

REFORESTATION OF DEGRADED LANDS IN THE VALLE CALIFORNIA OF PATAGONIA, CHILE - VALIDATION REPORT



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Report Title	Reforestation of Degraded Lands in the Valle California of Patagonia, Chile – Validation Report
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Summary:

Environmental Services, Inc., (ESI) was contracted by SNP Patagonia Sur on 19 January 2012 to conduct the project validation of the *Reforestation of Degraded Lands in the Valle California of Patagonia, Chile* project, dated 06 June 2012.

According to the Project Document (PD),¹ “*Reforestation of Degraded Lands in the Valle California of Patagonia, Chile* is a grouped project utilizing the CDM methodology ‘Consolidated afforestation and reforestation baseline and monitoring methodology’ (AR-ACM0001). All current and future project activity instances will be implemented in the geographic region represented by Regions IX, X, XI, XII and XIV of Chile, and all will apply an identical set of baseline, additionality, and eligibility criteria. The initial project activity instance is located in an area known as Valle California, in the Palena Province of Region X of Los Lagos, Chile. The initial project activity instance will be made up of many small plots of land, all of which are parts of larger parcels of land that are currently under ownership of SNP Patagonia Sur.” The Project Proponent is Agrícola y Forestal SNP Ltda.

The grouped project start date is April 30, 2010, and the project crediting period will be 80 years. Due to a voluntary easement with conservation purposes being implemented by the Project Proponent, the project lifetime is perpetual. The grouped project differs from other reforestation projects currently proposed or implemented in Chile due to its reforestation utilizing native Chilean tree species. The project activity instances will take place on land that is classified as degrading or degraded due to their baseline scenario of livestock grazing.

The validation objective included an assessment of compliance with the VCS Standard (Version 3.2) and the likelihood that implementation of the planned GHG project will result in the GHG emission removal enhancements as stated by the project developer (ISO 14064-3:2006). This validation assessed the GHG emission removals through Agriculture, Forestry and Other Land Use (AFOLU) projects, specifically Afforestation, Reforestation, and Revegetation (ARR).

The scope of the validation included the GHG project and baseline scenarios; physical infrastructure, activities, technologies and processes of the GHG project; GHG sources, sinks and/or reservoirs; types of GHG's; and time periods covered. The geographic validation scope was defined by the project boundary, which included multiple project areas (grouped), the carbon reservoir types, management activities, growth and yield models, inventory program, and contract periods.

The validation criteria followed the guidance documents provided by VCS and included the following: VCS Program Guide (01 Feb 2012, v3.2), VCS Standard (01 Feb 2012, v3.2), Program Definitions (01 Feb 2012, v3.2), AFOLU Requirements (01 Feb 2012, v3.2), AFOLU Non-Permanence Risk Tool (01 Feb 2012, v3.1), and AR-ACM0001 V 05.2.0.

A summary of all findings is included in Attachment A. There are no restrictions of uncertainty.

ESI confirms all validation activities, including objectives, scope and criteria, level of assurance and the PD adherence to the VCS Standard (v3.2, 01 Feb 2012) as documented in this report are complete. ESI concludes without any qualifications or limiting conditions that *Reforestation of Degraded Lands in the Valle California of Patagonia, Chile* dated 06 June 2012 meets the requirements of VCS Standard (v3.2, 01 Feb 2012).

¹ CarbonVerde, LLC, *Reforestation of Degraded Lands in the Valle California of Patagonia, Chile*, Version 3.0, 06 June 2012.

Table of Contents

1 Introduction 4

 1.1 Objective 4

 1.2 Scope and Criteria 4

 1.3 Level of assurance 4

 1.4 Summary Description of the Project 5

2 Validation Process 5

 2.1 Method and Criteria..... 5

 2.2 Document Review 6

 2.3 Interviews 6

 2.4 Site Inspections 6

 2.5 Resolution of Any Material Discrepancy 7

3 Validation Findings..... 7

 3.1 Project Design 7

 3.1.1 Project Proponent and Other Entities 7

 3.1.2 Project Start Date 8

 3.1.3 Project Crediting Period 8

 3.1.4 Project scale and estimated GHG emission reductions or removals 8

 3.1.5 Project Activities 11

 3.1.6 Project Location..... 14

 3.1.7 Project compliance with applicable laws, statutes and other regulatory frameworks 14

 3.1.8 Ownership and other programs..... 15

 3.1.9 Additional information relevant to the project..... 16

 3.2 Application of Methodology 17

 3.2.1 Title and Reference 17

 3.2.2 Applicability 17

 3.2.3 Project Boundary 18

 3.2.4 Baseline Scenario 19

 3.2.5 Additionality 19

 3.2.6 Quantification of GHG Emission Reductions and Removals 20

 3.2.7 Methodology Deviations 21

 3.2.8 Monitoring Plan 22

 3.3 Environmental Impact 22

 3.4 Comments by stakeholders..... 23

4 Validation conclusion 24

5 Appendix A..... 25

6 Appendix B..... 29

1 INTRODUCTION

1.1 Objective

The validation objective for this project included an assessment of compliance with the VCS Standard (v3.2, 01 Feb 2012) and the likelihood that implementation of the planned GHG project would result in the GHG emission removal enhancements, as stated by the project developer (ISO 14064-3:2006). This validation assessed the GHG emission removals through an AFOLU project – specifically Afforestation, Reforestation, and Revegetation (ARR).

1.2 Scope and Criteria

The scope of the validation included the GHG project and baseline scenarios; physical infrastructure, activities, technologies and processes of the GHG project; GHG sources, sinks and/or reservoirs; types of GHG's; and time periods covered. The geographic validation scope was defined by the project boundary, which included multiple project areas (grouped), the carbon reservoir types, management activities, growth and yield models, inventory program, and contract periods. The scope of *Reforestation of Degraded Lands in the Valle California of Patagonia, Chile* was outlined by the project developer prior to the validation initiation and is re-defined as follows:

Baseline Scenario	The baseline scenario for the project is continued degradation due to over-use for livestock production, resulting in thin and fragile soils, which cannot reforest naturally.
Activities/Technologies/Processes	Reforestation of three native species of beech tree – <i>Nothofagus betuloides</i> (Coigüe), <i>Nothofagus antarctica</i> (Ñirre), and <i>Nothofagus pumilio</i> (Lenga).
Sources/sinks/Reservoirs	Carbon biomass stocks in above- and below-ground biomass.
GHG Type	CO ₂
Time Period	80 years, beginning on April 30, 2010 and ending on April 30, 2090.
Project Boundary	The initial project activity instance is comprised of 20 individual reforestation lots (VC_1 – VC_20) totaling 136.65 hectares in Valle California, Palena Province, Chile.

1.3 Level of assurance

The level of assurance was used to determine the depth of detail that the validator placed in the Validation Sampling Plan to determine if there are any errors, omissions, or misrepresentations (ISO 14064-3:2006). ESI assessed the project (general principles, data, sampling descriptions, documentation, calculations, etc.) to provide *reasonable assurance* to meet the Project Level requirements of the VCS Program. The evidence used to achieve a *reasonable* level of assurance is specified in the following sections.

1.4 Summary Description of the Project

As stated in the Project Document (PD),² “*Reforestation of Degraded Lands in the Valle California of Patagonia, Chile*” is a grouped project utilizing the CDM methodology ‘Consolidated afforestation and reforestation baseline and monitoring methodology’ (AR-ACM0001). All current and future project activity instances will be implemented in the geographic region represented by Regions IX, X, XI, XII and XIV of Chile, and all will apply an identical set of baseline, additionality, and eligibility criteria. The initial project activity instance is located in an area known as Valle California, in the Palena Province of Region X of Los Lagos, Chile. The initial project activity instance will be made up of many small plots of land, all of which are parts of larger parcels of land that are currently under ownership of SNP Patagonia Sur.” The Project Proponent is Agrícola y Forestal SNP Ltda.

The validator confirmed that the grouped project start date is April 30, 2010, and the project crediting period will be 80 years. Due to a perpetual conservation easement being implemented by the Project Proponent, the project lifetime is perpetual. The grouped project differs from other reforestation projects currently proposed or implemented in Chile due to its reforestation utilizing native Chilean tree species. The project activity instances will take place on land that is classified as degrading or degraded due to their baseline scenario of livestock grazing.

The initial project activity instance includes the reforestation of 136.65 hectares of degraded land in Region X of Chile, in an area known as Valle California (VC). The project activities were initiated in 2010, with the planting of native *Betulooides* trees on approximately 57 hectares spread over twenty lots. These plantations were established in areas without tree cover, previously dominated by grazing activities.

Carbon pools included in the project boundary are above and below-ground biomass.

2 VALIDATION PROCESS

2.1 Method and Criteria

The sampling plan methodology is derived from all items in our validation process stated above. Specifically, the sampling plan utilizes the VCS guidance documents and ISO 14064-3. For this validation, the sample size for the desktop portion of the validation included a review of 100% of the PD and supporting documents. The field validation included an onsite review of 9 of the 39 plots installed by the project (23%). These tracts were selected to allow a review of a sufficient sample for the validator; sufficient to provide the necessary sample size to meet a reasonable level of assurance; as directed by the professional judgment of the Lead Validator.

During the field review of these plots the following aspects of the project were assessed:

- pre-project conditions, as evidenced by condition of adjacent or nearby non-project areas, by evidence of site-preparation activities, and related
- current project conditions, including reported tree species, reported planting density, reported current density, reported growth characteristics (diameter, or similar), reported biomass volume (above- and/or below-ground), implementation of management plan/monitoring (historical and contemporary), and related

² CarbonVerde, LLC, 06 June 2012.z

Direct field measurement of tree density (number planted and species) and growth characteristics was performed in limited instances, with a detailed review of field measurement methodologies sufficient to satisfy the professional discretion of the Lead Validator.

2.2 Document Review

A detailed review of all project documentation was conducted to ensure consistency with, and identify any deviation from VCS program requirements (VCS, Version 3 and associated updates), and the methodology (AR-ACM0001). Initial review focused on the PD and included an examination of the project details, data and parameters, and quantification of GHG emission reductions and removals.

AFOLU Non-Permanence Risk Tool (01 February 2012 v3.1) was used by the project proponent to assess overall project risk. The final risk score for *Reforestation of Degraded Lands in the Valle California of Patagonia, Chile* was calculated to be 15%. The information in this report was evaluated by validators and found to have been conducted appropriately and in compliance with VCS Standards v3.2. No discrepancies were found in the evaluation of the elements of the Risk Analysis.

Please see Appendix A for a complete list of documents provided by the client during validation, including any items associated with the risk analysis.

2.3 Interviews

Onsite interviews and informal discussions were conducted with project staff. Additionally interviews were conducted with community members; however, due to the remoteness of the project only two such interviews were held. During all interviews no negative comments were received and information provided in the PD was supported. Meetings included discussions with:

Warren Adams – Patagonia Sur

Divya Mankikar – Patagonia Sur

Matías Río – Patagonia Sur

Alejandro Orizola – Patagonia Sur

Ernesto Jaramillo – *Former Project Landholder*

“Nilia Monje– *Former Project Landholder*

2.4 Site Inspections

The field validation included an onsite review of 9 of the 39 plots installed by the project (23%). These tracts were selected to allow a review of a sufficient sample for the validator; sufficient to provide the necessary sample size to meet a reasonable level of assurance; as directed by the professional judgment of the Lead Validator.

During the field review of these plots the following aspects of the project were assessed:

- pre-project conditions, as evidenced by condition of adjacent or nearby non-project areas, by evidence of site-preparation activities, and related

- current project conditions, including reported tree species, reported planting density, reported current density, reported growth characteristics (diameter, or similar), reported biomass volume (above- and/or below-ground), implementation of management plan/monitoring (historical and contemporary), and related

Direct field measurement of tree density (number planted and species) and growth characteristics was performed in limited instances, with a detailed review of field measurement methodologies sufficient to satisfy the professional discretion of the Lead Validator.

2.5 Resolution of Any Material Discrepancy

During the validation process, there was a risk that potential errors, omissions, and misrepresentations would be found. The actions taken when errors, omissions, and misrepresentations were found included notifying the client of the issue(s) identified, and expanding our review to the extent that satisfied the Validator’s professional judgment.

During the course of the validation, seventy (70) non-conformity reports (NCRs) and/clarifications (CLs) were identified. All NCRs/CLs were satisfactorily addressed. The NCRs/CLs provided necessary clarity to ensure the project was in compliance with the requirements of the VCS Standard for GHG projects. For a complete list of all NCRs/CLs and their resolutions, refer to Appendix B.

3 VALIDATION FINDINGS

3.1 Project Design

The scope of *Reforestation of Degraded Lands in the Valle California of Patagonia, Chile* was outlined in Section 1.2 of this report. This project is seeking registration under the Verified Carbon Standard (VCS 3.2) as an Afforestation, Reforestation and Revegetation (ARR) project and has been developed in compliance with the AFOLU Requirements (01 Feb 2012, v3.2). It is a grouped project.

3.1.1 Project Proponent and Other Entities

Project Proponents	Point of contact	Roles/ Responsibility	Contact Details
Agrícola y Forestal SNP Ltda	Divya Mankikar, Carbon Offsets General Manager	Project developer, implementer, manager	Agrícola y Forestal SNP Ltda, 515 Madison Avenue Suite 1500, New York, NY 10022 Office: +1 212-888-0215 Cell: +1-973-393-1759

As stated in the Project Document³ and confirmed during validation, “this project is being developed entirely by Agrícola y Forestal SNP Limitada.

The following affiliated companies shall play an operative role described as follows:

³ CarbonVerde, LLC, 06 June 2012.

Agricola y Forestal Melimoyu Limitada is a limited liability company established and registered under Chilean law who has acquired and currently owns all of the properties included within the project boundary described in Section 2.3 of this Project Description.

Sociedad Servicios Turísticos SNP Limitada is a limited liability company established and registered under Chilean law which has been in charge of paying for the baseline studies detailed in Section 3 of the Project Description, as well as establishing itself as paying for the planting services related to the reforestation.”

Other Entities	Point of contact	Roles/ Responsibility	Contact Details
Environmental Services, Inc. (ESI)	Shawn McMahon	Validator	Environmental Services, Inc. 3800 Clermont St., NW North Lawrence, OH 44666 United States of America Phone: +1-330-833-9941

3.1.2 Project Start Date

The project start date is April 30, 2010 – the date on which activities leading to the generation of GHG emission reductions or removals were implemented by the project. This date corresponds to the invoicing and supply of native plant species to the project, which were successional planted thereafter.

3.1.3 Project Crediting Period

The project crediting period for this grouped project is 80 years, beginning on April 30, 2010 and ending on April 30, 2090.

3.1.4 Project scale and estimated GHG emission reductions or removals

Project	X
Mega-project	

Years	Net Number of Emissions Reductions	Total Estimated Emissions Reductions
Year 2010	0.03	0.03
Year 2011	0.27	0.30
Year 2012	0.86	1
Year 2013	2	3
Year 2014	3	6
Year 2015	6	12
Year 2016	8	20
Year 2017	12	32
Year 2018	16	48

Year 2019	21	68
Year 2020	27	95
Year 2021	33	128
Year 2022	41	169
Year 2023	49	219
Year 2024	59	278
Year 2025	70	347
Year 2026	82	429
Year 2027	95	524
Year 2028	109	632
Year 2029	124	756
Year 2030	141	897
Year 2031	159	1,055
Year 2032	178	1,233
Year 2033	198	1,432
Year 2034	220	1,652
Year 2035	244	1,896
Year 2036	269	2,165
Year 2037	295	2,460
Year 2038	323	2,784
Year 2039	353	3,137
Year 2040	384	3,521
Year 2041	417	3,938
Year 2042	452	4,390
Year 2043	488	4,878
Year 2044	526	5,404
Year 2045	566	5,970
Year 2046	607	6,577
Year 2047	651	7,228
Year 2048	696	7,924
Year 2049	743	8,667
Year 2050	793	9,460
Year 2051	844	10,303
Year 2052	897	11,200
Year 2053	952	12,152
Year 2054	1,009	13,161
Year 2055	1,068	14,229
Year 2056	1,130	15,359
Year 2057	1,193	16,552
Year 2058	1,259	17,811

Year 2059	1,327	19,137
Year 2060	1,397	20,534
Year 2061	1,469	22,003
Year 2062	1,544	23,547
Year 2063	1,621	25,168
Year 2064	1,700	26,868
Year 2065	1,782	28,649
Year 2066	1,866	30,515
Year 2067	1,952	32,467
Year 2068	2,041	34,507
Year 2069	2,132	36,640
Year 2070	2,226	38,866
Year 2071	2,322	41,188
Year 2072	2,421	43,609
Year 2073	2,523	46,132
Year 2074	2,627	48,759
Year 2075	2,734	51,493
Year 2076	2,843	54,336
Year 2077	2,955	57,291
Year 2078	3,070	60,361
Year 2079	3,187	63,548
Year 2080	3,187	66,735
Year 2081	3,187	69,923
Year 2082	3,187	73,110
Year 2083	3,187	76,297
Year 2084	3,187	79,485
Year 2085	3,187	82,672
Year 2086	3,187	85,859
Year 2087	3,187	89,047
Year 2088	3,187	92,234
Year 2089	3,187	95,421
Total Estimated ERs		95,421
Total Number of Crediting Years		80
Average Annual Emissions Reductions		1,192.76

3.1.5 Project Activities

The validation affirmed the following project activity assertions of the PD. "The initial project activity instance involves the reforestation of 136.65 hectares of degraded land in Region X of Patagonia, in an area known as Valle California (VC).

The first project activities began in 2010, where nearly 57 ha spread over twenty areas were forested. These plantations were established in areas without tree cover, and by using species of the *Nothofagus* genus, such as the Coihue (*N. betuloides*) and Ñirre (*N. antarctica*).

Forestation activities involve a series of steps aimed at creating a well-planned planting programme. The main forestation steps are the following:

- Identifying suitable planting areas,
- Preparing or readying the land to be planted,
- Transporting the saplings from the nursery to the properties, and remote planting areas,
- Planting itself.

Such preparation requires special attention on the land in order to make the correct decisions at the right time, as well as keeping the relevant records

Identifying planting areas

The Forestry Operations Manager and Sub-manager of SNP Patagonia Sur identify the planting areas using GIS maps and observations in the field. Once the afforested areas are selected, they are clearly delineated through the use of a GPS in the field. The points are subsequently imported to ArcGIS and Google Earth, where the necessary maps are later generated in order to be presented to CONAF and any other institutions that require them.

At this point, the managers determine which species and how many of each species should be planted in each location. The Forestry Operations Manager relies on knowledge of terrain and hydrologic conditions to decide which species are most suitable for each area.

Once the planting areas are identified, the managers proceed to determine the roads and paths we will use to supply those areas with plants. These paths are cleared by using hand tools, such as machetes, weed eaters and chainsaws when necessary. It should be noted that the planting areas do not usually have access for vehicles, for which reason horses (pack horses) are needed to help supplying the planting areas with saplings.

Fence Building and Repair

It is important to maintain a good fence around reforestation sectors, so that animals in neighbouring premises and those using the roads to reach summer pastures do not destroy the plants. This work is done by staff that maintains Valle California's premises. They generally use recycled materials and fallen trees for repairing the fences.

Plant Supply

The supply of plants comes from the Vivero Mañihuales nursery, owned by the company Forestal Mininco, located in the region of Aysén. The nursery has broad experience in the production of exotic plants and in recent years, has been taking advantage of its greenhouse and irrigation infrastructure, as well as fertilization equipment to produce native plants.

During the 2011 season, 226,500 plants were procured from the nursery. These were divided in the following amounts:

- Coihues: 100,000 plants (*Nothofagus betuloides*)
- Lengas: 71,500 plants (*Nothofagus pumilio*)
- Ñirres: 55,000 plants (*Nothofagus antarctica*)

Total 226,500 plants

Through an exploratory trip by the Forestry Operation Manager, it was established that the Vivero Mañihuales nursery works with transplants from natural nurseries. These plants are deposited in containers and conditioned through controlled temperature, fertilization and irrigation for 1 year.

During the final weeks prior to transportation, the seedlings proceed to "hardening", which involves applying calcium and waiting for the vegetative growth to end and the seedling to become dormant in order to ready them for transport to the field. The nursery must meet this condition that the seedlings are dormant before determining the transport date. In 2011, transport began on April 18th using Patagonia Sur's truck.

The transport boxes hold about 200 seedlings each (the exact number per box depends on their size and foliage). In addition, a gel is applied in order to keep the plants moist during transportation. When the plants arrive at the premises, they are stored in a warehouse to avoid the low temperatures of the area. A Unimoc truck is used to bring the plants nearer to the planting areas. Subsequently, pack horses are used to transport the plants to the planting sites. Each horse can carry around 500 to 800 plants, depending on the plants' size and foliage.

Plant Quality

Plants coming from the nursery must have the shape of the container that held them when they were in the nursery, with fine or secondary roots that look white. Plants must appear without scrapes on the stems or cracked trunks.

The nursery is requested to deliver seedlings with a root/shoot mass ratio that is not less than 2:1, in order to ensure a balance of nutrients and water during transport. Furthermore, the stem must be ligneous with a diameter below 3 millimeters (mm) so that the plant has a greater potential to withstand extremely cold and snowy conditions.

Damaged plants or those that do not meet the minimal conditions requested are sent back to the nursery for replanting.

Weed control

This task consists in the reduction or elimination of vegetation competing with the species being planted, preventing competition for water, light and nutrients. This activity is needed for proper establishment and growth of the plantation. No chemical weed control will be employed.

Weed control becomes even more relevant considering the topographic restrictions of the area. For proper control, grass weeds must be eliminated in a 30 x 30 centimeter (cm) square where the plant will be located. The bushes in the planting area will not be eliminated. They will be used for the protection of the new plant according to a "plant nursery" technique.

Soil Preparation

This task involves modifying the surface layer of the soil to enhance its physical conditions, thus facilitating the establishment of plants. The soil should be soft and weed-free in a 30 x 30 cm

square, with a depth of 25 cm. This way, the soil can retain the appropriate amount of water, therefore encouraging better root development for plants.

Soil preparation will not be conducted with heavy machinery. Only hand tools, such as, machetes, shovels and brush cutters will be used, if necessary.

Pest Control

The main potential risk from pests to the plantation is the presence of Hares (*Lepus europaeus*) (common name: hares) in the reforestation area. The damage they produce may be significant as they can cut off the tops of plants.

An effective natural control in the population of hares is also expected due to the strong presence of foxes in the area. The extent of the damage caused by hares will be monitored through permanent plots. The first examination of damage from hares yielded the results that the hares are not yet a major factor.

The other problem that will directly affect the plantation is the explosive increase of rodents in the area throughout this year, mainly due to the flowering of the Quila (*Chusquea quila*). The extent of this damage will be monitored through permanent plots.

Planting Methodology

The seedlings will be planted at a density of 1,700 plants per hectare (pl/ha) distributed heterogeneously within standard 100 m² plots. Therefore the plantation will not be established in rows, but it will use a system that divides a surface of 100 m² in 3 rectangles. 6 plants are placed in the outer rectangles and 5 plants are placed in the center rectangle, totalling 17 plants in 100m². This will lead to a consistent density of 1,700 pl/ha (see Figure 2), though in a heterogeneous pattern.

Replanting areas with low survival

Each summer, the forest monitoring information will be updated, principally occurring during the months of January through March. Based on the results obtained during data collection, Patagonia Sur will proceed to plan the replantation of affected areas between the months of April and May. The objective will be to maintain the desired density in each plantation area.

Further Considerations

In order to monitor the appropriate plantation establishment, Patagonia Sur conducts bimonthly tours to correct issues that might be related to the damage produced by hares, frost heaving, twisted plants due to heavy snow, entrance of animals, and to identify the potential mortality issues early and take immediate action.

Patagonia Sur is not using fertilizer on its reforested plantations.

The lifetime of the project activity is estimated to be infinite based on a permanent voluntary easement with conservation purposes which is being placed on the land.”⁴

⁴ CarbonVerde, LLC, 06 June 2012.

3.1.6 Project Location

As stated in the PD, “the initial project activity instance is located in an area known as Valle California, Palena Province in Region X, Chile. All future project activity instances will take place in Regions IX, X, XI, XII and XIV. Agrícola y Forestal SNP Ltda has adopted a "grouped project" approach for this project, because it is expanding throughout southern Chile.”⁵ As required by VCS, a KML file has been prepared that defines the extent of the geographic area of the expanded program and this is shown in the project description.

3.1.7 Project compliance with applicable laws, statutes and other regulatory frameworks

All relevant information on SNP Patagonia Sur’s compliance with laws, statutes, and other regulatory frameworks can be found in the supporting document, titled “Sec 1.11 Laws Statutes”.

As stated in the PD the following information was confirmed during the validation process.

“1) Land Titles:

Real Estate property in Chile is for the most part privately owned, thus, any transaction regarding ownership is set to be made by private agreements. In this matter the main limitation established by law is in relation with the proper registration of the land title in the Land Registrar (Conservador de Bienes Raíces). This registration is deemed to be the only valid way to transfer property rights of land.

Regarding fiscal land (owned by the state), Decree Law N°1939 of Acquisition, Administration and Disposition of Fiscal Assets (Decreto Ley N° 1939 sobre Adquisición, Administración y Disposición de Bienes del Estado) regulates the cases and conditions in which the State may sell, buy, lease, etc.

All of SNP’s properties in Valle California were privately acquired, with all the required registrations in the Conservador de Bienes Raíces de Chaiten in force.

2) Limitations of Land Use

The main limitation established regarding the properties in Valle California, is the one established in Decree Law N° 3.516 (Decreto Ley N° 3516, Establece Normas sobre División de Predios Rústicos) in relation with Law N° 20.443 of Construction and Town Planning (Ley N° 20.443, Ley General de Urbanismo y Construcción). Thought and enacted as a measure to control the “urbanization” of rural communities, and to protect agriculture, DL N°3516 declares that no rural property located outside of the established areas for urban development shall be divided in plots under 0.5 hectares, and that any new plot product of such subdivision will not be allowed to change its original designation of use, thus, none of these plots shall lose their qualification as land suitable for agriculture, livestock and/or forestry.

All of SNP’s properties are subject to and comply with these legal limitations. Further evidence is found in the certificate of compliance given by CONAF regarding the Decree Law 701 (detailed below), which could only be given to properties with an agricultural qualification and suitable features for reforestation. (See supporting document titled “Sec 1.11 Compliance with CONAF”)

⁵ CarbonVerde, LLC, 06 June 2012.

All of SNP's properties are subject to and comply with these legal limitations.

3) Regulatory Incentives related to Forestry:

a) Decree Law 701 (Decreto Ley N° 701, Fija Regimen Legal de los Terrenos Forestales o Preferentemente Aptos para la Forestación, y establece Normas de Fomento sobre la materia).

This Decree Law establishes incentives for reforestation on degraded land to owners of forest properties (previously qualified as such by the Corporación Nacional Forestal (CORFO)), by subsidizing the cost related to such activities. The reimbursement will be in force after a specific period determined by law, when the authorities confirm the existence and survival of the forested plantations within the frame of conditions previously determined. SNP's reforestation projects costs in Valle California are expected to be partly covered with this mechanism. [NOTE: There is no way to be 100% certain that Patagonia Sur will meet the conditions required with all of the reforestation]. Current reforestation areas in Valle California have either been (i) positively qualified as complying with the conditions established by this Decree Law, or (ii) are in the process of being qualified (applications submitted to this date).

For an explanation of the additionality implications of this subsidy, please refer to Project document Section 2.5, as well as supporting documents, "Section 2.5 Additionality" as well as "Section 2.5 Additionality – Financial Barrier Table".

b) Law N° 20.283 (Ley N° 20.283 sobre Recuperación del Bosque Nativo y Fomento Forestal)

This law was enacted in 2008 and is expected to create the right incentives in order to promote, recover and improve Chile's Native Forest. However, Laws 20.283 and 701 are mutually exclusive. Therefore, the application of Law 20.283 is unfeasible in relation to this project. Additional information on the law can be found in the supporting document, "Sec 1.11 Laws Statutes".

SNP Patagonia Sur declares that all of the above-mentioned laws, rules and decrees, apply to the whole geographic region considered for the initial project activity as well as future project instances."⁶

3.1.8 Ownership and other programs

3.1.8.1 Right of use

The validation activities confirmed "all of the areas which are to be reforested as a part of the initial project activity instance are segments of larger properties which have been acquired by SNP Patagonia Sur. Title documents proving purchase of each of the properties have been reviewed and can be found in the supporting PDF document titled "Sec 1.12.1 Proof of Title".

The 20 reforestation lots which represent the project area of the initial project activity instance are located in a single property, El Rosal (998.62 hectares) that is currently owned by Agrícola y Forestal Melimoyu Limitada."⁷

3.1.8.2 Emissions trading programs and other binding limits

⁶ CarbonVerde, LLC, 06 June 2012.

⁷ CarbonVerde, LLC, 06 June 2012.

Currently, no other emissions trading programs or binding limits exist in the geographic region where this grouped project will be developed.

3.1.8.3 Participation under other GHG programs

The project has not been registered and is not seeking registration under any other GHG programs.

3.1.8.4 Other forms of environmental credit sought or received

The project has not generated, nor does it intend to generate any other form of GHG related environmental credit under the VCS Program.

3.1.8.5 Rejection by other GHG programs

The project has neither applied to receive credits from, nor has it been rejected by any other GHG program.

3.1.9 Additional information relevant to the project

3.1.9.1 Eligibility criteria for grouped projects

The PD explains that “this initial project activity instance, as well as all future project activity instances shall:

1. Meet the applicability conditions set out in Version 5.2 of CDM Methodology AR-ACM0001, and therefore be established on degraded or degrading land.
2. Use the tree species and planting methodology described in the document entitled “Sec 1.8 and 4 Plantation Establishment and Monitoring Manual”.
3. Apply the technologies or measures in the same manner as specified in the Project Description. This will involve planting trees and following the monitoring regime as described in the document entitled “Sec 1.8 and 4 Plantation Establishment and Monitoring Manual”.
4. Be subject to the baseline scenario determined in “Section 2.4 Baseline Scenario” of the Project Description for the specified project activity and geographic area, and therefore be established on land where the primary use was grazing.
5. Have characteristics with respect to additionality that are consistent with that of the first instance in Valle California, as described in the document entitled “Section 2.5 Additionality”.
6. Take place within the geographic area defined for this grouped project, Patagonian provinces of Chile, Regions IX, X, XI, XII and XIV.”⁸

3.1.9.2 Leakage management for AFOLU projects

In accordance with the applicability conditions of the required tool: “Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity”, the project utilized the “Guidelines on conditions under which increase in GHG

⁸ CarbonVerde, LLC, 06 June 2012.

emissions related to displacement of pre-project grazing activities in A/R CDM project activity is insignificant” to demonstrate that leakage in the initial project activity instance is insignificant. These assertions were confirmed during the validation event. For evidence of the use of this tool and its guidance, please see the supporting document entitled “Sec 1.13 Leakage Statement”.

The VCS Non-Permanence Risk Analysis determined an overall risk rating of 15% for the project. This rating of 15% signifies that the Project Proponent must hold a minimum of 15% of credits in a pooled AFOLU buffer account. However, SNP Patagonia Sur is going beyond this minimum to hold 20% of credits in the pooled AFOLU buffer account. The supporting document titled “Sec 1.13 Non-Permanence Risk” demonstrates the use of this tool and estimates a minimum of 14,313 credits will be held in the pooled AFOLU buffer account.

3.1.9.3 Commercially Sensitive Information

There is no commercially sensitive information within the PD that will be excluded from the publicly issued PD.

3.1.9.4 Further Information

There is no further additional information, which would have a bearing on the eligibility of the project, relating to net GHG emissions reductions or removals or quantification of net GHG emissions reductions or removals, that has not been included in the PD and its supporting documentation.

3.2 Application of Methodology

3.2.1 Title and Reference

The project is applying the CDM Consolidated afforestation and reforestation baseline and monitoring methodology, AR-ACM0001: “Afforestation and reforestation of degraded land,” Version 5.2.0.

3.2.2 Applicability

The validation confirmed the project met the following applicability conditions of AR-ACM0001⁹:

“1. The A/R CDM project activity is implemented on degraded lands, which are expected to remain degraded or to continue to degrade in the absence of the project, hence the land cannot be expected to revert to a non-degraded state without human intervention.”

As demonstrated by the supporting document titled, “Sec 2.5 Additionality,” the area in which the project has been implemented was historically used for grazing, and has become degraded to the extent that it is now minimally useful for grazing livestock. Were it not for the project and carbon financing, inefficient grazing would continue at low productivity, and additional degradation of the project area would take place due to continued presence of livestock on the property.

The latest version of the “Tool for the identification of degraded or degrading lands for consideration in implementing A/R CDM project activities” was applied to demonstrate

⁹ AR-ACM0001: Afforestation and reforestation of degraded land --- Version 5.2.0

that the project area lands are degraded and degrading. See supporting document titled “Sec 2.2 Degradation”, for evidence of the use of this tool.

“2. If at least a part of the project activity is implemented on organic soils, drainage of these soils is not allowed and not more than 10% of their area may be disturbed as result of soil preparation for planting.”

Neither the initial project activity instance, nor its future project activity instances will take place on organic soils.

“3. The land does not fall into wetland category.”

Neither the initial project activity instance, nor its future project activity instances will take place on wetlands.

Because the project scenario will not account for soil organic carbon as a carbon pool (see page 1 of the supporting document titled “Sec 3 Baseline Procedure Document”), the methodology states that the project is exempt from the additional applicability conditions.

3.2.3 Project Boundary

The initial project activity instance is comprised of 20 individual reforestation lots, VC_1 – VC_20, totalling 136.65 hectares. Each lot is described in the following table and shown on the maps included in the PD.

Valle California Reforestation Project					
Reforestation Lot*	Forestation year	Density (trees/ha)	Species planted	No. of trees planted	Hectares**
VC_1	2010	1300	70% Coihue and 30% Ñirre	1196	0,92
VC_2	2010	1300	70% Coihue and 30% Ñirre	2028	1,56
VC_3	2010	1300	70% Coihue and 30% Ñirre	221	0,17
VC_4	2010	1300	70% Coihue and 30% Ñirre	3744	2,88
VC_5	2011	1700	100% Nirre	4607	2,71
VC_6	2010	1300	90% Coihue and 10% Ñirre	19513	15,01
VC_7	2010	1300	70% Coihue and 30% Ñirre	3900	3
VC_8	2010	1300	70% Coihue and 30% Ñirre	6526	5,02
VC_9	2010	1300	70% Coihue and 30% Ñirre	5473	4,21
VC_10	2011	1700	100% Lenga	72760	42,8
VC_11	2012	1700	100% Lenga	1938	1,14
VC_12	2012	1700	100% Lenga	3400	2
VC_13	2012	1700	100% Coihue	2924	1,72
VC_14	2012	1700	100% Coihue	901	0,53
VC_15	2012	1700	100% Coihue	5474	3,22
VC_16	2012	1700	100% Lenga	25330	14,9
VC_17	2012	1700	100% Coihue	2414	1,42
VC_18	2012	1700	100% Coihue	2533	1,49
VC_19	2011	1700	100% Ñirre	14042	8,26
VC_20	2010	1300	70% Coihue and 30% Ñirre	30797	23,69
Total				209.721	136,65

The above-mentioned reforestation lots are in Valle California within the boundaries of the property El Rosal, which is detailed in Section 1.12.1 of the Project Description. Details of each property's land title can also be found in Section 1.12.1 of the Project Description. Valle California and El Rosal are shown on the included maps. For a detailed map of each lot, and the boundaries of the entire Valle California property, the supporting KML file titled "Sec 2.3 Project Boundaries" was provided to the validator.

Boundaries were confirmed on the site visit for the current instance, and the geographic area boundary for the grouped project was confirmed to be consistent with the requirements for VCS grouped projects.

3.2.4 Baseline Scenario

Based on validator research, review of project documents and site visits conducted, the findings support the justification that the baseline land use scenario without the project will continue to be grasslands for livestock use. The lands are part of degraded lands that have undergone historic burning to clear lands for livestock grazing, which further caused soil loss and degradation.¹⁰ According to the PD, "regeneration of the forest has not been possible due to the constant overgrazing and trampling by animals, which prevents the reestablishment of the original vegetation.

The loss of productivity of the properties has led to a decrease in the incomes from livestock activities of many landowners, and thus to the abandonment of some land. This abandonment has contributed to the abundant regeneration of Radal (*Lomatia hirsuta*), a shrub, but to a lesser extent Nirre, Coihue, Lenga and some shrub species such as *Berberis*, *Baccharis* and *Rosa moschata*."¹¹

3.2.5 Additionality

The methodology requires the use of the "Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities," and details of its use can be found in the supporting document titled "Section 2.5 Additionality."

The validator confirmed that "the two credible land uses are livestock grazing and reforestation without VCS registration/carbon finance. Both of these land use scenarios are credible alternatives to the development of a VCS ARR project. Ultimately, reforestation without the implementation of a VCS ARR project is prevented due primarily to large financial barriers to independently reforesting the land. Even with the potential subsidy provided through Decree Law 701 (See Section 1.11 of the Project Description on the applicability of Decree Law 701), a reforestation project remains prohibitively expensive due to the long period of tree growth time before benefits can be realized. The Baseline Scenario, following the barrier analysis, is determined as livestock grazing. Currently, the only other registered afforestation project in Chile is a small scale CDM project involving the plantation of non-native Pine trees in Region VI of Central Chile. Another potential, but yet unregistered project in Region X of Chile consists of planting 489.52 hectares of Ponderosa pine in a managed forest that is thinned in Year 20 and

¹⁰ Quintanilla, V (2005): "Degradacion del bosque nordpatagonico en la cuenca superior del Rio Palena (43°S)". Geographicalia, 47, Pp. 47-68 (Provided in translated English to the validator).

¹¹ CarbonVerde, LLC, 06 June 2012.

harvested in Year 40. As the project is a non-native, monoculture plantation, which is grown for the sake of timber, it is significantly different from that of Patagonia Sur's, maintaining the additionality of this reforestation project. *Patagonia Sur's proposed VCS ARR project is unique in the reforestation of trees native to Chile.*

Essential distinctions can be made between SNP Patagonia Sur's proposed ARR project and the projects mentioned above. Therefore, the proposed ARR project activity is not the baseline scenario, and it is additional."¹²

3.2.6 Quantification of GHG Emission Reductions and Removals

3.2.6.1 Quantification of baseline emissions

The validator confirmed that "baseline Emissions have been estimated in accordance with the AR-ACM0001 Baseline Methodology Procedure, Sections II-4, II-4.1, and II-4.2. The procedure for quantifying baseline emissions or removals entailed sampling biomass within the project boundary to estimate total stocks and then estimating change over the crediting period following the procedure detailed in Section II-4 of AR-ACM0001 Version 5.2.0.

Under the applicability conditions of this methodology:

- Changes in carbon stock of above-ground and below-ground biomass of non-tree vegetation may be conservatively assumed to be zero for all strata in the baseline;
- It is expected that the baseline dead wood and litter carbon pools will not show a permanent net increase. It is therefore conservative to assume that the sum of the changes in the carbon stocks of dead wood and litter carbon pools is zero for all strata in the baseline scenario;
- Since carbon stock in SOC is unlikely to increase in the baseline, the change in carbon stock in SOC may be conservatively assumed to be zero for all strata in the baseline scenario.

The results of this analysis found no trees within the baseline scenario, and thus net removals from trees are zero. Shrub crown cover was less than 5% of the project area, thus the guidance allows this factor to be considered negligible. Patagonia Sur has chosen to proceed with estimating the removals from shrubs. Baseline carbon stock in shrubs was also determined using the same tool. The baseline stock was determined to be 515.8 tonnes of CO₂-equivalent. This low number underscores the extent to which this landscape is deforested."¹³

3.2.6.2 Quantification of project emissions

The validator has confirmed that "Project Emissions have been estimated in accordance with the AR-ACM0001, Sections II-5, II-5.1, and II-5.2. SNP Patagonia Sur concluded that there is no increase in GHG emissions as a result of implementation of the proposed project activity."¹⁴

¹² CarbonVerde, LLC, 06 June 2012.

¹³ CarbonVerde, LLC, 06 June 2012.

¹⁴ CarbonVerde, LLC, 06 June 2012.

3.2.6.3 Quantification of leakage

“In accordance with the applicability conditions of the required tool: “Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity”, SNP Patagonia Sur utilized the “Guidelines on conditions under which increase in GHG emissions related to displacement of pre-project grazing activities in A/R CDM project activity is insignificant” to demonstrate that leakage in the initial project activity instance is insignificant.

Due to this assessment of insignificance, Equation (7) of the Baseline Methodology Procedure was not used to calculate leakage.”¹⁵ These assertions were confirmed during validation.

3.2.6.4 Summary of GHG emission reductions or removals

The validator confirmed “Net GHG Emission Reductions and Removals have been estimated in accordance with the AR-ACM0001 Baseline Methodology Procedure, Sections II-7 and II-7.1. The results of this determine that Net GHG Emission Reductions or Removals for the 80-year project crediting period are estimated at 94,905.33 t CO₂-e.”¹⁶

3.2.6.5 Uncertainties associated with the calculation of emissions

The validator confirmed there are no deductions associated with uncertainty. “SNP Patagonia Sur followed the “Guideline on conservative choice and application of default data in estimation of the net anthropogenic GHG removals by sink”, to results in conservative. To ensure the net anthropogenic GHG removals by sinks to be measured and monitored precisely, credibly, verifiably, and transparently, a quality assurance and quality control (QA/QC) procedure has been implemented.

The plan that describes specific QA / QC procedures will be presented in the following:

- a) Standard Operating Procedures (SOP) for data collection that will be established for all procedures such as: GIS analysis; field measurements; data entry; data documentation and data storage
- b) Training courses will be held for all relevant personnel on all data collection and analysis procedures (to manage and calibrate the various measuring instruments (caliper, diametric tape, hypsometer, compass, GPS, etc).
- c) Steps will be taken to control for errors in the sampling and data analysis to develop a credible plan for measuring and monitoring carbon stock and change in the project context. The same procedures shall be used during the project life to ensure continuity.”¹⁷

3.2.7 Methodology Deviations

The validation confirmed that there are no deviations from the methodology.

¹⁵ CarbonVerde, LLC, 06 June 2012.

¹⁶ CarbonVerde, LLC, 06 June 2012.

¹⁷ CarbonVerde, LLC, 06 June 2012.

3.2.8 Monitoring Plan

The following are the primary data and parameters that were monitored prior to, and made available and assessed during validation:

- Location of project area
- Boundary of project area
- Area of project area/plots
- Baseline trees/shrubs
- Baseline tree circumference/diameter at root collar/crown cover
- Baseline shrub crown cover
- Baseline strata
- Age of plantation
- Project trees
- Number of trees
- DRC
- Height
- Biomass allometric equations, coefficients, ratios and parameters
- Animal damage
- Survival rate
- Total CO₂

The monitoring plan, procedures and equipment were comprehensive and were found to be applicable to the parameters monitored. They were appropriately designed and provided reasonable assurance that the sequestration occurring from GHG sources, sinks, and reservoirs was (baseline) and will be (project scenario) accurately assessed. In accordance with the conditions of the approved baseline and monitoring methodology AR-ACM0001, project emissions were considered insignificant and therefore neglected. SNP Patagonia Sur is responsible for the registration, monitoring, measurement, and reporting of sequestration, within the timeframe required by VCS-AFOLU-ARR requirements.

3.3 Environmental Impact

In addition to the sequestration of carbon, the *Reforestation of Degraded Lands in the Valle California of Patagonia, Chile* project creates several environmental co-benefits.

The validation confirmed that “as SNP Patagonia Sur’s efforts both reforest riparian areas and those near more mature secondary forested areas, the project will create and expand habitat for local biodiversity and improve the health of the Tigre River which flows within Valle California. The carbon offset project creates an alternative source of income derived from the land. As cattle are removed and the forest is re-established, habitat for the following key species is created:

- Puma (*Puma concolor*)
- Kodkod (*Oncifelis guigna*) - a type of leopard
- Huemul (*Hippocamelus bisulcus*) - a small deer
- Andean Condor (*Vultur grifus*)
- Magellanic Woodpecker (*Campephilus magellanicus*)
- Southern river otter (*Lontra provocax*)
- Rufous-legged Owl (*Strix rufipes*)
- Various species of Buzzard (*Buteo sp*)

Many of these species are considered vulnerable to extinction and are thus in critical need of conservation. The Reforestation and Biodiversity Project supports all of these species in expanding areas they can inhabit and by connecting forested islands.

Finally, the National Forest Corporation of Chile (CONAF) characterized the soil within Valle California as degrading, and therefore recommended reforestation to stabilize the fragile and deteriorating soils. As they are reforesting riparian areas of the Tigre River, it is expected that water quality within the river will improve.

As part of the by-laws of the *Servidumbre ecologica*, which is similar to a conservation easement, Patagonia Sur will monitor the environmental impact of its activities at regular intervals.¹⁸


3.4 Comments by stakeholders

The validation confirmed that comments from stakeholders were appropriately documented and were found to be overwhelmingly positive. Representatives of several families who are former owners of land that now belongs to SNP Patagonia Sur, and owners of adjacent land, sent letters of support for *Reforestation of Degraded Lands in the Valle California of Patagonia, Chile*. Translations of these letters were provided to validators.

¹⁸ CarbonVerde, LLC, 06 June 2012.

4 VALIDATION CONCLUSION

ESI confirms all validation activities including objectives, scope and criteria, level of assurance and the PD adherence to the VCS Standard (v3 and updates) as documented in this report are complete. ESI concludes without any qualifications or limiting conditions that *Reforestation of Degraded Lands in the Valle California of Patagonia, Chile* dated 06 June 2012 meets the requirements of the VCS Standard (v3 and updates).

Report Submitted to:	Voluntary Carbon Standard Association 1730 Rhode Island Ave. NW Suite 803 Washington, D.C. 20036 Agrícola y Forestal SNP Ltda, 515 Madison Avenue Suite 1500 New York, NY 10022
Report Submitted by:	Environmental Services, Inc. Corporate Office 7220 Financial Way, Suite 100 Jacksonville, Florida 32257
ESI Lead Validator Name and Signature:	 Shawn McMahon Lead Validator
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Date:	18 June 2012

SPM/SMM/JPM/RB VO12003.00 VCS Validation Report (v01).doc
K: pf:06/18/12f

5 APPENDIX A

- Received from client on 2011-12-21
 - PIN_Patagonia Sur.pdf
- Received from client on 2012-02-01
 - Firm7.pdf
 - Firm8.pdf
 - Sec 2.3 Project Boundaries.kmz
 - Sec 5 Env Impact - Estudio Línea Base VC .pdf
 - Firm1.pdf
 - Firm2.pdf
 - Firm3.pdf
 - Firm4.pdf
 - Firm5.pdf
 - Firm6.pdf
- Received from client on 2012-02-06
 - Sec 2.3 Completed Project Boundary Template.pdf
 - Sec 2.3 Procedures to demonstrate eligibility.pdf
 - Sec 2.3_Relevant_GHG_Sources.doc
 - Sec 2.5 Additionality_Proof of Prior Consideration of Carbon Offsets Business.pdf
 - Sec 2.5 Additionality.pdf
 - Sec 3 Baseline Procedure Document.pdf
 - Sec 3 Tool for Estimation of carbon stocks and change of carbon stocks of trees and shrubs.pdf
 - Sec 3_Supporting Data (Divya Mankikar's conflicted copy 2012-01-26).xls
 - Sec 3_Supporting Data.xls
 - Sec 1.1 to 1.4 Project Proponent and Other Participant Entities.pdf
 - Sec 1.5 Project Start Date.pdf
 - Sec 1.7 Estimated Ex-Ante Emissions Reductions.xlsx
 - Sec 1.8 and 4 Plantation Establishment and Monitoring Manual.pdf
 - Sec 1.8 Conservation Easement Draft.pdf
 - Sec 1.11 Laws Statutes and 2.5 Additionality_Urban Development Law.pdf
 - Sec 1.11 Laws Statutes and 2.5 Additionality_IRS Certificate.pdf
 - Sec 1.12.1_Proof of title.pdf
 - Sec 1.13 Leakage Statement.pdf
 - Sec 1.13 Non-Permanence Risk.pdf
 - Sec 2.2 Quintanilla_Palena Paper.pdf
 - Sec 2.2_Degradation_DM.pdf
 - Sec 3 Baseline Procedure Document.pdf
 - Sec 3 Tool for Estimation of carbon stocks and change of carbon stocks of trees and shrubs.pdf
 - Sec 3_Supporting Data (Divya Mankikar's conflicted copy 2012-01-26).xls
 - Sec 3_Supporting Data.xls
 - Sec 1.1 to 1.4 Project Proponent and Other Participant Entities.pdf
 - Sec 1.5 First_Contract_Forestal Mininco.pdf
 - Sec 1.5 Project Start Date.pdf
 - Sec 1.7 Clarification of Small Scale Project Requirements.pdf
 - Sec 1.7 Estimated Ex-Ante Emissions Reductions.xlsx
 - Sec 1.8 and 4 Plantation Establishment and Monitoring Manual.pdf
 - Sec 1.8 Conservation Easement Draft.pdf
 - Sec 1.9 Map of Project Area Within Region X.pdf
 - Sec 1.11 Laws Statutes and 2.5 Additionality_Urban Development Law.pdf
 - Sec 1.11 Laws Statutes and 2.5 Additionality_IRS Certificate.pdf
 - Sec 1.11 Laws Statutes_AO.docx

- Sec 1.11_Compliance with CONAF_AO.pdf
- Sec 1.12.1 Proof of title
- Sec 1.12.1_Proof of title.pdf
- Sec 1.13 Leakage Statement.pdf
- Sec 1.13 Non-Permanence Risk.pdf
- Sec 2.2 Quintanilla_Palena Paper.pdf
- Sec 2.2_Degradation_DM.pdf
- Sec 2.3 Completed Project Boundary Template.pdf
- Sec 2.3 Procedures to demonstrate eligibility.pdf
- Sec 2.3 Project Boundaries.docx
- Sec 2.3_Relevant_GHG_Sources.doc
- Sec 2.5 Additionality - Financial Barrier Table.xls
- Sec 2.5 Additionality_Proof of Prior Consideration of Carbon Offsets Business.pdf
- Sec 2.5 Additionality.pdf
- Received from client on 2012-02-07
 - Patagonia Sur ARR VCS Grouped Project Description.pdf
- Received from client on 2012-02-09
 - Sec 5 Env Impact - Estudio L+inea Base VC .pdf
 - Sec 5 Environmental Impact.docx
 - Sec 6 Comments from Stakeholders.doc
 - MACOSX
 - Sec 6 Stakeholder comments
 - Sec 1.9 Project Location_Regional Maps.kmz
 - Sec 2.3 Project Boundaries.kmz
 - Sec 4 Monitoring.doc
- Received from client on 2012-02-20
 - forms_V.California_Chile.xlsx
- Received from client on 2012-02-21
 - Verification Summary_PatSur_21Feb2012.pdf
 - ATT00001.htm
 - ATT00002.htm
 - ATT00003.htm
 - image.gif
 - Parameters Monitored_14Feb2011.xlsx
- Received from client on 2012-02-21
 - Sec 1.12.1 Proof of title.pdf
 - Copy of Sec 3_Supporting Data.xls
 - Patagonia Sur ARR VCS Grouped Project Description_2-23-2012.docx
 - Sec 1.8 and 4 Plantation Establishment and Monitoring Manual.pdf
 - Sec 1.9 Project Location_Regional Maps.kmz
- Received from client on 2012-03-02
 - Patagonia Sur ARR VCS Grouped Project Description_2-23-2012.docx
 - Monitoring Report.pdf
- Received from client on 2012-03-16
 - Section 1.1. and 1.2 _Project Proponent and Other Entities Involved in the Project.pdf
 - 2012-03-16_Validation_Round_1_NCRs_final.xlsx
 - Patagonia Sur ARR VCS Grouped Project Description_3-16-2012.docx
 - Sec 1.7 Estimated Ex-Ante Emissions Reductions.xlsx
 - Sec 1.8 Conservation Easement Draft.pdf
 - Sec 1.12.1 Proof of title.pdf
 - Sec 1.13 External Risk calculation.xlsx
 - Sec 1.13 Non Permanence Risk_Version 3.2.pdf
 - Sec 3 Tool for Estimation of carbon stocks and change of carbon stocks of trees and shrubs_revised.pdf
 - Sec 3_Supporting Data1.xls

- Sec.1.12.1_Proof of title_Survey.pdf
- Received from client on 2012-03-18
 - Forms_VC.xlsx
 - Sec 1.9 Project Location_ Regional Maps.kmz
 - TXT.rtf
 - VCS Monitoring Report .doc
 - 2012_03_16_Verification_Round_1_NCRs_CLs.xlsx
 - Carbon Study_Final Report.pdf
 - CONAF FIRE DATA.xls
- Received from client on 2012-04-18
 - Sec 3_Supporting Data.xls
 - 2012-4-18_Validation_Round_2_NCRs_CLs .xlsx
 - Cash Flow Statement.pdf
 - Holocene tephrochronology of the southernmost part (42°30'-45°S) of the Andean Southern Volcanic Zone.pdf
 - Mininco Invoice.pdf
 - Patagonia Sur ARR VCS Grouped Project Description_4-16-2012.docx
 - Sec 1.1 Ecoregions classification_Lavandero, Gastó y Rodrigo, Santiago, Chile, 1994..pdf
 - Sec 1.11 Laws Statutes.pdf
 - Sec 1.13 Non Permanence Risk_Version 3.2.doc
 - Sec 2.3 Valle California Satellite Image_1981.jpg
 - 3 Baseline Procedure Document_Revised.doc
- Received from client on 2012-04-21
 - 2012-4-18_Validation_Round_2_NCRs_CLs.xlsx
 - VCS Monitoring Report_4_20_2012 .doc
- Received from client on 2012-05-09
 - 1.13 Non Permanence Risk_Version 3.2.doc
 - ATT00001.htm
 - ATT00002.htm
 - ATT00003.htm
 - ATT00004.htm
 - Patagonia Sur ARR VCS Grouped Project Description_5-9-2012.docx
 - Sec 1.1 Ecoregions Classification_Lavandero Gastó y Rodrigo Santiago_English.pdf
 - Sec 1.8 Contract about an Agreement for the Development of a Sustainable and Restricted Real Estate Project.pdf
 - Sec 1.13 External Risk calculation.xlsx
- Received from client on 2012-05-18
 - 2012_04_20_Verification_Round_2_ncrS_cls.xlsx
- Received from client on 2012-05-22
 - Sec 1.1 and 1.2_Project Proponent and Other Entities Involved.pdf
- Received from client on 2011-05-23
 - Reforestation_Project_VC_final.xls
 - Sec 3_Supporting Data.xls
 - VCS Monitoring Report_4_20_2012 .doc
 - Patagonia Sur ARR VCS Grouped Project Description_5-9-2012.docx
- Received from client on 2012-05-25
 - Forms_Biomass_Calc_05_25_12.xlsx
 - Patagonia Sur ARR VCS Grouped Project Description_5-9-2012.docx
 - Patagonia Sur ARR VCS Grouped Project Description_5-25-2012.docx
 - Sec 1.1 Ecoregions Classification_Lavandero Gastó y Rodrigo Santiago_Annex 1_Map .pdf
 - Sec 3_Supporting Data.xls
 - VCS Monitoring Report_5_25_2012 .doc
- Received from client on 2012-05-31

- Cash Flow for Validators_31 May.xls
 - Sec 1.13 Non Permanence Risk_31 May.doc
- Received from client on 2012-06-05
 - Patagonia Sur ARR VCS Grouped Project Description_6-5-2012.docx
 - Sec 1.7 Reforestation_Forecasting_Calculation.xls
 - Sec 3_Supporting Data.xls
- Received from client on 2012-06-06
 - Patagonia Sur ARR VCS Grouped Project Description_6-5-2012.docx
 - Patagonia Sur ARR VCS Grouped Project Description_Final.pdf
 - Sec 1.7 Reforestation_Forecasting_Calculation.xls
 - Sec 3_Supporting Data.xls

6 APPENDIX B

20	General (see comments to the right)	y	y							<p>Section 3 of the PE now states "It is well demonstrated in the document and attached to the report that the information provided is accurate and reliable. The information is as accurate as the report as it is correct. There is all the more of the information given received. The figure that makes the program easy to understand is supported in the paper (PE) by the part of Carter's Tuesday email. As noted before we need this to confirm the temperature temperature figure".</p>	<p>From Appendix 6 (dated) email of 25 May 2014: "The 'Detailed document' of 2014 will be corrected as it was noted to be inaccurate already included in the PE document."</p> <p>In the same email to section 3.1, will be provided to the public before including the data identified as Figure 1 to our understanding that this is in line with the stated in the section 3.1 of the PE document should be enough to cover the geographical aspect of project (intended) and the temperature in Figure 1 if a new map is required please let us know."</p>	<p>Appendix 6 (dated)</p>						y
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