

Forest Carbon Partnership Facility (FCPF) Technical Assessment of Final ER-PD Chile

I General Approach of the Review

Each TAP member revised the parts of the ER-PD in relation to a series of criteria and indicators that are in accordance with his/her professional experience. One teleconference was held to explain the evaluation procedure and to clarify doubts. The TAP coordinator organized and supplemented where necessary the comments of the TAP members, and did the final editing of the text. All criteria and indicators were systematically reviewed with members of Chile REDD+ staff, TAP members and members of the FMT/BM, during a country visit from June 27 to July 1, 2016. During this visit, the TAP members explained in detail why they considered that certain criteria or indicators did not meet the requirements stipulated in the Methodological Framework and how these observations could be incorporated in a revised version of the ER-PD. Chile agreed to submit an advanced draft ER-PD. As such, the first report is based on the review of the advanced draft of July 17, 2016 (Advanced Draft) and additional documents provided to the TAP. This second report is based on the advanced draft version of the ER-PD delivered on October 24, 2016 and additional revisions delivered on November 9, 2016 and November 19, 2016, derived from comments made during three teleconferences and various e-mails on reference level, uncertainty analysis and program transactions.

Those criteria or indicators that at this stage do not completely meet the requirements of the Methodological Framework, according to the opinion of the TAP, are qualified as not met, this in accordance with the decisions taken in the TAP orientation Workshop in Bonn (sept 4-5, 2015) and Tap calibration teleconference organized by the FMT/BM on Safeguards (June 24, 2016).

PART 1 OF TECHNICAL ASSESSMENT: Summary

Date of Current Assessment: November 20, 2016

Date of Current Assessment: Advanced draft ER-PD, October 24, 2016, with a revised version delivered on November 9, 2016 and November 19, 2016.

Name of Assessment team members:

1. Inthamoussu, Agustin (Carbon Accounting Expert): Carbon accounting (section 3)
2. de Jong, Ben (Lead Reviewer and Carbon Accounting Expert): Uncertainty analysis, general coordination, text editing (section 1, part of section 3)
3. Kandzior, Angelika (Social and Environmental Safeguards Expert): Safeguards, non-carbon benefits (section 4, part of section 5)
4. Lopes, Ludovino (Legal Expert): Program transactions, data management (section 6, part of section 4)
5. Santibanez, Fernando (Country Expert): Ambition, Program design (section 1, part of section 5)

<p>Summary Assessment of the Quality and Completeness of the ER-PD:</p> <p>Chile has prepared an interesting ER-PD document that can lead to an important REDD+ program. Chile has done a very good job of putting together an impressive amount of information, both in the ER-PD and in the various annexes provided to the TAP, particularly in relation to the analysis of drivers. The quality of the document is very good, although the English version needs a thorough review of the text.</p> <p>In total, 58 criteria or indicators are met, 5 are not met, and 15 are not applicable at this stage.</p>	Indicators	1 st Assessment	2 nd assessment
<p>II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects</p> <p>The program will increase the net removal of the forest sector by about 10% in the jurisdictional area that is selected. The accounting area covers about 50% of native forest of Chile and 80% of exotic plantations of pines and eucalyptus. This area contains all kind of actors coping with native forests in the country. The proposal will include three main climatic zones: temperate subhumid, rainy temperate and cold temperate climate. This area represents the largest part of the industrial forest sector. As such, the program can be considered as ambitious.</p> <p>In this section, all 3 indicators are met.</p>	<p>1.1</p> <p>1.2</p> <p>1.3</p>	<p>YES</p> <p>YES</p> <p>YES</p>	<p>YES</p> <p>YES</p> <p>YES</p>
<p>III. Carbon Accounting</p> <p>III (a) Scope and methods→ Criteria 3 - 6</p> <p>III (b) Uncertainties→ Criteria 7 - 9</p> <p>III (c) Reference Level→ Criteria 10 - 13</p> <p>III (d) Reference Level, Monitoring & Reporting on Emission Reductions→ Criteria 14-16</p> <p>III (e) Accounting for Displacement (leakage) → Criterion 17</p> <p>III (f) Accounting for Reversals→ Criteria 18 – 21</p> <p>III (g) Accounting for ERs → Criteria 22 - 23</p> <p>The country is considering in the ER-PD, the REDD+ activities “reducing emissions from deforestation”, “reducing emissions from forest degradation”, “enhancement of forest carbon stocks” and “conservation of carbon stocks”. The emissions from deforestation occur in the areas that represents a land-use change from forest land to non-forest land. Degradation is considered as any reduction in the carbon content of a forest, induced by human activity with such intensity, that forestry activity must be ceased in order for the forest to recover productivity. Forests converted to commercial plantations are also considered as forest degradation. Degradation does not imply any land cover change. The activity of “Sustainable management of forest” was not included because currently there are no official data to spatially define the areas subject to sustainable management. The country is designing a program to include this activity in the future.</p> <p>The sources and sinks associated with the REDD+ activities described before are associated with the following pools: above-ground biomass, below ground biomass and deadwood. Soil Organic Carbon is not considered in the ER-PD. The Reference level is prepared in harmony with the Forest Emission</p>	<p>3.1</p> <p>3.2</p> <p>3.3</p> <p>4.1</p> <p>4.2</p> <p>5.1</p> <p>6.1</p> <p>6.2</p> <p>7.1</p> <p>7.2</p> <p>8.1</p> <p>8.2</p> <p>9.1</p> <p>9.2</p> <p>9.3</p> <p>10.1</p> <p>10.2</p> <p>10.3</p> <p>11.1</p> <p>11.2</p> <p>12.1</p> <p>13.1</p> <p>13.2</p> <p>13.3</p> <p>13.4</p>	<p>YES</p> <p>YES</p> <p>NO</p> <p>NO</p> <p>YES</p> <p>YES</p> <p>NO</p> <p>YES</p> <p>NO</p> <p>NO</p> <p>NO</p> <p>NO</p> <p>YES</p> <p>N.A.</p> <p>N.A.</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>NO</p> <p>NO</p> <p>YES</p> <p>YES</p> <p>N.A.</p> <p>N.A.</p> <p>N.A.</p> <p>N.A.</p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>NO</p> <p>YES</p> <p>NO</p> <p>NO</p> <p>NO</p> <p>YES</p> <p>N.A.</p> <p>N.A.</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>N.A.</p> <p>N.A.</p> <p>N.A.</p> <p>N.A.</p>

Reference Level submitted to the UNFCCC and with the National and future State GHG Inventories.	14.1	YES	YES
<p>For the construction of the reference level, Chile has a complete forest definition. The country presents detailed information on forest types present in each region. However, the emission factors used to estimate emissions from deforestation are calculated at the level of region, not at the level of forest type.</p> <p>IPCC methods are considered and methodologies are maintained, both in the construction of the Reference Level and in the MMR. The estimation of the area under degradation and stock enhancement is based on a methodology that considers a stock chart that can only be applied to one forest type; as such, more explanations are requested to understand how the model was extrapolated to the other forest types in order to identify the areas (pixels) that are considered under degradation and stock enhancement, as these forests have different stocking parameters and as such different thresholds to define the area under degradation and stock enhancement. As such, the estimations of uncertainty are also not calculated or estimated for these forests for which there is no stock chart. The TAP recommends evaluating the uncertainty associated to apply the previously explained methodology to all forest types. This will allow the country to assess the use of such data and will estimate the emissions using the best available data. The estimation of uncertainties related to the use of regional emissions factors instead of forest emission factors is also lacking. These are the two reasons why five indicators (6.1, 7.1, 7.2, 8.1 and 8.2) are not met yet. The lack of these sources of information may cause a bias in the emission and removal estimations of the four activities.</p> <p>The ER Program is designed and implemented to prevent and minimize the risk of reversals and address the long-term sustainability of ERs. The ER Program has also in place an effective strategy to mitigate and/or minimize, to the extent possible, potential displacement.</p> <p>In this section, 29 criteria or indicators are met, 4 are not met (mostly related to two sources of uncertainty that are lacking), and 10 do not apply at this stage</p>	14.2	YES	YES
	14.3	YES	YES
	15.1	YES	YES
	16.1	YES	YES
	17.1	YES	YES
	17.2	YES	YES
	17.3	N.A	N.A
	17.4	N.A	N.A
	18.1	YES	YES
	18.2	YES	YES
	19.1	YES	YES
	20.1	N.A	N.A
	20.2	N.A	N.A
	21.1	YES	YES
	21.2	N.A	N.A
	22	YES	YES
	23	YES	YES
IV. Safeguards	24.1	YES	YES
<p>Actions undertaken to meet WB and Cancun Safeguards → Criteria 24-26</p> <p>Each of the WB and Cancun Safeguards is specifically addressed in the strategic document, explaining thoroughly how the safeguards are being considered and met. Relevant tools for risk mitigation are presented in the ESMF and related documents. Regarding the SIS, important characteristics are outlined which allow the indicator to be evaluated as fulfilled, although the system as a whole is still object of a specific consultancy.</p> <p>CONAF –as well as other public and semi-public institutions in Chile- possesses a mechanism for information, claims and suggestions called OIRS which has been functioning for years and has also received a largely positive evaluation by its users. It is therefore a very useful basis for the ER-PD's FGRM that complies with the attributes requested. In fact, relevant elements for the improvement of the existing FGRM are outlined. However, the TAP feels that the relationship between the existing FGRM and specific mechanisms concerning ER-PD is not sufficiently considered in the document.</p> <p>Indicators concerning non-carbon benefits are being tackled as part of the Safeguard Information System. This process is still ongoing and once the indicators have been identified, techniques for data collection will be developed. As the SIS advances in its elaboration, it will probably become clear that the “mainstream” area deserves a specification into sub-areas.</p> <p>Although the ER-PD reflects a thorough concern about risk mitigation measures, certain aspects with regard to indigenous peoples could be strengthened. This is the case for the current institutional</p>	24.2	NO	YES
	25.1	YES	YES
	25.2	N.A	N.A
	26.1	YES	YES
	26.2	NO	YES
	26.3	YES	YES

<p>situation, which foresees a “replacement” of CONADI by various organizational bodies, which might have effects on the ER-PD, once proper indigenous representative institutions are in place. It also applies to potential claims that may arise (or deepen) as a consequence of the interest in joining the program, for which CONAF has to be prepared.</p> <p>In this section, 6 criteria or indicators are met and 1 does not apply at this stage.</p>			
<p>V. Sustainable Program Design and Implementation</p> <p>V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28</p> <p>V. (b) Benefit sharing → Criteria 29 – 33</p> <p>V. (c) Non-Carbon Benefits → Criteria 34 – 35</p> <p>The ER Program identifies the different types of strategic activities that include direct mitigation measures and facilitation measures, associated with the main drivers for degradation, deforestation and no increases in stocks. Opportunities of forest enhancement are extensively explored by using the legal body of instruments already available in the country. Some of these instruments are in place for decades, and have proven their positive impact in promoting reforestation.</p> <p>Land tenure could cause some conflicts in those areas, owned by native ethnicities. Considering the whole accounting area of the program, this portion of the land is rather small, but not least important, as recognized by the authors. The ER Program takes in account and describes the range of land and resource tenure rights and also the categories of rights-holders present in the Accounting Area, including the Indigenous Peoples and other relevant communities; it describes the existing mechanisms to prevent conflicts over land and resources rights, and Resolution mechanisms for significant conflicts related to communities and/or indigenous lands</p> <p>There is a complete list of benefit-sharing structures, including payments, incentives, non-monetary benefits, legal benefits, educational programs to help to restore burned areas. The ER Program proposes a series of schemes to distribute the benefits among the target populations. The benefits were identified during participatory processes. The document also identifies priority non-carbon benefits. It is suggested to broaden the scope of non-carbon benefits, improve the indicators and outline some techniques to gather data.</p> <p>In this section, 12 criteria or indicators are met, and 2 do not apply at this stage.</p>	<p>27.1</p> <p>27.2</p> <p>28.1</p> <p>28.2</p> <p>28.3</p> <p>29</p> <p>30.1</p> <p>31.1</p> <p>32.1</p> <p>33.1</p> <p>34.1</p> <p>34.2</p> <p>35.1</p> <p>35.2</p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>N.A</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>N.A</p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>N.A</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>N.A</p>
<p>VI. ER Program Transactions</p> <p>VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36</p> <p>VI (b) Data Management and ER Transaction Registries → Criteria 37 - 38</p> <p>Chilean legislation does not give a legal definition of ‘carbon rights’, nor is there any national policy to encourage a system to legally create or trade these rights, or an institutional structure in place for this purpose. Despite this regulatory vacuum, carbon removal projects have been developed in Chile within the framework of the Kyoto Protocol under the CDM, while others have been trading on the Voluntary</p>	<p>36.1</p> <p>36.2</p> <p>36.3</p> <p>37.1</p> <p>37.2</p> <p>37.3</p> <p>37.4</p> <p>38.1</p> <p>38.2</p>	<p>NO</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>NO</p> <p>YES</p> <p>N.A.</p>	<p>NO</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>N.A.</p>

<p>Carbon Market, subject to international standards, meaning that Chile has some experience in this regard. In view of this, the national legislation permits the implementation of these types of projects via the application of general contractual rules. The ER Program Entity identified as CONAF doesn't have a specific legal or regulatory framework, stipulating the authority to enter into an ERPA and also the ability to transfer directly Titles of ERs to the Carbon Fund.</p> <p>The ER Program Entity demonstrates that there will be a mechanism in place that will allow CONAF to transfer Titles of ERs prior to ERPA signature, or at the latest, at the time of transfer of ERs to the Carbon Fund, specifically taking in consideration that a significant part of the land where emission reductions are being achieved are considered public lands, and that the remaining lands already have sub-arrangements options (contractual agreements between the State and private land owners) that will allow the transfer the Titles of ERs from those who are voluntarily inserted in the Program.</p> <p>Based on national needs and circumstances, the ER Program host country has made a decision to maintain its own national ER transaction registry. This REDD+ registry database will be installed on the SIT-CONAF platform. The procedures to conduct audits by third-parties to these registration systems will be agreed upon with the Carbon Fund. There is no statement in the ER-PD that indicates that an Operational Guideline exists (or in an advanced stage of preparation) that clarifies the roles and responsibilities of entities involved in the national or centralized ER transaction registry, as well as rules to operate of the registry.</p> <p>In this section, 8 criteria or indicators are met, 1 is not met, and 2 do not apply at this stage.</p>	<p>38.3 38.4</p>	<p>YES NO</p>	<p>N.A. YES</p>
<p>SUMMARY SCORE and overall comment:</p> <p>In total, 58 criteria or indicators are met, 5 are not met, and 15 are not applicable at this stage.</p> <p>The comments on the indicators that are met or not met are outlined in the corresponding sections of the review and the indicators that are not met refer to carbon accounting (5), safeguards (1) and program transactions (1). All indicators of the sections of ambition and sustainable program design and implementation are met or not applicable at this stage. Indicators of the carbon accounting that are not met all refer to the lack of stock charts for most of the forest types and the use of regional emission factors, instead of forest emission factors. The relationship between the existing FRGM mechanisms and the system that will be put in place for the ER-PD needs to be outlined, whereas there are no operational guidelines developed that explains to obtain the legal authority that regulates the roles and responsibilities of the institutions that will be entitled of the transaction registry.</p>			

PART 2 OF TECHNICAL ASSESSMENT: DETAILED ASSESSMENT

C. 1 The proposed ER Program is ambitious, demonstrating the potential of the full implementation of the variety of interventions of the national REDD+ strategy, and is implemented at a jurisdictional scale or programmatic scale.

Ind. 1.1 The ER Program Measures aim to address a significant portion of forest-related emissions and removals

[Ambition and strategic rationale for the ER Program – 2.2]

YES

The ER includes reduction of emissions due to forest degradation, mainly from reducing the areas affected by forest fire. Also the ER program includes reductions by improving forest management practices, using the mechanisms provided by the new forest protection law. Measures to avoid substitution of natural forest by exotic species and harmonization of agriculture and forest development are also considered.

The complimentary documents and annexes provide information on total emissions/captures in the forestry sector. There is no estimation of incremental impact of the proposed measures of the ER-Program. The TAP suggests to include a projection of the mitigation potential of each component of the program, to be committed until 2025.

Ind. 1.2 The ER Program is ambitious, uses new or enhanced ER Program Measures to reduce Emissions or enhance removals, is undertaken at a jurisdictional scale and/or takes a programmatic approach (i.e., involves multiple land areas, landowners or managers within one or several jurisdictions), and reflects a variety of interventions from the national REDD+ strategy in a coordinated manner.

[Ambition and strategic rationale for the ER Program – 2.2, 2.3]

YES

The ER program is subnational, with well-defined jurisdictional limits, encompassing a region of about 15 300 000 hectares, where the most important part of the industrial forest activity is taking place. The total area is defined but it is impossible to involve all actors everywhere. For this reason, the TAP agrees that Chile proposes concrete perimeters where the ER program will implement each set of actions, based a study, made by an external organization that identifies hotspots of emission problems. Chile bases the proposal on the results of this study. More precision on the number and localization of actors that will be involved in the program is recommended, as this information, will be very useful to monitor the progress of the program.

C. 2 The Accounting Area matches a government- designated area that is of significant scale

Ind. 2.1 The Accounting Area is of significant scale and aligns with one or more jurisdictions; or a national-government-designated area (e.g., ecoregion) or areas.

[Accounting Area of the ER Program – 3.1]

YES

The accounting area covers about 50% of the native forests of Chile and 80% of the exotic plantations of pines and eucalyptus. The area contains all types of actors that are coping with native forests in the country. The proposal will include three main climatic zones: temperate sub-humid and humid, and cold temperate. The geographical extension of the accounting area covers a variety of climates of the central zone of Chile. It also covers the area where most of the environmental conflicts occur in wildland areas, due to agriculture, livestock and exotic forest plantations.

C. 3 The ER Program can choose which sources and sinks associated with any of the REDD+ Activities will be accounted for, measured, and reported, and included in the ER Program Reference Level. At a minimum, ER

Programs must account for emissions from deforestation. Emissions from forest degradation also should be accounted for where such emissions are significant.	
<p>Ind. 3.1 The ER Program identifies which anthropogenic sources and sinks associated with any of the REDD+ Activities will be accounted for in the ER Program</p> <p>[Description of Sources and Sinks selected – 8.1]</p>	YES
<p>The Emissions Reductions Program identifies the sources and sinks associated with the REDD+ Activities that will be accounted for.</p> <p>The REDD+ activities (listed in Decision 1/CP.16 paragraph 7 and in the FCPF Carbon Fund Methodological Framework) that the country is considering in the ER-PD program are:</p> <ul style="list-style-type: none"> • “Reducing emissions from deforestation” • “Reducing emissions from forest degradation” • “Enhancement of forest carbon stocks” and • “Conservation of carbon stocks”. <p>Sustainable Management of Forest is not considered in the program because the areas that are sustainably managed cannot be spatially identified within the Chilean territory. The carbon flows generated by management actions will remain within the baseline of degradation or increase of carbon stocks. The country is designing a program to include this activity in the future.</p> <p>The emissions from deforestation occur in areas that represents a land use change from forest land to non-forest land. “Conservation of carbon stocks” is considered in the ER-PD as emissions and removals of carbon stocks in public or private conservation areas, as well as in areas of native forest protected by decree. Carbon flows in these areas are generally the result of removals due to the growing of trees within the forests, natural regeneration or anthropogenic planting/enrichment, and emissions due to legal and illegal cutting of trees, selective felling, collection of firewood, fires, and overgrazing. During the technical assessment, the TAP understood that the consideration of this REDD activity within the program could generate confusion with reducing emissions from degradation or enhancing of carbon stocks, as “conservation of carbon stocks” is applicable under those circumstances where forests undergo minimal disturbances due to human activities and result in a net zero carbon balance (or natural increase) in the near and long-term (Global Observation of Forest and Land Cover Dynamics). The TAP suggested to consider the carbon flows occurring in these conservation areas within the “reducing emissions from forest degradation” and “enhancement of forest carbon stocks” activity. The country argued that the approach, followed in the ER-PD, is consistent with other official documents, such as the Forest Reference Emission Level/Forest Reference Level of Native Forest in Chile and it was not raised as a problem during it assessment. The TAP finally concludes this is not a relevant observation and the indicator is accomplished, given that the approach followed by the country does not lead to an accounting problem and is related to a nomenclature issue.</p> <p>The sources and sinks associated with the REDD+ activities described before are: above-ground biomass, below ground biomass and deadwood which are listed and described in table 7.2.a. Other pools such as soil organic carbon or harvested wood products are not being considered, to maintain consistency with the National Greenhouse Gas Inventory and Forest Reference Level submitted to UNFCCC. At the moment of review of the Draft ER-PD an inconsistency was found between this document and the National Forest Reference Level (FREL) submitted to UNFCCC in relation to the Soil Organic Carbon. This pool was considered in the National Reference Level submitted to UNFCCC in its version of January 4th, 2016. The latest version of the FREL excludes this pool, thus the different documents are now fully consistent. The program aligns well with the objectives of the REDD+ initiative.</p>	
Ind. 3.2 The ER Program accounts for emissions from deforestation.	YES

[Description of Sources and Sinks selected – 8.1]	
<p>Chile ER Program account for emissions from deforestation.</p> <p>Deforestation is defined as the conversion of forest areas to a different land use, either permanent or where there is no certainty about how and when the forest would be restored when the land use change took place.</p> <p>Deforestation is not considered to be a change of use of the native forestland into plantations (according to the definition stated previously). This land use change will be recorded under the heading of “degradation”, in order to maintain consistency with the National Greenhouse Gas Inventory. Areas which are temporarily without stock or where trees have been removed are not considered deforestation, provided that a natural or assisted regenerative activity is planned, recorded and documented.</p> <p>It was correctly assumed that carbon stocks in deforested areas immediately after deforestation are zero. The difference with National Greenhouse Gas Inventory is due to the use of ΔC_G values in deforested areas immediately after deforestation, which corresponds to the carbon present in non-forest land.</p> <p>Deforestation is a net source of emissions and accounts for 3,452,884 tons of CO₂, which is 27% of total emissions under Chile’s Emissions Reductions Program. The remaining 73% of emissions corresponds to forest degradation: 9,149,392 tons of CO₂.</p> <p>An important emphasis is put on deforestation, despite the fact that this is not the main source of emissions. The main deforestation drivers are identified and discussed in the chapter on “displacement”. They are aligned with the social and economic complexity and are categorized with “low” or “medium” risk of displacement.</p>	
<p>Ind. 3.3 Emissions from forest degradation are accounted for where such emissions are more than 10% of total forest-related emissions in the Accounting Area, during the Reference Period and during the Term of the ER-PA. These emissions are estimated using the best available data (including proxy activities or data).</p> <p>[Description of Sources and Sinks selected – 8.1]</p>	YES
<p>Degradation is considered as a reduction in the carbon content of a forest, induced by human activity. Such human activity has been with such intensity that forestry activity must be ceased in order to have the forests recover their productivity. It does not imply any land use change.</p> <p>Any conversion of native forests into plantations of exotic trees (also known as substitution) will be considered forest degradation. The carbon stock in plantations after the substitution will be considered as zero, due to the necessary process of clear cutting for the establishment of a plantation. Carbon flows in forest plantations will not be accounted in the REDD + reference level. Emissions resulting from forest fires are also included in forest degradation.</p> <p>Such definitions were agreed after extensive discussions between national and international experts from UCCSA (Unit of Climate Change and Environmental Services), the Department of Forest Ecosystems Monitoring from CONAF; INFOR; Universidad Austral de Chile, Universidad Mayor, Winrock International, the World Bank and CONAFOR from México. There is a reference to two documents citing these definitions: Anexo_Definiciones_REDD+ and Anexo_Acta_Taller_NR.</p> <p>Degradation accounts for 73% of total forest related emissions in the Accounting Area: 9,149,392 tons of CO₂.</p> <p>Forest degradation in forest land remaining forest land is calculated using the methodology based on the continuous inventory and spatial data, which includes Landsat images. The methodology establishes that each plot in the inventory can be located within the range of the stock chart produced by Gingrich et al. (<i>Gingrich, S. F. 1967. Measuring and</i></p>	

evaluating stocking and stand density in Upland Hardwood forests in the Central States. For. Sci. 13:38-53.). Thresholds of resilience for plots were established on the basis of the Gingrich stocking chart for the Roble-Rauli-Coihue forest type, as described in Bahamóndez and Thompson (2016). Any movement from an upper to a lower position passing over the “B” line in that chart, will correspond to degradation and any movement from a lower to an upper position passing over the “B” line in that chart, will correspond to an enhancement of carbon stocks. The main limitation to this methodology is that, at present, only the stock chart associated with the forest type Roble-Rauli-Coihue is validated and published. ER-PD includes non-validated versions of Siempreverde and Lenga stock charts, which were generated in forests of southern Argentina. No national charts are available neither for these types of forests nor for the remaining forest types. It is worth to mention that this lack of validation does not impact in the emissions factors, but it could impact the area considered degraded or with stock enhancement (activity data; based on the number of plots passing over the threshold line in either direction). Notwithstanding, the TAP team acknowledges that Chile is currently working on the validation of the thresholds of resilience (line “B”) for all forest types, as part of their plan of improvements for the estimation of the FREL.

The TAP concludes that this indicator is fulfilled, but that the lack of stock charts for the remaining forest types influences the outcome of other indicators (6.1, 7.1, 7.2).

C. 4 The ER Program should account for, measure and report, and include in the ER Program Reference Level, significant carbon pools and greenhouse gases, except where their exclusion would underestimate total emission reductions.

Ind. 4.1 The ER Program accounts for all Carbon Pools and greenhouse gases that are significant within the Accounting Area, both for Reference Level setting and Measurement, Monitoring and reporting (MMR).

[Description of Carbon Pools and greenhouse gases selected – 8.2]

YES

Aboveground and belowground biomass pools are considered in all the REDD+ activities.

Deadwood and litter (necromass) are included in deforestation, degradation and conservation but are not included in non-forest land converted to forests land because the rate of accumulation of dead wood is not known.

Soil Organic Carbon was not considered in the ER-PD to maintain consistency with the National Greenhouse Gas Inventory, which does not account for soil organic carbon due to the non-existence of data at the national level and the inaccuracy of sources of information. The country has decided not to include this pool in the proposed NREF by decision of the technical team, backed up by other experts from the Ministry of Agriculture, during the process of compiling the BUR (Biennial Update Report) 2014. Additional argumentation is presented: exclusion of this pool is because values are strongly site-dependent (due to climate, soil type, and management factors). As a result, default values are not reliable.

The Monitoring Measurement and Reporting System is consistent with the NREF/NRF, having considered the same carbon pools and greenhouse gases, warranting comparability in the estimations between mean historic annual emissions during the reference period and during the period under ERPA.

Ind. 4.2 Carbon Pools and greenhouse gases may be excluded if:

- I. Emissions associated with excluded Carbon Pools and greenhouse gases are collectively estimated to amount to less than 10% of total forest-related emissions in the Accounting Area during the Reference Period; or
- II. The ER Program can demonstrate that excluding such Carbon Pools and greenhouse gases would underestimate total emission reductions.

[Description of Carbon Pools and greenhouse gases selected – 8.2]

YES

Soil Organic Carbon was not considered in the ER-PD to maintain consistency with the National Greenhouse Gas Inventory, which does not account for soil organic carbon due to the non-existence of data at national level and the

inaccuracy of sources of information. The country has decided not to include this pool in the proposed NREF by decision of the technical team, backed up by other experts from the Ministry of Agriculture during the process of compiling the BUR (Biennial Update Report) 2014. Additional argumentation is presented: exclusion of this pool is because values are strongly site-dependent (due to climate, soil type, and management factors). As a result, default values are not reliable.

To make this decision more robust, the country has decided to estimate the emissions of the soil organic pool due to deforestation, using Tier 1 methodology. Emissions from this pool are thus estimated at 128,005 tons of CO₂/year, representing 7.7% of 1,653,819 tons of CO₂/year due to deforestation.

The Technical Advisory Panel acknowledges the existence of Spreadsheets that calculates and demonstrates this pool amount less than 10% of total forest-related emissions during the Reference Period, partially fulfilling indicator 4.1.I. The TAP encourages the country to argue that exclusion of Soil Organic Carbon and Litter are collectively estimated to amount to less than 10% of total forest-related emissions in the Accounting Area during the Reference Period. Furthermore, there is a need to include such calculations in the Dropbox folder (with a link in chapter 8), if the documentation can be made available publicly.

Despite what is expressed above, it is understood that the exclusion of Soil Organic Carbon underestimate total emissions reductions (indicator 4.2.II), thus the exclusion is acceptable from this perspective.

C. 5 The ER Program uses the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines, as adopted or encouraged by the Conference of the Parties as a basis for estimating forest-related greenhouse gas emissions by sources and removals by sinks.

Ind. 5.1 The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR).

[Description of method used for calculating the average annual historical emissions over the Reference Period – 8.3]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area– 9.1]

YES

The ER Program is totally consistent with the 2006 Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories, Volume 4: Agriculture, Forestry and Other Land Use.

The methods used to estimate emissions and removals for Reference Level setting and for Measurement, Monitoring and Reporting are obtained in all cases from IPCC.

In the majority of the calculations of emissions and removals in the Reference Level, the methods are also consistent with the National Forest Emissions Reference Level, submitted to UNFCCC, and the National Greenhouse Gas Inventory. However, IPCC 2006 Volume 4, Equation 2.8 is used to estimate the change in carbon stocks in forest land which remains unchanged due to degradation. This methodology counts the carbon stocks at different points in time, whereas the INGEI uses a gain-loss method, applying Equation 2.7 of the IPCC 2006, rather than the stock difference method.

IPCC methods are also used to estimate carbon losses in deforestation, as well as non-CO₂ emissions from forest fires and increments of carbon stocks in forest land remaining forest land.

C. 6 Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions), are documented and made publicly available online. In cases where the country's or ER Program's policies exempt sources of information from being publicly disclosed or shared, the information should be made available to independent reviewers and a rationale is

provided for not making these data publicly available. In these cases, reasonable efforts should be made to make summary data publicly available to enable reconstruction.

<p>Ind. 6.1 The following methodological steps are made publicly available:</p> <ol style="list-style-type: none"> I. Forest definition; II. Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable; III. Choice of activity data, and pre-processing and processing methods; IV. Choice of emission factors and description of their development; V. Estimation of emissions and removals, including accounting approach; VI. Disaggregation of emissions by sources and removal by sinks; VII. Estimation of accuracy, precision, and/or confidence level, as applicable; VIII. Discussion of key uncertainties; IX. Rationale for adjusting emissions, if applicable; X. Methods and assumptions associated with adjusting emissions, if applicable. <p>[Forest definition used in the construction of the Reference Level 9.2] [Description of method used for calculating the average annual historical emissions over the Reference Period 8.3] [Activity data & emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]</p>	<p>NO</p>
<ol style="list-style-type: none"> I. Chile provides a clear definition of forest in its ER-PD and explains the relation between the definition applied in the ER-PD and other similar processes such as GHG accounting for the Convention. II. Chile separates native forests from planted forests. It also distinguishes degraded forests (native forests that lost carbon stock). Plantations are separated into native species and exotic species plantations. For accounting purposes, Chile separates native forests from planted forests, considering in the ER-PD planted forests as degraded forest with zero carbon stock and accumulation. Scrubland is considered as other forested land. III. Four out of five REDD+ activities are included in the accounting, only sustainable management of forests is not yet included, due to lack of georeferenced data of managed forest. The information and processing method for forest degradation and for areas that are recovering is incomplete, as the methodology only presents information of the stock chart for one forest type (see also 3.3, 6.1.V; 7.1; 7.2). Stock charts with specific thresholds are required for each forest type, in order to be able to detect when a pixel can be considered as degraded or recovered from year 1 to year 2. As can be noted in the annex on the selection of emission factors (Anexo Selección de factores de emisión; http://www.encrv-chile.cl/index.php/monitoreo/carbono-forestal/niveles-de-referencia), the forest types vary significantly in biomass, and as such in tree density and standing volume. IV. The country presents detailed information on forest types present in each region. However, the emission factors used to estimate emissions from deforestation and change of natural forest to plantations with exotic species are calculated at the level of region, not at the level of forest type. The ER-PD should clarify this choice (see also 6.1.VII and VIII; 7.1, 7.2). V. As mentioned under 3.3 and 6.1.III, the estimation of emissions from degradation and stock enhancement is only valid for one forest type; as such, it is not clear how this approach has been extrapolated to other forest types, as no data are available how to calculate the areas that are degrading or recovering for all other forest types. VI. The emissions are disaggregated by sources and sinks, both for forest to non-forest and vice versa and forest degradation versus stock enhancement. VII. Two key uncertainties that lack information are: -1. the uncertainty related to the use of regional emission factors instead of forest-related emission factors (see also 6.1.IV, 7.1, 7.2) and -2. The 	

	uncertainty in relation to the lack of stock charts of the majority of the forest types present in the accounting area (see also 3.3., 6.1.III, 7.1, 7.2). Both sources of uncertainty cause accuracy-type errors, which may lead to a bias in the estimations of emissions and removals of all proposed activities.	
VIII.	The emissions are not adjusted. Not applicable	
IX.	Not applicable	
Ind 6.2 For the following spatial information, maps and/or synthesized data are displayed publicly, and reasonable efforts are made to explain how these were derived from the underlying spatial and other data, and to make key data sets or analyses publicly available: I. Accounting Area II. Activity data (e.g., forest-cover change or transitions between forest categories) III. Emission factors IV. Average annual emissions over the Reference Period V. Adjusted emissions Any spatial data used to adjust emissions, if applicable. [Forest definition used in the construction of the Reference Level 9.2] [Description of method used for calculating the average annual historical emissions over the Reference Period 8.3] [Activity data & emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]		YES
 I. Maps of the accounting area are available separately for each region (http://www.enccrv-chile.cl/index.php/monitoreo/carbono-forestal/niveles-de-referencia) II. Maps that show deforestation are publicly available (http://www.enccrv-chile.cl/index.php/monitoreo/carbono-forestal/niveles-de-referencia); maps of degradation and stock enhancement are also available (http://www.enccrv-chile.cl/index.php/monitoreo/carbono-forestal/niveles-de-referencia). III. Maps that show the loss and gain of carbon due to degradation and stock enhancement are available, as well as tables representing emissions and removals in each region (http://www.enccrv-chile.cl/index.php/monitoreo/carbono-forestal/niveles-de-referencia). IV. Estimation of the annual emissions and removals over the reference period are presented in tables (http://www.enccrv-chile.cl/index.php/monitoreo/carbono-forestal/niveles-de-referencia). V. No adjustments are made, not applicable		
C.7 Sources of uncertainty are systematically identified and assessed in Reference Level setting and Measurement, Monitoring and reporting		
Ind 7.1 All assumptions and sources of uncertainty associated with activity data, emission factors and calculation methods that contribute to the uncertainty of the estimates of emissions and removals are identified. [Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1] [Identification and assessment of sources of uncertainty 13.1]		NO

Chile has improved significantly the uncertainty analysis after the country visit, taking into consideration almost all sources of uncertainties that were identified during this visit. However, there are still two sources of uncertainties that remain unsolved. The first uncertainty that is not identified nor estimated is related to the use of the extrapolation of the Bahamóndez approach to forest types, for which no stock charts with degradation thresholds are available. So it is not clear how the areas under degradation and stock enhancement were calculated for those forests and with what levels of uncertainty. The second source of uncertainty that is not identified nor estimated is the uncertainty in relation to the use of regional emission factors instead of forest-type related emission factors, as suggested in our first report. The approach of using regional EF can only be justified under the following assumptions: 1. The number of forest inventory plots for each forest type present in the region, from which the EF were calculated, are proportionally stratified (The number of plots established in each forest type is a fixed percentage of the area that the forest type represents) 2. Deforestation and natural forests converted to plantations with exotic species are established in areas proportional to the areas occupied by the forest types occurring in that region. The first assumption is not fulfilled, since the number of inventory plots in each region is not proportional to the area these forest types occupy (based on the data that are available at <http://www.enccrv-chile.cl/index.php/monitoreo/carbono-forestal/niveles-de-referencia>), whereas the second assumption cannot be verified with the available data but is questionable, as it can equally be expected that deforestation and forest conversion to plantations with exotic species occur at the best sites, that is where better stocked forests are present. Both sources of uncertainties that lack information are related to accuracy, which both may cause a bias in the reference emission estimations of all REDD+ activities, proposed in the ER-PD.

Ind 7.2 The sources of uncertainty identified in Indicator 7.1: are assessed for their relative contribution to the overall uncertainty of the emissions and removals.
[Identification and assessment of sources of uncertainty 13.3]

NO

The sources of uncertainty, related to the two sources of information that are not available, are not assessed and may cause a bias in the reference emission estimations of all REDD+ activities proposed in the ER-PD, as stated in 7.1. In the analysis of uncertainty of degradation and stock enhancement for forests that do not have an estimation of the stock thresholds need to be estimated separately e.g. the error in using the only available stock chart for other forest types and associated error in area estimations (this apply to 3 out of 4 REDD+ activities: degradation, stock enhancement and stock conservation, see also 7.1). The uncertainty using the regional emissions factors instead of forest-type EF have also not been assessed (this affects emission estimations of deforestation and natural forests converted to plantations with exotic species, see also 7.1).

C 8 The ER Program, to the extent feasible, follows a process of managing and reducing uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting.

Ind 8.1 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 that work within the local circumstances of the ER Program.

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period, 13.2]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area]

NO

<p>The estimations of uncertainties have substantially improved in the advanced draft of the ER-PD. Many sources of uncertainties have been disaggregated, as suggested by the TAP. However, there is no set of standard operation procedures available yet that will be implemented to minimize systematic errors, although these are under construction and will be made available, as stated in the draft ER-PD (page 202 of July 17th version). Particularly, attention is required to indicate how forest degradation and stock enhancement analysis will be carried out in future monitoring in forests, for which no stock charts are available or how the estimations of emissions and removals will be adjusted, once these charts become available. It is also important to move from regional-based emission factors to forest-type based emission factors to avoid accuracy errors in emission estimations of deforestation and forest conversion to plantations with exotic species.</p>	
<p>Ind 8.2 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.</p> <p>[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 10, 13] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1] [Identification and assessment of sources of uncertainty 13.1]</p>	YES
<p>The estimations of uncertainties have substantially improved in the advanced draft of the ER-PD. Many sources of uncertainties have been disaggregated, as suggested by the TAP. Errors and uncertainties of many sources have been assessed. Once operating procedures will be available (see indicator 8.1), Chile is able to identify how to minimize the uncertainties. The TAP recommends to Chile to pay attention to the two sources of uncertainty that are not identified yet and their relative importance are not assessed, as pointed out under 7.1 , 7.2 and 8.1.</p>	
<p>C 9 Uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting is quantified in a consistent way, so that the estimation of emissions, removals and Emission Reductions is comparable among ER Programs</p>	
<p>Ind 9.1 Uncertainty associated with activity data and emission factors is quantified using accepted international standards, for example by providing accuracy, confidence interval, distribution of error, and propagation of error. Where errors in data and methods are considered large as defined in IPCC Guidelines, Monte Carlo methods (numerical simulations) should be used to estimate uncertainty</p> <p>[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 13.1] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]</p>	YES
<p>Taking into consideration the limitations of the lack of data and uncertainty analysis expressed under indicators 6.1, 7.1, 7.1, 8.1 and 8.2, the analysis applied follows accepted international standards, such as the IPCC guidelines. However, no Monte Carlo simulations or sensitivity analysis were applied to estimate overall uncertainty or to identify the main sources of uncertainty, as pointed out under 7.2.</p>	
<p>Ind 9.2 Uncertainty of the estimate of Emission Reductions is quantified using Monte Carlo methods. Underlying sources of error in data and methods for integrated measurements of deforestation, forest degradation and enhancements (e.g., as in a national forest inventory) are combined into a single combined uncertainty estimate and are reported at the two-tailed 90% confidence level</p> <p>[Quantification of uncertainty in Reference Level setting 13.2]</p>	N.A.

Not applicable at this stage	
<p>Ind 9.3 Uncertainty of Emissions Reductions associated with deforestation, forest degradation and enhancements are reported separately if measured through separate (i.e., non-integrated) approaches and when degradation is estimated using proxy data.</p> <p>[Quantification of uncertainty in Reference Level setting 13.2]</p>	N.A.
Not applicable at this stage	
C 10 The development of the Reference Level is informed by the development of a Forest Reference Emission Level or Forest Reference Level for the UNFCCC	
<p>Ind 10.1 The Reference Level is expressed in tons of carbon dioxide equivalent per year</p> <p>[Estimated Reference Level 9.7]</p>	YES
<p>Chile has a Reference Level for Forest Emission/Forest Reference Levels for native forest and sub-national coverage for four REDD+ activities with annual net emissions expressed in tons of carbon dioxide equivalent per year of 159,825 t CO₂-eq.</p> <p>Emissions from deforestation accounts for 3.45 million tCO₂-eq., degradation results with 9.15 million tCO₂-eq. annual removals of -2.43 million tCO₂-eq. resulting from Conservation of stocks and -10.01 million tCO₂-eq. resulting from Increase in forest carbon stocks, as shown in table 8.5.3.I.</p>	
<p>Ind 10.2 The ER Program explains how the development of the Reference Level can inform or is informed by the development of a national Forest Reference Emission Level or Forest Reference Level, and explains the relationship between the Reference Level and any intended submission of a Forest Reference Emission Level or Forest Reference Level to the UNFCCC</p> <p>[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.8]</p>	YES
<p>As part of Chile's participation in the United Nations Framework Convention on Climate Change and in response to the invitation issued by the UNFCCC in its decision 12/CP.17 paragraphs 9 and 11, Chile voluntarily submitted its Reference Level for Forest Emission/Forest Reference Levels (NREF/NRF).</p> <p>This document was submitted in January 2016, reviewed by the Assessment Team from the UNFCCC and resent in August 2016. The results presented, methods, sources of information and annexes submitted to the UNFCCC are the same as provided in the Emissions Reduction Program Document to the FCPF. Soil Organic Carbon pool is no longer considered in the Reference Level submitted to UNFCCC as it is not considered in the GHG inventory and the ER-PD.</p> <p>There is also consistency between the reference scenario of native forest in the ER-PD and the National Greenhouse Gas Inventory of Chile, taking into consideration the implicit differences between a reference level and a GHG Inventory.</p> <p>The authority responsible for the AFOLU (Agriculture, Forestry and Other Land Use) sector in the National GHG</p>	

<p>Inventory for Chile is the Ministry of Agriculture. The entities in charge of producing the specific calculation for the UTCUTS sector are CONAF and INFOR, also with the responsibilities for compiling the NREF/NRF of the native forest in Chile. The variations presented in the NREF/NRF are improvements, resulting from better data availability and the use of more accurate methods to be incorporated in the 2018 biennial report for updating the National GHG Inventory.</p> <p>The similarities and differences between the INGEI and the NREF/NRF are listed in each activity of the ER-PD.</p>	
<p>Ind 10.3 The ER Program explains what steps are intended in order for the Reference Level to achieve consistency with the country's existing or emerging greenhouse gas inventory</p> <p>[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.6]</p>	<p>YES</p>
<p>As discussed in indicator 10.2 there is consistency between the NREF/NRF, the ER-PD and the National Greenhouse Gas Inventory of Chile, taking into consideration the implicit differences between a reference level and a GHG Inventory.</p> <p>The authority responsible for the AFOLU (Agriculture, Forestry and Other Land Use) sector in the National GHG Inventory for Chile is the Ministry of Agriculture. The entities in charge of producing the specific calculation for the UTCUTS sector are CONAF and INFOR, also with the responsibilities for compiling the NREF/NRF of the native forest in Chile.</p> <p>Additionally, the Forestry Institute (INFOR) is responsible for the Continuous Forest Inventory, which data can be used to update emission factors. This authority will be in charge of implementing the methodology for estimating carbon flows in forest land remaining forest land.</p> <p>The Department of Monitoring Forest Ecosystems and INFOR are responsible for obtaining information about activity data and emission factors for the National Greenhouse Gas Inventory and Biannual Update Reports (BURs), in land-use, land use change and forestry sector. The MRV system will maintain the same institutional structure as the GHG Inventory, generating a route of feedback between institutions, ensuring consistency and optimizing resources.</p> <p>All the activities linked with the National GHG Inventory will be coordinated with the Sectorial AFOLU team, which is composed of ODEPA (Office of Agricultural Studies and Policies), INIA (Agricultural Research Institute), SAG (Agricultural and Livestock Service), INFOR (National Forestry Institution), FIA (Foundation for Agricultural Innovation) and CONAF, the latter will ultimately conduct the final integration of data with the rest of the sectors through the coordination and leadership of the Ministry of the Environment.</p>	
<p>C 11 A Reference Period is defined</p>	
<p>Ind 11.1 The end-date for the Reference Period is the most recent date prior to two years before the TAP starts the independent assessment of the draft ER Program Document and for which forest-cover data is available to enable IPCC Approach 3. An alternative end-date could be allowed only with convincing justification, e.g., to maintain consistency of dates with a Forest Reference Emission Level or Forest Reference Level, other relevant REDD+ programs, national communications, national ER program or climate change strategy</p> <p>[Reference Period 9.1]</p>	<p>YES</p>

As per latest version of the FCPF Carbon Fund Methodological Framework (June 2016), the end-date for the Reference Period is the most recent date prior to two years before the TAP starts the independent assessment of the draft ER Program Document and for which forest-cover data is available to enable IPCC Approach 3.

The reference period used for Chile's subnational FREL/FRL of native forests is determined by the availability of the necessary information to construct the reference level as well as differences in the methods used to estimate emissions and removals by activities and sub-activities.

Considering the circumstances, two different reference periods were stipulated, one for activities or sub-activities that cause a land use or sub-use change and other for activities or sub-activities that occur in permanent forests

The data source for all activities involving land use change (deforestation, degradation by substitution and forest carbon stock enhancements due to land use change) is the Land Registry and Assessment of Vegetation Resources in Chile. This data source is updated at different times for each region. Different regions have maps produced in different years. In order to achieve consistency within the region, and taking into consideration the fact that the carbon stock fluxes in the NREF consist of projecting historical averages, the reference period for the forest emissions reference levels is set at 2001 to 2013. This consistent reference level is achieved using interpolation of emissions and removals from the dates of the maps to the dates of the reference period. See table below for clarification.

Date reference period							
Region	Date map 1	Date map 2	Date map 3	Start reference period	End reference period	Interpolation start year (b ₁)	Interpolation end year (b ₂)
Maule	1997	2009	2016	2001	2013	4	3
Biobío	1997	2008	2014			4	1
La Araucanía	1997	2007	2013			4	0
Los Ríos	1997	2006	2013			4	0
Los Lagos Norte	1997	2006	2013			4	0
Los Lagos Sur	1997		2013			4	0

The NREF for degradation and increases of forest carbon stocks in native forest land remaining native forest land was estimated using the methodology described by Bahamóndez et al. (2009), which uses data from the Continuous National Inventory and Landsat images. The reference period for this activity is 2001-2010.

The emissions of non-CO₂ gases produced by forest fires were calculated based on tabular data from Chile's National GHG Inventory timeline. The period defined is 2001-2010.

The end date for the Reference Period is consistent across different regions in Chile and accomplish with the requirement in the latest version of the FCPF Carbon Fund Methodological Framework. The Technical Advisory Panel recommends the country for improving this point and for justifying the selection of a unique end-date of the Reference Period

<p>Ind 11.2 The start-date for the Reference Period is about 10 years before the end-date. An alternative start-date could be allowed only with convincing justification as in Indicator 11.1, and is not more than 15 years before the end-date.</p> <p>[Reference Period 9.1]</p>	<p>YES</p>
<p>As it is explained in indicator 11.1, the reference period used for Chile's subnational FREL/FRL of native forests is determined by the availability of the necessary information to construct the reference level as well as differences in the methods used to estimate emissions and removals by activities and sub-activities.</p> <p>In the case of the initial year for the activities or sub-activities that cause a land use or sub-use change (deforestation, substitution, enhance of carbon stock and restitution) interpolation is required in all regions since the initial Cadaster map in all regions is from 1997. The NREF for degradation and increases of forest carbon stocks in native forest land remaining native forest land was estimated using the methodology described by Bahamóndez et al. (2009), which uses data from Continuous National Inventory and Landsat images. Consequently, the reference period for this activity is 2001-2010.</p> <p>The emissions of non-CO2 gases produced by forest fires were calculated based on tabular data from Chile's National GHG Inventory timeline. The period defined is 2001-2010, to maintain consistency with the forests remaining forests reference period.</p> <p>The number of years for the reference scenario in activities or sub-activities that cause a land use or sub-use change (deforestation, substitution, enhance of carbon stock and restitution) is twelve years, which is more than 10 years before the end date. Besides no direct justification is provided to explain this situation, the TAP understands that the use of initial year 2010 is valid considering the available information and interpolation method.</p>	
<p>C 12 The forest definition used for the ER Program follows available guidance from UNFCCC decision 12/CP.17</p>	
<p>Ind 12.1 The definition of forest used in the construction of the Reference Level is specified. If there is a difference between the definition of forest used in the national greenhouse gas inventory or in reporting to other international organizations (including an Forest Reference Emission Level or Forest Reference Level to the UNFCCC) and the definition used in the construction of the Reference Level, then the ER Program explains how and why the forest definition used in the Reference Level was chosen.</p> <p>[Forest definition used in the construction of the Reference Level 9.2]</p>	<p>YES</p>
<p>Chapter 8.2 is entirely dedicated to explain the definitions and difference between forest types in Chile. Under the ER Program forest is defined by the Land Registry (Catastro) as Native Forest, Mixed Forest and Scrubland.</p> <p>Native Forest: <i>"forest formed by native species, which have been generated naturally, are the result of natural regeneration or which takes the form of a plantation under the tree canopy, involving the same species in existence in the original area of distribution, where there may be the accidental presence of exotic species distributed at random".</i></p> <p>Other forested land, as defined by the National Report for Chile in the Global Forest Resources Assessment for 2015 (FRA2015) as <i>"Land not defined as forest which extends over more than 0.5 hectares; with trees of a height in excess of 5 m and a tree canopy cover of 5 to 10 per cent, or trees capable of reaching these minimum limits; or with a mixed cover of bushes, scrubland and trees in excess of 10 per cent must be included. Land subject to use which is predominantly agricultural or urban must be included"</i>.</p> <p>The document sets the relation between the previous definitions and the Land Registry records (Catastro) to allow the necessary consistency with the National GHG Inventory.</p>	

	<table><tr><th>Definitions in the current document</th><th>Land Registry of Native Forest</th></tr><tr><td>Forest</td><td>Use: Forest</td></tr><tr><td>Native Forest</td><td>Secondary use: Native Forest, Mixed Forest</td></tr><tr><td>Other forested land</td><td>Secondary use: Scrubland</td></tr><tr><td>Plantations</td><td>Use: Plantation Secondary use: Plantation, Young – Recently Harvested, Naturalized Exotic Trees</td></tr><tr><td>Exotic Plantations</td><td>Use: Plantation 1 Species: Exotic Species</td></tr><tr><td>Native Plantations</td><td>Use: Plantation 1 Species: Native Species</td></tr></table>	Definitions in the current document	Land Registry of Native Forest	Forest	Use: Forest	Native Forest	Secondary use: Native Forest, Mixed Forest	Other forested land	Secondary use: Scrubland	Plantations	Use: Plantation Secondary use: Plantation, Young – Recently Harvested, Naturalized Exotic Trees	Exotic Plantations	Use: Plantation 1 Species: Exotic Species	Native Plantations	Use: Plantation 1 Species: Native Species	
Definitions in the current document	Land Registry of Native Forest															
Forest	Use: Forest															
Native Forest	Secondary use: Native Forest, Mixed Forest															
Other forested land	Secondary use: Scrubland															
Plantations	Use: Plantation Secondary use: Plantation, Young – Recently Harvested, Naturalized Exotic Trees															
Exotic Plantations	Use: Plantation 1 Species: Exotic Species															
Native Plantations	Use: Plantation 1 Species: Native Species															
C 13 The Reference Level does not exceed the average annual historical emissions over the Reference Period. For a limited set of ER Programs, the Reference Level may be adjusted upward by a limited amount above average annual historical emissions. For any ER Program, the Reference Level may be adjusted downward.																
Ind 13.1 The Reference Level does not exceed the average annual historical emissions over the Reference Period, unless the ER Program meets the eligibility requirements in Indicator 13.2. If the available data from the National Forest Monitoring System used in the construction of the Reference Level shows a clear downward trend, this should be taken into account in the construction of the Reference Level [Average annual historical emissions over the Reference Period 9.6, 13.2]		YES														
<p>The Reference Level does not exceed the average annual historical emissions over the Period. The ER Program for Chile does not propose any adjustments to the Reference Level.</p> <p>The Reference level is determined by accounting the emissions and removals in three different REDD+ activities: deforestation, degradation, conservation and enhancements of forest carbon stocks in five regions in Chile. The final value is 159,825 tCO₂-eq.</p> <p>There is no evidence that the Reference Level has a downward or upward trend, as only two data points are available.</p>																
Ind 13.2 The Reference Level may be adjusted upward above average annual historical emissions if the ER Program can demonstrate to the satisfaction of the Carbon Fund that the following eligibility requirements are met: (i) Long-term historical deforestation has been minimal across the entirety of the country, and the country has high forest cover (country or jurisdictional area); (ii) National circumstances have changed such that rates of deforestation and forest degradation during the historical Reference Period likely underestimate future rates of deforestation and forest degradation during the Term of the ERPA. [Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6].		N.A														
Not applicable																
Ind 13.3 For countries meeting the eligibility requirements in Indicator 13.2, a Reference Level could be adjusted above the average historical emission rate over the Reference Period. Such an adjustment is credibly justified on the basis of expected emissions that would result from documented changes in ER Program circumstances, evident before the end-date of the Reference Period, but the effects of		N.A														

<p>which were not fully reflected in the average annual historical emissions during the Reference Period. Proposed adjustments may be rejected for reasons including, but not limited to:</p> <ul style="list-style-type: none"> i. The basis for adjustments is not documented; or ii. Adjustments are not quantifiable. <p>[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]</p>	
not applicable	
<p>Ind 13.4 An adjustment of the Reference Level above the average annual historical emissions during the Reference Period may not exceed 0.1%/year of Carbon Stocks</p> <p>[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]</p>	N.A
not applicable	
<p>C 14 Robust Forest Monitoring Systems provide data and information that are transparent, consistent over time, and are suitable for measuring, reporting and verifying emissions by sources and removals by sinks, as determined by following Criterion 3 within the proposed Accounting Area</p>	
<p>Ind 14.1 The ER Program monitors emissions by sources and removals by sinks included in the ER Program's scope (Indicator 3.1) using the same methods or demonstrably equivalent methods to those used to set the Reference Level.</p> <p>[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]</p>	YES
<p>In chapter 9.1 of the Advanced Draft ER-PD "Approach for Monitoring, Reporting and Verification in order to estimate the emissions produced within the framework of the RE Program in the Accounting Area", the procedures and methodology to Monitor, Measure and Report the emissions reductions obtained during the ERPA in the accounting area are explained.</p> <p>Chile's MRV is based on a monitoring plan, which must provide transparent data and information, consistent over time and capable of measuring, reporting and allowing checks to be carried out on emissions from sources and removals by sinks taken into consideration in the ER Program. The methods must be consistent with the NREF/NRF, considering the same sinks and sources, in order to guarantee that the estimates between the reference period and the performance period can be compared.</p> <p>The description of the monitoring plan and MRV system is presented in the ER-PD, separated in two categories: 1) areas with land use change and 2) forest land remaining as forest land.</p> <p>Areas with land use change include deforestation activities, enhancement of carbon stocks resulting from restoration and forest plantation, degradation caused by replacement and conservation areas. At present, the official source of information at a national level, from which land use change information is obtained, is the system for monitoring changes in the use of the land and vegetation, the Land Registry (Catastro). This is the source of information used for</p>	

the NREF/NRF and it is also the source of information used by the National GHG Inventory. This information is updated every 5 to 10 years and is not adequate for meeting the needs to measure the activity data at least twice during the ERPA period, as required by the FCPF Methodological Framework. As a response, CONAF is designing a system to support the Land Registry, which will allow estimating the land-use change at a national level twice during the ERPA period. Alternatives compatible with the Land Registry will be analyzed, focusing on the Landsat and Sentinel systems. The desired result is to carry out monitoring events in 2017, 2019, 2021 and 2023, due to the fact that in these years the system for supporting the Land Registry is expected to be updated in all regions.

The estimation of emission from degradation and stock enhancement is only validated for one forest type, as such, it is not clear how this approach has been extrapolated to other forest types, as the data that are available to calculate the GHG fluxes for these other forest types cannot be validated. Also the use of regional EF needs to be clarified, as pointed out under indicators 7.1, 7.2, 8.1 and 8.2.

The Continuous Forest Inventory is already being used in the construction of the Reference Level and it's future annual updates will be used to improve the estimates of emission factors, in each monitoring event and, if possible, the results from this inventory will be harmonized with the results of the Dendro-energy and Forest Carbon Inventory.

The forest land remaining forest land category includes activities like degradation, conservation of carbon stocks in forests, sustainable forest management and carbon stocks increases in forest land remaining forest land.

To be consistent with previous category, monitoring events in forest land remaining forest land will also be carried out in 2017, 2019, 2021 and 2023. The activity data for each event will be taken from Landsat 8 images for these years, or from compatible satellites in the future. The objective is to incorporate the new data from Continuous Forest Inventory into each monitoring event. In all cases, the methodology applied for calculating emissions and removals will be based on the difference in carbon reserves between the year of the initial measurement and the year of the final measurement as defined in IPCC and used in the construction of the Reference Level. It is not clear how this will translate into identifiable emission reductions and stock enhancement increases that can be attributed to the ER-Program.

In relation to the area affected by forest fires, the CONAF will use the annual data on the historical statistics for forest fires, which is the same source of information used in the National GHG Inventory and for the establishing of the NREF/NRF.

Sustainable forest management activity data corresponds to those surface areas subject to formal management processes. At the moment there is no complete official information about the activity, so it was not included in the NREF/NRF. Nevertheless, CONAF has begun the process of generating the information needed to construct the reference level for sustainable forest management, differentiated between the other activities and spatially explicit. In the course of 2016 the Reference Level for sustainable forest Management is scheduled to be integrated in the sub-national NREF/NRF.

Ind 14.2 Activity data are determined periodically, at least twice during the Term of the ERPA, and allow for ERs to be estimated from the beginning of the Term of the ERPA. Deforestation is determined using IPCC Approach 3. Other sinks and sources such as degradation may be determined using indirect methods such as survey data, proxies derived from landscape ecology, or statistical data on timber harvesting and regrowth if no direct methods are available

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

YES

In chapter 9.1 of the Advanced Draft ER-PD "Approach for Monitoring, Reporting and Verification in order to estimate the emissions produced within the framework of the RE Program in the Accounting Area" the procedures and methodology are explained how to Monitor, Measure and Report the emissions reductions obtained during the ERPA

in the accounting area.

The description of the monitoring plan and MRV system is presented in the ER-PD separated in two categories: 1) areas with land use change and 2) forest land remaining as forest land.

Areas with land use change include deforestation activities, enhancement of carbon stocks resulting from restoration and forest implantation, degradation caused by replacement and conservation areas. At present, the official source of information at a national level, from which land use change information is obtained, is the system for monitoring changes in the use of the land and vegetation, the Land Registry (Catastro). This is the source of information used for the NREF/NRF and it is also the source of information used by the National GHG Inventory. This information is updated every 5 to 10 years and is not adequate for meeting the need to measure the activity data at least twice during the ERPA period, as required by the FCPF Methodological Framework. As a response, CONAF is designing a system to support the Land Registry, which will allow estimating the land-use change at a national level twice a year. Alternatives compatible with the Land Registry will be analyzed, focusing on the Landsat and Sentinel systems. The desired result is to carry out monitoring events in 2017, 2019, 2021 and 2023, due to the fact that in these years the system for supporting the Land Registry is expected to be updated in all regions.

The Continuous Forest Inventory is already being used in the construction of the Reference Level and it's future annual updates will be used to improve the estimates of emission factors, in each monitoring event and, if possible, the results from this inventory will be harmonized with the results of the Dendro-energy and Forest Carbon Inventory.

The forest land remaining forest land category includes activities like degradation, conservation of carbon stocks in forests, sustainable forest management and carbon stocks increases in forest land remaining forest land.

To be consistent with previous category, monitoring events in forest land remaining forest land will also be carried out in 2017, 2019, 2021 and 2023. The activity data for each event will be taken from Landsat 8 images for these years, or from compatible satellites in the future. The objective is to incorporate the new data from Continuous Forest Inventory into each monitoring event. In all cases, the methodology applied for calculating emissions will be based on the difference in carbon reserves between the year of the initial measurement and the year of the final measurement as defined in IPCC and used in the construction of the Reference Level. The estimation of emission from degradation and stock enhancement is only validated for one forest type, as such, it is not clear how this approach has been extrapolated to other forest types, as no data are available to calculate the GHG fluxes for these other forest types. It is also not clear how the methodology used to estimate the emissions from degradation and removals from stock enhancement will be repeated over time, as the methodology is based on the estimation of differences between image time series. It is not clear how this will translate into identifiable emission reductions and stock enhancement increases that can be attributed to the ER-Program.

In relation to the area affected by forest fires, the CONAF will use the annual data on the historical statistics for forest fires, which is the same source of information used in the National GHG Inventory and for the establishing of the NREF/NRF.

Sustainable forest management activity data corresponds to those surface areas subject to formal management processes. At the moment there is no complete official information about the activity, so it was not included in the NREF/NRF. Nevertheless, CONAF has begun the process of generating the information needed to construct the reference level for sustainable forest management, differentiated between the other activities and spatially explicit.

The TAP recommends the country to improve the section, making explicit the fulfillment or not with the requirements of the indicator, e.g. if deforestation is determined using IPCC approach 3, how the land-use change at a national level will be detected at least twice during the term of the ERPA, if ERs can be estimated from the beginning of the Term of the ERPA, or if Future Sustainable Forest Management Reference Level will be determined periodically, at least twice during the term of the ERPA.

<p>Ind 14.3 Emission factors or the methods to determine them are the same for Reference Level setting and for Monitoring, or are demonstrably equivalent. IPCC Tier 2 or higher methods are used to establish emission factors, and the uncertainty for each emission factor is documented. IPCC Tier 1 methods may be considered in exceptional cases [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]</p>	<p>YES</p>
<p>In chapter 9.1 of the Advanced Draft ER-PD “Approach for Monitoring, Reporting and Verification in order to estimate the emissions produced within the framework of the RE Program in the Accounting Area” the procedures and methodology are explained how to Monitor, Measure and Report the emissions reductions obtained during the ERPA in the accounting area.</p> <p>Chile’s MRV is based on a monitoring plan which must provide transparent data and information, consistent over time and capable of measuring, reporting and allowing checks to be carried out on emissions from sources and removals by sinks taken into consideration in the ER Program. The methods must be consisted with the NREF/NRF, considering the same sinks and sources, in order to guarantee that the estimates between the reference historic period and the performance period can be compared.</p> <p>The description of the monitoring plan and MRV system is presented in the ER-PD separated in two categories: 1) areas with land use change and 2) forest land remaining as forest land.</p> <p>Areas with land use change include deforestation activities, enhancement of carbon stocks resulting from restoration and forest implantation, degradation caused by replacement and conservation areas. The Continuous Forest Inventory is already being used in the construction of the Reference Level and it’s future annual updates will be used to improve the estimates of emission factors, in each monitoring event and, if possible, the results from this inventory will be harmonized with the results of the Dendro-energy and Forest Carbon Inventory.</p> <p>The forest land remaining forest land category includes activities like degradation, conservation of carbon stocks in forests, sustainable forest management and carbon stocks increases in forest land remaining forest land. To be consistent with previous category, monitoring events in forest land remaining forest land will also be carried out in 2017, 2019, 2021 and 2023. The objective is to incorporate the new data from Continuous Forest Inventory into each monitoring event. In all cases, the methodology applied for calculating emissions will be based on the difference in carbon reserves between the year of the initial measurement and the year of the final measurement as defined in IPCC and used in the construction of the Reference Level. The estimation of emission from degradation and stock enhancement is only validated for one forest type, as such, it is not clear how this approach has been extrapolated to other forest types, as no data are available to calculate the GHG fluxes for these other forest types. It is also not clear how the methodology used to estimate the emissions from degradation and removals from stock enhancement will be repeated over time, as the methodology is based on the estimation of differences between image time series. It is not clear how this will translate into identifiable emission reductions and stock enhancement increases that can be attributed to the ER-Program.</p> <p>The TAP recommends Chile to improve this section, with references to the methods used (tier) to estimate emission factors and the uncertainty for each emission factor in the MMR approach.</p>	
<p>C 15 ER Programs apply technical specifications of the National Forest Monitoring System where possible</p>	
<p>Ind 15.1 ER Programs articulate how the Forest Monitoring System fits into the existing or emerging National Forest Monitoring System, and provides a rationale for alternative technical design where applicable. [Relation and consistency with the National Forest Monitoring System 10.3]</p>	<p>YES</p>

As stated in chapter 9.3 “Relationship and consistency with the National Forest Monitoring System”, Chile has tools and systems for collecting activity data and emissions factors, which are used as a basis for its Forest Monitoring System. These are:

- Land Registry of Vegetation Resources,
- Continuous Forest Inventory,
- National Dendro-energy and Forest Carbon Inventory,
- Forestry Administration and Control System (SAFF), and
- Territorial Information System (SIT).

As per what is said in ER-PD, these systems allow information associated with land use in Chile to be extracted, displayed, consulted and maintained.

The Monitoring, Reporting and Verification approach for the Emissions Reduction Program consists of the integration and interoperability of the aforementioned existing systems, which are explained in sections 9.1 “Approach for Monitoring, Reporting and Verification in order to estimate the emissions produced within the framework of the RE Program in the Accounting Area” and 9.2 “Institutional structure for the MRV”. Therefore, the relationship between the Forest Monitoring System and National Forest Monitoring System is direct and consistency is guaranteed.

C 16 Community participation in Monitoring and reporting is encouraged and used where appropriate

Ind 16.1 The ER Program demonstrates that it has explored opportunities for community participation in monitoring and reporting, e.g., of ER Program Measures, activity data, emission factors, safeguards and Non-Carbon Benefits, and encourages such community participation where appropriate

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1, 10.3]

YES

The ER Program has identified the participation of communities in the monitoring and reporting in an existing indirect form: complaints about forest fires and illegal logging.

In the country, use of fire as a tool in agriculture and forestry is ruled by Decree No. 276 from the Ministry of Agriculture enacted on 1980. This decree regulates and set standards on technical and administrative procedures for using fire, mainly for disposal of harvest residues from agriculture or forestry.

This decree was issued considering that about 45% of forest fires in the country were generated by the practice of using fire to eliminate agricultural and forestry residues without proper planning or safeguarding control measures. Currently, only 6% of fires are generated by agricultural and / or forestry burning.

Application of Decree N° 276 is carried out under the following procedures: 1) users have to attend CONAF or Police offices to submit a notice on the date and location where fire will be used, reporting on planning and control measures to prevent or fight potential fires that could be arise; 2) users should proceed in accordance to a pre-established calendar for burning set by CONAF disaggregated by counties, with a time-schedule for using fire under appropriate conditions in order to keep fire under control; 3) users have to adopt guidelines on proper use of fire as a tool for habilitation of agricultural and forest lands, including matters on controlled-burning techniques and environmental considerations to keep fire under control.

About 20% of notifications of occurrence of forest fires (1,382 fires during season 2015/2016) were reported by citizens through Phone-Number 130 for Emergencies of CONAF. The remaining fires were reported by the forest fires

detection system of CONAF.

Regarding illegal logging, CONAF has mechanisms to receive complaints from citizens on violations of the forest law. CONAF has communication channels to this effect by post mail and email. CONAF verifies veracity of the facts through site inspection and reports to the complainant the outcome of the enforcement. As a final verifier of the process, in addition to the legal actions that may arise against an alleged offender, an official letter is sent to the complainant address with the results of the law enforcement carried out by CONAF, informing whether there was infringement to the forest legislation in force and legal measures adopted by CONAF in case required. Infringements may be related to:

- Logging
- Felling of riparian vegetation
- Other situations affecting national forest resources.

The beneficiary of this mechanism is the community, who fulfills:

- To sue complaints formally using appropriate procedures.
- To provide identification of the complaint, facts and identification of an alleged offender.

During the period 2013-2015, a total of 3,310 complaints were received from third-parties, involving forest plantations, native forests and xerophytic formations.

C 17 The ER Program is designed and implemented to prevent and minimize potential displacement

Ind 17.1 Deforestation and degradation drivers that may be impacted by the proposed ER Program measures are identified, and their associated risk for displacement is assessed, as well as possible risk mitigation strategies. This assessment categorizes Displacement risks as high, medium or low.

[Identification of risk of Displacement 11.1]

YES

The ER Program is subnational (embraces Region Maule, Bio Bio, Araucania, Los Rios and Los Lagos), the risk of displacement due to Program mitigation measures is towards other Regions of the country.

In section 10.1 "Identification of risks of movement" a list of drivers of deforestation or degradation is presented, with the explanation of the reasons of deforestation and degradation, based on the preliminary results of the analysis described in section 4 "Analysis of the direct and underlying causes of Deforestation, Forest Degradation, and no Enhancement of forest carbon Stocks".

The most relevant direct causes of Deforestation, Forest Degradation, and no Enhancement of forest carbon Stocks, are:

- Expansion due to agricultural and livestock farming, with low risk of displacement

Specifically, in the Accounting Area one of the main transformation forces of the landscape was also agricultural activity. Various authors have noted that the loss of native forests was as a result of the clearing of agricultural fields at the expense of the slash and burning of the vegetation that covered a large part of the territory (Donoso & Lara 1996, Cisterna et al. 1999). This phenomenon mostly occurred some decades ago, therefore there are not many records or much quantitative background that enables an accurate measurement of the real impact of these transformations.

However, the fact that the current areas of remaining native forest are mostly located in areas of difficult access, steep slopes, altitudes of 800 miles above sea level, or within protected forested areas, is a reflection of the pressure for change that agricultural and livestock put over the native ecosystems.

- Urban expansion, with low risk of displacement

Given that mitigation measures are planned to be applied at national level under the ENRRCV, there are no high risks of emissions from deforestation moving to other regions of Chile. There may be displacements to Argentina, but there is not much anthropogenic deforestation in the border region, so the risk is low.

With regard to internal displacement, it is possible that if the farmer or livestock owner is discouraged from his former livelihood (which involved deforestation due to agricultural and livestock farming expansion), it is possible that he will look for another similar livelihood such as collection of firewood, which may generate emissions as degradation. However, the risk remains low given that the agricultural and livestock farms expansion is not an activity that generates many emissions and any national displacement may be collected using the MRV system.

- Unsustainable use of vegetation resources, with medium risk of displacement

Extraction of raw materials in forest, without considering its ecosystem requirements for its conservation, results in degradation and even deforestation. This action, sustained over time, puts the forest mass into a state of degradation such that its recovery would need a high level of effort in terms of time and financial cost. The degradation process that is described can be seen as the dismantling of a low yield productive unit (forest), in which trees are taken out and sold mainly as a raw material of low value (firewood), and the land use is converted to give greater yields. In all regions, based on participation workshops, the “Low profitability and opportunity costs of the forest” was mentioned as an indirect cause, as a cause that impacts upon the Unsustainable Use of the Native Forest.

According to ER-PD it is possible that an approach involving mitigation measures for degradation caused by “floreo” (collection of the best specimens of a population), collection of valuable timber and harvesting of firewood may lead to movements to other regions of Chile, given the strong economy in timber products and the high demand for firewood in Chile. It is more likely that movements will occur due to the harvesting of logs, given that the market is national, while the firewood market is regional. There are plans to apply the mitigation methods at national level in order to avoid this type of movement.

Within regions, there is a possibility of displacement if the incorporation of Management Plans subject to Forest Classification Criteria (PMCOF) results in a reduction in timber and firewood removed from forests. The risk is associated to the high demand for products, causing people to look for other areas, probably without management plans (illegal), from which to take timber and supply the market.

- Forest fires, with medium risk of displacement

This cause of degradation and deforestation, and in some cases disincentive for enhancement of forest carbon stocks, is closely related to human activity, whether due to carelessness, indifference and/or lack of skill in using fire and, on many occasions by mere intention, which demonstrates a cultural issue associated with a lack of understanding regarding the impact that fires have on the environment.

Forest fires have mainly anthropogenic causes, are not intended to degrade forests but are usually the result of accidents or crime. It is therefore not very likely that a forest fire would spread from one region to another, particularly because mitigation measures will be applied at a national level.

- Expansion of monoculture forests, with medium risk of displacement

Given that forest plantations are deemed to be “Forest Lands” according to the categories defined by the IPCC, the areas of native forest that are transformed into forest plantations of exotic species cannot be classified as Deforestation. Following this logic, the ENCCRV has established that, “any change of land use from Native Forest to Forest Plantation will be deemed to be degradation”.

This situation could spread to regions in the north of the ER Program Area due to strong economic returns from plantations. Maps from the Land Registry indicate that this is a relatively common transition in these regions, particularly the substitution of scrubland, which is considered a native forest. However, national mitigation measures, such as the improvement of CONAF supervision, environmental education and valorization of native forests, should prevent this type of displacement. The focus on mitigation in terms of doing planning and land management which will result in prohibiting substitution in certain areas could cause displacement to other areas within the ER Program Area. However, planning also involves designating optimal areas for establishing new exotic plantations where substitution would cause less environmental damage, thus diminishing the potential for displacement.

- Use of forest for livestock, with medium risk of displacement

The incompatibility existing between livestock practices and forest management in the rural sector is deemed to be one of the main threats against the conservation of forest ecosystems and other vegetation resources in the accounting area. The intensive breeding of livestock and agriculture for self-consumption and sale at local markets are the main livelihood for peasant families and are practices strongly rooted in their traditions, whilst the forest and its products are not a relevant productive component on the estate, because its contribution in the generation of income has historically not been very significant and long-term, therefore it does not correspond to their immediate financial requirements.

In their risk assessment, it is said that this is the most common cause of deforestation in Mediterranean areas (not part of ER Program), but it also occurs in the Maule region, which is part of the ER Program Area. As a result, displacement could spread to the north if mitigation focuses solely on the ER Program Area. However, the CONAF also plans to focus overgrazing mitigation in Mediterranean areas, meaning that there is only a small risk of displacement. Within the ER Program Area, the measure of establishing graze-free strips could displace livestock, leading them to forage and graze in other areas, causing degradation.

- Effects of climate change, desertification and droughts, with low risk of displacement

No displacement is expected as part of the strategy to combat the effects of climate change, as it is a natural phenomenon that cannot be “displaced” to another location when efforts are focused in one location.

The most relevant indirect causes Deforestation, Forest Degradation, and no Enhancement of forest carbon Stocks in the accounting area are deficiencies in public policies, poor understanding and cultural valuation of vegetation resources, informality of the firewood market, and rural poverty with its consequent lack of opportunities.

Ind 17.2 The ER Program has in place an effective strategy to mitigate and/or minimize, to the extent possible, potential Displacement, prioritizing key sources of Displacement risk.

[ER Program design features to prevent and minimize potential Displacement 11.2]

YES

In chapter 10.2 it is presented the “Elements of the ER Program to prevent and minimize the potential for displacement”.

In order to mitigate displacement within the ER Program Area, it is expected to take actions towards key drivers of deforestation and degradation.

- Expansion of agriculture and livestock: In order to mitigate the possibility of emissions – caused by deforestation due to the expansion of agriculture and livestock – being displaced to cause forest degradation, it is expected that funding will be put in place to support the conservation of native forests.
- Urban and industrial expansion: this cause produces few emissions. Emphasis has therefore been placed on the mitigation of displacement caused by other factors.
- Unsustainable use of vegetation resources: plans are being developed to combat the risk of displacing emissions by reducing the amount of timber removed from areas with Management Plans subject to Forest Classification Criteria (PMCOF), while seeking a better price for sustainably felled timber. This way, plantation owners can remove less timber and sell it for a higher price. Better organization of the supply chain would make it more feasible to certify sustainable timber and give a fair price. Furthermore, the ENCCRV will seek to lower the costs of landowners, lower taxes and improve auditing so as to encourage the option of subscribing to a PMCOF.
- Forest fires: In order to prevent emissions caused by mitigation measures aimed at reducing the amount of biomass close to vulnerable areas, each mitigating activity will be planned in detail to determine how to remove the least amount of biomass with the greatest impact on reducing the risk of fires. Plans are in place to use this strategy very restrictedly as a means of reducing emissions caused by controlled burn. Weather

<p>conditions will also be monitored to ensure that burning only begins during the rainy season when temperatures are low and there is little wind, so as to avoid fire spreads.</p> <ul style="list-style-type: none"> • Expansion of monoculture forests: as part of measures concerning planning and land management, priority areas are expected to be set aside for plantations of exotic plants where this would cause the least environmental damage. This prioritization should compensate for the prohibition on substitution in areas of native forest where greater environmental damage would be caused. • Use of forest for livestock: As part of mitigation measures, plans are in place to provide technical support to facilitate the overall management of livestock. This will allow for better forest management and more efficient use of small area in order to minimize the necessity of using more area for grazing. By maximising small areas, it will be possible to establish strips of protected areas without the need to replace these areas with other terrain. The strategy for managing summer pastures will also allow grazing without long-term degradation, as a better managed area can grow and replace biomass lost to grazing, creating a balanced system whereby the amount of biomass remains stable. • Effects of climate change, desertification and droughts: displacement of the effects of climate change is very unlikely and it is therefore not necessary to take displacement mitigation measures in this regard. 	
Ind 17.3 By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement	N.A
Only applicable at the time of verification.	
Ind 17.4 ER Programs are also invited to report on changes in major drivers in the ER Accounting Area, any Displacement risks associated with those drivers, and any lessons from the ER Programs' efforts to mitigate potential Displacement	N.A
Only applicable at the time of verification.	
C 18 The ER Program is designed and implemented to prevent and minimize the risk of reversals and address the long-term sustainability of ERs	
Ind 18.1 The ER Program has undertaken an assessment of the anthropogenic and natural risk of reversals that might affect ERs during the Term of the ERPA and has assessed, as feasible, the potential risk of reversals after the end of the Term of the ERPA [Identification of risk of Reversals 12.1]	YES
<p>Chile's ER Program has identified natural and anthropogenic sources of reversals that might affect Emissions Reductions during the Term of the ERPA and beyond it in section 11.1 of the ER-PD: "Identifying risks of reversals".</p> <p>The default risks factors in the ER Program Buffer Guidelines are used to describe the main risks factors of the ER Program: i) conflicts over land, poor appropriation of rights to benefits and/or inadequate or negative inclusion of different stakeholders in the ER Program belonging to "A. Lack of broad and sustained stakeholder support", ii) risk due to the insufficient knowledge and skills of the various institutions involved and the lack of coordination between them, in "B. Lack of institutional capacity and/or ineffective vertical/cross-sector coordination", iii) risk due to inadequate laws, modification in legislation, the incorrect design of the ER Program (if does not sufficiently address the causes and agents of deforestation and degradation), corruption and ineffective governance, lack of practical execution and a lack of continuous funding in "C. Lack of long-term effectiveness in confronting underlying factors and</p>	

iv) Risk of natural disturbances and disasters in “D. Exposure and vulnerability to natural disturbances”.

Each risk factor is assessed in its level of risk for causing regression (with a percentage value) following the ER Program Buffer Guidelines. The default risk percentage value is 10% or 5% (depending on the factor) and if the risk factor is categorized as “high” there was no discount, if the risk factor is categorized as “medium” there was 5% or 2% discount (depending on the factor) and if the risk factor is categorized as “low” there was a 10% or 5% discount (depending on the factor), ending in 10%, 5%, 3% or 0% reversal risk set-aside percentage, depending on the risk factor and its evaluation. Risk factor “I” is medium (5%), “ii” is low (0%), “iii” is medium (3%) and “iv” is medium 3%. A correct justification of each evaluation and corresponding discount is presented in the ER-PD.

Despite it the risks factors are not specifically considered by its capacity to generate reversals after the end of the Term of the ERPA, it is understood that the risks factors described are neither specific for the Term of the ERPA. Risk factors cited in the ER-PD are general risk factors that could be applicable before, during and after the Term of the ERPA.

Ind 18.2 The ER Program demonstrates how effective ER Program design and implementation will mitigate significant risks of Reversals identified in the assessment to the extent possible, and will address the sustainability of ERs, both during the Term of the ERPA, and beyond the Term of the ERPA
[ER Program design features to prevent and mitigate Reversals 12.2]

YES

Chile’s ER Program has identified natural and anthropogenic sources of reversals of non-permanence that might affect Emissions Reductions during the Term of the ERPA in section 11.1 “Identifying risks of reversion”.

The default risks factors in the ER Program Buffer Guidelines are used to describe the main risks factors of the ER Program: i) conflicts over land, poor appropriation of rights to benefits and/or inadequate or negative inclusion of different stakeholders in the ER Program belonging to “A. Lack of broad and sustained stakeholder support”, ii) risk due to the insufficient knowledge and skills of the various institutions involved and the lack of coordination between them, in “B. Lack of institutional capacity and/or ineffective vertical/cross-sector coordination”, iii) risk due to inadequate laws, modification in legislation, the incorrect design of the ER Program (if does not sufficiently address the causes and agents of deforestation and degradation), corruption and ineffective governance, lack of practical execution and a lack of continuous funding in “C. Lack of long-term effectiveness in confronting underlying factors and iv) Risk of natural disturbances and disasters in “D. Exposure and vulnerability to natural disturbances”.

In order to prevent and minimize the risk factors of reversions mentioned above, the ER Program proposes a set of measures under each risk factor. For the existing future reversals, the ER Program proposes to monitor these emissions, using the same methodologies as in the Reference level setting and MRV system.

Despite that the Program is conscious that the long-term success of reducing the risk of reversals will depend on the sustained implementation of the measures during and beyond the Term of the ERPA, no specific evaluation of the sustainability of the Emissions Reductions beyond the Term of the ERPA was performed. However, it is understood that several of the mitigation measures proposed have a long-term influence on the sustainability of Emissions Reductions. For example, measures aiming to create or improve legislation, or continuing elaborating the National Strategy on Change Climate and Vegetation Resources, have a permanent characteristic that exceeds the Term of the ERPA.

Notwithstanding, the Technical Advisory Panel encourages the country to present more concrete measures to mitigate risks of reversals. Some of the measures presented have a lack of practical sense or its implementation seems diffuse, e.g. “maintain the current level of inter- and intra-institutional coordination”. Questions like “who will maintain this current level?” or “how will it be maintained?” should be answered in the presentation of the measure.

C 19 The ER Program accounts for Reversals from ERs that have been transferred to the Carbon Fund during the Term of the ERPA

Ind 19.1 During the Term of the ERPA, the ER Program accounts for Reversals from ERs using one of the following options:

YES

- Option 1: The ER Program has in place a Reversal management mechanism (e.g., buffer reserve or insurance) that is substantially equivalent to the Reversal risk mitigation assurance provided by the 'ER Program CF Buffer' approach referred to in option 2 below, appropriate for the ER Program's assessed level of risk, which in the event of a Reversal during the Term of the ERPA will be used to fully cover such Reversals.
- Option 2: ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), and based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Pro

[Reversal management mechanism, Selection of Reversal management mechanism 12.3]

During the Term of the ERPA, the ER Program accounts for reversals from Emissions Reductions using the second option: "ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Program CF Buffer equivalent to the amount of transferred ERs affected by the Reversal event."

Chile proposes, using the ER Program CF Buffer, to bank credits associated with the risk of uncertainty and regression. The way in which the number of emission reduction to be placed in the Buffer will be determined, is presented in the document "ER Program Buffer Guidelines" of the FCPF.

Chile will also maintain its own record of credits associated with emission reductions and other ecosystem benefits. This national register will be used to integrate all environmental services in the country and thus avoid double-counting across various schemes and programs. This will ensure that credits placed in the Carbon Fund Buffer will not be allocated to other program.

C 20 The ER Program, building on its arrangements put in place during the readiness phase and during the Term of the ERPA, will have in place a robust Reversal management mechanism to address the risk of Reversals after the Term of the ERPA

Ind 20.1 At the latest 1 year before the end of the Term of the ERPA, the ER Program will have in place a robust Reversal management mechanism or another specified approach that addresses the risk of Reversals beyond the Term of the ERPA

N.A

Only applicable before the end of the ERPA term.

Ind 20.2 If the ER Program has selected option 2 under Indicator 19.1, all or a portion of the Buffer ERs of the ER Program, subject to a Carbon Fund review of the Methodological Framework and a decision of the parties to the ERPA in 2019, will be transferred to the mechanism identified in Indicator 20.1 at the end of the Term of the ERPA. If the ER Program fails to meet the requirements of Indicator 20.1, all remaining

N.A

Buffer ERs in the ER Program CF Buffer will be cancelled	
Only applicable before the end of the ERPA term.	
C 21 The ER Program monitors and reports major emissions that could lead to reversals of ERs transferred to the Carbon Fund during the Term of the ERPA	
Ind 21.1 The ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals [Monitoring and reporting of major emissions that could lead to Reversals of ERs 12.4]	YES
<p>Chile's ER Program has identified natural and anthropogenic sources of reversals that might affect Emissions Reductions during the Term of the ERPA in section 11.1 "Identifying risks of reversion".</p> <p>The default risks factors in the ER Program Buffer Guidelines are used to describe the main risks factors of the ER Program: i) conflicts over land, poor appropriation of rights to benefits and/or inadequate or negative inclusion of different stakeholders in the ER Program belonging to "A. Lack of broad and sustained stakeholder support", ii) risk due to the insufficient knowledge and skills of the various institutions involved and the lack of coordination between them, in "B. Lack of institutional capacity and/or ineffective vertical/cross-sector coordination", iii) risk due to inadequate laws, modification in legislation, the incorrect design of the ER Program (if does not sufficiently address the causes and agents of deforestation and degradation), corruption and ineffective governance, lack of practical execution and a lack of continuous funding in "C. Lack of long-term effectiveness in confronting underlying factors and iv) Risk of natural disturbances and disasters in "D. Exposure and vulnerability to natural disturbances".</p> <p>In order to prevent and minimize the risk factors of reversals mentioned above, the ER Program proposes a set of measures under each risk factor.</p> <p>For the existing future reversals, the ER Program proposes to monitor these emissions, using the same methodologies as in the Reference level setting and MRV system.</p> <p>Monitoring is planned to take place on a biannual basis so as to allow reversals to be detected at early stages. In relation to forest fires, which are anthropogenic risks of reversals and combated with mitigation measures aimed at preventing and minimizing the potential for these reversals, the CONAF performs annual monitoring, meaning this kind of reversal will be promptly addressed.</p>	
Ind 21.2. The ER Program reports to the Carbon Fund within 90 calendar days after becoming aware of any emissions in the Accounting Area or changes in ER Program circumstances that, in the reasonable opinion of the ER Program, could lead to Reversals of previously transferred ERs by the next Monitoring event. The ER Program explains how the potential Reversals would be addressed by additional ER Program Measures or by the Reversal management mechanism described in Indicator 19.1.	N.A
Only applicable at the time a reversal occurs and at the time of verification.	
C 22 Net ERs are calculated by the following steps:	

<p>1. Subtract the reported and verified emissions and removals from the Reference Level</p> <p>2. Set aside a number of ERs from the result of step 1, above, in a buffer reserve. This amount reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA. The amount set aside in the buffer reserve is determined using the conservativeness factors for deforestation listed in the MF. For estimated emissions reductions associated with degradation, the same conservativeness factors may be applied if spatially explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) are used. Otherwise, for proxy-based approaches, apply a general conservativeness factor of 15% for forest degradation Emission Reductions.</p> <p>3. Set aside a number of ERs in the ER Program CF Buffer or other reversal management mechanism created or used by an ER Program to address Reversals</p>	
[Ex-ante estimation of the Emission Reductions 14.3]	YES
<p>Despite the Emissions Reductions will not really occur until the ER Program is implemented, monitored, verified and reported, the net Emissions Reductions are calculated as an ex-ante forecast of the program. The estimations are not calculated separately for each proposed activity, but as a % of reference level emissions and removals of each REDD+ activity.</p> <p>In section 13. “Emissions Reductions Calculation”, Chile presents a technical analysis to determine the reduction objectives over the term of the ERPA. This analysis includes a forecast of the total reduction potential of direct mitigation measures and the reduction objectives presented by Chile at the UNFCCC in its INDCs.</p> <p>The results show that Chile has the following objectives: reduction of 20% of emissions in deforestation, reductions of 15% of emissions in degradation, increase of 5% in carbon stocks in conservation areas and increase of 20% in stocks in other areas. The origin of these percentage reduction in emissions or increases in removals are not well explained and the TAP suggest to clarify these. In section 1, it is suggested that the country makes an effort to estimate ex-ante the most likely effect of each proposed action, in order to justify the overall ex-ante emission reduction estimation.</p> <p>To calculate the net ex-ante Emissions Reductions, the procedures presented in the Carbon Fund Methodological Framework was followed. The estimated total uncertainty for the subnational FREL/FRL of Chile is 28.5% and is used as a proxy for the net ER estimation. A discount of 4% was therefore applied, in accordance with the methodological framework of the Carbon Fund. 11% was subtracted towards the Buffer, in accordance with the risks identified.</p> <p>The total net ER for the period 2017-2025 is 25,775,761 tons of CO₂-eq., according to the table presented below.</p>	

FREL/FRL	Deforestation	Degradation	Conservation	Increases	Total FREL
	3.452.884	9.149.382	-2.430.439	-10.012.012	159.815
Expected emissions	ERPA objective 20%	ERPA objective 15%	ERPA objective 5%	ERPA objective 20%	ERPA objective
2017	3.107.596	8.691.913	-2.479.048	-11.013.213	-1.692.752
2018	3.107.596	8.691.913	-2.479.048	-11.013.213	-1.692.752
2019	3.107.596	8.691.913	-2.503.352	-11.013.213	-1.717.057
2020	2.934.951	8.234.444	-2.503.352	-11.513.814	-2.847.771
2021	2.934.951	8.234.444	-2.527.657	-11.513.814	-2.872.075
2022	2.934.951	8.234.444	-2.527.657	-11.513.814	-2.872.075
2023	2.762.307	7.776.975	-2.551.961	-12.014.414	-4.027.093
2024	2.762.307	7.776.975	-2.551.961	-12.014.414	-4.027.093
2025	2.762.307	7.776.975	-2.551.961	-12.014.414	-4.027.093

C 23 To prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once. Any reported and verified ERs generated under the ER Program and sold and/or transferred to the Carbon Fund shall not be sold, offered or otherwise used or reported a second time by the ER Program Entity. Any reported and verified ERs generated under the ER Program that have been sold and/or transferred, offered or otherwise used or reported once by the ER Program Entity shall not be sold and transferred to the Carbon Fund

(i) [Participation under other GHG initiatives 14.1]

YES

To accomplish Criterion 23, the ER Program has established some specific provisions and mechanisms to avoid double counting by taking in consideration the already existing projects and other GHG initiatives. The ER Program presents a specific map where those potential projects are identified in order to avoid double counting.

The only concern that is not clear is about the future capture of information of new projects under the accounting area, that could be addressed through the already existing system of previous authorization of Forest Management Projects.

Taking in consideration those procedures, the ER Program offers solutions and mechanisms to avoid double counting related to the main methodological principles and requisites.

(ii) [Data management and Registry systems to avoid multiple claims to ERs 19.2]

YES

To accomplish the second part of Criterion 23, the ER Program has established some specific provisions and mechanisms:

As defined by the Methodological Framework and specified in Criterion 23 to prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once and any reported and verified ERs generated under the ER Program and sold and/or transferred to the Carbon Fund shall not be sold, offered or otherwise used or reported a second time by the ER Program Entity.

To prevent such double counting the ER Program defines the title and ownership of the emission reductions in public and private lands, based on the legal framework of the country: Public Land Emissions Reductions based on the

Constitution of the Republic of Chile, Article 589 and 590 of the Civil Code and the Forest Legislation (Native Forest Law (Law N°20.283);

REDD+ registry systems are tabular databases that assign serial numbers to reduced emissions and include information to characterize the source and nature of a specific reduced emission. For the ER Program, bearing in mind that the Reference Level and the MRV system are spatially explicit, the registry system will include spatial information, allowing reductions to be mapped and confirmed.

In light of the above, this REDD+ registry database will be installed on the SIT-CONAF platform and will contain the following information:

- Allocation of a serial number to each emission reduction (tCO₂e) to convert them into identifiable credits. The format of serial numbers must include the serial number via a code that identifies the year, location/region and municipality in which the reduced emissions were generated, as well as the activity and quantity/number of reduced emissions (for example: 2018-LR-VA-SFM-00001: credit 00001 for sustainable forest management in the Los Ríos region, municipality of Valdivia, generated in 2018)
- Geolocation of detailed emissions reductions used when it is necessary to specify the specific point where reduced emissions were generated so as to avoid double-entry with other emissions reduction projects, primarily VCS and CDM projects. The location is determined, delimited and registered with the necessary detail so as to extract reduced emissions from ER Program accounts.

The status of the reduced emission will fall into one of the following categories:

- Seller
- Buyer
- Date of transaction
- Part of the buffer account
- Available for transaction

This will create the ability to produce summarized reports with the:

- Quantity of emissions generated per year
- Quantity of emissions reductions generated per region
- Quantity of emissions reductions generated per activity (e.g. prevented deforestation, sustainable forest management, increased forest carbon content, etc.)
- Summary of emissions reduced according to status: sold, in the buffer account or available for transaction

Taking in consideration these procedures, the ER Program offers solutions and mechanisms to avoid double counting as required by the main methodological principles and requisites, as such this part of the criterion is also met.

C 24 The ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+

<p>Ind 24.1 The ER Program demonstrates through its design and implementation how it meets relevant World Bank social and environmental safeguards, and promotes and supports the safeguards included in UNFCCC guidance related to REDD+, by paying particular attention to Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC</p> <p>[Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]</p>	<p>YES</p>
<p>Referring to the WB social safeguards, it can be affirmed that the WB Operational Policy 4.10 on Indigenous Peoples receives due attention. This is evident with regard to culturally-based knowledge, gender and intergenerational issues and the process of free, prior and informed consultation of the affected indigenous communities in order to obtain their broad community support. The support is made visible by the deliberate involvement of indigenous stakeholders during the ER-PD preparation process that is described in detail in the Safeguards Plan. The criteria for the selection of the stakeholders are described as part of a multi-level, multi-sector and multi-stakeholder approach, which was based on the methodology for the participatory process of the Strategic Environmental and Social Assessment. Despite this fact, it is important to mention that the Chilean Indigenous Peoples do not have their own representative body (or bodies) yet, although measures towards this goal are underway.</p> <p>CONAF's already existing Intercultural Forestry Model (MOFIM by its Spanish acronym) is mentioned as a significant part of the Plan for Indigenous Peoples that relates to the ESMF. Furthermore, the ER Program contains a short description of the distinctive features of the Mapuche worldview, concentrating on these specific indigenous stakeholders because they are located within the area of accountability.</p> <p>Concerning OP 4.12, CONAF is including a Framework for Involuntary Settlement providing tools to tackle the potential risks in the ESMF. So far no risk has been detected in this regard.</p> <p>Regarding the WB environmental safeguards, these are being considered as an integral element of the ER- Program. Thus, OP 4.01 that deals with the Environmental Assessment, requires an environmental assessment of projects proposed for Bank financing. Chilean Law N°19.300 provides the Environmental Impact Assessment System, which is a tool for environmental management, but applies only to projects or activities and not to strategies, policies, programs or plans. This explains the implementation of the Strategic Environmental and Social Assessment mechanism to the Strategy. In an implementation phase, the legal tool will be applicable to certain projects specified in its Article 10.</p> <p>During the process of preparing the ESMF of the Strategy on Climate Change, an analysis of the national and international regulatory framework was performed concerning OP 4.01, OP 4.36, OP 4.04, OP 4.09 and OP 4.11 of the World Bank. In the case of OP 4.11, the ESMF will include Standard Procedures on Physical and Cultural Heritage, thus generating adequate measures in the case of eventual discoveries of resources with physical or cultural heritage values.</p> <p>As for the Cancún Safeguards</p> <p>Safeguard a), the consistency of the planned measures with regard to national forestry objectives and international conventions and agreements is shown.</p> <p>Safeguard b) that tackles transparency and effectiveness of the national forestry governance structures is also treated in a detailed way.</p> <p>With regard to Safeguard c) the respective elements, specifically ILO 169, UNDRIP and Chilean Law 20.249, are outlined, including the already mentioned text on the Mapuche worldview.</p> <p>Concerning Safeguard d), CONAF points out several instruments that have been considered in regard to a full and effective participation of stakeholders, particularly ILO 169 and UNDRIP. The ILO Convention has been made operative in Chile by Decree N°66 of the Ministry of Social Development. This decree has been rejected by several indigenous organizations because it does not require a measure to be accepted by a collective decision (consent). The Chilean Government has promised to revise the decree, although this revision has not taken place yet. Nevertheless, in a letter to CONAF, the Ministry for Social Development points out that in the case of the Strategy on Climate Change</p>	

(ENCCRV for its Spanish acronym) a process of indigenous participation (not consultation) should be carried out. The statement addresses the guidelines of paragraph 1, Article 7 of the ILO Convention. Thus, compared to Article 6 of the same legal instrument that refers to administrative and legislative measures, a consent is not mandatory. This is important, since in the workshops opinions were gathered and exchanged, without necessarily constructing consented results nor involving all possible stakeholders.

Concerning Safeguard e), the national policies, plans and programs for the conservation of forests and biological diversity are outlined and their compatibility with the measures mentioned in the Strategy on Climate Change is proven.

With regard to Safeguard f), CONAF identifies the potential risks that could result in a reversion of the situation, which the Strategy on Climate Change is aiming at. For each risk factor, measures have been defined that are able to prevent and/or combat the risks.

Related to Safeguard g) measures have been taken to ensure the reduction and handling of causes and agents of deforestation and forest degradation. The Monitoring, Reporting and Verification system will reflect this concern.

Ind 24.2 Safeguard Plans address social and environmental issues and include related risk mitigation measures identified during the national readiness process, e.g., in the SESA process and the ESMF, that are relevant for the specific ER Program context (e.g., land tenure issues), taking into account relevant existing institutional and regulatory frameworks. The Safeguards Plans are prepared concurrently with the ER Program Document, and are publicly disclosed in a manner and language appropriate for the affected stakeholders

[Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]

YES

According to the ER-PD, the ESMF and the protocols and instructions contained in it ensure the appropriate institutional management that potential environmental and social risks may require and, in fact, the following tools could be accessed:

Annex 1: Indigenous Peoples Planning Framework (MPPI by its Spanish acronym)

Annex 2: Framework on Resettlement

Annex 3: Physical and Cultural Resources

Annex 4: Pests and Diseases

Annex 5: Protocol for the activation of the World Bank OP 4.3.6 on Forests and OP 4.04 on Natural Habitats

The Indigenous Peoples Planning Framework contains the following items:

- MOFIM: MOFIM is defined as a community work scheme that tackles the management of natural resources via a territorial approach in order to identify solutions that are applicable to the reality of rural Mapuche people.
- MAIA: MAIA is a conceptual and practical work scheme, which relies on the holistic Andean perspective that combines productive, environmental and cultural elements. It implies the fusion of ancestral and technical knowledge for the use and management of natural resources.
- Methodology and procedures for the dialogue with and participation of indigenous peoples: Description of the participatory process implemented in the readiness phase.
- Supreme Decree N° 66: regulates the consultation process derived from article 6 of OIT 169.
- Notification of the Ministry of Social Development: refers to the participation of Indigenous peoples in the elaboration of plans (article 7 of OIT 169).
- Outline of ToR for the elaboration of ESMF: The ToR refer to the "Consultancy for the Elaboration of the Indigenous Plan for the Management of Natural Resources and Forestry Development as well as the updating of the intercultural tools for planning and intervention, MAIA and MOFIM".

It can be stated that relevant risk mitigation measures and tools are being specified in the ESMF and related documents. Some details could still be improved:

Regarding the Plan for Resettlement, OIT 169 and its Article 16 should be mentioned in the document. In fact, the article is mentioned in the ESMF and the documents should be as aligned as possible.

Under the same “alignment” perspective, the ER-PD should also make a reference to MAIA.

Regarding the ToR for the elaboration of the ESMF:

- It is very relevant that they include the revision of both MOFIM and MAIA. However, emphasis should be put on the participatory revision of the tools, including a wide number of indigenous stakeholders- men and women, elder and young persons-, in the process.
- Due to the sensitivity of the issue for indigenous peoples, any mapping exercise of indigenous communities or territories (as described in the ToR) should be envisaged carefully and consulted correspondingly.

The following should be considered in terms of potential consequences:

In the context of consultation processes, page 35 of the Indigenous Peoples Plan (MPPI by its Spanish acronym) refers to representative organizations of the different indigenous peoples. Nevertheless, there are no formally representative organizations of the indigenous peoples and only few of the peoples count with an organization recognized by themselves as representative. The latter is not the case for the Mapuche people. Of course, ancestral authorities exist in the territories but they do not represent the indigenous population as a whole. Indigenous associations are not representative either since they do not constitute second level institutions. This scenario might change if the new Indigenous Institutional Structure will be implemented, but at the time being its project of law still remains in the Chilean Congress.

C 25 Information is provided on how the ER Program meets the World Bank social and environmental safeguards and addresses and respects the safeguards included in UNFCCC guidance related to REDD+, during ER Program implementation

Ind 25.1 Appropriate monitoring arrangements for safeguards referred to in Criterion 24 are included in the Safeguards Plans

[Description of arrangements to provide information on safeguards during ER Program implementation 15.2 and 6.1]

YES

Social and environmental safeguards will be monitored by the Safeguards Information System (SIS), which constitutes part of the MRV system.

A specialized team is working on the design of the SIS. Nevertheless, numerous characteristics of the system or arrangements have been defined beforehand. Although these elements (characteristics/arrangements) are not part of the Safeguards plan, they are outlined in the Strategy on Climate Change itself. Among the available inputs the following items stand out:

- roles of the SIS as defined in the Cancun Safeguards, WB Operational Policies and the Warsaw Framework;
- Institutional mechanisms regarding the SIS;
- considerations with regard to the participatory process;
- attributes of indicators;
- SIS and the Grievance Redress Mechanism.

The Safeguards Plan mentions four different steps for the development of SIS:

- formulation and prioritizing of indicators;
- validation of indicators;
- generation of the base-line;

<ul style="list-style-type: none"> • how to monitor, report and verify. <p>At the time, the first two steps are being tackled during the “Process of Public and Indigenous Consultation and Self-assessment of the Strategy on Climate Change”.</p> <p>The design of the SIS is still underway.</p>	
<p>Ind 25.2 During ER Program implementation, information on the implementation of Safeguards Plans is included in an annex to each ER monitoring report and interim progress report. This information is publicly disclosed, and the ER Program is encouraged to make this information available to relevant stakeholders. This information is also made available as an input to the national systems for providing information on how safeguards are addressed and respected (SIS) required by the UNFCCC guidance related to REDD+, as appropriate.</p>	<p>N.A</p>
<p>Only applicable at the time of verification.</p>	
<p>C 26 An appropriate Feedback and Grievance Redress Mechanism (FGRM) developed during the Readiness phase or otherwise exist(s), building on existing institutions, regulatory frameworks, mechanisms and capacity</p>	
<p>Ind 26.1 An assessment of existing FGRM, including any applicable customary FGRMs, is conducted and is made public. The FGRM applicable to the ER Program demonstrates the following:</p> <ul style="list-style-type: none"> i) Legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program; ii) Access to adequate expertise and resources for the operation of the FGRM <p>[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]</p>	<p>YES</p>
<p>Public institutions in Chile possess a so-called Office for Information, Complaints and Suggestions (OIRS by its Spanish acronym). In the case of CONAF, the OIRS will constitute the basis for the FGRM mechanisms required for the implementation of the Strategy on Climate Change.</p> <p>The majority of users who were interviewed regarding satisfaction with the OIRS, revealed high scores.</p> <p>The ER-PD presents a process flow diagram for citizen attention of the OIRS and additionally includes a table that specifies who does what in which time-frame and how this is registered (Matrix of citizen attention process). Based on this description and the according legal premises, the attributes stated under i) prove to be fulfilled.</p> <p>Since the FGRM will be based on existing mechanisms, it can also be assumed that the adequate expertise and resources are and will be available, thus accomplishing ii).</p>	
<p>Ind 26.2 The description of FGRM procedures, included in the Benefit-Sharing Plan and/or relevant Safeguards Plans, specifies the process to be followed to receive, screen, address, monitor, and report feedback on, grievances or concerns submitted by affected stakeholders. As relevant, the Benefit-Sharing Plan and/or relevant Safeguards Plans and/or ER Program Document describe the relationship among</p>	<p>YES</p>

<p>FGRM(s) at the local, ER Program, and national levels</p> <p>[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]</p>	
<p>As already mentioned under 26.1, the document presents a process flow diagram for citizen attention of the OIRS and additionally includes a table that specifies who does what in which time-frame and how this is registered (Matrix of citizen attention process). In this context, CONAF highlights the need of OIRS' improvement at the local level.</p> <p>An extensive table reunites the suggestions made by stakeholders, divided into male and female, for introducing improvements of the existing mechanism of complaints and suggestions. These recommendations were collected in the workshops during the participatory consultation process and -properly systematized- will constitute an important input for an improved and widened FGRM.</p> <p>In this context it is important to know whether the ERPD will have a differentiated access to the OIRS. Further on, will specifically trained personnel attend the issues raised? In order to facilitate the use of the mechanism at the local level, which measures are going to be implemented? Which of the suggestions recollected during the workshops can contribute to the improvement? Given the oral traditions of indigenous and rural peoples, there exists probably a need to complement the existing ways of expressing complaints and suggestions by more participatory methods.</p> <p>In order to create knowledge and minimize doubts regarding the ERPD, which non –formal and formal Environmental Education Programmes are going to be implemented? Indigenous world views such as the Mapuche one are characterized by their search for balance between human beings, nature, territories and spirituality. Is this traditional knowledge going to be reflected in the programmes?</p>	
<p>Ind 26.3 If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM</p> <p>[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]</p>	<p>YES</p>
<p>In the document, CONAF highlights the need of improving the existing OIRS mechanisms at a local level. Suggestions of the stakeholders are presented but they have not been systematized according to different criteria for improvement, or at least this is not visible in the ER-PD.</p> <p>However, a WB document is specifically mentioned that will guide the process of improvement: "Evaluating a Grievance Redress Mechanism". Furthermore, it is explicitly affirmed that the stakeholders' inputs concerning the topic of improvement are going to be considered.</p> <p>CONAF also states that the existing system possesses the required conditions that allow to</p> <ul style="list-style-type: none"> ○ i) collect demands, suggestions, complaints and proposals from throughout the national territory that might help strengthen the ENCCRV during its different phases, especially during the implementation phase, ○ ii) respond to potential beneficiaries, especially indigenous peoples, local communities and other vulnerable social sectors, which almost always have difficulties to access information and are also the groups that are exposed to potential risks and impacts, ○ iii) report to international bodies such as the UNFCCC, FCPF, UN-REDD, among others, ○ iv) strengthen the Safeguards Information System to receive, track and monitor the socio-environmental safeguards. (ER-PD: 272) <p>CONAF mentions that the existing OIRS is a valuable structure that can be readily complemented with elements that make it compatible with the ER Program.</p>	

It can be affirmed that, although a concrete plan for improvement cannot be clearly identified in the ER-PD, relevant elements of it do emerge from the text.

C 27 The ER Program describes how the ER Program addresses key drivers of deforestation and degradation

Ind 27.1 The ER Program identifies the key drivers of deforestation and degradation, and potentially opportunities for forest enhancement

[Analysis of drivers and underlying causes of deforestation and forest degradation, and existing activities that can lead to conservation or enhancement of forest carbon stocks 4.1]

YES

The ER Program adds details on how the drivers of deforestation and degradation will be addressed in the quest to reduce its impact. An important effort has been made to link the measures to the objectives of reducing emissions and preventing degradation.

The ER Program identifies the different types of strategic activities that include direct mitigation measures and facilitation measures associated with the main drivers for degradation, deforestation and no increases in stocks. Opportunities of forest stock enhancements are extensively explored by using the legal body of instruments already available in the country. Some of these instruments are in place for decades, and have proven their positive impact in promoting reforestation (the most part of the more than 2 million hectares forested in the period 1970-2010 originated in one specific legal mechanism, Decree 701). Some of these instruments are obsolete and require updating, which is proposed in this program, to extend its action to small farm owners. Including small farmers in this kind of benefits, a considerable extension of the territory could be part of a conservation, protection or reforestation program. It is important to say, that many of the degradation drivers involve small land owners, who practice degrading activities as a survival strategy.

Ind 27.2 The ER Program identifies currently planned ER Program Measures and how they address the key drivers identified in Indicator 27.1, and the entities that would undertake them

[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]

[Institutional and implementation arrangements 6.1]

YES

Key drivers are addressed in different ways, depending its nature. The most relevant measures are: reforestations on the basis of the subsidy provided by the improved Decree 701, inclusion of small farmers in the coverage of the law 20283 (Native Forest Conservation), which allow small farmers to use native forest by applying sustainable practices monitored by the State, creation of buffer zones for livestock exploitation, improving the surveillance of land-use change, education and training of public agents and stakeholders, recognizing environmental services and eventually paying these services, improving the National Forest Inventory using satellite techniques. The most part of activities involving small farmers will require the participation of INDAP (National Institute on Agricultural Development). A stronger linkage with this institution is recommended by the TAP.

While conflicts over indigenous land ownership far exceed the objectives of this project, this considers the different types of properties that exist in the territory. For cases in which a conflict might emerge, a mechanism for dispute resolution, based on legal and institutional resources, is proposed.

The ER Program recognize the importance of the indigenous population, giving them a specific context aimed at the enhancement of understanding of indigenous cultures, in order to establish mechanisms compatible with their culture. Particular attention is devoted to ecosystem services such as water production and protection of biodiversity, two of the principles having priority in these cultures. Specifically, a targeted action focused on the implementation of

a program valuing ancestral understanding of natural resources related to biodiversity, forests and water, three aspects having higher importance for native populations.

The program includes educational and awareness actions such as: workshops for owners and indigenous communities, educational programs for owners and social groups, strengthening environmental education in rural schools as well as technical training, implementation of environmental fairs aimed at rural families, specific training cycles, inclusion of ENCCRV contents in undergraduate Colleges and post-graduate cycles to enhance professional capabilities.

C 28 The ER Program has undertaken and made publicly available an assessment of the land and resource tenure regimes present in the Accounting Area

Ind 28.1 The ER Program reviews the assessment of land and resource tenure regimes carried out during the readiness phase at the national level (i.e., SESA) and, if necessary, supplements this assessment by undertaking an additional assessment of any issues related to land and resource tenure regimes in the Accounting Area that are critical to the successful implementation of the ER Program, including:

- I. The range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and categories of rights-holders present in the Accounting Area (including Indigenous Peoples and other relevant communities);
- II. The legal status of such rights, and any significant ambiguities or gaps in the applicable legal framework, including as pertains to the rights under customary law;
- III. Areas within the Accounting Area that are subject to significant conflicts or disputes related to contested or competing claims or rights, and if critical to the successful implementation of the ER Program, how such conflicts or disputes have been or are proposed to be addressed; and
- IV. Any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area.

The ER Program demonstrates that the additional assessment has been conducted in a consultative, transparent and participatory manner, reflecting inputs from relevant stakeholders

[Description of land tenure systems, analysis of laws and regulatory framework 4.4 and 4.5, stakeholder consultation process 5.1]

YES

Land tenure could cause conflicts in the area owned by native ethnicities. Considering the whole accounting area of the program, this portion of the land is rather small, but not less important, as recognized by the authors. The potential conflicts are concentrated on lands having community ownership. In some cases, their participation in the actions proposed by this program will require a complete consensus among all the members of the community. Also a source of conflict could arise in areas that change from private to community property as a consequence of the Chilean State program, which by private land to be delivered to native communities. In both cases CONAF needs to take all necessary care before initiating an action, to ensure that the legal status of lands are guaranteed now and in the future. This is particularly applicable for 2 of the 5 regions of the accounting area.

28.1 – I – The ER Program takes in account and describes the range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and also the categories of rights-holders present in the Accounting Area, including the Indigenous Peoples and other relevant communities;

28.1 – II - The ER Program considers and describe the legal status of such rights, and significant ambiguities in the applicable legal framework, including the rights under customary law;

28.1- III – The ER Program contains a list of solutions for the conflicts or disputes related to contested or competing claims or rights as stated in Chapter 17 – Ownership of Emission Reductions and 17.2 – Transfer of Title to emission Reductions.

The ER Program also describes the existing mechanisms to prevent conflicts over land and resources rights, and Resolution mechanisms for significant conflicts related to communities and/or indigenous lands “Mecanismos de solución para conflictos significativos relacionados a comunidades y/o tierras indígenas”.

Within the Judicial System, a Conciliation Office has been created and regulated by Law N° 19, and the Legal Assistance Program.

It is also important to refer to the Indigenous Land and Water Fund and Mechanisms for conflict resolution regarding local communities and land in general: “Mecanismos de solución para conflictos relacionados a comunidades locales y tierras en general”.

The ER-PD identifies mediation as an alternative to some specific situations in the country legal framework, even though “in the case of Chile, the experiences of alternative systems for dispute resolution regarding domain or land tenure are rather scarce. ... “. Predominant mechanisms to resolve these conflicts are judicial, either through Ordinary Courts (civil or criminal judges) or arbitral tribunals appointed by mutual agreement between the parties or resolved by a third party.

28.1- IV – The ER Program describes the potential impacts on the existing land and resource tenure in the Accounting Area.

The ER Program meet the indicator 28.1 – I , II , III and IV, although the TAP would like to point out the following in relation to 18.1 - III and IV:

In the regions of Biobío, Araucanía, Los Ríos and Los Lagos, claims of Mapuche communities over certain ancestral areas exist. These claims are often geared towards private landowners, amongst them enterprises of the forestry sector, in some areas leading to significant controversies.

Although it is CONADI that carries out the role of a mediator in case of disputes, it seems to be important for CONAF to be prepared for these cases and to count upon protocols for the transformation and management of conflicts at an early stage.

CONAF suggests the inclusion of a clause for dispute resolution in the contract on right transfers from the owner to the institution in charge. Besides, an arbitration clause might be added which is intended to withdraw the contentious issue from the Ordinary Courts of Justice and take it to a judge appointed by the parties whose resolution has to be mutually accepted.

Nevertheless, these measures are referring to disputes in existing contracts between CONAF and land-owners. The implementation of the Strategy on Climate Change and the associated benefits could potentially increase the interest in lands and new demands could arise. It is important for CONAF to be prepared for this and to count upon protocols of procedures to attend stakeholders that claim rights on land formally belonging to a third party. Any of the extension agents might potentially envisage a situation of this kind in the areas with indigenous presence and he or she should not have to improvise, but be oriented by some -though maybe general- guidelines.

In this context it is also important to remember that, even though the workshops included a great diversity of stakeholders, a formal and widely accepted representation of the Mapuche people or their territorial populations (i.e. Pewenche, Lafkenche, Williche) does still not exist, although the new Indigenous Institutional Structure is underway (the Project of Law was sent to the Chilean Congress in January 2016). This means that “new” indigenous stakeholders

who have not yet participated in the readiness process may still appear on the scenario. It also may grant access towards indigenous instances of conflict management and transformation.

It is therefore recommended that a specific protocol should be considered and mentioned in the Strategy on Climate Change, which of course has to form part of the ESMF. Also, the relation between the Grievance Redress Mechanism and potential disputes should be outlined. At last, it is suggested to align the new text with the previous remarks on the issue in order to transmit a consistent view.

Ind 28.2 The ER Program explains how the relevant issues identified in the above assessment have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s). If the ER Program involves activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, the relevant Safeguards Plan sets forth an action plan for the legal recognition of such ownership, occupation, or usage. Beyond what is required for the successful implementation of the ER Program, the ER Program is encouraged to show how it can contribute to progress towards clarifying land and resource tenure in the Accounting Area, where relevant.

[Assessment of land and resource tenure in the Accounting Area 4.4]

[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]

YES

The ER Program may open important opportunities to help native communities to improve their living status. It is important to say that the many of the principles of the main native cultures and ethnicities have been promoted by this program. This program won't cope with the status of the land property, just will open opportunities for landowners to participate in conserving and enhancing forest, together with improving their possibilities to sustain their lives. Land ownership of native people is regulated by law in Chile, no project can change this.

Most of the safeguards are described on the Strategic Environmental and Social Assessment (SESA) and the Environmental and Social Management Framework (ESMF). The author provides extended information of the safeguards considered during the readiness process. During the participatory processes 1,248 people actively contributed to the discussions, all belonging to different social groups (key actors or stakeholders). The multi-sector, multi-level, multi-actor approach covers an ample and representative sample. During the whole process of consultation and program preparation, decisions were analyzed, to determine that the mitigation measures comply with the operational policies of the World Bank, Cancun safeguards, and national regulations in force in Chile on complementary safeguards that are mandatory to fulfill.

Ind 28.3 The ER Program provides a description of the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund

[Transfer of Title to ERs 18.2]

YES

The ER Program provides a description of the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund, and addresses each type of land (public and private) and identifies each one of them on the accounting area.

The Program defines specific mechanisms to address potential implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund as stated under Criteria 23,1 and 28.1- II :

The ER Program presents a specific map where those potential projects are identified in order to avoid double counting.

The ER Program intends to avoid double counting by taking in consideration the already existing projects and other GHG initiatives such as explained in Chapter 18 on Data Management and Registry Systems and 18.1 on Participation in other GHG initiatives, mainly CDM and VCS (Voluntary Carbon Projects) projects.

“All of these projects are located within regions of the accounting area and are distributed spatially explicitly, meaning that excluding them from the accounting area and future monitoring do not pose a problem. ...These projects, along with any voluntary initiatives taking place in the accounting area, must be correctly recorded on a national registry system to ensure they are not accounted for twice).

The only concern that is not clear is about the future capture of information on new projects within the accounting area that could be addressed through the already existing system of previous authorization of Forest Management Projects.

Also the ER Program brings a list of solution for the conflict or disputes related to contested or competing claims or rights as stated in Chapter 17 on Ownership of Emission Reductions and 17.2 17.2 on Transfer of Title to emission Reductions), describing:

- Existing mechanisms to prevent conflicts over land and resources rights, and Resolution mechanisms for significant conflicts related to communities and / or indigenous lands “Mecanismos de solución para conflictos significativos relacionados a comunidades y/o tierras indígenas”.
- Within the Judicial System, a Conciliation Office has been created and regulated by Law N° 19,253 and the Legal Assistance Program.

It is important to refer also to the Indigenous Land and Water Fund and the Mechanisms for conflict resolution regarding local communities and land in general: “Mecanismos de solución para conflictos relacionados a comunidades locales y tierras en general”.

Mediation constitutes also an important issue in the country legal framework as an alternative to some specific situations, but even in the case of Chile the experiences of alternative systems for dispute resolution regarding domain or land tenure are rather scarce. Predominant mechanisms to resolve these conflicts are judicial, either through Ordinary Courts (civil or criminal judges) or arbitral tribunals appointed by mutual agreement by the parties or by a third party.

C 29 The ER Program provides a description of the benefit-sharing arrangements for the ER Program, including information specified in Indicator 30.1, to the extent known at the time.

Description of benefit-sharing arrangements [16.1 in ER-PD of 15 Jan. 2016]

YES

There is a complete list of benefit-sharing structure, including payments, incentives, non-monetary benefits, legal benefits, educational, helps to restore burned areas. The ER Program propose a series of schemes to distribute the benefits among the target populations.

C 30 The Benefit Sharing Plan will elaborate on the benefit-sharing arrangements for Monetary and Non-Monetary Benefits, building on the description in the ER Program Document, and taking into account the importance of managing expectations among potential beneficiaries

<p>Ind 30.1 The Benefit-Sharing Plan is made publicly available prior to ERPA signature, at least as an advanced draft, and is disclosed in a form, manner and language understandable to the affected stakeholders for the ER Program¹². The Benefit-Sharing Plan contains the following information:</p> <p>The categories of potential Beneficiaries, describing their eligibility to receive potential Monetary and Non-Monetary Benefits under the ER Program and the types and scale of such potential Monetary and Non-Monetary Benefits that may be received. Such Monetary and Non-Monetary Benefits should be culturally appropriate and gender and inter-generationally inclusive. The identification of such potential Beneficiaries takes into account emission reduction strategies to effectively address drivers of net emissions, anticipated implementers and geographical distribution of those strategies, land and resource tenure rights (including legal and customary rights of use, access, management, ownership, etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations.</p> <p>Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.</p> <p>Monitoring provisions for the implementation of the Benefit-Sharing Plan, including, as appropriate, an opportunity for participation in the monitoring and/or validation process by the Beneficiaries themselves</p> <p>[Description of benefit-sharing arrangements 16.1]</p>	<p>YES</p>
<p>The ER Program considers a Benefit Sharing Plan that describes the benefit-sharing arrangements for Monetary and Non-Monetary Benefits.</p> <p>The ER Program takes in account and establishes procedures to manage resources and expectations among the potential beneficiaries, specifically:</p> <ul style="list-style-type: none"> • The categories of potential Beneficiaries • Their eligibility to receive potential Monetary and Non-Monetary Benefits • The types and scale of such potential Monetary and Non-Monetary Benefits; • The possibility to be culturally appropriate and gender and inter-generationally inclusive. • The identification of such potential Beneficiaries takes into account emission reduction strategies to effectively address drivers of net emissions, anticipated implementers and geographical distribution of those strategies, land and resource tenure rights (including legal and customary rights of use, access, management, ownership, etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations. <p>The ER Program also identifies: criteria's, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.</p> <p>At least there are in the ER Program provisions that allows the monitoring of the implementation of the Benefit-Sharing Plan.</p>	
<p>C 31 The benefit-sharing arrangements are designed in a consultative, transparent, and participatory manner appropriate to the country context. This process is informed by and builds upon the national readiness process, including the SESA, and taking into account existing benefit-sharing arrangements, where appropriate</p>	
<p>Ind 31.1 The Benefit-Sharing Plan is prepared as part of the consultative, transparent and participatory process for the ER Program, and reflects inputs by relevant stakeholders, including broad community support by affected Indigenous Peoples. The Benefit-Sharing Plan is designed to facilitate the delivery and sharing of Monetary and Non-Monetary Benefits that promote successful ER Program implementation. The Benefit-Sharing Plan is disclosed in a form, manner and language</p>	<p>YES</p>

<p>understandable to the affected stakeholders of the ER Program</p> <p>[Description of stakeholder consultation process 5.1]</p> <p>[Summary of the process of designing the benefit-sharing arrangements 16.2]</p>	
<p>The benefits were identified during the participatory processes (SESA workshops). Elements for the strategy of sharing benefits were selected. These elements will be considered when designing the final system as part of the program execution. Although this indicator can be given by met, "non-carbon" benefits include aspects that CONAF is not entirely responsible and some important issues are out of the institutional competence of CONAF. For this reason, it is recommended to include more explanatory text how CONAF will rely on partners like INDAP or other agencies to ensure the positive impact of a good plan profit sharing, effectively promoting the development of local communities.</p>	
<p>C 32 The implementation of the Benefit-Sharing Plan is transparent</p>	
<p>Ind 32.1 Information on the implementation of the Benefit-Sharing Plan is annexed to each ER Program monitoring report and interim progress report and is made publicly available [16.1]</p>	<p>N.A</p>
<p>Only applicable at the time of verification.</p>	
<p>C 33 The benefit-sharing arrangement for the ER Program reflects the legal context</p>	
<p>Ind 33.1 The design and implementation of the Benefit-Sharing Plan comply with relevant applicable laws, including national laws and any legally binding national obligations under relevant international laws</p> <p>[Description of the legal context of the benefit-sharing arrangements 16.3]</p>	<p>YES</p>
<p>The ER Program reflects the legal context of the Country and the main legal framework challenges that the implementation that the ER Program potentially will need to address.</p> <p>The ER Program also includes the design and implementation of the Benefit-Sharing Plan and comply with relevant applicable laws, including national laws and any legally binding national obligations under the relevant international laws.</p>	
<p>C 34 Non-Carbon Benefits are integral to the ER Program</p>	
<p>Ind 34.1 The ER Program outlines potential Non-Carbon Benefits, identifies priority Non-Carbon Benefits, and describes how the ER Program will generate and/or enhance such priority Non-Carbon Benefits. Such priority Non-Carbon Benefits should be culturally appropriate, and gender and inter-generationally inclusive, as relevant</p> <p>[Outline of potential Non-Carbon Benefits and identification of Priority Non-Carbon Benefits 17.1 in the reviewed ER-PD of 15 January 2016]</p>	<p>YES</p>
<p>The ER-PD outlines potential non-carbon benefits which are linked to the different action mechanisms (MT.1 to</p>	

<p>M.T6, IF.2 to IF.6, US.4 to US.6 and MG.1). These benefits take into consideration cultural diversity and aspects of gender. In this context -among others- socio-cultural heritage topics like ancestral practices related to the Mapuche world view and women's knowledge on environmental issues are specified.</p> <p>The document also identifies priority non-carbon benefits, denominated "biophysical and mainstream areas", divided into 4 and 2 priority aspects each. This identification was carried out by the technical team, based on the input produced by the participatory consultation process carried out in 2015.</p>	
<p>Ind 34.2 Stakeholder engagement processes carried out for the ER Program design and for the readiness phase inform the identification of such priority Non-Carbon Benefits</p> <p>[Description of stakeholder consultation process 5.1]</p>	<p>YES</p>
<p>The program for the focus groups which were conducted during the stakeholder engagement process and that is presented in the Safeguard Plans, provides space for the identification of the potential benefits of the ER Program.</p> <p>Indeed, the thematic guideline included a question on the topic, based on the explicit assumption that the potential benefits would be cultural, social, ecological and economic.</p> <p>On a primary level, this information is also present in the reports that were prepared of each workshop conducted during the already mentioned stakeholder engagement process.</p> <p>INDAP in Chile is the body in charge of rural development. The law 20283 to protect native forests has not yielded the expected results precisely because farmers are engaged in more profitable agricultural activities. All carbon capture programs or conservation of sinks require a combination of several agricultural activities in order to ensure its sustainability in time, otherwise they will not be sustainable and risk to be abandoned. Looking to this objective the role of INDAP is essential as CONAF does not have the technical capabilities to do so. It is not clear the real "engagement" of this strategic institution.</p>	
<p>C 35 The ER Program indicates how information on the generation and/or enhancement of priority Non-Carbon Benefits will be provided during ER Program implementation, as feasible.</p>	
<p>Ind 35.1 The ER Program proposes an approach utilizing methods available at the time to collect and provide information on priority Non-Carbon Benefits, including, e.g., possibly using proxy indicators. If relevant, this approach also may use information drawn from or contributed as an input to the SIS</p> <p>[Approach for providing information on Priority Non-Carbon Benefits 17.2]</p>	<p>YES</p>
<p>Non-carbon benefits were identified by stakeholders during the workshops conducted in the preparation phase of the ER-Program and reflect a wide spectrum of ideas. They were then categorized by CONAF into a biophysical and a mainstream area (whereby the "mainstream" area seems to be a category that is too heterogeneous). Each area was structured into "elements" which are briefly described.</p> <p>As the document mentions, indicators concerning non-carbon-benefits are being tackled as part of the Safeguard Information System. The development of monitoring and evaluation mechanisms is a complex task and as such is still ongoing, including future tests of indicators in pilot areas.</p> <p>Of course it depends on the indicators and whether they are quantitative or qualitative, which methods or techniques of data collection are proposed. As there are no indicators for non-carbon benefits identified yet, no methods are proposed either.</p>	

<p>Concerning the qualities or characteristics of indicators, chapter 14.1.8. offers guidelines. Several of the items refer to methodological aspects, specifically those mentioned under the title “eligibility of indicators”. It can therefore be concluded that the topic is being approached carefully.</p> <p>Finally, the document states that the Safeguard Information System is expected to be available towards the end of 2016.</p>	
<p>Ind 35.2 Information on generation and/or enhancement of priority Non-Carbon Benefits will be provided in a separate annex to each ER Program monitoring report and interim progress report, and will be made publicly available</p>	<p>N.A</p>
<p>Only applicable at the time of verification.</p>	
<p>C 36 The ER Program Entity demonstrates its authority to enter into an ERPA and its ability to transfer Title to ERs to the Carbon Fund</p>	
<p>Ind 36.1 The ER Program Entity demonstrates its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, either through:</p> <ul style="list-style-type: none"> i. Reference to an existing legal and regulatory framework stipulating such authority; and/or ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority. <p>[Authorization of the ER Program 18.1]</p>	<p>NO</p>
<p>The ER Program Entity stipulates that CONAF doesn’t have a specific legal and regulatory framework, stipulating which authority will enter into an ERPA and also the ability to transfer directly the Titles to ERs to the Carbon Fund. The ER Program describes the competences of CONAF and considers that she has competence to celebrate international agreements under the objectives established by law to CONAF, it acknowledges simultaneously the need to ask and obtain the necessary legal compliance competences and also the need to ask for authorization to the “Consejo Directivo de La Corporacion Nacional” the ability to celebrate an international agreement (see Annex 7 – Pronunciamento de Fiscalia de La Corporacion Nacional Florestal – Memorandum n 51-6, 5 de Octubre de 2016). This issue is very recent and legal frameworks are not yet created in most countries, and Chile is one of those countries (See Chapter 17.2.1 on Legal considerations for the transfer of emission reductions and removals permits and the implications for land tenure types).</p> <p>“...Carbon rights or emission reductions rights are not regulated under Chilean legislation. Transfer of title to these rights must be considered in light of Chile’s national legal framework, particularly in relation to contractual and ownership rules...</p> <p>“ ... Chilean legislation does not give a legal definition of ‘carbon rights’, nor is there any national policy to encourage a system to legally create or trade these rights or an institutional structure in place for this purpose. Despite this regulatory vacuum, carbon removals projects have been developed in Chile within the framework of the Kyoto Protocol under the CDM, while other have been traded on the Voluntary Carbon Market, subject to international standards, meaning that Chile has some experience in this regard. In view of this, national legislation permits the implementation of these types of projects via the application of general contractual rules....”.</p> <p>From the analyses of the ER Program and the legal framework of the Country, CONAF doesn’t have yet neither:</p> <ul style="list-style-type: none"> I. A reference to an existing legal and regulatory framework stipulating such authority; neither II. A letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or 	

from the relevant governmental body authorized to confirm such authority.

The ER Program describes the intention of CONAF to obtain such legal and/or regulatory procedure, requesting these to the competent authorities at the national level (See Chapter 17 on Ownership of Emissions Reductions and 17.1 on ER Program Authorization).

“CONAF have to request resolution from the General Controller of the Republic of Chile to enable CONAF without any caveat to subscribe the ERPA with the World Bank in its capacity as trustee of the FCPF.

“It is necessary to require an eventual opinion of the Controller in order to provide major legal certainty regarding the power of CONAF to act as a legal party in the ERPA.”.

“...Of analysis formulated by the Legal Unit of CONAF, and in the event of persistent doubt, the CONAF consider request of a legal opinion from the Office of the General Controller of the Republic to support the capacity and authorization to subscribe the ERPA with the World Bank in its capacity as trustee of the FCPF. Depending on the progress of negotiations on ERPA with the World Bank, this legal resolution will be previously requested, at stage of "Term Sheet", or included as condition precedent to the ERPA.

...The General Controller of the Republic is the highest instance of enforcement within the Central Government and aims to defend the principle of legality, i.e., it verifies that the services of the State acting within its mandate and subject to the procedures the law provides. The Constitutional Act regulates this institution granting powers to interpret the legal rules that affect governmental administration, resulting in the issuance of mandatory legal reports, which become an administrative doctrine.

Under the provisions of Article 5 and 33 letter b) of the Organic Constitutional Law N°10,336, any Director of Public Service can request legal advice to the General Controller of the Republic. Consultations are concerning the interpretation of the rules governing the organ, as well as the legality of their actions and performance.

The verdict of the General Controller of the Republic grants legal certainty regarding the powers of CONAF to act as a legal party before the ERPA. However, in case that body may consider that according to the regulatory framework of CONAF, it has not sufficient legal authority, it will grant the necessary powers to the Ministry of Agriculture.

It should be noted that the CONAF is a subsidiary body to the Ministry of Agriculture and oversees the implementation of the ENCCRV, and therefore, all measures related to forests and forest management.

The ER-PD brings also in the Annex 7 a legal opinion (“Pronunciamento de Fiscalia”) from the “Corporacion Nacional Florestal – Memorandum n 51-6, 5 de Octubre de 2016” but the text states clearly that even recognizing that CONAF has the ability to celebrate international contracts will probably need to submit those international agreements to the higher decision of the “Consejo Directivo de La Corporacion Nacional”. The legal opinion also doesn’t grant to CONAF directly (by itself) the ability to transfer titles from the State, and considers the legal model of transfer from the private landowners through a “Convenio” respecting the Principle of the Autonomy of the Private Parties.

The ER Program states the intention to proceed with the regulatory framework to adjust such items (see Chapter 17 on Ownership of Emissions Reductions and 17.1 on ER Program Authorization):

“...The successful implementation of the ENCCRV depends on technical assistance and international financial support.

Adoption of international agreements is consequently a sine-qua-non-condition for CONAF's ability to fulfill its function of implementing the ENCCRV and contribute meeting the objectives on climate change of Chile. At this time, CONAF is working on two pieces of legislation that are part of the action steps referred to in the ENCCRV. On the one hand, the inclusion of elements of climate change in the draft new law on forestry development, and on the other hand, the inclusion of relevant legal amendments to the Native Forest Law (Law N°20.283). Therefore, specific powers and functions can be established in any of these instruments for CONAF higher legal support to act, if necessary.”

From the above statements it is clear that the host country understands the legal methodological compliance procedures and the need of the ER Program Entity to have the legal ability and authority to transfer title to the Carbon Fund, but is also clear that the procedures that needs to be arranged and effectively executed (before CONAF can start the negotiations and/or celebrate the ERPA), by changing the legal regulatory framework or by obtaining the letter from the relevant overarching governmental authority (General Controller of the Republic of Chile) are not yet in place.

After the exchange of ideas and small changes in the text submitted to the TAP on November 19, 2016, the TAP considers this indicator is not met yet, adding the following arguments:

The text maintains all the initial considerations that are the basis for the TAP to conclude that Chile doesn't have

a legal framework/letter from relevant overarching governmental authority before the start of ERPA negotiations.

Annex 7 of the ERPD states clearly that it will be necessary to ask for formal confirmation that CONAF will be authorized to enter into the ERPA negotiation and transfer title of ERs.

The limitations of CONAF's ability to transfer title of ERs are not based on the potential limitation about the transfer of titles from private land owners, because the MF accepts clearly the possibility to transfer title through sub-arrangements with private land owners.

The main concern is about the ability to transfer Emissions Reductions generated on public land.

In Chile, public assets.... (Emission reduction generated in public lands) are regulated "by several special laws, while the Ministry of National Assets is the principal administrator of public property. [1] Peñalillo, D. Los bienes. La propiedad y otros derechos reales [Property and other real rights], Editorial Jurídica de Chile [Legal Publishing House of Chile], fourth edition, Santiago, p. 37. As the ERPD states, it is The Ministry of National Assets that has the power to acquire, administer and use State or public property (and not the Environmental Ministry/CONAF).

.....With regard to the allocation of public property to public authorities to achieve their purposes, article 56 of Decree-Law 1939 stipulates that allocation constitutes the allotment of one or more State assets by the Ministry of National Assets to the petitioner institution, for the petitioner to use in order to achieve its own purposes.....

Similarly, questions are also being asked of how it is possible for State authorities, as legal persons, to receive payment in exchange for implementing REDD+ activities, it being understood that this activity would be commercial, since it involves the profitability of property. According to article 19, no. 21, subparagraph 2, the Chilean State operates according to the concept of subsidiarity. This article requires a law to be accepted by an absolute majority before the State and its agencies may undertake commercial activities.

Finally the new paragraph is inserted in Sub-Section: 1) Emissions reductions generated on privately owned land, under the Section / Chapter 17.2.1 Legal considerations for the transfer of emission reductions and removals permits and the implications for land tenure types. That Section and paragraph only deals with private land and doesn't cover the main issue and limitation as identified here: "Emissions reductions generated on public lands"

In conclusion the paragraph: "Within the framework of the above, the CONAF will ensure that it obtains the legal capacity prior to the negotiations of its ER program in order to be able to transfer the ownership of the reduced emissions" is inserted on page 295 (private land) and not inserted on page 300 (public emissions reductions), and consequently doesn't give the clarification that it is going to be applied to all emission reductions, especially to the "emissions reductions generated on public land" and will be able to get the competent authorization for all the emission reductions (it seems to be applicable only to the private land emissions).

IN CONCLUSION:

The text still has contradictory statements saying that:

- a) There is no legal framework, nor
- b) An authorization letter, and
- c) CONAF will need to ask formal authorization from another Public Institution that is not perceived yet, and
- d) Public assets and their commercialization depends on the Ministry of National Assets (not on the Environmental Ministry/CONAF), and the new paragraph
- e) Is inserted on the sub-section for private lands (instead of the final section, to be applicable as a conclusion for all the universe of reductions);

.

<p>Ind 36.2 The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, while respecting the land and resource tenure rights of the potential rights-holders, including Indigenous Peoples (i.e., those holding legal and customary rights, as identified by the assessment conducted under Criterion 28), in the Accounting Area. The ability to transfer Title to ERs may be demonstrated through various means, including reference to existing legal and regulatory frameworks, sub-arrangements with potential land and resource tenure rights-holders (including those holding legal and customary rights, as identified by the assessments conducted under Criterion 28), and benefit-sharing arrangements under the Benefit-Sharing Plan</p> <p>[Transfer of Title to ERs 18.2]</p>	<p>YES</p>
<p>The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, while respecting the land and resource tenure rights of the potential rights-holders. That includes Indigenous Peoples in the Accounting Area.</p> <p>The ability to transfer Title to ERs is demonstrated through various means on the ER Program:</p> <ul style="list-style-type: none"> • With reference to existing legal and regulatory frameworks – The legitimacy of the state to claim Public Land Emissions Reductions based on the Constitution of the Republic of Chile and Forest Legislation (Native Forest Law (Law N°20.283). ; • With sub-arrangements with potential private land and resource tenure rights-holders – See Chapter 17.2 on Transfer of Title to emission Reductions: <ul style="list-style-type: none"> - “Rights may be transferred from land owners to the CONAF (the authority in charge of the ER Program) in two ways: first, by executing an agreement containing a special transfer clause, as compared experience has shown, or second, by legal obligation via a legislative instrument that stipulates transfer of the right to opt for a program, subsidy or incentive. <p>Benefit-sharing arrangements are stipulated in the Benefit-Sharing Plan, as stated in Chapter 15 (Benefit-Sharing Arrangements).</p>	
<p>Ind 36.3 The ER Program Entity demonstrates its ability to transfer Title to ERs prior to ERPA signature, or at the latest, at the time of transfer of ERs to the Carbon Fund. If this ability to transfer Title to ERs is still unclear or contested at the time of transfer of ERs, an amount of ERs proportional to the Accounting Area where title is unclear or contested shall not be sold or transferred to the Carbon Fund</p> <p>[Transfer of Title to ERs 17.2]</p>	<p>YES</p>
<p>The ER Program Entity demonstrates its ability to transfer Title to ERs prior to ERPA signature, or at the latest, at the time of transfer of ERs to the Carbon Fund, specifically taking in consideration that a significant part of the land and emissions reduction are being done on public lands, and the others have sub-arrangements options (contractual agreements between the State and private land owners) that will allow the transfer of Title to ERs from those who are voluntarily inserted on the Program.</p> <p>Is still unclear the possibility to identify the reductions emissions of each piece of land, but from the legal point of view the availability of a legal contractual model established with each one of the private land owners will allow the legitimacy of the ER Program entity to transfer the Title of those specific emission reductions.</p> <p>There may be a potential difficulty in the ability to transfer ERs, related to the indigenous people lands, but the Country has in place specific conflict resolution mechanisms (such as CONADI, the Conciliation Offices created by Law 19,253, and others).</p> <p>If considered necessary, it will always will be possible to exclude the amount of ERs proportional to the Accounting Area where title is unclear or contested and in consequence those reductions shall not be sold or transferred to the</p>	

Carbon Fund.	
C 37 Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.	
<p>Ind 37.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management System managed by a third party on its behalf. In either case of a country's use of a third party centralized REDD+ Programs and Projects Data Management System, or a country's own national REDD+ Programs and Projects Data Management System, the indicators below apply</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 18.2]</p>	YES
<p>Chile has made a decision to maintain its own comprehensive national REDD+ Program and Projects Data Management System.</p> <p>See Chapter 18.2:</p> <p>"The main purpose of the REDD+ registry is to avoid double-entry of reduced emissions and to act as a central tool to manage the accounting and reporting of REDD+ emissions reductions trading in Chile. REDD+ registry systems are tabular databases that assign serial numbers to reduced emissions and include information to characterize the source and nature of a specific reduced emission. For the ER Program, bearing in mind that the Reference Level and the MRV system are spatially explicit, the registry system will include spatial information, allowing reductions to be mapped and confirmed.</p> <p>The REDD+ registry database will be installed on the SIT-CONAF platform."</p>	
<p>Ind 37.2 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:</p> <ul style="list-style-type: none"> 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. <p>An ER Program for the Carbon Fund should report its activities and estimated ERs in a manner that conforms to the relevant FCPF Methodological Framework C&Is</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 18.2]</p>	YES
<p>The National REDD+ Program and Project Data Management System provides the attributes to the ER Programs, and include the requisites established in indicator 37.2, including:</p> <ul style="list-style-type: none"> i. CONAF has the entity that has Title to ERs produced (or at least the entity that will have based on a contractual agreement the Title to transfer those credits); ii. The Geographical boundaries of the ER Program or project as stated in Chapter 3 on Location of the ER Program; iii. The Scope of REDD+ activities and Carbon Pools – as stated in Chapter 7.2 on Description of the reservoirs of carbon and greenhouse gases selected; and iv. The Reference Level used – See Chapter 8.5 on Estimation of the Reference Level and Chapter 18.2 on Data management and registry systems to avoid double-entry 	

The ER Program intends to report its activities and estimated ERs in a manner that conforms to the relevant FCPF Methodological Framework C&Is .	
<p>Ind 37.3 The information contained in a national or centralized REDD+ Programs and Projects Data Management System is available to the public via the internet in the national official language of the host country (other means may be considered as required).</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 19.2]</p>	YES
<p>The information contained in a national or centralized REDD+ Programs and Projects Data Management System is available to the public via the internet in the national official language of the host country; that information has been published and made publicly available.</p> <p>“the SIT, the official website of the ENCCRV (www.enccrv-chile.cl) was launched on June 20, 2016. The website includes spatial location and detailed description of all REDD + projects implemented on the national territory, including the accounting area”.</p>	
<p>Ind 37.4 Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System; and an audit of the operations is carried out by an independent third party periodically, as agreed with the Carbon Fund</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 18.2]</p>	YES
<p>There are already administrative procedures (at least in an initial phase of construction) at the national centralized REDD Program and Project Data Management, as stated in chapter 8.2:</p> <p>“...The Registry platform of the RE Program intended to be integrated into the National Registry Platform for Emissions Reduction that will involve transversely, the total mitigation measures for different sectors and will be managed by the Ministry of Environment...”</p> <p>And:</p> <p>“...The specific peculiarities of activities related to the Emission Reduction Program, make necessary, prior to the Platform for National Registry construction, a number of technical and legal considerations to be analyzed that could guide the requirements and steps that must be incorporated in an operating pseudo-register system and should be in force before the implementation of the first milestone of monitoring planned of ER Program ...”</p> <p>Also, the host country expressed the intention to make available a third-party auditing of the operations, as stated in 18.2.6 Third party audits:</p> <p>“...Third party audits of the reductions / removals of ER program includes two instances of review and control, based on management of Technical REDD + Annex of Biennial Update Report (BUR), which planned to be include the ER Program in the update 2018:</p> <ul style="list-style-type: none"> i. The BUR will be submitted to the process analysis of ICA (International Consultation and Analysis) of the UNFCCC. ii. According to the SNI-Chile procedures. BUR in its completeness is subjected to a voluntary review carried out by independent international expert’s contract by SNI-Chile. <p>Even the statement related to the auditing has been made using the BUR example (that is different from the ER Program centralized REDD Programs and Projects Data Management System) there is clearly the intention to submit periodically the audit of the operations to an independent third party.</p> <p>Taking in consideration the presence of the two main criteria’s: a) “administrative procedures” and b) “the</p>	

periodically audit of the operations to be submitted to an independent third party”, we consider that the criteria is met.

C 38 Based on national needs and circumstances, ER Program host country selects an appropriate arrangement to ensure that any ERs from REDD+ activities under the ER Program are not generated more than once; and that any ERs from REDD+ activities under the ER Program sold and transferred to the Carbon Fund are not used again by any entity for sale, public relations, compliance or any other purpose

Ind 38.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own national ER transaction registry, or instead to use a centralized ER transaction registry managed by a third party on its behalf

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

YES

Based on national needs and circumstances, the ER Program host country has made a decision to maintain its own national ER transaction registry.

See Page 267 – Chapter 18.2:

The REDD+ registry database will be installed on the SIT-CONAF platform and will contain the following information:

- Allocation of a serial number to each emission reduction (tCO₂e) to convert them into identifiable credits. The format of serial numbers must include the serial number via a code that identifies the year, location/region and municipality in which the reduced emissions were generated, as well as the activity and quantity/number of reduced emissions (for example: 2018-LR-VA-SFM-00001: credit 00001 for sustainable forest management in the Los Ríos region, municipality of Valdivia, generated in 2018)
- Geolocation of detailed emissions reductions Used when it is necessary to specify the specific point where reduced emissions were generated so as to avoid double-entry with other emissions reduction projects, primarily VCS and CDM projects. The location is determined, delimited and registered in the necessary detail so as to extract reduced emissions from ER Program accounts.
 - The status of the reduced emission will fall into one of the following categories:
 - Sold
 - Buyer
 - Date of transaction
 - In the buffer account
 - Available for transaction

Also the ER Program Registry intends to be able to “summarize information and produce reports (in summary tables or graphs) to inform decision-makers... by applying filters to the database, such as:

- Quantity of emissions generated per year
- Quantity of emissions reductions generated per region
- Quantity of emissions reductions generated per activity (e.g. prevented deforestation, sustainable forest management, increased forest carbon content, etc.)
- Summary of emissions reduced according to status: sold, in the buffer account or available for transaction

Ind 38.2 The national or centralized ER transaction registry reports ERs for the Carbon Fund using the accounting methods and definitions described above in the MF

[Data management and Registry systems to avoid multiple claims to ERs 19.2]

N.A.

Not applicable at this stage	
<p>Ind 38.3 An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public.</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 19.2]</p>	N.A.
<p>There is no procedure established at this moment to do the auditing in accordance to Criterion 38.3, but there is already a prevision in the ER Program, establishing that an independent auditing report will be able to certify that the national or centralized ER transaction registry performs required functions:</p> <p>“The procedures to conduct audits by third-parties to these registration systems will be agreed timely with the Carbon Fund”.</p>	
<p>Ind 38.4 Operational guidance exists, or is in advanced stage of preparation, that clarifies the roles and responsibilities of entities involved in the national or centralized ER transaction registry, as well as rules for operation of the registry.</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 19.2]</p>	YES
<p>Chile considered and expressed formally the existence of a technical and legal working progress to define the “operational guidance” rules, as stated in chapter 18.2 on Data management registry systems to avoid double-entry:</p> <p>“...The Registry platform of the RE Program intended to be integrated into the National Registry Platform for Emissions Reduction that will involve transversely, the total mitigation measures for different sectors and will be managed by the Ministry of Environment...” The specific peculiarities of activities related to the Emission Reduction Program, make necessary, prior to the Platform for National Registry construction, a number of technical and legal considerations to be analyzed that could guide the requirements and steps that must be incorporated in an operating pseudo-register system and should be in force before the implementation of the first milestone of monitoring planned of ER Program” ...</p> <p>Adding to that, the roles and a significant part of the operational rules have been already designed by the host country as stated in sections:</p> <p>18.2.1 – Basic Functions, covering not only basic functions but also, performance scale, temporal resolution, spatial resolution.</p> <p>18.2.3.1 Considerations for certification of carbon emission reductions and benefit sharing, and</p> <p>18.2.4. Attributes in the Registry System</p> <p>The ER-PD describes in a detailed a significant number of the operational rules, such as:</p> <p>Basic Functions: For the presentation of the data ... will use a database in which each row represents one ton of reduced / absorption emission increased (\pm t CO₂e) and each column represent the attributes, described below, for each ton reduced. An example of filing a ton of emission reductions/absorption increased is shown in the Table 1 (below):</p>	

Table 18.2.1.a. Register of a ton of emission reductions/removal increase in the pseudo-registry system

Serial Number	Year	Type	Region	Activity	Nature
2018-ER-LR-MFS- 00001	2018	Emission reduction	Los Ríos	Sustainable Forest Management	Available for transaction
2018-AI-LA-EFC- 00001	2018	Removal increase	La Araucanía	Enhancement of Forest Carbon Stock	Available for transaction
2018-ER-MA-DEG- 00001	2018	Emission reduction	Maule	Degradation	Available for transaction
2018-ER-BI-DEF- 00001	2018	Emission reduction	Biobio	Deforestation	Available for transaction
2018-AI-LL-FC- 00001	2018	Removal increase	Los Lagos	Conservation	Available for transaction

This data base will allow the user to filter each element registered based on different attributes, for example, the region where the element reduction occurred. Also, according to the ERP, it allows the user to synthesize, or add, emission reductions, such as:

Number of emissions / absorptions generated per year,

Number of emission reduction / increase absorptions (t CO₂e) by region,

Number of emission reductions / absorptions increased by REDD + activity generated,

Number of reduced emissions / absorptions increased by character: sold, in the account buffer, or available for transaction.

Performance Scale

i) Temporal resolution: According to Chapter 9 of ER-PD, the events of MRV for activities related to land use change and forests remaining forests occur every two years during the ERPA period: 2017, 2019, 2021, and 2023. The registry must be updated after these MRV events during those years. It will also be updated after each transaction and withdrawal.

ii) Spatial resolution: The registry should reflect the spatial resolution of the ER Program of Chile, defined in NSCCVR. Although action measures to achieve emission reduction / increase absorptions will be implemented at various scales, including national, regional, local, and owner scale it is initially considered that emission reduction / absorption increased should be registered at the regional level, consistent with the RL and MRV.

Attributes in the Registry System: For each ton of reduced emission / increased absorption, registry must specify the following attributes:

A serial number for each reduced emission / increased absorption to transform them into instruments that can be identified, traded, canceled and / or retired.

The format of the serial number should be a code to define the year when the reduced emission is generated, the type, and the location / generation region, activity, and number of reduced emission (example: 2018-RE-LR-MFS - 00001: 00001 bonus of sustainable forest management in the region of Los Rios, generated in 2018). If the reduction is part of a separate project, you should also identify the serial number. In the example, "IND" would be added at the

end of the number: 2018-RE-LR-MFS-0001-IND.El Tipo (Emisión reducida/Absorción incrementada)

Type (Emission reduction/absorption increased)

Region

Activity:

Deforestation avoided

Forest Degradation avoided

Enhancement of carbon stock

Forest Conservation

SNASPE / Private Conservation Area (ACP)/ Without Conservation Figure

Name SNASPE/ACP

Sustainable Forest Management

Management Plan ID

SAFF Database link

If "Forest Conservation" or "Sustainable Forest Management" is selected, there will be additional attributes as indicated in the sub-bullets above.

Year in which the reduced emission is generated

Nature of reduced emission

Sold: Recipient and Transaction date

Withdrawal

In the Buffer account

Available for transaction

Belongs to an independent forest carbon project: Project Name; Project Developer; Project Verifier; Name of the independent registry system used; Serial number for emission reduction in the independent registry system managed by a third part...

If "sold" or "belonging to an independent project," there will be additional attributes as indicated in the sub-bullets above. The ongoing legal analysis, determine the possibility to include additional attributes in the registration system.

Taking in consideration the existence of the working progress in the definition of the Operational guidance rules and as well the operational rules already specified for the operation of the registry in the ER-PD, we consider the Criteria is met.

