



# Plan Vivo Annual Report

## Limay Community Carbon Project

### 2010-2011

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## 1. Project summary

The following Annual Report to the Plan Vivo Foundation reports upon the progress of Taking Root's Limay Community Carbon Project for the 2010-2011 planting year.

### Summary

**Table 1: Project summary**

|                                                                                          |                         |                                                            |                      |
|------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------|----------------------|
| <b>Reporting period</b>                                                                  |                         | 1 October 2010 - 30 September 2011                         |                      |
| <b>Technical specifications in use</b>                                                   |                         | Mixed Species Plantation and Boundary Planting             |                      |
| <b>Area under management</b>                                                             | 155.3 ha equivalent*    | <b>Areas put under management since last report</b>        | 113.7 ha equivalent* |
| <b>Total smallholders with <i>plan vivos</i> and PES agreements (all vintages)</b>       | 81                      | <b>New smallholders with PES agreements (2011 vintage)</b> | 59                   |
|                                                                                          |                         | <b>2010 farmers who added new land (2011 vintage)</b>      | 9                    |
| <b>Total payments made to community fund (all vintages)</b>                              |                         |                                                            |                      |
| <b>Plan Vivo Certificates issued to date (2010 vintage)</b>                              | 12,342                  |                                                            |                      |
| <b>Submission for Certificate Issuance for new areas under management (2011 vintage)</b> | 33,684 tCO <sub>2</sub> |                                                            |                      |

*\*Boundary Planting is measured in kilometers, but the equivalent hectares have been calculated based on the tCO<sub>2</sub>e sequestered in Mixed Species Plantation. See Appendix 1 for more details.*

*Please note that some pricing information has been removed by the Plan Vivo Foundation for client confidentiality.*



## 2. Key Events, Developments and Challenges

### Key events

#### Caoba College project

**Cégep André-Laurendeau internship visit:** From 30 May - 15 June, eight students and two professors from Cégep André-Laurendeau, a college located in Montreal, Canada, completed an internship in Limay, Nicaragua. Hosted by participants of the Limay Community Carbon Project, the interns helped these families plant trees on their land and educated students at La Parcila primary school about the importance of trees in creating and maintaining a healthy environment.

This was the first time such an internship occurred in partnership with Taking Root. Deemed a success by both the students and the community alike, the internship programme will bring another group of students to Nicaragua in 2012.

*Read the review: [www.takingroot.org/2011/09/cegep-environmental-internship-in-nicaragua-a-success](http://www.takingroot.org/2011/09/cegep-environmental-internship-in-nicaragua-a-success)*



*Above: A cégep professor and Nicaraguan primary school students pose under a tree in the schoolyard before going to plant seedlings. Photo courtesy of Cégep André-Laurendeau*

### Key developments

#### Operations developments

**Scaling up:** Due to great demand, the area planted in 2011 was more than double the area planted in 2010. This was supported in great part by the subsequent developments.

**New technical specification:** This year, the project created and implemented the Boundary Planting technical specification in which trees are planted along property lines or around fields and pastures to serve as living fences or natural barriers. Although employing this technique requires traveling over a much greater distance than the Mixed Species Plantations, the producers embraced the specification since it complements their other agricultural and pastoral projects.

**New permanent sample plot system:** Previously, the monitoring of technical specifications was performed using temporary sample plots. This year, the methodology was improved through the establishment of a vast network of permanent sample plots (PSP) and the development of a continuous forestry inventory design system. This system is part of a long-term research project that combines geographical information systems and forest biometrics. In addition to monitoring the success of the growth and management milestones for each producer, the PSPs will be used to



collect tree- and plot-specific data for scientific research and development purposes. This new system will allow Taking Root to better understand species interaction through mixed plantings as well as the effects of site quality on productivity.

#### **Species-specific biomass equations:**

Taking Root began working with the University of British Columbia (Canada) to develop species-specific biomass and taper equations for a selection of the species used in the project. The objective is to improve growth, yield and merchantable product projections. So far this initial process has proven successful and the team will continue to analyze the data.



**New human resources:** In Nicaragua, a new technician, Deybing Lanuza Ariel Hernandez, was hired to help with such tasks as recruitment, planting logistics and training.

A new full-time monitoring technician, Randolph Castellón, was also hired for the monitoring and management of the PSP mentioned above.

**Producer-technician working structure:** To help identify issues and strengthen relationships between producers and technicians, each technician is now responsible for communicating with a specific set of producers. This gives each producer just one point of contact and minimizes communication errors within the team.

**Fuel-efficient cookstoves:** In 2011, community technicians purchased supplies to build over ten (10) new cookstoves within participating communities, which will help cut down on the demand for fuelwood, reduce the carcinogenic smoke released in the homes, and increase farmers' confidence and interest in the project.

#### **Technological advances**

The following technological improvements were put into place to help improve the workflow and build capacity within the team in Nicaragua:

**Office improvements:** A new office was set up in Limay with wireless Internet and new laptops equipped with tools such as Skype, file-sharing software and a remote access program. The Nicaraguan team received training on the new system and now has the capacity to communicate and transfer information more efficiently with the Canadian team. Likewise, any issues with the computers can be fixed remotely, if required. This bridges the gap that would otherwise be present because of the distance between the two offices.



**GPS technology:** Advanced GPS devices were purchased for the team in Nicaragua to allow for the automated measurement of areas of land. This leads to more efficient and less error-prone work.

**KML geospace files:** Taking Root's Technical Officer, David Baumann, has developed a set of KML (Keyhole Markup Language) geospatial files, which allows us to express geographic annotation and visualization on Internet-based, two-dimensional maps and three-dimensional Earth browsers, such as Google Maps and Google Earth, respectively. These maps can be shared with partners and clients abroad, further illustrating the scope and shape of the project.

To see a Google Map version, visit: [www.co2r.com/content/map.html](http://www.co2r.com/content/map.html)

### Organizational developments

**Human resources:** In Canada, a full-time Communications Coordinator was hired to help with Canadian and international communications and promotion. Brooke van Mossel-Forrester is a co-founder of Taking Root and was able to join the team full-time through the support of a wage subsidy provided by the Quebec government.

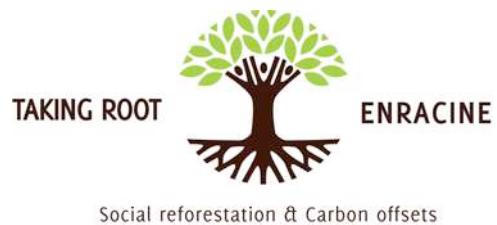
**Organization identity:** The first major project undertaken by the Communications Coordinator was to develop a new brand identity for Taking Root. Launched in May 2011, this new identity better reflects the organization's growth and place as an innovative leader in the reforestation industry and carbon market.

**Canadian office:** In response to the growth in Canadian staff, the Montreal headquarters moved to a larger location in July 2011.

### Project promotion

**Promotional videos:** Taking Root created a new promotional video for use by its clients, available in English and French. Wholesale clients have been able to re-appropriate the video and can share it with their clients abroad. Visit: [www.youtube.com/user/takingrootproject](http://www.youtube.com/user/takingrootproject)

**CO<sub>2</sub> Responsible promotional kit:** Taking Root has developed the CO<sub>2</sub> Responsible promotional kit for businesses that offset their services or products through the Limay Community Carbon Project. The kit includes a personalized microsite, stickers and shelf talkers, and the use of the CO<sub>2</sub> Responsible emblem on their communications material. The kit helps participating businesses raise awareness among their clients and competitors about the importance of managing and offsetting their carbon footprints. Visit the site: [www.co2r.com](http://www.co2r.com)



## Key challenges

### Quantity of seedlings

**Data requirements:** There was some difficulty collecting and processing data prior to starting the 2011 nurseries. This meant that certain information was not available on time, such as the size of some of the parcels to be planted, the total number of nurseries required and the total number of seeds needed. This was due in part to errors in data transfer and the need for more time to collect the data.

**Seeds collected:** As a result of the delayed data processing, the team was not able to gather enough seeds for certain tree species. This delayed the nurseries and resulted in a shortage of those species of seedlings when it was time to plant. For this reason, there were fewer trees planted than originally planned including a few areas that were not planted at all.

**Lesson learned:** Consequently, Taking Root has improved its planning process and has started collecting and processing information much earlier for the 2012 planting season. We will also seed 1.5 times the number of trees needed, whereas we seeded 1.2 times in 2011.

### Land measurements

**Area estimates:** In 2011, the community technicians recognized that the estimated size of land given to them by farmers did not match the areas calculated using corresponding GPS coordinates. Most often, farmers overestimated their areas, leaving the project with less area to plant than planned.

**Lesson learned:** Technicians now only use GPS to calculate the farmers' areas. With the GPSs, the calculations are done immediately in the devices and no transcribing or estimations are required.

### Project scale

**Demand for carbon offsets:** Taking Root is pleased that the demand for its carbon offsets is growing immensely and sales are very successful. However, the resulting challenge is that it is difficult to meet the demand on the ground, since it requires enlarging the planting area significantly. For this reason, Taking Root has had to turn down buyers.

**Lesson learned:** To meet this growing demand, Taking Root will expand the scope of its project significantly in the coming year. With improved technology and methodologies, and a more experienced staff, this projected growth will be very feasible.

## Future developments

### Future operations developments

**Scaling up:** As in this past year, the team will continue to increase the project size in the coming year within the existing project boundary as much as possible.

**Increasing project boundary:** In order to include new areas and meet rising demand, in 2012 Taking Root will begin the process of expanding the project boundary. A Remote Sensing Specialist from the University of British Columbia will help acquire and analyze a series of infrared satellite images to help us find priority areas as well as do the baseline calculations for this larger area.



**Project Design Document:** The Project Design Document (PDD) has been updated for the 2012 planting season to include Taking Root's strategy for surplus payments to the community fund. Currently, Taking Root signs agreements with producers before all offset sales contracts have been finalized. This means that the actual average price per offset and the contractual price agreed upon with the producers do not always match.

Subsequently, in the coming year Taking Root will establish a price paid to producers based on the previous year's average and the upcoming year's forecasted sales. Any surplus earned by the end of the year will be used to cover costs for community-related projects, including but not limited to nursery costs and the subsidization of fuel-efficient cookstoves. Such expenditures will be made in consultation with the communities and will be reported in the Plan Vivo Annual Report each year.

**Fuel-efficient stoves:** In the coming months, technicians will use the recently purchased material to build over ten (10) fuel-efficient cookstoves in participating communities.

### **Future technological improvements**

**Tablets:** This coming year, the technicians will be provided with pre-programmed tablet computers that have built-in GPS functionality and cameras. This means that much of their work, including monitoring, is digitized. There will be no need to transcribe information, as it will transfer easily from tablet to computer. Also as a result, monitoring results will feed directly into the biomass equations that Taking Root is developing.

### **Future sales developments**

**New partners:** Taking Root has already solidified agreements with new partners for distribution opportunities around the world. The coming year brings on three (3) new wholesale partners, including COTAP (United States), Global Carbon Exchange and Green Leaf (both United Kingdom).



### 3. Activities, total project size and participation

#### Current land-use activities

##### Approved technical specifications

**Mixed Species Plantation:** Land-use activities for 2011 vintage focused mainly on the Mixed Species Plantation. This technical specification involves planting and intensively managing multi-purposed mixed species forest plantations on participating farmers' land. All of the species selected are native to the region and are chosen in consultation with local producer groups and professional foresters.



For full details, view:

[www.planvivo.org/wp-content/uploads/Limay\\_mixed-forest\\_Plan-Vivo\\_TS\\_FINAL\\_March2011.pdf](http://www.planvivo.org/wp-content/uploads/Limay_mixed-forest_Plan-Vivo_TS_FINAL_March2011.pdf)

Above: Producers and helpers work to plant seedlings on a producer's lot.

**Boundary Planting:** This technical specification was introduced in 2011 as a pilot project. Otherwise known as living fences, boundary planting is a way of introducing a variety of tree species along a property line in order to replace fencing over time, as opposed to building and maintaining fences made of timber. While sequestering carbon dioxide, this system helps diversify income, build long-lasting fences, and produce highly prized sawnwood in the long run.

For full details, view: [www.planvivo.org/wp-content/uploads/TS\\_B\\_Limay-F.pdf](http://www.planvivo.org/wp-content/uploads/TS_B_Limay-F.pdf)

##### Technical specifications in development

**Silvopastoral Planting:** Currently in development, the Silvopastoral technical specification acknowledges the need for cattle pastures by integrating trees and improved pasture with livestock. The trees improve pasture productivity, provide shade, and produce timber, forage and fruit products for the farmers.

#### Summary of total participation and project size

The following data represents the scale of the project to date (all vintages).

The total number of producers with registered PES agreements: 81

The total area covered by the project: 155.3 ha equivalent

Total hectares Mixed Species Plantation: 126.0 ha

Total hectares Boundary Planting: 35.8 km (29.3 ha equivalent)



## 4. Submission for Plan Vivo Certificate Issuance

### Recruitment of new producers

As demand for Taking Root's carbon offsets is greater than our current level of production, there is no waiting list of producers. When recruiting for the 2011 vintage, our technicians traveled to selected communities within our project boundary and spoke with farmers about the project. If they met the criteria and agreed to our terms, we asked them to join.

### Recruitment challenges

#### Meeting client demand

Due to the success of the previous year, Taking Root decided to almost triple the territory for 2011. As a result, the challenge we encountered was in recruiting enough producers to meet the demands of our clients.

**Building relationships:** In our previous year, the technician responsible for recruitment at the time was able to easily recruit producers from his own community, as he had already established relationships there. This year, however, our group of technicians ventured into new communities with which they had no previous relationships. Without this or a strong knowledge of our project, farmers were less inclined to offer large pieces of land to the project. Consequently technicians had to recruit more farmers to meet the land requirements for 2011.

**Solution - Word of mouth:** Throughout the project, Taking Root has learned that producers are often willing to contribute more land again the following year, especially once they receive payments. Furthermore, word spreads quickly through the communities and other farmers become interested. Now as our project expands, more farmers become familiar with us and are eager to take part.

### Project sales and allocations

Table 2: Project CO<sub>2</sub> sales and allocations for the 2011 vintage

|                                                    |                                                |
|----------------------------------------------------|------------------------------------------------|
| <b>Total volume of CO<sub>2</sub> forward sold</b> | 33,684 tCO <sub>2</sub>                        |
| <b>Total sale price</b>                            |                                                |
| <b>Number of producers allocated to buyers</b>     | 68                                             |
| <b>Total area</b>                                  | 113.7 ha equivalent                            |
| <b>Technical specification applied</b>             | Mixed species plantation and Boundary planting |
| <b>Price to community fund per offset</b>          |                                                |
| <b>% of sale price to reach communities as PES</b> | 60%                                            |

For a complete list of producers and payments, see Monitoring Results in Appendix 2.



## 5. Sales of Plan Vivo Certificates

### Carbon sales

The following table outlines the distribution of Plan Vivo Certificates sold to date.

**Table 3: Carbon sales to date**

| Vintage          | Name of purchaser           | Number of Plan Vivo certificates purchased | Price per certificate (USD) | Total amount received (USD) |
|------------------|-----------------------------|--------------------------------------------|-----------------------------|-----------------------------|
| 2010             | PrimaKlima - weltweit- e.V. | 11,009                                     |                             |                             |
| 2010             | Carbon Advice Group         | 95                                         |                             |                             |
| 2010             | CLEVEL                      | 650                                        |                             |                             |
| 2010             | Carbon Finance Intel        | 50                                         |                             |                             |
| 2010             | Taking Root                 | 538                                        |                             |                             |
| <b>2010</b>      | <b>Total</b>                | <b>12,342</b>                              |                             |                             |
| 2011             | PrimaKlima - weltweit- e.V. | 20,950                                     |                             |                             |
| 2011             | CLEVEL                      | 850                                        |                             |                             |
| 2011             | CLEVEL                      | 1,350                                      |                             |                             |
| 2011             | Zero Mission                | 1,000                                      |                             |                             |
| 2011             | Taking Root                 | 9,534                                      |                             |                             |
| <b>2011</b>      | <b>Total</b>                | <b>33,684</b>                              |                             |                             |
| <b>All years</b> | <b>GRAND TOTAL</b>          | <b>46,026</b>                              |                             |                             |

Please note that pricing information has been removed by the Plan Vivo Foundation for client confidentiality.



## 6. Monitoring Results

### Monitoring results

For detailed monitoring results for new plan vivos, see Appendix 2.

For monitoring results for continuing participants, see Appendix 3.

### Barriers faced

Despite the following barriers, the monitoring was successful overall and the technicians were able to use a very efficient database for recording the data.



**Communication barriers:** As the 2011 monitoring followed a new system, there was an initial misunderstanding between Taking Root and the technicians on how to report data and on what trees to count. Fortunately the issue was recognized early during a routine review of the results so the teams were able to evaluate the process immediately and resolve the issue.

Above: Technicians measure the height of trees from the previous year.

The Taking Root team has found that being physically present in Nicaragua to help resolve such issues is always best, but is not always possible. Luckily with the use of Skype, the teams can share screens and review documents together.

**Lost or missing trees:** As a consequence of the abovementioned communication issue, the technicians were not initially recording whether trees were dead, missing, or not present, so the early results didn't clearly indicate if there were any losses of trees or if trees simply weren't planted. This will be addressed in the future with more rigorous monitoring standards.

### Unsuccessful monitoring of producers

Where plan vivos were monitored unsuccessfully, the following causes were apparent:

**Missing trees:** Producers did not always receive or start enough trees, due to the miscalculations mentioned above. Likewise, some trees did not survive once seeded or planted. These producers will not be penalized but will have to make up for the lost trees in the next planting season. Furthermore, we are seeding and planting many a larger buffer of trees in the upcoming season.

**Unplanted trees:** Another scenario involves farmers who didn't plant their trees for unknown reasons. These farmers were penalized in that they were not paid, but they have the opportunity to plant these trees and receive payment upon successful monitoring next year.

## Improvements to the monitoring process

A new monitoring system has been created so that monitoring is much better documented than the previous year.

**Permanent sample plots:** The new monitoring process uses permanent sample plots, which are distributed systematically throughout each stand.

To identify each plot, a high-density, thick wooden stake is then inserted into the ground. Approximately 20 cm of the stake should protrude above ground, be painted with a bright color and have a big nail hammered into the top of it. The paint is used to facilitate locating it whereas the nail can be used to attach the plot cord. Furthermore, should the stake not be replaced before entirely rotting, a metal detector can be used to pinpoint the plot's exact location for replacement because of to the nail.

This way, the technician is sampling from the same locations each year. The benefit is that the monitoring will track specific tree growth and species composition, as well as a number of other silvicultural attributes, over time.

**Larger sample plots:** Another change is the increase in the sampling plot size. This allows the technician to monitor more area in fewer plots, minimizing travel time.

**Single monitoring technician:** In order to streamline the process and make the results more consistent, the new monitoring system only engages one technician to do the monitoring.

**Technical improvements:** With this new system, the monitoring results are integrated into the main project database. This means that this database tracks the performance of the project on all levels, including the stand, the producer, the year and the entire project.



## 7. PES update

### Payments for Ecosystem Services

The table below provides a summary of the payments for ecosystem services made to date.

*Payment batch* indicates the number of separate times each producer received payments. *Producers paid* refers to the number of producers who successfully met the 2010 monitoring targets. *Payments issued* represents the unique payments made (number of batches x number of producers).

As shown in the table, producers who planted in 2010 and successfully met their monitoring targets received two payments in 2010 and the first of two payments for 2011. One of the 19 producers did not meet the monitoring targets for 2010, thus was not paid, but was able to catch up in 2011 and receive his first payment.

These 19 producers will receive their second 2011 payment before the end of the year. Likewise, producers who added land in 2011 will receive their first payments once this report has been approved.

For detailed PES information, see Appendix 4.

**Table 4: PES summary**

| Payment year | Vintage | Payment batches | Producers paid             | Payments issued | Amount paid*      |
|--------------|---------|-----------------|----------------------------|-----------------|-------------------|
| 2010         | 2010    | 2               | 18                         | 36              | \$4,898.67        |
| 2011         | 2010    | 1               | 19                         | 19              | \$2,530.08        |
| <b>TOTAL</b> |         | <b>3</b>        | <b>19 unique producers</b> | <b>55</b>       | <b>\$7,428.75</b> |

*\*Taking Root has provided many producers with advance payments to build fences as well as to hire help building nurseries, clearing the land before planting and planting the trees. These advance payments are being deducted from future payments at a rate that mirrors the PES schedule. Thus the figures in this table and in Appendix 4 have already had a percentage of the advance payments deducted. (See section 11.3 of Technical Specification – Mixed Forest Plantation for PES schedule.)*

**Table 5: Producer loans for material and cash advances for project establishment**

| Vintage      | Advance payment amounts |
|--------------|-------------------------|
| 2010         | \$6,053.37              |
| 2011         | \$20,358.52             |
| <b>TOTAL</b> | <b>\$26,411.89</b>      |



## 8. Ongoing Community Participation

### Community participation methods

To communicate with community participants throughout the process, Taking Root implemented the following:

#### Planting manuals

To ensure effective education of participating farmers on the key aspects of the project, Taking Root provided producers with planting manuals, detailing the planting pattern, measurements and tree species used. This helped significantly speed up the process and avoid confusion among producers.

#### Group training

Taking Root held group training sessions with each community to go over the planting and payment process.

#### Community meetings

In order to raise awareness about the project and gather insight from stakeholders, Taking Root held meetings with the mayor and various community leaders, as well as with producers in the participating communities.

### Discussion outcomes

#### Questions raised

In discussion, participants often asked about such things as fruit trees, minimum land, subdividing properties and tree ownership. It was important that they clearly understood the participation and payment requirements and the benefits of the project.

#### Resulting actions

During the meetings, we learned that participants preferred bi-annual payments instead of annual. Producers also wanted the payment schedule to coincide with the time when jobs needed to be done (i.e., clearing land). These changes were implemented in 2011 and the goal is to further solidify the payment dates in 2012.

#### Meeting minutes

For meeting minutes, please refer to the following files (delivered in connection therewith):

- REUNION EL PEDERNAL 1.doc
- REUNION MATEARES 1.doc
- REUNION PLATANARES 1.doc
- REUNION SANTA CRUZ 1.doc
- REUNION TRANQUERA 1.doc



## 9. Breakdown of Operational Costs

### Operational costs

The following table provides an overview of all operational costs connected to the project from 1 October 2010 – 30 September 2011.

**Table 6: Operational costs**

| Expenses              | Cost (USD)       |
|-----------------------|------------------|
| Human resources       | \$118,608        |
| Office/administration | \$15,853         |
| Equipment/materials   | \$2,077          |
| Travel                | \$7,776          |
| Production expenses   | \$9,603          |
| Consultancy           | \$12,155         |
| Plan Vivo fees*       | \$11,789         |
| Training              | \$5,165          |
| Marketing/Sales       | \$3,089          |
| Financial fees        | \$12,905         |
| Offsets in stock**    |                  |
| Community fund***     |                  |
| <b>Total Expenses</b> | <b>\$260,918</b> |

| Income              |          |
|---------------------|----------|
| Non-offset revenue  | \$16,327 |
| Sale of offsets     |          |
| Grants              | \$19,920 |
| Donations           | \$33,400 |
| <b>Total income</b> |          |

| Deficit                                                 |  |
|---------------------------------------------------------|--|
| <b>Deficit covered by<br/>guaranteed line of credit</b> |  |

\* This excludes the Plan Vivo fees related to a sale from the 2010 planting season received in 2011 [pricing information has been removed for client confidentiality].

\*\* Offsets in stock refers to 2010 and 2011 offsets purchased by Taking Root for resale that have yet to be sold.

\*\*\* This excludes contracts made during this financial period earmarked for offsets for the 2012 planting season.



## Appendix 1: Equivalent hectare calculation

“Equivalent hectares” refers to the conversion of units of one technical specification to another, in order to combine the two to better illustrate the project’s total size.

In Taking Root’s case, the equivalency factor is one hectare of Mixed Species Plantation, or 296.3 tonnes.

In 2011, one kilometer of Boundary Planting sequestered 243 tonnes.

By dividing the tonnage of one kilometer of Boundary Planting by the tonnage of one hectare of Mixed Species Plantation, we calculate that 0.82 hectares of Mixed Species is equal in tonnage to 1 kilometer of Boundary Planting.

If we then multiple the unit lengths in kilometers of the parcels of Boundary Planting by .82, we find the equivalent hectares in Mixed Species. The hectares from both technical specifications can then be aggregated to find the total equivalent hectares planted for the year.

| Technical specification         | Tonnes sequestered per unit | Equivalent area per tonnage | Total area planted | Equivalent area planted                |
|---------------------------------|-----------------------------|-----------------------------|--------------------|----------------------------------------|
| <b>Mixed Species Plantation</b> | 296.3 tonnes / hectare      | 1 ha = 1 ha                 | 126 ha             | 126 ha                                 |
| <b>Boundary Planting</b>        | 243 tonnes / kilometer      | 1 km = 0.82 ha              | 35.8 km            | 29.3 ha equivalent<br>(35.8 km x 0.82) |

## Appendix 2: Monitoring results for new plan vivos

The following table outlines the 2011 monitoring results for new plan vivos.

| Location | Plan Vivo | Parcel Number    | Name of Producer <sup>1</sup> | Technical Specification | Area | Units      | Monitoring |           |                    | Saleable tCO <sub>2</sub> |
|----------|-----------|------------------|-------------------------------|-------------------------|------|------------|------------|-----------|--------------------|---------------------------|
|          |           |                  |                               |                         |      |            | Target **  | Result ** | % of Plots Planted |                           |
| Limay    | 10.1.001  | 10.1.001.11.1.01 |                               | Mixed Species           | 1.1  | Hectares   | 6          | 6         | 100%               | 329                       |
| Limay    | 10.1.001  | 10.1.001.11.1.02 |                               | Mixed Species           | 0.5  | Hectares   | 3          | 3         | 100%               | 139                       |
| Limay    | 10.1.006  | 10.1.006.11.1.01 |                               | Mixed Species           | 0.8  | Hectares   | 7          | 0         | 0%                 | 237                       |
| Limay    | 10.1.009  | 10.1.009.11.1.01 |                               | Mixed Species           | 0.7  | Hectares   | 5          | 0         | 0%                 | 207                       |
| Limay    | 10.1.009  | 10.1.009.11.1.02 |                               | Mixed Species           | 0.4  | Hectares   | 2          | 0         | 0%                 | 110                       |
| Limay    | 10.1.013  | 10.1.013.11.1.01 |                               | Mixed Species           | 0.4  | Hectares   | 3          | 2         | 67%                | 107                       |
| Limay    | 10.1.013  | 10.1.013.11.1.02 |                               | Mixed Species           | 0.4  | Hectares   | 2          | 2         | 100%               | 130                       |
| Limay    | 10.1.014  | 10.1.014.11.1.01 |                               | Mixed Species           | 0.2  | Hectares   | 1          | 1         | 100%               | 62                        |
| Limay    | 10.1.014  | 10.1.014.11.1.02 |                               | Mixed Species           | 0.3  | Hectares   | 1          | 0         | 0%                 | 77                        |
| Limay    | 10.1.014  | 10.1.014.11.2.01 |                               | Boundary Planting       | 1.0  | Kilometers | 9          | 0         | 0%                 | 250                       |
| Limay    | 10.1.015  | 10.1.015.11.1.01 |                               | Mixed Species           | 0.6  | Hectares   | 4          | 0         | 0%                 | 193                       |
| Limay    | 10.1.020  | 10.1.020.11.2.01 |                               | Boundary Planting       | 0.9  | Kilometers | 7          | 0         | 0%                 | 207                       |
| Limay    | 10.1.020  | 10.1.020.11.2.02 |                               | Boundary Planting       | 0.2  | Kilometers | 2          | 0         | 0%                 | 53                        |
| Limay    | 10.1.020  | 10.1.020.11.2.03 |                               | Boundary Planting       | 0.1  | Kilometers | 1          | 0         | 0%                 | 29                        |
| Limay    | 10.1.020  | 10.1.020.11.2.04 |                               | Boundary Planting       | 0.6  | Kilometers | 5          | 0         | 0%                 | 146                       |
| Limay    | 10.1.021  | 10.1.021.11.2.01 |                               | Boundary Planting       | 0.3  | Kilometers | 3          | 0         | 0%                 | 68                        |
| Limay    | 10.1.021  | 10.1.021.11.2.02 |                               | Boundary Planting       | 0.8  | Kilometers | 7          | 0         | 0%                 | 197                       |
| Limay    | 10.1.022  | 10.1.022.11.2.01 |                               | Boundary Planting       | 0.4  | Kilometers | 3          | 0         | 0%                 | 90                        |
| Limay    | 10.1.022  | 10.1.022.11.2.02 |                               | Boundary Planting       | 0.3  | Kilometers | 3          | 0         | 0%                 | 78                        |

<sup>1</sup> Due to data protection regulations, the names of participants have been removed from the public version of this document

|       |          |                  |  |                   |     |            |    |    |      |     |
|-------|----------|------------------|--|-------------------|-----|------------|----|----|------|-----|
| Limay | 11.1.001 | 11.1.001.11.1.01 |  | Mixed Species     | 1.0 | Hectares   | 6  | 6  | 100% | 287 |
| Limay | 11.1.001 | 11.1.001.11.1.02 |  | Mixed Species     | 0.4 | Hectares   | 2  | 0  | 0%   | 116 |
| Limay | 11.1.002 | 11.1.002.11.1.01 |  | Mixed Species     | 1.1 | Hectares   | 7  | 3  | 43%  | 335 |
| Limay | 11.1.003 | 11.1.003.11.1.01 |  | Mixed Species     | 0.5 | Hectares   | 3  | 3  | 100% | 154 |
| Limay | 11.1.003 | 11.1.003.11.2.01 |  | Boundary Planting | 1.1 | Kilometers | 9  | 0  | 0%   | 275 |
| Limay | 11.1.003 | 11.1.003.11.2.02 |  | Boundary Planting | 0.3 | Kilometers | 3  | 0  | 0%   | 85  |
| Limay | 11.1.003 | 11.1.003.11.2.03 |  | Boundary Planting | 0.2 | Kilometers | 2  | 0  | 0%   | 46  |
| Limay | 11.1.004 | 11.1.004.11.1.01 |  | Mixed Species     | 1.2 | Hectares   | 6  | 6  | 100% | 350 |
| Limay | 11.1.005 | 11.1.005.11.1.01 |  | Mixed Species     | 0.7 | Hectares   | 3  | 3  | 100% | 196 |
| Limay | 11.1.005 | 11.1.005.11.1.02 |  | Mixed Species     | 0.7 | Hectares   | 5  | 4  | 80%  | 199 |
| Limay | 11.1.006 | 11.1.006.11.1.01 |  | Mixed Species     | 1.0 | Hectares   | 6  | 6  | 100% | 284 |
| Limay | 11.1.006 | 11.1.006.11.1.02 |  | Mixed Species     | 0.1 | Hectares   | *  | *  | *    | 18  |
| Limay | 11.1.007 | 11.1.007.11.1.01 |  | Mixed Species     | 0.7 | Hectares   | 3  | 1  | 33%  | 213 |
| Limay | 11.1.007 | 11.1.007.11.2.01 |  | Boundary Planting | 2.1 | Kilometers | 3  | 3  | 100% | 510 |
| Limay | 11.1.008 | 11.1.008.11.1.01 |  | Mixed Species     | 1.2 | Hectares   | 10 | 0  | 0%   | 361 |
| Limay | 11.1.009 | 11.1.009.11.1.01 |  | Mixed Species     | 0.5 | Hectares   | 2  | 1  | 50%  | 145 |
| Limay | 11.1.009 | 11.1.009.11.1.02 |  | Mixed Species     | 0.5 | Hectares   | 3  | 3  | 100% | 139 |
| Limay | 11.1.010 | 11.1.010.11.1.01 |  | Mixed Species     | 0.8 | Hectares   | 3  | 3  | 100% | 225 |
| Limay | 11.1.010 | 11.1.010.11.1.02 |  | Mixed Species     | 0.5 | Hectares   | 1  | 0  | 0%   | 154 |
| Limay | 11.1.011 | 11.1.011.11.1.01 |  | Mixed Species     | 0.9 | Hectares   | 5  | 5  | 100% | 252 |
| Limay | 11.1.011 | 11.1.011.11.1.02 |  | Mixed Species     | 0.7 | Hectares   | 5  | 0  | 0%   | 201 |
| Limay | 11.1.012 | 11.1.012.11.1.01 |  | Mixed Species     | 0.6 | Hectares   | 5  | 5  | 100% | 193 |
| Limay | 11.1.012 | 11.1.012.11.2.01 |  | Boundary Planting | 3.0 | Kilometers | 10 | 10 | 100% | 717 |
| Limay | 11.1.013 | 11.1.013.11.1.01 |  | Mixed Species     | 0.6 | Hectares   | 4  | 0  | 0%   | 187 |
| Limay | 11.1.013 | 11.1.013.11.1.02 |  | Mixed Species     | 0.7 | Hectares   | 2  | 2  | 100% | 201 |
| Limay | 11.1.014 | 11.1.014.11.1.01 |  | Mixed Species     | 0.8 | Hectares   | 3  | 3  | 100% | 246 |
| Limay | 11.1.014 | 11.1.014.11.1.02 |  | Mixed Species     | 0.4 | Hectares   | 3  | 0  | 0%   | 121 |
| Limay | 11.1.015 | 11.1.015.11.1.01 |  | Mixed Species     | 1.4 | Hectares   | 9  | 9  | 100% | 418 |
| Limay | 11.1.016 | 11.1.016.11.1.01 |  | Mixed Species     | 0.8 | Hectares   | 7  | 7  | 100% | 225 |
| Limay | 11.1.016 | 11.1.016.11.2.01 |  | Boundary Planting | 1.0 | Kilometers | 8  | 0  | 0%   | 245 |

|       |          |                  |  |                   |     |            |    |    |      |      |
|-------|----------|------------------|--|-------------------|-----|------------|----|----|------|------|
| Limay | 11.1.016 | 11.1.016.11.2.02 |  | Boundary Planting | 0.2 | Kilometers | 2  | 0  | 0%   | 44   |
| Limay | 11.1.016 | 11.1.016.11.2.03 |  | Boundary Planting | 0.2 | Kilometers | 2  | 0  | 0%   | 51   |
| Limay | 11.1.017 | 11.1.017.11.1.01 |  | Mixed Species     | 1.5 | Hectares   | 5  | 5  | 100% | 430  |
| Limay | 11.1.018 | 11.1.018.11.1.01 |  | Mixed Species     | 0.8 | Hectares   | 5  | 5  | 100% | 222  |
| Limay | 11.1.018 | 11.1.018.11.2.01 |  | Boundary Planting | 0.6 | Kilometers | 4  | 4  | 100% | 134  |
| Limay | 11.1.018 | 11.1.018.11.2.02 |  | Boundary Planting | 0.2 | Kilometers | 1  | 1  | 100% | 53   |
| Limay | 11.1.018 | 11.1.018.11.2.02 |  | Boundary Planting | 0.2 | Kilometers | 1  | 1  | 100% | 53   |
| Limay | 11.1.019 | 11.1.019.11.1.01 |  | Mixed Species     | 2.3 | Hectares   | 20 | 18 | 90%  | 696  |
| Limay | 11.1.020 | 11.1.020.11.1.01 |  | Mixed Species     | 0.6 | Hectares   | 0  | 0  | n/a  | 163  |
| Limay | 11.1.020 | 11.1.020.11.1.02 |  | Mixed Species     | 0.9 | Hectares   | 5  | 5  | 100% | 279  |
| Limay | 11.1.021 | 11.1.021.11.1.01 |  | Mixed Species     | 0.8 | Hectares   | 3  | 3  | 100% | 243  |
| Limay | 11.1.021 | 11.1.021.11.2.01 |  | Boundary Planting | 0.4 | Kilometers | 1  | 1  | 100% | 107  |
| Limay | 11.1.021 | 11.1.021.11.2.02 |  | Boundary Planting | 0.1 | Kilometers | 1  | 0  | 0%   | 27   |
| Limay | 11.1.021 | 11.1.021.11.2.03 |  | Boundary Planting | 0.4 | Kilometers | 4  | 0  | 0%   | 100  |
| Limay | 11.1.022 | 11.1.022.11.1.01 |  | Mixed Species     | 0.1 | Hectares   | *  | *  | *    | 39   |
| Limay | 11.1.022 | 11.1.022.11.1.02 |  | Mixed Species     | 0.9 | Hectares   | 5  | 5  | 100% | 276  |
| Limay | 11.1.023 | 11.1.023.11.1.01 |  | Mixed Species     | 1.2 | Hectares   | 5  | 5  | 100% | 353  |
| Limay | 11.1.024 | 11.1.024.11.1.01 |  | Mixed Species     | 1.8 | Hectares   | 12 | 12 | 100% | 519  |
| Limay | 11.1.025 | 11.1.025.11.1.01 |  | Mixed Species     | 4.4 | Hectares   | 15 | 7  | 47%  | 1310 |
| Limay | 11.1.026 | 11.1.026.11.1.01 |  | Mixed Species     | 2.3 | Hectares   | 14 | 14 | 100% | 676  |
| Limay | 11.1.027 | 11.1.027.11.1.01 |  | Mixed Species     | 0.5 | Hectares   | 2  | 2  | 100% | 148  |
| Limay | 11.1.027 | 11.1.027.11.1.02 |  | Mixed Species     | 0.6 | Hectares   | 3  | 3  | 100% | 184  |
| Limay | 11.1.027 | 11.1.027.11.2.01 |  | Boundary Planting | 0.3 | Kilometers | 3  | 0  | 0%   | 70   |
| Limay | 11.1.027 | 11.1.027.11.2.02 |  | Boundary Planting | 0.1 | Kilometers | 1  | 0  | 0%   | 17   |
| Limay | 11.1.027 | 11.1.027.11.2.03 |  | Boundary Planting | 0.5 | Kilometers | 4  | 0  | 0%   | 112  |
| Limay | 11.1.027 | 11.1.027.11.2.04 |  | Boundary Planting | 0.2 | Kilometers | 2  | 0  | 0%   | 53   |
| Limay | 11.1.027 | 11.1.027.11.2.05 |  | Boundary Planting | 0.3 | Kilometers | 3  | 0  | 0%   | 61   |
| Limay | 11.1.027 | 11.1.027.11.2.06 |  | Boundary Planting | 0.3 | Kilometers | 3  | 0  | 0%   | 78   |
| Limay | 11.1.028 | 11.1.028.11.1.01 |  | Mixed Species     | 0.3 | Hectares   | 2  | 0  | 0%   | 80   |
| Limay | 11.1.028 | 11.1.028.11.1.02 |  | Mixed Species     | 1.5 | Hectares   | 6  | 4  | 67%  | 450  |

|       |          |                  |  |                   |     |            |    |   |      |     |
|-------|----------|------------------|--|-------------------|-----|------------|----|---|------|-----|
| Limay | 11.1.028 | 11.1.028.11.1.03 |  | Mixed Species     | 0.5 | Hectares   | 1  | 0 | 0%   | 151 |
| Limay | 11.1.029 | 11.1.029.11.1.01 |  | Mixed Species     | 1.4 | Hectares   | 5  | 5 | 100% | 400 |
| Limay | 11.1.030 | 11.1.030.11.1.01 |  | Mixed Species     | 2.2 | Hectares   | 10 | 9 | 90%  | 649 |
| Limay | 11.1.031 | 11.1.031.11.1.01 |  | Mixed Species     | 1.4 | Hectares   | 4  | 4 | 100% | 400 |
| Limay | 11.1.032 | 11.1.032.11.1.01 |  | Mixed Species     | 0.9 | Hectares   | 7  | 7 | 100% | 273 |
| Limay | 11.1.033 | 11.1.033.11.1.01 |  | Mixed Species     | 0.9 | Hectares   | 5  | 5 | 100% | 273 |
| Limay | 11.1.034 | 11.1.034.11.1.01 |  | Mixed Species     | 1.0 | Hectares   | 5  | 5 | 100% | 287 |
| Limay | 11.1.034 | 11.1.034.11.1.02 |  | Mixed Species     | 0.3 | Hectares   | 1  | 1 | 100% | 95  |
| Limay | 11.1.035 | 11.1.035.11.1.01 |  | Mixed Species     | 1.5 | Hectares   | 3  | 2 | 67%  | 439 |
| Limay | 11.1.036 | 11.1.036.11.1.01 |  | Mixed Species     | 1.5 | Hectares   | 6  | 6 | 100% | 453 |
| Limay | 11.1.037 | 11.1.037.11.1.01 |  | Mixed Species     | 0.5 | Hectares   | 1  | 1 | 100% | 157 |
| Limay | 11.1.037 | 11.1.037.11.1.02 |  | Mixed Species     | 0.3 | Hectares   | 1  | 1 | 100% | 86  |
| Limay | 11.1.037 | 11.1.037.11.2.01 |  | Boundary Planting | 0.5 | Kilometers | 4  | 0 | 0%   | 112 |
| Limay | 11.1.037 | 11.1.037.11.2.02 |  | Boundary Planting | 0.4 | Kilometers | 4  | 0 | 0%   | 102 |
| Limay | 11.1.037 | 11.1.037.11.2.03 |  | Boundary Planting | 0.5 | Kilometers | 4  | 0 | 0%   | 112 |
| Limay | 11.1.038 | 11.1.038.11.2.01 |  | Boundary Planting | 1.6 | Kilometers | 9  | 9 | 100% | 394 |
| Limay | 11.1.038 | 11.1.038.11.2.02 |  | Boundary Planting | 0.4 | Kilometers | 3  | 2 | 67%  | 92  |
| Limay | 11.1.039 | 11.1.039.11.1.01 |  | Mixed Species     | 1.9 | Hectares   | 6  | 6 | 100% | 569 |
| Limay | 11.1.040 | 11.1.040.11.1.01 |  | Mixed Species     | 0.8 | Hectares   | 0  | 0 | n/a  | 240 |
| Limay | 11.1.040 | 11.1.040.11.1.02 |  | Mixed Species     | 0.5 | Hectares   | 4  | 4 | 100% | 148 |
| Limay | 11.1.040 | 11.1.040.11.2.01 |  | Boundary Planting | 1.5 | Kilometers | 9  | 2 | 22%  | 367 |
| Limay | 11.1.040 | 11.1.040.11.2.02 |  | Boundary Planting | 0.1 | Kilometers | 1  | 0 | 0%   | 27  |
| Limay | 11.1.040 | 11.1.040.11.2.03 |  | Boundary Planting | 0.0 | Kilometers | 1  | 0 | 0%   | 7   |
| Limay | 11.1.041 | 11.1.041.11.1.01 |  | Mixed Species     | 1.4 | Hectares   | 9  | 9 | 100% | 415 |
| Limay | 11.1.042 | 11.1.042.11.1.01 |  | Mixed Species     | 1.2 | Hectares   | 3  | 2 | 67%  | 350 |
| Limay | 11.1.043 | 11.1.043.11.1.01 |  | Mixed Species     | 0.9 | Hectares   | 5  | 5 | 100% | 276 |
| Limay | 11.1.043 | 11.1.043.11.1.02 |  | Mixed Species     | 0.4 | Hectares   | 4  | 2 | 50%  | 121 |
| Limay | 11.1.044 | 11.1.044.11.1.01 |  | Mixed Species     | 0.6 | Hectares   | 1  | 1 | 100% | 163 |
| Limay | 11.1.044 | 11.1.044.11.1.02 |  | Mixed Species     | 0.9 | Hectares   | 7  | 0 | 0%   | 261 |
| Limay | 11.1.044 | 11.1.044.11.1.03 |  | Mixed Species     | 0.9 | Hectares   | 2  | 2 | 100% | 279 |

|       |          |                  |  |                   |     |            |    |    |      |     |
|-------|----------|------------------|--|-------------------|-----|------------|----|----|------|-----|
| Limay | 11.1.045 | 11.1.045.11.1.01 |  | Mixed Species     | 1.5 | Hectares   | 2  | 2  | 100% | 447 |
| Limay | 11.1.046 | 11.1.046.11.1.01 |  | Mixed Species     | 1.2 | Hectares   | 7  | 7  | 100% | 364 |
| Limay | 11.1.046 | 11.1.046.11.1.02 |  | Mixed Species     | 0.5 | Hectares   | 5  | 5  | 100% | 157 |
| Limay | 11.1.046 | 11.1.046.11.1.03 |  | Mixed Species     | 0.4 | Hectares   | 2  | 2  | 100% | 124 |
| Limay | 11.1.047 | 11.1.047.11.1.01 |  | Mixed Species     | 0.8 | Hectares   | 4  | 4  | 100% | 231 |
| Limay | 11.1.047 | 11.1.047.11.2.01 |  | Boundary Planting | 0.4 | Kilometers | 3  | 3  | 100% | 92  |
| Limay | 11.1.047 | 11.1.047.11.2.02 |  | Boundary Planting | 0.3 | Kilometers | 2  | 2  | 100% | 66  |
| Limay | 11.1.047 | 11.1.047.11.2.03 |  | Boundary Planting | 0.6 | Kilometers | 5  | 4  | 80%  | 136 |
| Limay | 11.1.048 | 11.1.048.11.1.01 |  | Mixed Species     | 0.7 | Hectares   | 6  | 5  | 83%  | 219 |
| Limay | 11.1.048 | 11.1.048.11.2.01 |  | Boundary Planting | 0.1 | Kilometers | 1  | 0  | 0%   | 22  |
| Limay | 11.1.048 | 11.1.048.11.2.02 |  | Boundary Planting | 0.5 | Kilometers | 4  | 0  | 0%   | 117 |
| Limay | 11.1.048 | 11.1.048.11.2.03 |  | Boundary Planting | 0.1 | Kilometers | 1  | 0  | 0%   | 19  |
| Limay | 11.1.048 | 11.1.048.11.2.04 |  | Boundary Planting | 0.2 | Kilometers | 1  | 1  | 100% | 58  |
| Limay | 11.1.049 | 11.1.049.11.1.01 |  | Mixed Species     | 1.3 | Hectares   | 2  | 0  | 0%   | 385 |
| Limay | 11.1.050 | 11.1.050.11.1.01 |  | Mixed Species     | 0.6 | Hectares   | 5  | 5  | 100% | 166 |
| Limay | 11.1.050 | 11.1.050.11.2.01 |  | Boundary Planting | 0.4 | Kilometers | 0  | 0  | n/a  | 100 |
| Limay | 11.1.050 | 11.1.050.11.2.02 |  | Boundary Planting | 0.8 | Kilometers | 1  | 1  | 100% | 197 |
| Limay | 11.1.051 | 11.1.051.11.1.01 |  | Mixed Species     | 0.8 | Hectares   | 2  | 2  | 100% | 246 |
| Limay | 11.1.051 | 11.1.051.11.1.02 |  | Mixed Species     | 0.4 | Hectares   | 2  | 0  | 0%   | 110 |
| Limay | 11.1.052 | 11.1.052.11.1.01 |  | Mixed Species     | 0.7 | Hectares   | 6  | 6  | 100% | 199 |
| Limay | 11.1.052 | 11.1.052.11.1.02 |  | Mixed Species     | 2.7 | Hectares   | 24 | 0  | 0%   | 785 |
| Limay | 11.1.052 | 11.1.052.11.1.03 |  | Mixed Species     | 0.9 | Hectares   | 8  | 0  | 0%   | 267 |
| Limay | 11.1.053 | 11.1.053.11.1.01 |  | Mixed Species     | 2.2 | Hectares   | 19 | 19 | 100% | 646 |
| Limay | 11.1.053 | 11.1.053.11.2.01 |  | Boundary Planting | 0.2 | Kilometers | 2  | 0  | 0%   | 49  |
| Limay | 11.1.053 | 11.1.053.11.2.02 |  | Boundary Planting | 1.4 | Kilometers | 11 | 0  | 0%   | 335 |
| Limay | 11.1.053 | 11.1.053.11.2.03 |  | Boundary Planting | 0.0 | Kilometers | 1  | 0  | 0%   | 2   |
| Limay | 11.1.053 | 11.1.053.11.2.04 |  | Boundary Planting | 0.6 | Kilometers | 6  | 0  | 0%   | 156 |
| Limay | 11.1.054 | 11.1.054.11.1.01 |  | Mixed Species     | 1.1 | Hectares   | 7  | 7  | 100% | 341 |
| Limay | 11.1.055 | 11.1.055.11.1.01 |  | Mixed Species     | 0.8 | Hectares   | 3  | 3  | 100% | 222 |
| Limay | 11.1.055 | 11.1.055.11.2.01 |  | Boundary Planting | 1.9 | Kilometers | 3  | 2  | 67%  | 464 |

|       |          |                  |  |                   |     |            |    |   |      |     |
|-------|----------|------------------|--|-------------------|-----|------------|----|---|------|-----|
| Limay | 11.1.056 | 11.1.056.11.1.01 |  | Mixed Species     | 1.3 | Hectares   | 6  | 6 | 100% | 382 |
| Limay | 11.1.057 | 11.1.057.11.1.01 |  | Mixed Species     | 0.2 | Hectares   | 3  | 2 | 67%  | 47  |
| Limay | 11.1.057 | 11.1.057.11.2.01 |  | Boundary Planting | 0.5 | Kilometers | 4  | 4 | 100% | 122 |
| Limay | 11.1.057 | 11.1.057.11.2.02 |  | Boundary Planting | 0.3 | Kilometers | 2  | 0 | 0%   | 70  |
| Limay | 11.1.057 | 11.1.057.11.2.03 |  | Boundary Planting | 0.0 | Kilometers | 1  | 0 | 0%   | 10  |
| Limay | 11.1.057 | 11.1.057.11.2.04 |  | Boundary Planting | 0.1 | Kilometers | 1  | 0 | 0%   | 15  |
| Limay | 11.1.057 | 11.1.057.11.2.06 |  | Boundary Planting | 0.1 | Kilometers | 1  | 1 | 100% | 34  |
| Limay | 11.1.057 | 11.1.057.11.2.07 |  | Boundary Planting | 0.5 | Kilometers | 4  | 4 | 100% | 114 |
| Limay | 11.1.058 | 11.1.058.11.2.01 |  | Boundary Planting | 1.0 | Kilometers | 8  | 0 | 0%   | 238 |
| Limay | 11.1.058 | 11.1.058.11.2.02 |  | Boundary Planting | 0.2 | Kilometers | 2  | 0 | 0%   | 53  |
| Limay | 11.1.058 | 11.1.058.11.2.03 |  | Boundary Planting | 1.2 | Kilometers | 10 | 0 | 0%   | 301 |
| Limay | 11.1.058 | 11.1.058.11.2.04 |  | Boundary Planting | 1.7 | Kilometers | 14 | 0 | 0%   | 423 |
| Limay | 11.1.058 | 11.1.058.11.2.05 |  | Boundary Planting | 0.2 | Kilometers | 0  | 0 | n/a  | 53  |
| Limay | 11.1.059 | 11.1.059.11.1.01 |  | Mixed Species     | 0.9 | Hectares   | 3  | 3 | 100% | 273 |
| Limay | 11.1.059 | 11.1.059.11.2.01 |  | Boundary Planting | 1.2 | Kilometers | 4  | 4 | 100% | 296 |

|             |      |               |
|-------------|------|---------------|
| Total areas | 35.8 | Kilometers*** |
|             | 84.3 | Hectares      |

|                        |        |
|------------------------|--------|
| Total tCO <sub>2</sub> | 33,684 |
|------------------------|--------|

\* Parcel not monitored due to small size.

\*\* Monitoring Target and Monitoring Result are based on number of plots planted.

\*\*\* 35.8 km of Boundary Planting represents to 29.3 ha equivalent of Mixed Species Plantation.

Note: Monitoring Targets and Monitoring Results marked as 0 mean that no seedlings were available for these producers to plant. For this reason, no monitoring was done and producers were not penalized.

### Appendix 3: Monitoring results for continuing plan vivos

The following table outlines monitoring results for continuing participants (plan vivos where Certificates are already issued).

| Vintage | Year of monitoring | Location | Plan Vivo | Parcel Number    | Name of producer <sup>2</sup> | Technical Specification | Area (ha) | Target * | Result * | % of Plots Seeded | tCO <sub>2</sub> generated |
|---------|--------------------|----------|-----------|------------------|-------------------------------|-------------------------|-----------|----------|----------|-------------------|----------------------------|
| 2010    | 2                  | Limay    | 10.1.001  | 10.1.001.10.1.01 |                               | Mixed Species           | 1.0       | 9        | 9        | 100%              | 285                        |
| 2010    | 2                  | Limay    | 10.1.002  | 10.1.002.10.1.01 |                               | Mixed Species           | 1.9       | 10       | 10       | 100%              | 574                        |
| 2010    | 2                  | Limay    | 10.1.002  | 10.1.002.10.1.02 |                               | Mixed Species           | 0.9       | 7        | 7        | 100%              | 273                        |
| 2010    | 2                  | Limay    | 10.1.003  | 10.1.003.10.1.01 |                               | Mixed Species           | 3.4       | 29       | 20       | 69%               | 1005                       |
| 2010    | 2                  | Limay    | 10.1.004  | 10.1.004.10.1.01 |                               | Mixed Species           | 0.9       | 6        | 6        | 100%              | 264                        |
| 2010    | 2                  | Limay    | 10.1.005  | 10.1.005.10.1.01 |                               | Mixed Species           | 0.9       | 6        | 6        | 100%              | 257                        |
| 2010    | 2                  | Limay    | 10.1.005  | 10.1.005.10.1.02 |                               | Mixed Species           | 0.6       | 4        | 0        | 0%                | 188                        |
| 2010    | 2                  | Limay    | 10.1.006  | 10.1.006.10.1.01 |                               | Mixed Species           | 1.4       | 9        | 0        | 0%                | 414                        |
| 2010    | 2                  | Limay    | 10.1.007  | 10.1.007.10.1.01 |                               | Mixed Species           | 1.7       | 9        | 9        | 100%              | 505                        |
| 2010    | 2                  | Limay    | 10.1.008  | 10.1.008.10.1.01 |                               | Mixed Species           | 2.1       | 8        | 8        | 100%              | 611                        |
| 2010    | 2                  | Limay    | 10.1.009  | 10.1.009.10.1.01 |                               | Mixed Species           | 1.6       | 8        | 8        | 100%              | 480                        |
| 2010    | 2                  | Limay    | 10.1.010  | 10.1.010.10.1.01 |                               | Mixed Species           | 2.1       | 12       | 10       | 83%               | 613                        |
| 2010    | 2                  | Limay    | 10.1.011  | 10.1.011.10.1.01 |                               | Mixed Species           | 1.7       | 11       | 11       | 100%              | 497                        |

<sup>2</sup> Due to data protection regulations, the names of participants have been removed from the public version of this document

|      |   |       |          |                  |  |               |     |    |    |      |     |
|------|---|-------|----------|------------------|--|---------------|-----|----|----|------|-----|
| 2010 | 2 | Limay | 10.1.012 | 10.1.012.10.1.01 |  | Mixed Species | 1.0 | 6  | 6  | 100% | 287 |
| 2010 | 2 | Limay | 10.1.013 | 10.1.013.10.1.01 |  | Mixed Species | 1.0 | 6  | 5  | 83%  | 281 |
| 2010 | 2 | Limay | 10.1.014 | 10.1.014.10.1.01 |  | Mixed Species | 1.6 | 11 | 11 | 100% | 468 |
| 2010 | 2 | Limay | 10.1.015 | 10.1.015.10.1.01 |  | Mixed Species | 1.1 | 8  | 8  | 100% | 319 |
| 2010 | 2 | Limay | 10.1.015 | 10.1.015.10.1.02 |  | Mixed Species | 1.6 | 11 | 10 | 91%  | 471 |
| 2010 | 2 | Limay | 10.1.016 | 10.1.016.10.1.01 |  | Mixed Species | 2.1 | 18 | 13 | 72%  | 612 |
| 2010 | 2 | Limay | 10.1.016 | 10.1.016.10.1.02 |  | Mixed Species | 0.8 | 4  | 0  | 0%   | 236 |
| 2010 | 2 | Limay | 10.1.016 | 10.1.016.10.1.03 |  | Mixed Species | 1.7 | 14 | 14 | 100% | 494 |
| 2010 | 2 | Limay | 10.1.017 | 10.1.017.10.1.01 |  | Mixed Species | 3.0 | 26 | 24 | 92%  | 881 |
| 2010 | 2 | Limay | 10.1.018 | 10.1.018.10.1.01 |  | Mixed Species | 3.1 | 26 | 26 | 100% | 930 |
| 2010 | 2 | Limay | 10.1.019 | 10.1.019.10.1.01 |  | Mixed Species | 1.5 | 13 | 7  | 54%  | 451 |
| 2010 | 2 | Limay | 10.1.020 | 10.1.020.10.1.01 |  | Mixed Species | 0.4 | 3  | 1  | 33%  | 129 |
| 2010 | 2 | Limay | 10.1.020 | 10.1.020.10.1.02 |  | Mixed Species | 0.9 | 6  | 6  | 100% | 258 |
| 2010 | 2 | Limay | 10.1.021 | 10.1.021.10.1.01 |  | Mixed Species | 1.1 | 6  | 6  | 100% | 337 |
| 2010 | 2 | Limay | 10.1.022 | 10.1.022.10.1.01 |  | Mixed Species | 0.5 | 4  | 4  | 100% | 151 |
| 2010 | 2 | Limay | 10.1.022 | 10.1.022.10.1.02 |  | Mixed Species | 0.2 | 1  | 0  | 0%   | 68  |

Total hectares **41.7**

Total tCO<sub>2</sub> **12,342**

\*\* Monitoring Target and Monitoring Result are based on number of plots planted.

*Note: Individual parcel tCO<sub>2</sub> Generated does not perfectly sum to Total tCO<sub>2</sub> due to rounding errors. The total differs by three (3) tonnes.*

## Appendix 4: Payments for Ecosystem Services to date

The following table lists all payments made to producers to date, including how much has been paid since the last annual report. A percentage of the advance payments made to producers has also been removed from these amounts.

| Payment Year | Vintage | PV Number | First Name <sup>3</sup> | Last Name |
|--------------|---------|-----------|-------------------------|-----------|
| 2010         | 2010    | 10.1.001  |                         |           |
| 2010         | 2010    | 10.1.001  |                         |           |
| 2010         | 2010    | 10.1.002  |                         |           |
| 2010         | 2010    | 10.1.002  |                         |           |
| 2010         | 2010    | 10.1.003  |                         |           |
| 2010         | 2010    | 10.1.003  |                         |           |
| 2010         | 2010    | 10.1.004  |                         |           |
| 2010         | 2010    | 10.1.004  |                         |           |
| 2010         | 2010    | 10.1.006  |                         |           |
| 2010         | 2010    | 10.1.006  |                         |           |
| 2010         | 2010    | 10.1.005  |                         |           |
| 2010         | 2010    | 10.1.005  |                         |           |
| 2010         | 2010    | 10.1.007  |                         |           |
| 2010         | 2010    | 10.1.007  |                         |           |
| 2010         | 2010    | 10.1.009  |                         |           |
| 2010         | 2010    | 10.1.009  |                         |           |
| 2010         | 2010    | 10.1.010  |                         |           |
| 2010         | 2010    | 10.1.010  |                         |           |
| 2010         | 2010    | 10.1.011  |                         |           |
| 2010         | 2010    | 10.1.011  |                         |           |
| 2010         | 2010    | 10.1.013  |                         |           |
| 2010         | 2010    | 10.1.013  |                         |           |
| 2010         | 2010    | 10.1.012  |                         |           |
| 2010         | 2010    | 10.1.012  |                         |           |
| 2010         | 2010    | 10.1.014  |                         |           |
| 2010         | 2010    | 10.1.014  |                         |           |
| 2010         | 2010    | 10.1.016  |                         |           |
| 2010         | 2010    | 10.1.016  |                         |           |
| 2010         | 2010    | 10.1.015  |                         |           |
| 2010         | 2010    | 10.1.015  |                         |           |

<sup>3</sup> Due to data protection regulations, the names of participants have been removed from the public version of this document.

|      |      |          |  |  |          |
|------|------|----------|--|--|----------|
| 2010 | 2010 | 10.1.017 |  |  | \$175.54 |
| 2010 | 2010 | 10.1.017 |  |  | \$235.59 |
| 2010 | 2010 | 10.1.018 |  |  | \$193.02 |
| 2010 | 2010 | 10.1.018 |  |  | \$258.13 |
| 2010 | 2010 | 10.1.019 |  |  | \$87.06  |
| 2010 | 2010 | 10.1.019 |  |  | \$117.19 |
| 2011 | 2010 | 10.1.001 |  |  | \$64.77  |
| 2011 | 2010 | 10.1.002 |  |  | \$162.63 |
| 2011 | 2010 | 10.1.003 |  |  | \$246.64 |
| 2011 | 2010 | 10.1.004 |  |  | \$62.66  |
| 2011 | 2010 | 10.1.006 |  |  | \$87.78  |
| 2011 | 2010 | 10.1.005 |  |  | \$96.08  |
| 2011 | 2010 | 10.1.007 |  |  | \$115.29 |
| 2011 | 2010 | 10.1.008 |  |  | \$122.68 |
| 2011 | 2010 | 10.1.009 |  |  | \$102.35 |
| 2011 | 2010 | 10.1.010 |  |  | \$134.71 |
| 2011 | 2010 | 10.1.011 |  |  | \$106.50 |
| 2011 | 2010 | 10.1.013 |  |  | \$63.65  |
| 2011 | 2010 | 10.1.012 |  |  | \$59.25  |
| 2011 | 2010 | 10.1.014 |  |  | \$108.86 |
| 2011 | 2010 | 10.1.016 |  |  | \$298.63 |
| 2011 | 2010 | 10.1.015 |  |  | \$173.12 |
| 2011 | 2010 | 10.1.017 |  |  | \$202.14 |
| 2011 | 2010 | 10.1.018 |  |  | \$221.96 |
| 2011 | 2010 | 10.1.019 |  |  | \$100.37 |

|              |                  |                   |
|--------------|------------------|-------------------|
| <b>Total</b> | <b>All years</b> | <b>\$7,428.75</b> |
|              | <b>2010</b>      | <b>\$4,898.67</b> |
|              | <b>2011</b>      | <b>\$2,530.08</b> |

*Note: The amounts of the second payments made to producers in 2010 were updated based on more precise area measurements, thus vary slightly from the estimates made in the 2010 Annual Report.*