date: 27/09/2024
<p>1. Section 7 reviewed and accepted.</p> <p>6. Further information has been provided, ok.</p> <p>Thus, MCAR02 is closed.</p>	

MCAR id.	03	Date: 19/07/2024
MCAR description		
<p>The following issues have been found in section 2.:</p> <p>Section 2.1:</p> <p>In figure 1 of page 13 Organizational Structure of Chile, the ICP does not appear throughout section 2. Provide explanations about ICP MMA</p> <p>Section 2.2:</p> <ol style="list-style-type: none"> 1. In the Line Diagram the ICP does not appear throughout section 2. Every institution in the line diagram must be described in the section. 2. please provide the origin of equation 1. estimation of deforestation 3. In section 2.2.2 the Equation 9 is not exactly the equation 2.8 (b). 4. In section 2.2.2 the Equation 11 is not the equation 2.8 (a). 5. In section 2.2.2 equation 13 in page 34, provide the source of this equation and the CF value of 25 and 298 6. Provide the source for equations 15, 16 and 17. Provide Gayoso et al (2002) evidence for the R value of 0.2869. Moreover, provide the constant values of K and β. Provide also the source for equations 18 and 19. 		
Project proponent's response		Date: 20/08/2024

Section 2.2:

1. *The ICP has been specified in the document.*

 2. *Equation 1 comes from 2.15 of the IPCC Volume 4 Chapter 2 GENERIC METHODOLOGIES APPLICABLE TO MULTIPLE LAND USE CATEGORIES, adding the equivalent carbon conversion for forest land use changes to all non-forest land uses.*

 - 3 and 4: *The country presents in the document a summarized version of IPCC eq 2.8, both for equations 9 and 11 in the MR. In this simplified version, the term EF considers (V * BCEF * (1+R)), portion of the equation that is previously calculated in the thematic map, the elements of Volume, Conversion Factor and expansion of biomass and relationship stem root). It has been indicated in the reporting document in eq 9 and eq 11 that they correspond to an adaptation of eq 2.8 of the IPCC.*

 5. *Those values of Conversion Factors (CF) are taken from the National GHG Inventory Serie 1990 - 2018 and correspond to potentials of global warming from the IPCC Fourth Assessment Report (AR4). The source of the equation 13 is the IPCC Volume 4 Chapter 2 GENERIC METHODOLOGIES APPLICABLE TO MULTIPLE LAND USE CATEGORIES.*

 6. *Equations 15, 16, and 17 comes from the IPCC Volume 4 Chapter 2 GENERIC METHODOLOGIES APPLICABLE TO MULTIPLE LAND USE CATEGORIES. The R value for native species comes from INGEI 2020 page 404, based on the Biomass Inventory and Carbon Accounting document, from the FONDEF project MEASURING THE CARBON CAPTURE CAPACITY IN CHILE FORESTS AND PROMOTION IN THE WORLD MARKET.*
- Equations 18 and 19 correspond to adjustments made by the technical team to have a complete accounting and reference level for the activities of degradation and increase of forest carbon stocks, where the sub-activities were combined (added) considering that some were accounted using the land use conversion methodology, and others were accounted for using the remaining forest methodology.*

Documentation provided by the project proponent

VVB's evaluation

Date: DD/MM/YYYY

1. Please, explain where the explanations and references to the ICP have been done.
2. Please, include the origin of the equation in the MR
3. Please, provide such explanation within the text. Or explain where is located the explanation.
4. Idem
5. Please, provide the origin of equation and values in the MR beside the equation and the figures
6. Please, provide the source also in the MR, and externally, provide the source mentioned by the VVB to crosscheck the R value.

Project proponent’s response	Date: 06/09/2024
<ol style="list-style-type: none"> 1. Reference to the ICP was updated in figure 1, and the acronym in Spanish was included in the text that follow the figure. 2. The origin of the equation was included 3. For 3&4, the text was included in the document. 5. The equation 13 is a representation of the calculation ton convert non-CO2 GEI into CO2. It is not an equation based on any other . The conversion factors are taken from national GEI inventory. The previous explanation is incorrect. 6. For the equation 15, the reference from IPCC was included. The equations 16 & 17 are not from IPCC, this are developed specifically for the degradation in forest remaining forest assessment. This information was included in the ERPD and its application is maintained in the monitoring reports. The source for 	
VVB’s evaluation	Date: 27/09/2024
<ol style="list-style-type: none"> 1. Reference included. 2. Origin of the equation included and reviewed. 3. Ok 5. Explanation noted. Ok 6. The response is cut in half, however, the audit team has reviewed the application of the equation and deems it correct. <p>Hence, MCAR 03 is closed.</p>	

MCAR id.	04	Date: 19/07/2024
MCAR description		
<p>The following issues were found in section 3.1: Fixed Data and Parameters:</p> <ul style="list-style-type: none"> In section 3.1 of MR2, in table Parameter: Basic density value of the wood (D), the audit team was not able to find the value applied (0.496166) within the evidence provided. In section 3.1 of MR2, in table Parameter: Root-to-shoot ratios of native forest (R factor), the audit team was not able to find the value applied (0.2869) within the evidence provided. Provide evidence of Gayoso et al 2006 and 2002 to crosscheck multiple factors described among the section 3. In section 3.1, Specify the source of the AGB and BGB values of native forest for each specie. It cannot be found in the INGEI 2020 (e.g. alerce, Ciprés de las Guaitecas, araucaria...) In section 3.1 of MR2, in table Parameter: Dead organic matter of native forest (DOM), the audit team was not able to find the values (62.11 t/ha) for the forest type: Ciprés de las Guaitecas (young, adult/young, stunted). In section 3.1 of MR2, in table Parameter: Periodic annual increment (PAI) according to forest type, the evidence provided only shows Forest type Lenga for values of 5 m3 ha-1 year-1 (PAI). In section 3.1 of MR2, in table Parameter: Periodic annual increment (PAI) according to forest type, the audit team was not able to find the values for the forest type: Coihue de Magallanes (Mature (2.6), young (3.7), Mature/young (3.7)). For the Periodic annual increment (PAI) according to forest type there are several values that does not correspond with the source INGEI 2020. In section 3.1 of MR2, in table Parameter: Combustion factor, the audit team was not able to find the "International - Extra tropical forest" with such description. 		
Project proponent's response		Date: 20/08/2024

1. The values provided for these parameters have been previously presented in the ERP, the basic wood density, R factor and biomass values for other land uses. The basic density value comes from INGEI 2020 (page 403) and corresponds to the average density for native species (0.50).
2. The R value for native species comes from INGEI 2020 page 404, based on the Biomass Inventory and Carbon Accounting document, from the FONDEF project MEASURING THE CARBON CAPTURE CAPACITY IN CHILE FORESTS AND PROMOTION IN THE WORLD MARKET

3. Evidence:

Inventario de Biomasa y Contabilidad de Carbono, del proyecto FONDEF MEDICIÓN DE LA CAPACIDAD DE CAPTURA DE CARBONO EN BOSQUES DE CHILE Y PROMOCION EN EL MERCADO MUNDIAL, available in <https://docs.google.com/document/d/1dUB1BPkAmE6OAQag7cWhRLWHqC6jSFjQ/edit?usp=sharing&oid=103115075145926052872&rtpof=true&sd=true>

INVENTARIO DE CARBONO EN PRADERAS Y MATORRALES PARA EL ESTUDIO DE LINEA DE BASE PROYECTO SIF Sociedad Inversora Forestal S.A. REGIONES VII Y VIII, available in: <https://drive.google.com/file/d/1dZ1u0l8tYKlu-Yp6I52aOguNrsj9ck6b/view?usp=sharing>

4. The AGB and BGA parameters are estimated from the IFN plots. This affirmation is in the document.

Parameter:	Above and below ground biomass of native forest.
Description:	Above and below ground biomass of native forest. The native forest is classified by different forest type and structure. Each forest type has its own biomass value to estimate, depending on data availability.
Data unit:	Tons of dry biomass ha ⁻¹ (t.d.b. ha ⁻¹)
Source of data or description of the method for deriving the data including the spatial level of the data (local, regional, national, international):	Native forest data are national data and published in INGEI (2020). The mixed forest is calculated as a weighted average value of the forest types present in the region and according to the forest type surface present for the activity of delimitation of the period. For missing biomass values of the forest types and some of the structures a weighted average value was calculated in the region and according to the forest type surface present at the first year in the reference level (2013). The AGB and BGA parameters are estimated from the IFN plots. The estimate of the variation in carbon content of forests that remain as such in FRELPA and monitoring reports (1997-2006), restoration of forest remaining forests and Forestry Conservation schemes is estimated based on information coming from the Continuous Inventory of Forest Ecosystems and the application of remote sensing techniques on LANDSAT satellite images.

5. As mentioned in the table “For the missing DOM value of the forest types and some of the structures, a weighted average value was calculated in the region and according to the forest type surface present at the final year in the reference level (2013).” In the following link the FREL/FRL spreadsheet is shared:

AGREGAR PESATAÑA FILA TANTO.

https://docs.google.com/spreadsheets/d/1yM0klyYSEpqORvAAYhKQ8BL4Ftu0dF9H/edit?usp=drive_link&oid=103115075145926052872&rtpof=true&sd=true

6. For Lenga, the evidence provided does not have a value of 5. INGEI 2020 shows a value of 5.8 for Lenga forests that have a management plan. For the selection of the value it is assumed that this type of forest is highly managed, therefore this increment value is assigned for matures & stunted. For renewal and adult/renewal, the lowest increments are considered for the diameter classes of this forest type, which is considered the most conservative assumption, corresponding to the diameter class less than 10 cm, and between 50-60 cm.

<p>7. <i>Regarding to Coihue de Magallanes, INGEI 2020 indicates the value of 2.6 for forests with management plans, and values between 3.7, 4.6 and 6.1 per diameter class. Based on the difference in values for managed forests, the IPA of managed forests is used for the matures & stunted structure, along with the IPA of smaller diameter classes.</i></p> <p>8. <i>There is a translation error, the value is for all temperate zone forests, as indicated on page 2.54 of the 2006 IPCC Guidelines, Volume 4, chapter 2 “GENERIC METHODOLOGIES APPLICABLE TO MULTIPLE LAND USE CATEGORIES”.</i></p>	
<p>Documentation provided by the project proponent</p>	
<p>VVB’s evaluation</p>	
<p>Date: DD/MM/YYYY</p>	
<p>The value of (D) in the MR is reported as 0.496166. the value provided in the evidence according to the explanation is 0.5. please explain such difference, and why the Country is not using the one provided in the evidence. Complementary, explain the origin of 0.496166 instead of 0.5.</p> <p>The value from page 404 is 0.29. however, the value of the MR is 0.2869. please explain such difference.</p> <p>The evidence provided is deemed correct</p> <p>The explanation is deemed correct</p> <p>Please, explain the way in which this average was calculated</p> <p>The explanation is deemed correct</p> <p>The explanation is deemed correct</p> <p>Page 2.54 are the references of the IPCC document. Please, explain the correct page, and also, correct the translation (internation-extra tropical) according to the IPCC in the Combustion Factor Source of data in section 3.1</p>	
<p>Project proponent’s response</p>	
<p>Date: 06/09/2024</p>	

1. The value 0.496166 came from the result of an exhaustive bibliographic review by INFOR of various density reports prepared in Chile. The INGEI report the rounded value and the standard deviation, in this report we use the complete value.
2. The value for the R factor in table 6-27 (INGEI 2020) is 0.29 because is the rounded value of 0.2869.
5. For the missing DOM value of the forest types and some of the structures, a weighted average value was calculated in the region and according to the forest type surface present at the final year in the reference level (2013).
 First, it is advisable to download the following spreadsheet:
https://docs.google.com/spreadsheets/d/1yM0klyYSEpqORvAAyhKQ8BL4Ftu0dF9H/e/dit?usp=drive_link&ouid=103115075145926052872&rtpof=true&sd=true
 to be able to better visualize the formulas. Once downloaded, you should pay attention to the sheet called "Existencias-RegionalPonderado". In column BV row 17, the value 62.112196 (with all the decimals) is observed, this value comes from cell BR55, which corresponds to the total sum of each DOM value weighted by area of forest type and region.
 The first calculation is the area of each forest type by region (from S7 to AD54). Then the DOM calculation is carried out according to the weighting by region and forest type, from (BF7 to BQ54). The next step is to calculate the total weighted DOM by forest type and region (from BR7 to BR54). Finally, the sum of this column, from BR7 to BR54, results in 62.112196 with all the decimals (BR55). The value in the MR2 is 62.11 is the rounded value of 62.112196 with two decimals.
8. There is a translation error, the value is for all temperate zone forests. The correct page is 2.48 of the 2006 IPCC Guidelines, Volume 4, chapter 2 "GENERIC METHODOLOGIES APPLICABLE TO MULTIPLE LAND USE CATEGORIES". The issue (correction of "all temperate zone forests") was included in the MR2, Fixed Parameter section.

VVB's evaluation	Date: 27/09/2024
<ol style="list-style-type: none"> 1. Explanation accepted. 2. Ok. 5. The explanation for averages is accepted. 8. OK, understood. <p>Thus, MCAR04 is closed.</p>	

MCAR id.	05	Date: 19/07/2024
MCAR description		
<p>The following issues were found in section 3.2: Monitored data and parameters:</p> <ol style="list-style-type: none"> 1. Explain why for the parameter area of degradation of forests remaining forests monitored during 2001-2010, goes for such period, meanwhile for the parameters above and below go between 2011 and 2013 2. In section 3.2 of MR2, in table Parameter: Areas of different Forest Types(i) converted to another category of land use during the 2001 – 2013 period, it is not possible to find the values for parameter areas of different forest types (page 51) those such as 119.3, etc. 3. In section 3.2 of MR2, in table Parameter: ADegFF = Area of degradation of forests remaining forests monitored during 2001 - 2010 period, explain why the period of monitoring is 2001-2010 whether both parameters $\Delta\text{ATO_OTHERS}_{i,t}$ and ADegNFF, the period is 2001-2013. 4. In section 3.2 of MR2, in table Parameter: ADegNFF = Surface of degradation areas resulting from the conversion of forests into plantations during the 2001-2013 period, it was not possible to find the values for surface of degradation areas (page 53). 5. In section 3.2 of MR2, in table Parameter: Area burned between 2011-2010 in the ERP Regions, comes from the document "herramientas_incendios", tab incendios NR, rows 23. However, the parameters in such document have decimals. Please include the decimals. 6. In section 3.2 of MR2, in table Parameter: $\Delta\text{ATOOTHERS}_{i,t}$ = Area of used non-forest land converted into forest during the reference level, explain the origin of the parameters (Page 54). Do the same with Parameter: $\Delta\text{ATO_OTHERS}_{i,t}$ = Areas of conservation native forest that remains as such during the 2001-2010 period (Page 56). 7. Section 3.2 For a) Deforestation FREL/FRL provide the evidence of the areas. Could not be found in the spreadsheet provided in comments. Complementarily, in section 3.2 For c) Degradation - Substitution activity FREL/FRL provide the evidence of the areas. Could not be found in the spreadsheet provided in comments. 8. Provide the source for the areas displayed in j) Deforestation activity MR2. Could not be found in the spreadsheet. Also, provide the source for the i) Periodic Annual Increment for mixed forest. Could not be found in INGEI (2020). Complementarily, Provide the source for the areas displayed in l) Degradation - Substitution activity MR2. Could not be found in the spreadsheet. 9. In section 3.2, For m) Degradation – Forest fire activity MR2 the values presented in the spreadsheet contain decimals. Please include the decimals. 10. "Provide the source for n) Enhancement activity – No forest to native forest MR2" 		
Project proponent's response		Date: DD/MM/YYYY

1. The aboveground biomass parameter is not calculated for the period 2011-2013, please clarify this information. It is calculated according to the national forest inventory and the processing of information for the national GHG inventory. Belowground biomass is calculated as a proportion of aboveground biomass, represented by the R Factor.

To maintain consistency with the national GHG report, the AGB parameter is applied in the same way. The forest inventory operates by accumulating data and calculating value updates with re-measurement of sampling plots data sets.

2. The values correspond to the deforestation activity, they have been taken from the Deforestation spreadsheet, as activity data from land use and land use change maps: https://plataforma.encrv.cl/static/erpa/mr2/deforestacion/Herramienta_Deforestacion_NR2_MR2_v018.xlsx shared in the same table on page 52. In each region the deforested area is recorded (column O) and according to column G the forest type can be identified. With this information the sum was made by forest type for all regions (eg sheet of a region: MauleB-NB_NR).
3. This decision is explained in section 2.1 under the title "The selection and management of GHG related data and information". For clarity, DegFF FF stands for "Forest remaining forest" and DegNFF NFF for "NO Forest remaining Forest"
4. In the same table there is a Link associated with the calculation tool: https://plataforma.encrv.cl/static/erpa/mr2/sustitucion/Herramienta_Sustitucion_NR2_MR2_v008.xlsx. As was done for deforestation, the area (column O) by forest type (column G) of each region is added (eg sheet of a region: MauleB-PL_NR) and added.
5. Values with decimals were updated to the table.
6. The origin of the data for " $\Delta ATOOTHERS_t$ = Area of used non-forest land converted into forest", comes from the use change maps. Such maps are developed through the implementation of a semi – automated methodology for change detection that operates on Landsat images analyzed in Google Earth Engine by applying the land use definitions defined by Chile in the Cadastre of Native Forests.

Data for " ΔATO_OTHERS_t = Areas of conservation native forest that remains as such" comes from carbon stock maps. Everything that happens in forests that remain as such refers to data coming from plots in the Continuous Inventory of Forest Ecosystems or National Forest Inventory (IFN) by INFOR, combined with spectral information from the Landsat series. This information integrates forest state variables on the number of trees per hectare and basal area registered in the IFN plot monitoring, with Landsat spectral data in order to estimate carbon stocks.

These points are explained in section 2.1 under the title "The selection and management of GHG related data and information".

7. The activity data information corresponding to deforestation, substitution and increases from non-forest to forest comes from the land use change maps of each region (MCUT) which are found in the footers of the ERPA MR1 and MR2.

MCUT NREF and MR1 maps:

<https://plataforma.encrv.cl/static/erpa/mr1/mapas/CUT-MR1.zip>

<p>CO2 NREF maps in folder 2001-2010: https://plataforma.enccrv.cl/static/erpa/mr2/mapas/CO2-MR2.zip</p> <p>8. The MR2 deforestation and substitution data comes from the land use change maps shared in the footer on page 14.</p> <p>MCUT MR2 Maps: https://plataforma.enccrv.cl/static/erpa/mr2/mapas/CUT-MR2.zip</p> <p>The Periodic Annual Increase for mixed forests does not come directly from INGEI 2020, is calculated as a weighted average value of the forest types present in the region and according to the forest surface present for the activity of enhancement of the period (from no forest to native forest). Link to the spreadsheet:</p> <p>https://docs.google.com/spreadsheets/d/1PVzi7BEZGmkDAPjV1TpQZY1C-VIFjY2O/edit?usp=drive_link&ouid=103115075145926052872&rtpof=true&sd=true</p> <p>9. Decimals were added to the MR2 fire table.</p> <p>10. Non-forest to forest increases data comes from land use change maps: https://plataforma.enccrv.cl/static/erpa/mr2/mapas/CO2-MR2.zip included in the footer from page 14.</p>	
<p>Documentation provided by the project proponent</p>	
<p>VVB's evaluation</p>	
<p>Date: 20/08/2024</p>	
<ol style="list-style-type: none"> 1. What the VVB wanted to clarify, was the difference between periods. In some parameters, the period of calculation goes from 2001 to 2013. However, in area of degradation, it goes from 2001 to 2010. 2. The explanation is not clear. Please provide examples about the location of such evidence within the document provided. 3. Please, provide additional information about this selection, and the main difference for the usage of the period 4. The table is incorrect. Under the mentioned source, within alerce specie, the area in the MR is reported as 0.6. however, in the document provided the value is 0.0. same for the rest of species. 5. The decimals were included and this is deemed correct 6. The clarification is deemed correct 7. The evidence provided is deemed correct 8. The evidence provided is deemed correct 9. The update is deemed correct 10. The evidence provided is deemed correct 	
<p>Project proponent's response</p>	
<p>Date: 06/09/2024</p>	

1. The reference level was proposed and calculated for the period from 2001-2013 in general. Activities related to Land Use Change had information from Change Maps from 2001-2013. However, for degradation activity and enhancement in forest that remains as such, information was available from 2001-2010 which was aligned with the National Forest Inventory. This information is included in the ERPD approved by the FCPF in 2016. Additionally, when the countries were asked the possibility of applying corrections to the reference levels as addenda to the ERPD, the change in the reference period was not on the positive list of corrections allowed, therefore, the reference period cannot be modified in relation to what is established in the ERPD.
2. Each one of the spreadsheets have a name format “RegionB-NB_period” example: **MauleB-NB_NR** which correspond to **Maule region-forest to non-forest** activity from the **reference level**.

On the other hand, **MauleB-NB_RP2** correspond to **Maule region- forest to non-forest** activity from the **Monitoring Period 2**.

Each region has its own sheet for each period, examples of Reference Level: MauleB_NB_NR, ÑubleB-NB_NR, BioBioB-NB_NR etc.

Example of sheets for MR2: MauleB_NB_RP2, ÑubleB-NB_RP2, BioBioB-NB_RP2 etc.

To achieve the example value 119.3 for Alerce forest type, all the values in column O ranging from O15 to O66 from **ALL REGIONS** from the **SAME PERIOD** must be summed.

```
=SUMA('MauleB-NB_NR'!O15:O66;'ÑubleB-NB_NR'!O15:O66;'BioBioB-NB_NR'!O15:O66;'AraucaniaB-NB_NR'!O15:O66;'Los_RiosB-NB_NR'!O15:O66;'Los_LagosB-NB_NR'!O15:O66)
```

This formula results in the value 119.2676526 for Alerce forest type, which rounded to two decimal places is 119.3.

This formula must be replicated for the extension of the other forest type, as example for Cipres de las Guaitecas from O57 to O118, for Araucaria from O119 to O170 etc. The name of the forest type is in the column G from G15 to G651.

3. *DegFF FF* stands for “Degradation in Forest that remains as Forest ” and *DegNFF NFF* stands for “Degradation in -No- Forest that remains as Forest”, these two activities come from different estimation methods. In the case of the *DegFF FF* activity data, the stock change method is used, which is related to the information of the plots of the Continuous Inventory of Forest Ecosystems or National Forest Inventory (IFN) executed by INFOR, where the calculated period is from 2001 to 2010. The activity data for *DegNFF NFF*, comes from the use change maps. Such maps are developed through the implementation of a semi – automated methodology for change applying the land use definitions defined by Chile in the Cadastre of Native Forests and the available information from this maps where from 2001-2013.

4. The calculation is very similar to deforestation. Each one of the spreadsheets have a name format “RegionB-PL_period” example: MauleB-PL_NR which correspond to Maule region-forest to plantations activity from the reference level.

On the other hand, MauleB-PL_RP2 correspond to Maule region- forest to plantations activity from the Monitoring Period 2.

Each region has its own sheet for each period, examples of Reference Level: MauleB_PL_NR, ÑubleB-PL_NR, BioBioB-PL_NR etc.

Example of sheets for MR2: MauleB_BP_RP2, ÑubleB-PL_RP2, BioBioB-PL_RP2 etc.

To achieve the example value 0.6 for Alerce forest type, all the values in column O ranging from O15 to O18 from **ALL REGIONS** from the **SAME PERIOD** must be summed.

```
=SUMA('MauleB-PL_NR'!O15:O18;'ÑubleB-PL_NR'!O15:O18;'BioBioB-PL_NR'!O15:O18;'AraucaniaB-PL_NR'!O15:O18;'Los_RiosB-PL_NR'!O15:O18;'Los_LagosB-PL_NR'!O15:O18)
```

This formula results in the value 0.550010923 for Alerce forest type, which rounded to two decimal places is 0.6.

This formula must be replicated for the extension **of the other forest types for all the regions from the same period**, as example for Cipres de las Guaitecas from O19 to O22, for Araucaria from O23 to O26 etc. The name of the forest type is in the column G from G15 to G63.

VVB's evaluation

Date: 27/09/2024

1. Issue clarified.
2. Examples noted and reviewed, thank you.
3. Clarified.
4. OK, understood.

Hence, MCAR05 is considered closed.

MCAR id.	06	Date: 19/07/2024
MCAR description		
<p>The following issues were found in section 4:</p> <ol style="list-style-type: none"> 1. In section 4.1 the total value of average annual historical emissions from forest degradation over the reference period (2001-2013) is incorrect. Negative value -154,887,668. Moreover, commas are used to separate thousands and decimals. 2. The average annual historical removals by sinks over the reference period for each year is not correct according to the spreadsheet. (Value -10,740.394 and in the spreadsheet is -10,795.428) 		
Project proponent's response		Date: 20/08/2024
<ol style="list-style-type: none"> 1. <i>The table and the use of commas and points are corrected as indicated.</i> 2. <i>The value included in the document corresponds to the sum between enhancement removals and conservation removals. When reviewing the spreadsheet, you can notice this result.</i> 		
Documentation provided by the project proponent		
VVB's evaluation		Date: DD/MM/YYYY
<ol style="list-style-type: none"> 1. Table of section 4.1 has been updated. However, tables of section 4.1 and 4.2 do not represent the reporting period covered in MR2 (i.e. 5-12-2019 to 31-12-2021). 2. Value indicated is correct according to the spreadsheet. 		
Project proponent's response		Date: 06/09/2024
<ol style="list-style-type: none"> 1. The tables of section 4.1 and 4.2 contain the annualized values since, later in table 4.3 the calculation of the proration of the reporting period covered in MR2 is carried out. 		
VVB's evaluation		Date: 27/09/2024
<ol style="list-style-type: none"> 1. Understood. <p>MCAR06 is closed.</p>		

MCAR id.	07	Date: 19/07/2024
MCAR description		
<p>The following issues were found in section 5:</p> <ol style="list-style-type: none"> 1. the table used for uncertainty sources of page 69 is not the one from the guidelines 2. according to the template, the measurement has a contribution to overall uncertainty considered HIGH. However, in the MR is considered low. Idem for representativeness (wrong). 3. the consideration as Bias or Random, is missing in uncertainty table. 		
Project proponent's response		Date: DD/MM/YYYY
<p><i>These points correspond to those indicated in MCAR01, findings 6 to 9. Please find the answers indicated there.</i></p>		
Documentation provided by the project proponent		
VVB's evaluation		Date: 20/08/2024
<p>This finding is addressed in MCAR 01. Therefore, MCAR 07 is closed</p>		



MCAR id.	08	Date: 19/07/2024
MCAR description		
<p>The following issues were identified within section 6:</p> <ol style="list-style-type: none"> 1. In section 6.2, a national REDD+ Programs and Projects Data Management System or a third party centralized REDD+ Programs and Projects Data Management System needs to provide the attributes of ER Programs, including: i. The entity that has Title to ERs produced; ii. Geographical boundaries of the ER Program or project; iii. Scope of REDD+ activities and Carbon Pools; and iv. The Reference Level used. 2. In table Source of uncertainty of Section 6.4, Currently, there are six REDD+ projects linked to the voluntary market implemented by VCS in Chile. According to its own records, no credits due to emission reductions have been claimed during the 2020-2021 reporting period which significantly reduces potential inconveniences. This information is not correct. 3. In table Source of uncertainty of Section 6.4, it is stated that the Valdivian Coastal Reserve Project has 58,154 VCUs/year. However, this information is wrong. 		
Project proponent's response		Date: DD/MM/YYYY

1. The data Management System developed for the ERP of the ENCCRV is the ENCCRV information management platform, available at www.plataforma.enccrv.cl. This DMS currently works only registering projects developed under the ENCCRV, but could be expanded to the CONAF activities in the national territory. The system does not register other projects from private owners.

For that, the country uses a register allocated in <https://www.enccrv.cl/medicion-y-monitoreo>, in which the information on projects developed in the area of ERP accounting and ENCCRV implementation is organized. To do this, the country team carries out a review of the project certification records, systematizing those that could generate double accounting or double payment. The information included in table <https://www.enccrv.cl/medicion-y-monitoreo> section 2.4 is the one that is publicly available at the links. Where, depending on the Project, the available information is such as the entity that has Title to ERs produced; geographical boundaries of the ER Program or project, scope of REDD+ activities and Carbon Pools and the Reference Level used.

2. At the moment of delivery of 2nd Monitoring Report, of the 6 projects related to the voluntary market registered on the Verra registry, three projects had registered status: Mikro-Tek In, Agrícola y Forestal SNP Ltda and The Nature Conservancy; and three projects were under validation: Bosques Cautín S.A. and two from NFC Green SpA as listed on the website: <https://www.enccrv.cl/medicion-y-monitoreo> section 2.4.

Of these projects registered, Mikro-Tek (Reforestation of degraded lands in Chile through the use of mycorrhizal inoculation) uses only exotic species in its implementation, so it has no implications regarding double counting with the ENCCRV.

The two remaining registered projects: TNC (Avoid planned deforestation and degradation in the Valdivian Coastal Reserve, Chile) and Agrícola y Forestal SNP Ltda (Reforestation of degraded lands in the California Valley of Patagonia, Chile) do not present information regarding records of issue (Issuance Records) and did not present information actualized. Due to this, reduced emissions transactions cannot be verified from the 2020-2021 monitoring period in the projects mentioned above.

From the projects under validation, "Bosques Cautín" is now under Registration requested. This project comprises the management of three species of planted forests, which are exotic, so it has no implications regarding double counting with the ENCCRV. The project "Proventus Grouped Project" increase the carbon sequestration through the planting of woody commercial vegetation using *Pinus radiata* (Pino radiata) or *Eucalyptus globulus* (Blue gum) as a plantation species, both exotic species. The "Caelus Grouped Project".

3. In relation to the error identified for the TNC project (Avoid planned deforestation and degradation in the Valdivian Coastal Reserve, Chile), the value 58,154 corresponds to the Estimated Annual Emission Reductions, which is registered on the page VERRA. Below you can see two screenshots showing this amount.



Table 1.4. Ex ante estimate of net emission reductions (not including non-permanence risk buffer deduction)

Year	Estimated GHG emission Reductions or removals (CO ₂ e)
2004	171,563.3
2005	138,422.5
2006	54,548.3
2007	51,802.4
2008	42,099.4
2009	30,862.5
2010	36,652.1
2011	41,807.4
2012	36,242.2
2013	31,482.3
Total estimated ERs	581,542
Total number of crediting years in first 10 year baselines period	10
Average annual ERs	58,154

*Remember, the year refers to the year of the start of the annual period. Hence 2004 represents the year from 4 November 2003 to 3 November 2004.

If it is not correct, please inform where do we have to found the correct values.

Bosques Cautín S.A project currently appears on the VERRA platform requesting registration, in addition to presenting a value of annual emissions greater than that registered on our platform. This data will be updated in the monitoring report.

Documentation provided by the project proponent

VVB's evaluation **Date:** 20/08/2024

- 1.The explanation provided is deemed correct.
- 2.The clarification is deemed correct
- 3.The VCUs are the values when the monitoring was done. If the project is only a validation, these ERs are estimations.

Project proponent's response **Date:** 06/09/2024

- 3. This issue was corrected in the MR1 and MR2 replacing VCUs for ERs estimated

VVB's evaluation **Date:** 27/09/2024

- 3. Correction noted.

MCAR 08 is closed.

MCAR id.	09	Date: 19/07/2024
MCAR description		
In section 7, sub-section 7.3, exposure and vulnerability to natural disturbances is wrong considered. (high).		
Project proponent's response		Date: DD/MM/YYYY
<p>The risk associated with exposure and vulnerability to natural disturbances has been updated from medium to high, because one survey developed by World Bank & the country was done finding phenological evidence of the impact of drought & mega drought in forest land within the ERP area. The drought & mega drought is a natural disturbance whose effect has generated the browning in the forest canopy, including the death of any individuals. The study revealed the effect of the lack of water on the phenological cycle of the vegetation in the program area, identifying some anomalous behaviors in certain variables, with integral productivity being the one that best represented the anomalies.</p> <p>These anomalies were linked to drought, allowing us to identify a proportion of the forests directly affected by this phenomenon, managing to segregate carbon flows in these areas.</p> <p>In this way, the risk increases completely when the generated impact is detected, demonstrating the importance of its occurrence in the program area. No further information is provided because the study carried out was shared previously.</p>		
Documentation provided by the project proponent		
VVB's evaluation		Date: 20/08/2024
The explanation is deemed correct. Therefore, MCAR 09 is closed		

MCAR id.	10	Date: 19/07/2024
MCAR description		
<p>Within section 8, value for I Total reversal risk set-aside percentage applied to the ER program is incorrect according to section 7.3.</p> <p>Regarding the supporting annexes, Annex 4 onwards is missing.</p>		
Project proponent's response		Date: DD/MM/YYYY
<p><i>Remember that the FMT decided to apply the maximum discount level for reversal risk, which corresponds to 40%.</i></p> <p><i>Annex 4 should be included only in ERM1, as an addendum to the ERPD.</i></p>		
Documentation provided by the project proponent		
VVB's evaluation		Date: 20/08/2024
<p>The explanation is deemed correct. However, try to make more visible this difference and assumption, between section 7.3 and 8 (in spite of the explanation was done in page 100).</p> <p>"In this way, applying a completely conservative criterion and given the methodological adjustment in which the occurrence of non-anthropogenic disturbances is assessed, it was decided to apply 40% as the total risk of reversals"</p>		
Project proponent's response		Date: 06/09/2024
<p>The explanation was added between de section 7.3 and 8 as requested.</p>		
VVB's evaluation		Date: 27/09/2024
<p>Correct. MCAR10 is closed.</p>		

Minor Corrective Action Request

mCAR id.	01	Date: 25/10/2024
mCAR description		
As described in section 5.4.2 of the verification report, the Country Participant will have to include in section 6.2 of the MR the information requested in MF indicator 37.2 and make it accessible to the public.		
Project proponent's response		Date: DD/MM/YYYY
<i>N/A as it is left open until next verification.</i>		
Documentation provided by the project proponent		
VVB's evaluation		Date: DD/MM/YYYY
N/A		

Observation

OBSERVATION ID	01	Date: 19/07/2024
OBSERVATION description		
<p>During the desk review, the following observation were raised by the audit team:</p> <p>Portrait:</p> <ol style="list-style-type: none"> 1. In the initial table there is one missing box: Number of FCPF ERs from enhanced removals. 2. please, in those observations or source of information in which there are no systematized statistics but it is a widely recognized reality, please provide additional information <p>Section 1.1:</p> <ol style="list-style-type: none"> 3. According to the main page, there are several days from 2019 which belongs to the reporting period. 4. Provide evidence of the training activities for owners and producers such as fire prevention 5. Provide evidence of the following: the sustainable management implemented in the 3.720 ha of forest, the 1.223 property inspections, 907 verified forest management plans, 1.587 complaints from third parties, 209 inspections to collection points, 287 inspections to logging trucks, 498 patrols carried out, 385 judicial requests, 87 preventive activities and 176 verification of tree marketing <p>Section 1.2:</p> <ol style="list-style-type: none"> 6. within urban and industrial activity expansion it is stated that there are no systematized statistics, but it is a recognized reality. Please provide further details about this assumption <p>Section 2.2.2:</p> <ol style="list-style-type: none"> 7. In section 2.2.2 of MR2, provide evidence of data source of Equation 1. Estimation of Deforestation. 8. In section 2.2.2 of MR2, is provided the data source for the parameter CF (conversion factor of non no-CO2 gas into CO2e, ton gas no-CO2 ton CO2e-1.) Please indicate the accurate chapter from IPCC 2006. <p>Section 4.1:</p> <ol style="list-style-type: none"> 9. please provide evidence for the Letter No 119/2020 which is stated in Section 4.1 of MR2. <p>Section 5:</p> <ol style="list-style-type: none"> 10. Please, provide further clarification for the use of pro-rata factor of 0.963014. <p>Section 6.4:</p> <ol style="list-style-type: none"> 11. In of Section 6.4, provide explanation about this: CONAF has not defined procedures and agreements to sell or assign ERs of the ER Program area to other entities under a different GHG program or standard. Indeed, these projects could trade ER for the period 2020-2021. In order to avoid double counting, CONAF considers the exclusion of the areas reported in as participants of a voluntary carbon market standard, thus avoiding considering ERs from areas committed to other buyers. In particular, for this period it was not possible to collect the geographical areas, however, transactions with other standards were not recorded either. 		

Project proponent's response	Date: DD/MM/YYYY
<ol style="list-style-type: none"> 1. <i>The initial table is corrected as requested. Please consider that the template was updated after the delivery of the ERMR.</i> 2. <i>The evidence comes from activity data generated from land use change maps. They clearly identify the dynamics of land use change and show specific trends regarding the increase in some uses and subuses.</i> 3. <i>That's correct, 27 days of 2019 are within this reporting period (from december 5, 2019).</i> 4. <i>CONAF has mandatory management instruments related to fire prevention, such as native forest management plans, which seeks the sustainable use of native forest resources, with the goal of obtaining timber and non-timber goods, considering the multifunctionality of forests and biological diversity, safeguarding water quality and avoiding soil deterioration and the Management Standard for the prevention and protection against forest fires in rural areas and urban-rural interface areas, through which Vegetation-Free and Fuel-Cutting Belts located adjacent to urban-rural interface areas may be implemented, in this regard, owners and producers are informed and monitored continuously.</i> <i>Likewise, CONAF has a program for communities prepared for forest fires, which the purpose of to share innovative ideas with communities and their inhabitants that will help create a community that is better prepared to reduce the risk of forest fires. To learn more about this program, visit the website: https://www.conafprevencionincendios.cl/ and to learn about the results achieved, consult the participatory public accounts reports available on the website: https://www.conaf.cl/participacion-ciudadana/".</i> 5. <i>This information comes from the results of CONAF's internal management for the control of its activities and the establishment of internal performance goals of the Institution. This report provides a summary of the background information that each CONAF unit handles as a result of its annual management.</i> 6. <i>The assumption is collected from activity data on the dynamics of land use changes, which come from land use change maps. From these, the dynamics of surface expansion of industrial activity and urban areas/settlements are recognized.</i> 7. <i>Equation 1 comes from 2.15 of the IPCC Volume 4 Chapter 2 GENERIC METHODOLOGIES APPLICABLE TO MULTIPLE LAND USE CATEGORIES, adding the equivalent carbon conversion for forest land use changes to all non-forest land uses.</i> 8. <i>The values 25 for CH4 & 298 for N2O refers to global warming potential for GHG calculations. This data is taken from the national GHG inventory 1990-2018 serie, based on AR4 IPCC, available in https://snichile.mma.gob.cl/wp-content/uploads/2022/06/Informe_del_Inventario_Nacional_de_GEI_serie_1990-2018.pdf</i> 9. <i>Access link to Official Letter 119/2020: https://drive.google.com/file/d/1_S6Jzev29e2Qh0NxN5Bfi10HoXu5idkV/view?usp=sharing</i> 	

<i>FMT</i>	<i>response:</i>
<p>https://drive.google.com/file/d/1de_YnbyeXMJTMuJAmIohy5U5dEo9QzyZ/view?usp=sharing</p>	
<p>10. <i>The prorata factor for the second ERMR is $757/730 = 1,0369$, given that the reporting period includes an additional 27 days of 2019, until December 31, 2021.</i></p>	
<p>11. <i>CONAF has not defined the procedures and agreements to sell or assign ERs of the ER program because all the results generated by the program implementation will be used by the country to the commitments of climate change mitigation actions. In addition to the above, the results of the ERP are distributed to the beneficiaries in the program area according to the benefit sharing plan established by the country.</i></p>	
<p><i>Currently in Chile, an emissions compensation mechanism is being developed, in which the option of generating solution projects based on the nature of the forestry area is proposed, for which an increase in the generation of projects in the forestry accounting area could be generated. However, the development of this mechanism is still incipient.</i></p>	
<p><i>Regardless of the above, the established procedure indicates that in the case of generating RE in the program area, CONAF must exclude these areas and the transactions associated with these projects, in order to guarantee that double accounting and double payment are avoided.</i></p>	
<p>Documentation provided by the project proponent</p>	
<p>VVB's evaluation</p>	<p>Date: DD/MM/YYYY</p>
<ol style="list-style-type: none"> 1. Initial table has been updated to comply with the template. However, the word reversal is repeated not complying with the template. 2. Explanations are deemed correct. 3. Days of 2019 are not accounted in several sections such as 4.1 and 4.2. See MCAR 06. 4. Evidence provided is deemed correct. 5. Please provide the reports so the audit team can verify that the information is reliable. 6. Explanations are deemed correct. 7. Equation 2 comes from 2.15 of the IPCC Volume 4 Chapter 2 <i>GENERIC METHODOLOGIES APPLICABLE TO MULTIPLE LAND USE CATEGORIES</i>. Therefore, data source provided is not correct. 8. Evidence provided is deemed correct and based on IPCC. 9. Evidence provided is deemed correct. 10. Explanations are deemed correct. 11. Clarifications are deemed correct. 	
<p>VVB's evaluation</p>	<p>Date: 06/09/2024</p>
<ol style="list-style-type: none"> 1. The word reversal was erased to comply with the template. 3. The tables of sections 4.1 and consider only the annualized values. The days of the reporting period covered in MR2 are considered in the proration in table 4.3 also, the extension is defined in the initial table. <p style="background-color: #ff00ff; color: black; margin: 5px 0;">5. AGREGAR ESTOS CAMBIOS AL DOCUMENTO NUEVO</p> <p>For a better comprehension we unify the information in a single excel called "Observation_01_VV" with different sheets. Link: https://docs.google.com/spreadsheets/d/1yurYU9l_eY8G-sEAGcNbS10o0buxALir/edit?usp=sharing&oid=103115075145926052872&rtpof=true&sd=true</p>	

-The sustainable management implemented in the 3.720 ha of forest : “superficie bonificada ley de BN” and correspond to the sum of the two years from the region of the pre. =SUM(L7:M12). This information comes from the **Departamento de Bosque Nativo from the Gerencia de Conservación de Ecosistemas Boscosos y Xerofíticos** those who address forest incentives.

The following values cited correspond to the sum of the activities reported in the sheet “Reporte actividades 2020” from the Executive Report from December 2020 and the sheet “Reporte actividades 2021” from the Executive Report from December 2021. The values came from internal management indicators of **the Gerencia de Fiscalización**

- the 1.223 property inspections: =SUM(L24:Q24)₂₀₂₀ + SUM(L24:Q24)₂₀₂₁ (the sum of each year)

-907 verified forest management plans: =SUM(L22:Q22)₂₀₂₀ + =SUM(L22:Q22)₂₀₂₁ (the sum of each year)

-1.587 complaints from third parties: This information must be updated because of an error in the sum of the regions of the PRE area. The real value is 1545, the mistake came from the aggregation of a region out of the PRE (42 from region VI year 2020).

-209 inspections to collection points: =SUM(L27:Q27)₂₀₂₀ + =SUM(L27:Q27)₂₀₂₁ (the sum of each year)

-287 inspections to logging trucks: =SUM(L28:Q28)₂₀₂₀ + SUM(L28:Q28)₂₀₂₁ (the sum of each year)

-498 patrols carried out: This information must be updated because two patrols weren't counted from the year 2020. The correct value is 500. The value correspond to the sum of the are Air patrol, River patrol and Ground patrol for year 2020 and the sum of the Air patrol, Ground patrol and PLANET air patrol for year 2021.

=SUM(L29:Q31)₂₀₂₀ + = SUM(L29:Q31)₂₀₂₁

-385 judicial requests: The value correspond to the sum of the different types of judicial request.

= SUM(L32:Q36)₂₀₂₀ + =SUM(L32:Q36)₂₀₂₁

-87 preventive activities: =SUM(L40:Q42)₂₀₂₀+ =SUM(L39:Q41)₂₀₂₁

-176 verification of tree marketing: The value correspond to the sum of Larch Product Marking and Larch Stock Declaration of each year.

=SUM(L44:Q45)₂₀₂₀+ =SUM(L42:Q43)₂₀₂₁

7. The Equation 1 is adapted from Equation 2.15 of the IPCC Volume 4 Chapter 2.

VVB's evaluation	Date: 27/09/2024
<p>1. ok</p> <p>3. Ok, correct.</p> <p>5. Please clarify the answer and if it has been added to the document. The evidence provided have been reviewed and confirmed.</p> <p>7. Ok</p> <p>OBS 01 is closed.</p>	

APPENDIX 2: EVIDENCE PROVIDED BY COUNTRY PARTICIPANT AND REVIEWED BY AENOR

AENOR has reviewed all evidence provided. The evidence provided by the country are located within the Monitoring report in the corresponding section for each evidence. The evidence is located within external links that can be visited to contrast the information. AENOR confirms that all the links referenced in the MR work properly and they are updated. If some links were broken when AENOR tried to open them, some findings have been raised to solve the problem.

Document information

Version	Date	Description
2.4	December 2024	Remove decimals.
2.3	November 2024	Round up corrections in section 5.2 and 5.6
2.2	November 2024	Typo correction in section 5.6.
2.1	October 2024	Format updates in section 5.6.
2.0	October 2024	Update with comments from FMT. mCAR 01 included to be addressed in the next verification event.
1.1	October 2024	Update with comments from ITR.
1.0	October 2024	Initial version adopted.