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 advanced draft ER-PD. Chile agreed to submit an advanced draft ER-PD. As such, this first report is based on the review of the advanced draft ERPD of July 17, 2016 (Advanced Draft) and additional documents provided to the TAP.

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: August 9, 2016

Date of Current Assessment: Advanced draft ER-PD, July 17, 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)

Summary Assessment of the Quality and Completeness of the ER-PD:

Chile has prepared an interesting ERPD 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.

In total, 48 criteria or indicators are met, 16 are not met, and 14 are not applicable at this stage.
II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects

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 almost 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 is the area representing the largest part of the industrial forest sector. As such, the program can be considered as ambitious.

In this section, all 3 indicators are met.

<table>
<thead>
<tr>
<th>III. Carbon Accounting</th>
<th>3.1 YES</th>
<th>3.2 YES</th>
<th>3.3 NO</th>
<th>3.4 NO</th>
<th>3.5 YES</th>
<th>3.6 NO</th>
<th>3.7 NO</th>
<th>3.8 NO</th>
<th>3.9 YES</th>
<th>3.10 NO</th>
<th>3.11 YES</th>
<th>3.12 NO</th>
<th>3.13 YES</th>
<th>3.14 YES</th>
<th>3.15 N.A.</th>
<th>3.16 N.A.</th>
<th>3.17 YES</th>
<th>3.18 YES</th>
<th>3.19 YES</th>
<th>3.20 YES</th>
<th>3.21 YES</th>
<th>3.22 N.A.</th>
<th>3.23 N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>III (a) Scope and methods → Criteria 3 - 6</td>
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<td>III (b) Uncertainties → Criteria 7 - 9</td>
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<td>III (c) Reference Level → Criteria 10 - 13</td>
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<td>III (d) Reference Level, Monitoring &amp; Reporting on Emission Reductions → Criteria 14-16</td>
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<td>III (e) Accounting for Displacement (Leakage) → Criterion 17</td>
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<td>III (f) Accounting for Reversals → Criteria 18 – 21</td>
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<td>III (g) Accounting for ERs → Criteria 22 - 23</td>
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The country is considering in the ER-PD the REDD+ activities of “emissions from deforestation”, “emissions from forest degradation” and “enhancement of forest carbon stocks”. The emissions from deforestation occur in the areas that represents a land use change from forest land to non-forest land. “Conservation of carbon stocks” is considered in the calculation of the NREF/NRF but, during the site visit to the country it was suggested to consider this as of “forest degradation and enhancement of carbon stocks” (fluxes) in areas of native forest subject to formal conservation. The activity of “Sustainable management of forest” was not included because there are no official data to spatially define the area subject to this condition at the moment.

The sources and sinks associated with the REDD+ activities described before are: above-ground biomass, below ground biomass and deadwood. Soil Organic Carbon was not considered in the ER-PD to maintain consistency with the National Greenhouse Gas Inventory, which does not account soil organic carbon due to the non-existence of data at national level and the inaccuracy of sources of information. The Reference level is prepared in harmony with the Forest Emission Reference Level submitted to the UNFCCC -after some minor amended details-, and with the National and future State GHG Inventories. It is recommended to disaggregate degradation sub-activities, such as “Substitution”
and “degradation” in forest land remaining forest land in all calculations, including in the uncertainty analysis.

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, as expected.

IPCC methods are considered and methodology maintained both in the construction of the Reference Level and in the MMR. 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.

The estimations of accuracy and precision are incomplete and need to be more disaggregated by sources of uncertainty. The key uncertainties are not discussed in detail, such as the estimation of the uncertainties in the LU maps, the uncertainties associated to the estimations of emissions and removals in forests remaining forests (degradation and stock enhancement) and the emission factors used to estimate emissions from deforestation.

The methodology used to estimate the reference level is filled with sources of error in accuracy that need clarification, such as the interpolation of LUC (up to almost 10 years), the use of EF at a regional scale instead of forest type, among others.

The different start and end date for the Reference Period can cause inconsistencies in land use change rates, particularly if there are specific events generating outlier values in land use change dynamics.

In relation to the Reference Period, there is a lack of consistency across the Regions and REDD+ activities, thus the TAP recommended the Country to follow their plan of improvement and reframe the reference period. The emissions factors and activity data used to construct the Reference Level are the same as for the Monitoring.

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.

In this section, 24 criteria or indicators are met, 9 are not met, and 10 do not apply at this stage.

IV. Safeguards

**Actions undertaken to meet WB and Cancun Safeguards**

Each of the WB and Cancun Safeguards is specifically addressed in the strategic document explaining thoroughly how the safeguards are being considered and met. Regarding the SIS, relevant 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.

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.
The document does not identify the prioritized risk mitigation measures. ESMF, protocols and instructions contained in the ER-PD are supposed to ensure the appropriate institutional management that potential environmental and social risks may require. However, these tools are not specifically named and outlined, and a general reference to them is not sufficient.

Neither the Safeguards Plan nor the ER Program Document describe the relationship among FGRMs at the local, ER Program, and national levels which is why the document(s) should be complemented accordingly.

The Safeguards Plan refers to the consultation of stakeholders regarding appropriate mechanisms of FGRMs. However, no formal analysis of this issue appears in the strategy. The complaints and suggestions expressed by stakeholders during the SESA participatory process should be systematized as the basis for a Plan for Improvement of the existing mechanism and the plan itself outlined in the strategy.

In this section, 3 criteria or indicators are met, 3 are not met, and 1 does not apply at this stage.

**V. Sustainable Program Design and Implementation**

V. (a) Drivers and Land Resource Tenure Assessment \(\rightarrow\) Criteria 27-28

V. (b) Benefit sharing \(\rightarrow\) Criteria 29 – 33

V. (c) Non-Carbon Benefits \(\rightarrow\) Criteria 34 – 35

The ER Program identify 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.

Land tenure could cause some conflicts just 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 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.

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. The benefits were identified during the participatory processes. The document 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.

In this section, 11 criteria or indicators are met, 1 is not met, and 2 do not apply at this stage.

**VI. ER Program Transactions**

VI (a) ERPA Signing Authority and Transfer of Title To ERs \(\rightarrow\) Criterion 36

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Status</th>
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<tbody>
<tr>
<td>27.1</td>
<td>YES</td>
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<tr>
<td>27.2</td>
<td>YES</td>
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<tr>
<td>28.1</td>
<td>YES</td>
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<tr>
<td>28.2</td>
<td>YES</td>
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<tr>
<td>28.3</td>
<td>YES</td>
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<tr>
<td>29</td>
<td>YES</td>
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<tr>
<td>30.1</td>
<td>YES</td>
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<td>31.1</td>
<td>YES</td>
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<td>32.1</td>
<td>N.A</td>
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<tr>
<td>33.1</td>
<td>N.A</td>
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<tr>
<td>34.2</td>
<td>N.A</td>
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<tr>
<td>35.1</td>
<td>NO</td>
</tr>
<tr>
<td>35.2</td>
<td>N.A</td>
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</tbody>
</table>

- **Version 2, 20 May 2016**
## VI (b) Data Management and ER Transaction Registries ➔ Criteria 37 - 38

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. The ER Program Entity identified as CONAF doesn’t have a specific legal and regulatory framework stipulating the authority to enter into an ERPA and also the ability to transfer directly (by itself) the Title to ERs to the Carbon Fund. 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 reduction emissions are being done under public lands, and the others have sub-arrangements options (contractual agreements between the State and private land owners) that will allow the transfer Title to ERs from those who are voluntarily inserted in the Program.

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 timely with the Carbon Fund. There is no statement if there exists an Operational guidance, 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.

In this section, 7 criteria or indicators are met, 3 are not met, and 1 does not apply at this stage.

### SUMMARY SCORE and overall comment:

In total, 48 criteria or indicators are met, 16 are not met, and 14 are not applicable at this stage.

The comments on the indicators that are met or not met are outlined in the corresponding sections of the review and refer to ambition, carbon accounting, safeguards, sustainable program design, and program transactions. All indicators of the section of ambition are met. Important indicators of carbon accounting, in relation the reference period, definitions and uncertainty analysis require important improvements, as well as indicators of safeguards and program transactions.
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.

<table>
<thead>
<tr>
<th>Ind. 1.1 The ER Program Measures aim to address a significant portion of forest-related emissions and removals</th>
<th>YES</th>
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</thead>
<tbody>
<tr>
<td>[Ambition and strategic rationale for the ER Program – 2.2]</td>
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</tbody>
</table>

Yes, the ER includes reduction of emissions due to forest degradation, mainly affected areas of 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, committed in the next years until 2025.

<table>
<thead>
<tr>
<th>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.</th>
<th>YES</th>
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<tbody>
<tr>
<td>[Ambition and strategic rationale for the ER Program – 2.2, 2.3]</td>
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</table>

The ER program is subnational, with jurisdictional limits, encompassing a region of about 15 300 000 hectares, where the most important part of the industrial forest activity is carried out. From this perspective, it has a jurisdictional approach rather. More detail is needed about the specific selected pilot areas of action of the program. The total area is defined but it is impossible to involve all actors everywhere. For this reason, the TAP suggests to propose concrete perimeters where the ER program will implement each group of actions. The authors already include a study, made by an external organization, in order to select hotspots of emission problems. They have to base the proposal on the results of this study. More precision on the number and localization of actors involved in the program is needed. Without this information, it will be very difficult to monitor the progress of this program.

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

<table>
<thead>
<tr>
<th>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.</th>
<th>YES</th>
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<tbody>
<tr>
<td>[Accounting Area of the ER Program – 3.1]</td>
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</table>

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 and humid and cold temperate. This geographical extension covers the variety of climates of the central zone of Chile 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.

<table>
<thead>
<tr>
<th>Ind. 3.1</th>
<th>The ER Program identifies which anthropogenic sources and sinks associated with any of the REDD+ Activities will be accounted for in the ER Program</th>
</tr>
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<tbody>
<tr>
<td>YES</td>
<td>[Description of Sources and Sinks selected – 8.1]</td>
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</table>

The Emissions Reductions Program identifies the sources and sinks associated with the REDD+ Activities.

The REDD + activities listed in Decision 1/CP.16, paragraph 70 the country is considering in the ER-PD, are “emissions from deforestation”, “emissions from forest degradation” and “enhancement of forest carbon stocks”. The emissions from deforestation occur in the areas that represents a land use change from forest land to non-forest land.

In the first draft of the ER-PD (May 23rd 2016) it was stated that “Conservation of carbon stocks” is considered in the calculation of the NREF/NRF but, during the site visit to the country it was understood that the calculation of carbon stocks is not the most adequate and is very similar to the calculation of emissions from forest degradation and enhancement of forest carbon stocks. In the Advanced Draft ER-PD (17072016) it was clarified in the same section, but is still considered as “Conservation of Carbon Stocks”. The TAP suggests to consider these as part of the activities related to “emissions from forest degradation” and “enhancement of forest carbon stocks”, but focused on areas with a conservation status.

The activity of “Sustainable management of forest” is not included because there are no official data to spatially define the area subject to this condition at the moment. Notwithstanding, the country is designing a program to include this activity in the future.

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 litter, 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 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 last version of the FREL excludes this pool, thus the different documents are now totally consistent.

The program aligns well with the objectives of the REDD+ initiative.

<table>
<thead>
<tr>
<th>Ind. 3.2</th>
<th>The ER Program accounts for emissions from deforestation.</th>
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<tbody>
<tr>
<td>YES</td>
<td>[Description of Sources and Sinks selected – 8.1]</td>
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</table>

Chile ER Program account for emissions from deforestation.

Deforestation is defined as the conversion of forest areas to a different use of the land, when this is either permanent or where there is no certainty about how and when the forest would be restored when the land use change took place.

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. Nor will areas which are temporarily without stock...
or where trees have been removed be considered to be areas of deforestation, provided that a natural or assisted regenerative activity is planned, recorded and documented.

It was correctly assumed that carbon stocks in deforested areas immediately after deforestation occurs, are zero. The difference with National Greenhouse Gas Inventory is due to the use of $\Delta C$ values in deforested areas immediately after deforestation occurs, which corresponds to the carbon present in non-forest land.

Deforestation is a net source of emissions and accounts for 1,653,819 tons of CO$_2$, which is 20% of total emissions under Chile’s Emissions Reductions Program. The remaining 80% of emissions corresponds to forest degradation: 6,573,197 tons of CO$_2$.

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.

**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).

[Description of Sources and Sinks selected – 8.1]

Degradation is considered as any reduction in the carbon content of a forest, induced by human activity. Such human activity has been with such an intensity that means that forestry activity must be ceased. It does not imply any land use change.

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.

Such definitions were agreed by an extensive discussion with the participation of national and international experts from UCCSA (Unit of Climate Change and Environmental Services) and 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.

Degradation accounts for 80% of total forest related emissions in the Accounting Area: 6,573,197 tons of CO$_2$.

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. (Gingrich, S. F. 1967. Measuring and 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, as described in Bahamondez and Thompson (2016). Any movement from an upper to a lower position in that chart will correspond to degradation. The main limitation to this methodology is that at present, only the stock chart associated with the forest type Roble-Rauli-Coihue (Ro-Ra-Co) is validated and published. ER-PD includes non-validated versions of Siempreverde and Lenga stock charts, which were generated based on forests of southern Argentina. No charts are available for the remaining forest types. Another restriction of this methodology is related to the next evaluation. Since the analysis is based on the difference between to time series, there is no base map for the next evaluation, so it is unclear how this tool will be used to spatially reference the impact of any emission reduction or stock enhancement activity (see also the section on uncertainty analysis).
It is recommended that reference to Bahamondez and Thompson (2016) is made in the corresponding section as well as the inclusion of “substitution” and “restitution” argumentation in the body of the text. Also it is recommended the inclusion of “Anexo_Definiciones_REDD+” and “Anexo_Acta_Taller_NR” in the Dropbox folder (link in chapter 8) if the documentation can be publicly available. Finally, it is recommended to disaggregate sub-activities “substitution” and “degradation” in forest land remaining forest land, also clarifying that the ER Program is not accounting for “stock conservation activities” as one of the REDD activities, but as carbon emissions and removals in “areas of forest conservation”, for example modifying the table 7.1, second paragraph in chapter 8 and other sections that refer to “stock conservation”.

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). | NO |
| Description of Carbon Pools and greenhouse gases selected – 8.2 |

The ER Program accounts for aboveground and belowground biomass in forest deforestation and forest degradation activities.

Deadwood is included in deforestation and degradation but it is not included in non-forest land converted to forests land because the rate of accumulation of dead wood is not known.

Despite litter is mentioned in “Methodological Protocols for the development of the FREL/FRLs for REDD+ activities in Chile’s ER Program area” (mentioned in Bibliography in chapter 8.6 and attached as part of the NREF/MRF) nothing is said in ER Program Document.

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.

Further explanations or justifications are required to demonstrate that litter is not a significant pool, complying with indicator 4.2.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 4.2.ii: the ER Program can demonstrate that excluding such Carbon Pools and greenhouse gases would underestimate total emissions reductions.

| Ind. 4.2 Carbon Pools and greenhouse gases may be excluded if: | YES |
| 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 |
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 CO$_2$/year, representing 7.7% of 1,653,819 tons of CO$_2$/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 publicly available.

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.

<table>
<thead>
<tr>
<th>Ind. 5.1</th>
<th>The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR).</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td></td>
</tr>
</tbody>
</table>

| [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] |

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 emissions and removals calculations 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 areas, as well as non-CO$_2$ 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.

<table>
<thead>
<tr>
<th>Ind. 6.1</th>
<th>The following methodological steps are made publicly available:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Forest definition;</td>
</tr>
<tr>
<td>II.</td>
<td>Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable;</td>
</tr>
<tr>
<td>III.</td>
<td>Choice of activity data, and pre-processing and processing methods;</td>
</tr>
<tr>
<td>IV.</td>
<td>Choice of emission factors and description of their development;</td>
</tr>
<tr>
<td>V.</td>
<td>Estimation of emissions and removals, including accounting approach;</td>
</tr>
<tr>
<td>VI.</td>
<td>Disaggregation of emissions by sources and removal by sinks;</td>
</tr>
<tr>
<td>VII.</td>
<td>Estimation of accuracy, precision, and/or confidence level, as applicable;</td>
</tr>
<tr>
<td>VIII.</td>
<td>Discussion of key uncertainties;</td>
</tr>
<tr>
<td>IX.</td>
<td>Rationale for adjusting emissions, if applicable;</td>
</tr>
<tr>
<td>X.</td>
<td>Methods and assumptions associated with adjusting emissions, if applicable.</td>
</tr>
</tbody>
</table>

[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]

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 processing method for forest degradation is incomplete, as the methodology is only validated for one forest type (see also 6.1.IV, V and VIII; 6.2.II and III; 7.1; 7.2. It is not clear why conservation of forest stocks is treated as a separate activity, whereas the GHG estimation procedure is very similar to the detection of forest degradation and stock enhancement. According to the GOFC-GOLD REDD+ sourcebook (http://www.gofcgold.wur.nl/redd/), the role of forest stock conservation under REDD+ is important to avoid forests to become a source of carbon emissions in the future and to ensure permanence of carbon stocks by establishing long-term commitments to preserve forest, which implies that disturbances due to human activities in such areas are minimal, and in sum, will result in a net zero carbon balance (or natural increase) in the near and long-term.

IV. 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. The ER-PD should clarify this choice and why this does not generate additional uncertainties, particularly in terms of accuracy (see also 6.1.VII and VIII; 7.1).

V. As mentioned under 6.1.III, 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
The enhancement will be repeated over time, as the methodology is based on the estimation of differences between image time series (see also 14.1 and 2).

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. The estimations of accuracy and precision are incomplete and need to be more disaggregated by sources of uncertainty (see also 7.1 and 7.2). The confidence level is not always mentioned in the uncertainty analysis, so it is not clear if the 95% confidence level mentioned in some sources, is universal or that other levels are used.

VIII. The key uncertainties are not discussed in detail, such as the estimation of the uncertainties in the LU maps, the uncertainties associated to the estimations of emissions and removals in forests remaining forests (degradation and stock enhancement) and the emission factors used to estimate emissions from deforestation.

IX. The emissions are not adjusted. Not applicable

X. 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]

- **I.** Maps of the accounting area are publicly available
- **II.** Maps that show deforestation, degradation and stock enhancement are available.
- **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
- **IV.** Estimation of the annual emissions and removals over the reference period are presented in tables.
- **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.

**YES**
There are various sources of uncertainty that are not included in the analysis, among others errors in the application of the degradation model to non-validated forest types, additional errors associated to the use of the model (error in the inventory data used to calibrate the model, spatial error associated with the inventory data, among others). It is also not clear how the model will be used in future analysis, as the model is based on differences between time series of satellite imagery, which does not create an image from which a subsequent analysis can be carried out. As such, the uncertainty related to re-applying the model to a new set of image comparison needs to be clarified and how this will be used to spatially reference the impact of the ER-Program.

Concerning the estimation of error in the emission factors, it is not clear how these are calculated. Particularly the possible accuracy error in applying a regional emission factor (EF), instead of a forest type related EF has not been clarified.

It is recommended to disaggregate as much as possible the sources of uncertainty and to apply sensibility analysis to determine the importance of each variable in the level of uncertainty.

There is no estimation of the error due to accuracy. The methodology used to estimate the reference level has several sources of error in accuracy that need clarification, such as the interpolation of LUC (up to almost 10 years, see also 11.1 and 11.2), the use of EF at a regional scale instead of forest type, the application of the degradation tool to subsequent time series analysis, among others.

The uncertainty analysis in relation to the LU maps lacks clarity how the level of uncertainty was calculated (confusion matrices?) and how many data points were used to estimate the level of uncertainty.

The uncertainty analysis for forest remaining forest needs to be presented separately for the categories considered as degradation and stock enhancement (there are three categories of degradation, each with specific calculations and related errors.

**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]**

The sources of uncertainty related to the analysis of degradation need to be presented separately e.g error in using the extrapolation methodology, error in using the forest density model and derived emission factors, see also 7.1. No sensitivity analysis or Monte Carlo has been carried out to assess the relative contribution of the factors to the overall uncertainty of emissions and removals. Furthermore, as stated under 7.1, the uncertainty analysis is incomplete and lacks various variables.

**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.

<table>
<thead>
<tr>
<th>Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period, 13.2</th>
<th>Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area</th>
</tr>
</thead>
</table>

Currently there is no set of standard operation procedures available that will be implemented to minimize systematic errors, although these are under construction and will be made available soon, as stated in the advanced draft ER-PD (page 202 of July 17th version). Particularly attention is required to indicate how the forest degradation and stock enhancement analysis will be carried out in future monitoring within the forest-remaining-forest category, as it is not clear how this will be carried out (both in terms of generating models for all forest types as of how to compare the outcome of the reference scenario (2001-2010) with a second period.

### 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.

| 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 |

Currently there is no set of standard operation procedures available that will be implemented to minimize systematic errors, although these are under construction and will be made available soon, as stated in the advanced draft ER-PD (page 202 of July 17th version). Various sources of uncertainty and random errors are not identified yet and their relative importance are not assessed, as pointed out under 7.1.

### 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

| 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 |

**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.
Taking into consideration the limitations of the uncertainty analysis expressed under indicators 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.

<table>
<thead>
<tr>
<th>Ind 9.2</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.A</td>
<td>[Quantification of uncertainty in Reference Level setting 13.2]</td>
</tr>
</tbody>
</table>

Not applicable at this stage.

<table>
<thead>
<tr>
<th>Ind 9.3</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.A</td>
<td>[Quantification of uncertainty in Reference Level setting 13.2]</td>
</tr>
</tbody>
</table>

. 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

<table>
<thead>
<tr>
<th>Ind 10.1</th>
<th>The Reference Level is expressed in tons of carbon dioxide equivalent per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>[Estimated Reference Level 9.7]</td>
</tr>
</tbody>
</table>

Chile has a Reference Level for Forest Emission/Forest Reference Levels for native forest and sub-national coverage for three REDD+ activities with annual net removals expressed in tons of carbon dioxide equivalent per year of 1,471,502 t CO₂-equ.

Emissions from deforestation accounts for 1.65 million tCO₂-equ., degradation results with 6.57 million tCO₂-equ. annual removals of -1.8 million tCO₂-equ. resulting from Conservation of stocks and -7.9 million tCO₂-equ. resulting from Increase in forest carbon stocks, as shown in table 8.5.3.I of the ER-PD.

The Technical Advisory Panel encourages the country to calculate and report emissions and removals under the exact activities listed in decisions 1/CP.16, paragraph 70 of the United Nations Framework Convention on Climate Change (see discussion in indicator 3.1). “Conservation” in table 8.5.3.I does not have the same meaning as “Conservation of carbon stocks” in such decision (see also GOFC-GOLD REDD+ guidelines).

<table>
<thead>
<tr>
<th>Ind 10.2</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>[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]</td>
</tr>
</tbody>
</table>
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).

This document was submitted in January 2016, and it is currently being reviewed by the Assessment Team from the UNFCCC. 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. There are slight variations in data due to different versions available and review processes, however the final documents will contain the same final results, as Chile has explained during the country visit and stated in the Advanced Draft ER-PD. Soil Organic Carbon pool was considered in the Reference Level submitted to UNFCCC but it will be excluded in the revised versions.

There is also consistency between the reference scenario of native forest in the ER-PD and the National Greenhouse Gas Inventory of Chile, taking in consideration the implicit differences between a reference level and a GHG Inventory.

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. 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.

The similitudes and differences between the INGEI and the NREF/NRF are listed in each activity of the ER-PD.

**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

[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] YES

As discussed in indicator 10.2 There is also consistency between the NREF/NRF of the native forest in Chile 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.

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.

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.

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.

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.

### C 11 A Reference Period is defined

**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.

[Reference Period 9.1]

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 in the ER-PD varies in relation to the activity and geographical region, depending on the period of time when the information is made available.

Data source for deforestation activities is the Land Registry and Assessment of Vegetation Resources in Chile is updated at different times for each region:

<table>
<thead>
<tr>
<th>Region</th>
<th>Historic Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maule</td>
<td>1999/2009</td>
</tr>
<tr>
<td>Araucanía</td>
<td>2007/2013</td>
</tr>
<tr>
<td>Los Ríos</td>
<td>2006/2013</td>
</tr>
<tr>
<td>Los Lagos Sur</td>
<td>1998/2013</td>
</tr>
<tr>
<td>Los Lagos Norte</td>
<td>2006/2013</td>
</tr>
</tbody>
</table>

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 Bahamón et al. (2009), which uses data from 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.

Degradation caused by conversion of native forests into plantations or scrubs and for other land converted to forest land uses the matrices of land use change from Land Registry. Consequently, the reference period varies according to the region, between 1997 and 2012.

The reference period for the conservation activity is the same as the one for degradation of unchanged forests, 2001-2010. Extrapolation from a specific mean regional annual area is applied for years in which the regions do not have data activity (as was the case with deforestation).

The different end date for the Reference Period can cause inconsistencies in land use change rates, particularly if there are specific events generating outlier values in land use change dynamics or degradation. The Technical Advisory Panel recommends the country to provide a satisfactory justification for the selection of different end-dates of the Reference Period, e.g. demonstrating that the land use dynamics are not affected by atypical events.
Otherwise, the country can choose to change and homogenize the end-date of the Reference Period for the different activities and regions, as stated in Appendix 6 of the ER-PD: “Plan to improve Chile’s subnational FREL/FRL”, providing it’s justification of changes.

**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.

[Reference Period 9.1]

The start-date of the Reference Period in the ER-PD varies in relation to the activity and geographical region, depending on the period of time when the information is made available.

Data source for deforestation activities is the Land Registry and Assessment of Vegetation Resources in Chile, which is updated at different times for each region:

<table>
<thead>
<tr>
<th>Region</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Maule</td>
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<tr>
<td>Bío Bío</td>
<td>1998/2008</td>
</tr>
<tr>
<td>Araucanía</td>
<td>2007/2013</td>
</tr>
<tr>
<td>Los Ríos</td>
<td>2006/2013</td>
</tr>
<tr>
<td>Los Lagos Sur</td>
<td>1998/2013</td>
</tr>
<tr>
<td>Los Lagos Norte</td>
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</tr>
</tbody>
</table>

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 Bahamón et al. (2009), which uses data from Continuous National Inventory and Landsat images. Consequently, 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.

Degradation caused by conversion of native forests into plantations or shrubs and for other land converted to forest land uses the matrices of land use change from Land Registry. Consequently, the reference period varies according to the region, between 1997 and 2012.

The reference period for the conservation activity is the same as the one for increases and degradation of unchanged forests, 2001-2010. Extrapolation from a specific mean regional annual area is applied for years in which the regions do not have data activity (as was the case with deforestation).

The number of years for the reference scenario in some activities is more ten years and in some case more than sixteen years, one year longer than allowed by Carbon Fund Methodological Framework. The Technical Advisory Panel recommends the country to adjust the start-date of the Reference Period according to the “Plan to improve Chile’s subnational FREL/FRL” in the way it considers more appropriate, providing sufficient justification and considering the “Guidance on the use of interpolation of data in relation to the Reference Period of an ER program” of the Methodological Framework of the FCPF.

**C 12** The forest definition used for the ER Program follows available guidance from UNFCCC decision 12/CP.17

**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
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.

Native Forest: “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”.

Other forested land, as defined by the National Report for Chile in the Global Forest Resources Assessment for 2015 (FRA2015) as “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”.

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.

<table>
<thead>
<tr>
<th>Definitions in the current document</th>
<th>Land Registry of Native Forest</th>
</tr>
</thead>
<tbody>
<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</td>
</tr>
<tr>
<td></td>
<td>Secondary use: Plantation, Young – Recently Harvested, Naturalized Exotic Trees</td>
</tr>
<tr>
<td>Exotic Plantations</td>
<td>Use: Plantation</td>
</tr>
<tr>
<td></td>
<td>1 Species: Exotic Species</td>
</tr>
<tr>
<td>Native Plantations</td>
<td>Use: Plantation</td>
</tr>
<tr>
<td></td>
<td>1 Species: Native Species</td>
</tr>
</tbody>
</table>

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

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.

The Reference level is determined by accounting the emissions and removals in three different REDD+ activities: deforestation, degradation and enhancements of forest carbon stocks in five regions in Chile. The final value is -1,471,499 tCO$_2$-eq.

There is no evidence that the Reference Level has a downward or upward trend, as only two data points are available.
**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].

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 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:

i. The basis for adjustments is not documented; or

ii. Adjustments are not quantifiable.

[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]

Not applicable

**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

[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]

Not applicable

**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

**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.

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” it is established the procedures and methodology to Monitor, Measure and Report the emissions reductions obtained during the ERPA in the accounting area.

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.

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 includes deforestation activities, enhancement of carbon stocks resulting from restoration and forest plantation, degradation caused by replacement, 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 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 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. Finally, it is not clear how the impact of the ER-Program on reduction of emissions due to degradation and increase in stock enhancement will be spatially referenced so that credits can be generated that are spatially identified and attributed to the ER-Program.

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. 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.

We recommend the Party to actualize the status of different initiatives considered for the MRV, e.g. the construction of the sustainable forest management reference level, taking into note that the ER-PD will be presented in December 2016 to the FCPF.

**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” it is established the procedures and methodology 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.

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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. In the course of 2016 the Reference Level for sustainable forest Management is scheduled to be integrated in the sub-national NREF/NRF.

We recommend 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, ERs can be estimated from the beginning of the Term of the ERPA or Future Sustainable Forest Management Reference Level will be determined periodically, at least twice during the term of the ERPA.

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**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

**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” it is established the procedures and methodology to Monitor, Measure and Report the emissions reductions obtained during the ERPA in the accounting area.

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.
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 includes deforestation activities, enhancement of carbon stocks resulting from restoration and forest implantation, degradation caused by replacement, 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.

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.

The Technical Advisory Panel recommends Chile to improve this section, with references to the methods used (tier) to estimate emission factors and the uncertainty for each emission factor.

### C 15 ER Programs apply technical specifications of the National Forest Monitoring System where possible

<table>
<thead>
<tr>
<th><strong>Ind 15.1</strong></th>
<th><strong>YES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>[Relation and consistency with the National Forest Monitoring System 10.3]</td>
</tr>
</tbody>
</table>

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 information, 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.

Version 2, 20 May 2016
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]

The ER Program has identified the participation of communities in the monitoring and reporting in an existing and 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.

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. |

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 it’s 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, formality of the firewood market, and rural poverty with its consequent lack of opportunities.

<table>
<thead>
<tr>
<th>Ind 17.2</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>[ER Program design features to prevent and minimize potential Displacement 11.2]</td>
</tr>
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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 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.
- 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

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<th>N.A</th>
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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

<table>
<thead>
<tr>
<th>N.A</th>
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</table>

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

<table>
<thead>
<tr>
<th>Identification of risk of Reversals 12.1</th>
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</table>

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”.

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”.

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.
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.

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.

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

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

- **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 Program.
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.

| 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 |
| 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 Buffer ERs in the ER Program CF Buffer will be cancelled | N.A |

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

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 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

YES

[Monitoring and reporting of major emissions that could lead to Reversals of ERs 12.4]
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”.

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.

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 reversals, the CONAF performs annual monitoring, meaning this kind of reversal will be promptly addressed.

**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.

Only applicable at the time a reversal occurs and at the time of verification.

**C 22** Net ERs are calculated by the following steps:

1. Subtract the reported and verified emissions and removals from the Reference Level
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.
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
<table>
<thead>
<tr>
<th>Ex-ante estimation of the Emission Reductions 14.3</th>
<th>YES</th>
</tr>
</thead>
</table>

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.

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.

The results show that Chile has the following objectives: reduction of 20% of emissions in deforestation, reductions of 15% of emissions in degradation, increase 5% in carbon stocks in conservation areas and increase 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.

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.

The total net ER for the period 2017-2025 is 16,578,928 tons of CO₂-eq.

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

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

The ER Program intends to avoid double counting by taking in consideration the already existing projects and other GHG initiatives such as explicated on page 265 - Chapter 18 – Data Management and Registry Systems – 18.1 - Participation in other GHG initiatives: composed by CDM projects and VCS (Voluntary Carbon 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 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 related to the main methodological principles and requisites solutions and mechanisms to avoid double counting, this part of the criterion is met.
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));

And defines the ability to transfer the title of emission reductions in two ways (Page 259 – Chapter 17.2 – Transfer of Title to emission Reductions):

“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.

Also to avoid double counting the country as already a national centralized Data Management REDDO Program and Projects System, and intends to create a national or centralized ER transaction registry, as stated on Pages 266 and 267 – Chapter 18 – Data Management and Registry Systems – 18.2 Data Management and Registry systems to avoid double-entry:

“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.

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 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

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 those procedures the ER Program offers related to the main methodological principles and requisites solutions and mechanisms to avoid double counting, this part of the criterion is 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+

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

YES

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

Referring to the WB social safeguards, it can be affirmed that the WB Operational Policy 4.10 on Indigenous Peoples receives due attention. This becomes 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 the multi-level, multi-sector and multi-stakeholder approach on which the methodology for the participatory process of the Strategic Environmental and Social Assessment was based. Despite this fact, it is important to mention that Chilean Indigenous Peoples do not yet have an own representative body (or bodies) although measures towards this goal are underway.

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 pertains 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 of the location of the area of accountability.

Concerning OP 4.12, CONAF is including in its ESMF a Framework for Involuntary Settlement providing tools to tackle the potential risks. However, it is mentioned that so far no risk has been detected.

Regarding the WB environmental safeguards, they are being considered as an integral element of the ER- Program. Thus, OP 4.01 on Environmental Assessment, requires an environmental assessment of projects proposed for Bank financing. Chilean Law N°19.300 that provides the Environmental Impact Assessment System as a tool for environmental management, applies only to projects or activities, but not to strategies, policies, programs or plans. This explains the implementation of the Strategic Environmental and Social Assessment mechanism to the Strategy. However, in an implementation phase, the legal tool will be applicable to certain projects specified in its Article 10.

With regard to the WB environmental safeguards, in 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. In the case of OP 4.11 the ESMF will include Standard Procedures of on Physical and Cultural Heritage thus generating adequate measures in the case of the eventual discovery of resources with physical or cultural heritage values.
As for the Cancún: Safeguard a), the consistency of the planned measures with regard to national forestry objectives and international conventions and agreements is shown.

Safeguard b) that tackles transparency and effectiveness of the national forestry governance structures is also treated in a detailed way.

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.

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 (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 measures have been defined which 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** Safeguards 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]  

NO

During the SESA process, social and environmental issues as well as risk mitigation measures were identified in a participatory procedure. These inputs are available in the workshop reports, though not in the Safeguards Plan.

In chapter 14 of the ER-PD, short texts on the scope of SESA and ESMF have been included. As for SESA, it states that through a participatory process 44 risks were determined. The risks prioritized by stakeholders were: inarticulate planning and implementation of public policies, development of policies with scarce financial resources and design of public policies without social validation.

The text does not specify the prioritized mitigation measures.

According to the corresponding text in 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. However, these tools are not presented in the strategic document.
It does not seem sufficient to mention that there are protocols and mechanisms to avoid or mitigate risks and adverse impacts but it is suggested to specify the main tools and measures, both regarding SESA and ESMF.

<table>
<thead>
<tr>
<th>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</th>
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</thead>
</table>

**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 simultaneously constitutes part of the MRV system.

At the time a specialized team is working on the design of the SIS. Nevertheless, numerous characteristics of the system or arrangements concerning it 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:

- formulating and prioritizing of indicators;
- validating indicators;
- generating the base-line;
- monitoring, reporting and verifying.

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”.

The design of the SIS is still underway.

<table>
<thead>
<tr>
<th>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.</th>
</tr>
</thead>
</table>

N.A

Only applicable at the time of verification.
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

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:
   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

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3] 

YES

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.

The majority of users who were interviewed regarding satisfaction with the OIRS revealed high scores.

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). Based on this description and the according legal premises, the attributes stated under i) prove to be fulfilled.

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).

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 FGRM(s) at the local, ER Program, and national levels

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3] 

NO

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). It also mentions the existing OIRS at the national, regional and local level. During 2015, CONAF received almost 26.000 requests (i.e. complaints or suggestions).

However, neither the Safeguards Plan nor the ER Program Document describe the relationship among FGRMs at the local, ER Program, and national levels. It is therefore suggested that the document should include this description.

Ind 26.3 If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3] 

NO
Although the assessment performed does not offer evidence regarding necessary improvements of the existing FGRM, workshops conducted during 2015 generated suggestions for the improvement of the OIRS. In fact, the Safeguards Plan refers to the consultation of stakeholders regarding appropriate mechanisms. However, no formal analysis of this issue appears in the strategy.

It is therefore suggested that the complaints and suggestions expressed by stakeholders during the SESA participatory process should be systematized as the basis for a Plan for Improvement of the existing mechanism and the plan itself included in the strategy.

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]

In front of each driver the ER Program added details on how they 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 identify 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 (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]

Key drivers are addressed in different way depending on 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 by these services, improving the National Forest Inventory made by 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 was recommended by the TAP review.
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]

Land tenure could cause some conflicts just 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 conflict could be 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 changing of property from private to community property as consequence of the Chilean State program which by private land to be delivered to native communities. In both cases CONAF as to take all necessary care before initiating an action, to ensure the legal status of lands and its possible changes. This is unavoidable but is concentrated in 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 as pertains to the rights under customary law;

28.1- III – The ER Program bring a list of solution for the conflict or disputes related to contested or competing claims or rights as stated in pages 260 and 261 – Chapter 17 – Ownership of Emission Reductions – 17.2 17.2 – Transfer of Title to emission Reductions):

The ER Program describes also:

c. 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 (pag 260)”.

On the Judicial System: the Conciliation Offices – created and regulated by Law N° 19,253 (Page 260), and the Legal Assistance Program (Page 261).

Important also to refer 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 (page 261)”.

Mediation constitutes an alternative to some specific situations in the country legal framework, 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.

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

<table>
<thead>
<tr>
<th><strong>Ind 28.2</strong></th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Assessment of land and resource tenure in the Accounting Area 4.4]</td>
<td></td>
</tr>
<tr>
<td>[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]</td>
<td>YES</td>
</tr>
</tbody>
</table>

The ER Program may open important opportunities to help native communities to improve their living status. It is important to say that the principles of the main native cultures and ethnicities have many of the principles promoted by this program. This program won’t cope with the status of the land property, just will open some opportunities for landowners to participate in conserving, 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 an extended information of the safeguards considered during the readiness process. Participatory processes joined 1,248 people 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 submitted to an analysis 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 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]

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 – Page 266.

The ER Program intends to avoid double counting by taking in consideration the already existing projects and other GHG initiatives such as explicated on page 265 - Chapter 18 – Data Management and Registry Systems – 18.1 - Participation in other GHG initiatives: composed by CDM projects and VCS (Voluntary Carbon 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 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 related to the main methodological principles and requisites solutions and mechanisms to avoid double counting and met the Criteria 23.1.

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 pages 260 and 261 – Chapter 17 – Ownership of Emission Reductions – 17.2 17.2 – Transfer of Title to emission Reductions), describing:

- Existing mechanisms to prevent conflicts over land and resources rights (pag 260) , 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 (pag 260) “.

Important to refer also in this context 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 (page 261)”. 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.

<table>
<thead>
<tr>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>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: 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. Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits. 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.</td>
</tr>
<tr>
<td>[Description of benefit-sharing arrangements 16.1]</td>
</tr>
</tbody>
</table>

The ER Program considers a Benefit Sharing Plan that describes the benefit-sharing arrangements for Monetary and Non-Monetary Benefits.

The ER Program takes in account and establishes procedures to manage resources and expectations among the potential beneficiaries, specifically:

- 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.

The ER Program also identifies: criteria’s, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.

At least there are in the ER Program provisions that allows the monitoring of the implementation of the Benefit-Sharing Plan.

### 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

| 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 understandable to the affected stakeholders of the ER Program |
| YES |

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.

### C 32 The implementation of the Benefit-Sharing Plan is transparent

| 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] |
| N.A |

Only applicable at the time of verification.

### C 33 The benefit-sharing arrangement for the ER Program reflects the legal context
### 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

[Description of the legal context of the benefit-sharing arrangements 16.3]

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.

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.

### C 34 Non-Carbon Benefits are integral to the ER Program

#### 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

[Outline of potential Non-Carbon Benefits and identification of Priority Non-Carbon Benefits 17.1 in the reviewed ER-PD of 15 January 2016]

The ER-PD outlines potential non-carbon benefits which are linked to the different action mechanisms (MT.1 to 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.

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.

#### 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

[Description of stakeholder consultation process 5.1]

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.

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.

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.

### 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.
### 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. 

[Approach for providing information on Priority Non-Carbon Benefits 17.2]

**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.

**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:

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.

[Authorization of the ER Program 18.1]

The ER Program Entity identified as CONAF doesn’t have a specific legal and regulatory framework stipulating the authority to enter into an ERPA and also the ability to transfer directly (by itself) the Title to ERs to the Carbon Fund, even the ER Program describes the competences of CONAF and acknowledges the need to ask and obtain the necessaire legal compliance competences, this issue has in other countries is very recent and legal framework is not yet created, and Chile is one of those countries (See Page 257 and 258 – Chapter - 17.2.1 Legal considerations for the transfer of emission reductions and removals permits and the implications for land tenure types):

“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.”

From the analyses of the ER Program and the legal framework of the Country CONAF doesn’t have yet neither:

I. A reference to an existing legal and regulatory framework stipulating such authority; neither

II. 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 procedures by requesting them to the competent authorities at the national level (See page 255 – Chapter 17 – Ownership of Emissions Reductions – 17.1 ER Program Authorization):

“On this matter, 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. 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 Comptroller 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 Comptroller 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 has not sufficient legal authority, it will be granted 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 it is in charge of implementing the ENCCRV, and therefore, all measures related to forests and forest management.

Also the ER Program states the intention to proceed with the regulatory framework to adjust such items (see page 255 – Chapter 17 – Ownership of Emissions Reductions – 17.1 ER Program Authorization):

“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.

The ENCCRV set a formal link between national forest objectives and goals of international climate treaties. In this sense, the ENCCRV goes beyond traditional national environmental strategies, as it clearly expresses its international commitment in its role in the implementation of REDD+ and other international environmental (biodiversity, combating desertification) and climate (UNFCCC, Paris Agreement) objectives. In fact, compliance with technical and political UNFCCC, UNCCD and certification standards of environmental services requirements are some of the main strategic pillars of the ENCCRV.

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.

Reducing emissions is defined by the Carbon Fund as a result of mitigation, measured in tons of CO₂ with respect to a jurisdictional reference level. Mitigation results reflect the net benefit of all measures and activities implemented in the reference area for a defined period. This includes emission reductions and removals generated by public programs and
private activities. CONAF compensates any effort by those involved in the Program of Payment for Environmental Services (PES) under the proposed Benefit Sharing system (see Chapter 15 of the ER-PD). To avoid double counting, the transfer of titles shall ensure emissions reductions at the local level, in exchange for a payment (as described in Chapter 17, Section 2).

Transactions with the Carbon Fund require important decision-making about use and allocation of ER titles for the fulfillment of the objectives set in the Nationally Determined Contributions of Chile…”

From the above statements it is clear that the country understands the methodological compliance procedures and the need of the ER Program Entity to have the ability and authority, but is also clear that some legal 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).

<table>
<thead>
<tr>
<th><strong>Ind 36.2</strong> 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</th>
<th>YES</th>
</tr>
</thead>
</table>

The ER Program Entity demonstrates its ability to transfer Title 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.

The ability to transfer Title to ERs is demonstrated through various means on the ER Program:

- 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 Page 259 – Chapter 17.2 – Transfer of Title to emission Reductions:
  - “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.

Benefit-sharing arrangements are stipulated in the Benefit-Sharing Plan, as stated on Page 242 and Chapter 15 (Benefit-Sharing Arrangements).

<table>
<thead>
<tr>
<th><strong>Ind 36.3</strong> 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</th>
<th>YES</th>
</tr>
</thead>
</table>

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.

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.

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 has CONADI - Page 260 -, the Conciliation Offices created by Law 19,253 – Page 261 – and others).

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 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.

<table>
<thead>
<tr>
<th>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</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Data management and Registry systems to avoid multiple claims to ERs 18.2]</td>
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</table>

Chile has made a decision to maintain its own comprehensive national REDD+ Program and Projects Data Management System.

See page 267 – Chapter 18.2:

“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.

The REDD+ registry database will be installed on the SIT-CONAF platform.”

<table>
<thead>
<tr>
<th>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:</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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&amp;Is</td>
<td></td>
</tr>
</tbody>
</table>
The National REDD+ Program and Project Data Management System provides the attributes to the ER Programs, and include the requisites established in Criterion 37.2, including:

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 at Pages 22 and 23 – Chapter 3 Location of the ER Program;

iii. The Scope of REDD+ activities and Carbon Pools – as stated at Page 140 – Chapter 7.2 – Description of the reservoirs of carbon and greenhouse gases selected; and

iv. The Reference Level used – See Page 160 and next – Chapter 8.5 – Estimation of the Reference Level and also Page 266 – Chapter 18.2 - 18.2- 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.

<table>
<thead>
<tr>
<th>Ind 37.3</th>
<th>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).</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td></td>
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</tbody>
</table>

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 in accordance to the statement on Page 267:

“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”.

<table>
<thead>
<tr>
<th>Ind 37.4</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td></td>
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</tbody>
</table>

There are some administrative procedures at the national centralized REDD Program and Project Data Management but we didn’t find any reference to an existing third party auditing of the operations in accordance to Criterion 37.4, Nevertheless, the ER Program includes a provision, establishing that an independent auditing report is contemplated as part of the procedures. Page 267: “The procedures to conduct audits by third-parties to these registration systems will be agreed timely with the Carbon Fund”.

Taking in consideration that not all the requisites are accomplished we understand that the criteria does not met.

<table>
<thead>
<tr>
<th>C 38</th>
<th>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</th>
</tr>
</thead>
</table>
**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

**Ind 38.3** An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public.

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

Page 267: “The procedures to conduct audits by third-parties to these registration systems will be agreed timely with the Carbon Fund”.

| 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. | NO |
| [Data management and Registry systems to avoid multiple claims to ERs 19.2] |

There is no statement that an Operational guidance exist or is 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 for operation of the registry. There are only at this stage the information that the system will include it,

Please see at Page 267, of the ER-PD Advanced Draft:

“the Administration System of Forest Enforcement (SAFF, acronym in Spanish) defines administrative procedures for the operation and permanent record of the management plans approved by the institution. The system will include those Management Plans that consider REDD+ activities.”
Annex 1 to the TAP technical assessment