

# ArBolivia Plantation Forestry



An innovative project with an integrated economic, social and environmental approach

Cochabamba / Eelde, December 6, 2010



[www.arbolivia.org](http://www.arbolivia.org)

*Using the Sicirec formula,  
commercial plantation forestry in developing countries  
encourages environmental awareness, helps to preserve biodiversity  
and improves the livelihoods of the local population.*



# Contents

---

1. ArBolivia Introduction
2. ArBolivia Goals
3. Project Building Blocks
4. ArBolivia further Characteristics
5. ArBolivia Organization
6. ArBolivia Legal Structure
7. ArBolivia Finance
8. Project Risks
9. Risk-Management
10. Current Project Status
11. Sicirec Group



# 1. ArBolivia Introduction

## What?

ArBolivia is a pioneering 7,200 hectare commercial plantation forestry operation. Unlike most other commercial plantations, it uses a wide range of predominantly indigenous tree species and shares the benefits of the timber equally with local farmers. Thanks to carbon revenues and low-cost green loans, ArBolivia is still able to offer a projected IRR of 16%+ for investors.

## Why?

The project areas have been severely deforested over the last thirty years, and continue to suffer as a result of extensive migration from the highlands to the tropical lowlands. The ArBolivia project offers a profitable alternative to the total clearing of primary forests and results in livelihood improvement for participating smallholders, while at the same time preserving biodiversity.

## Where?

The project areas are located at the foot of the Andes on the edge of the Amazon Basin across four “departments” in Bolivia.

## When?

The project started in September 2007 following an extended period of research and development dating back to 1995 and has an estimated cycle of about fourty years.

## Who?

The ArBolivia project is an initiative of Sicirec Group and the local NGO Fundación Cetefor and is organized in close cooperation with Bolivian smallholders and farmers federations.

## Asociación Accidental Cetefor-Sicirec (AACS)

The ArBolivia project has been structured as a joint venture between Sicirec Bolivia and Fundación Cetefor. This is known as AACS.

AACS finalises contracts with the participating local farmers, with farmers federations, and with buyers of carbon credits and other environmental services.

## Project Partners



Flemish Government



## 2. ArBolivia Goals

### Forestry / agriculture / agroforestry

- Establishment of a series of small and large scale commercial plantation forestry projects
- Production of a continuous flow of export quality hardwood timber and an improved position in the chain of custody.
- Improved and sustainable land use.
- Improved agriculture and agroforestry practices.
- Prevention of further land degradation.

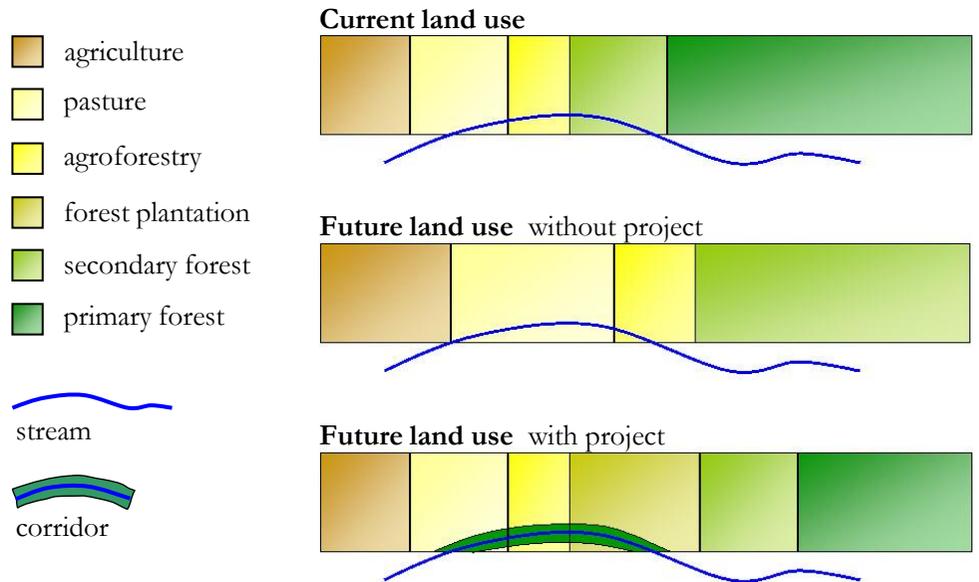
### Benefits for investors

- A projected IRR of 16% or higher.
- Return of capital by 2023.
- Exit possibilities.

### Benefits for smallholders

- Lasting livelihood improvement for participating farmers.
- Training and capacity building for participating farmers and their communities.
- Strengthening current structures of cooperation between local farmers to achieve an improved position in timber markets.
- Access to microcredit for farmers, with trees as collateral.
- Enhanced timber prices for farmers.

### Land use change as a result of project activity

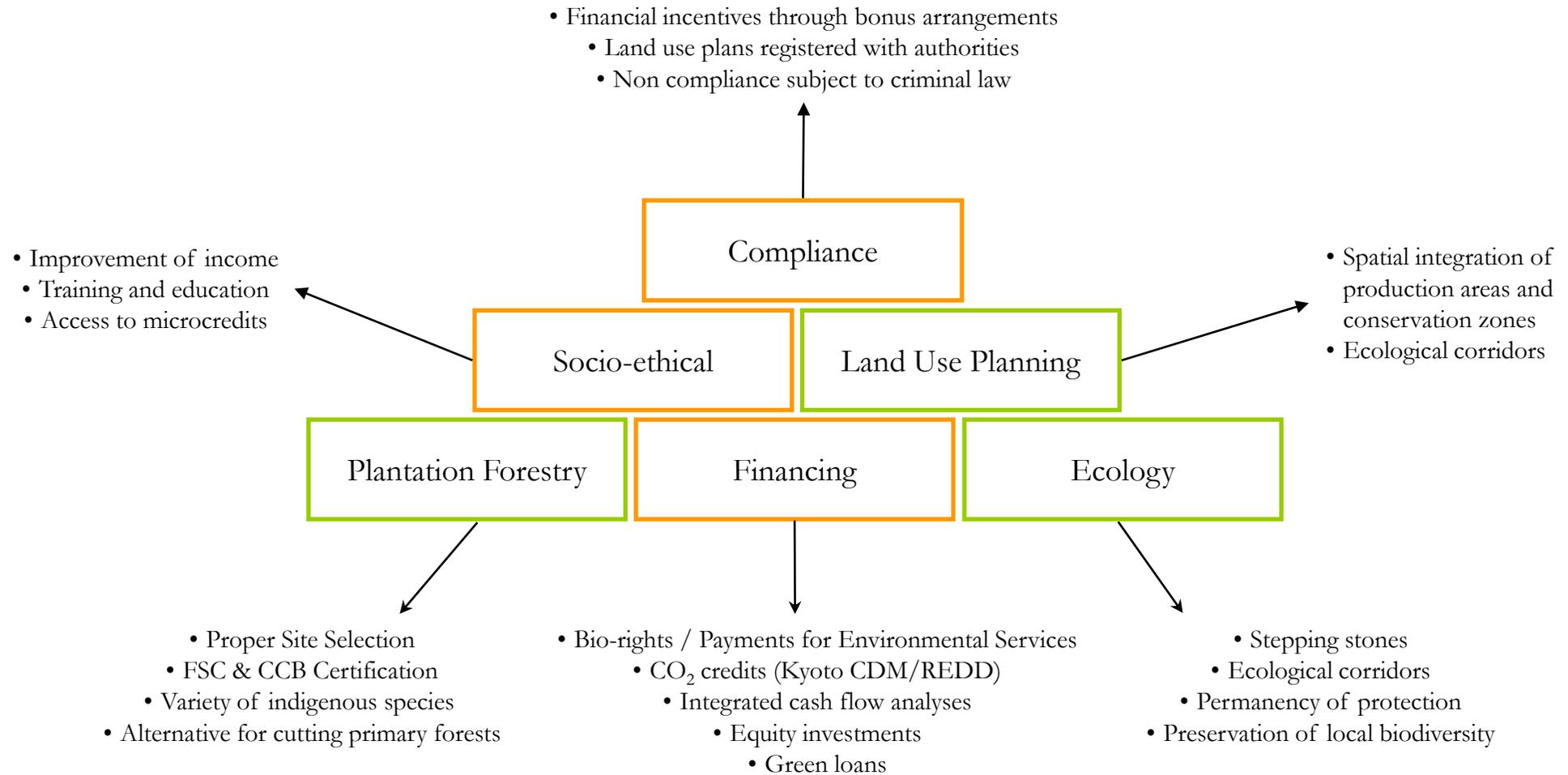


### Conservation / corridors / biodiversity

- Establishment of 1,200 hectares of permanently protected new nature reserves.
- Repair of essential ecological structures.
- Linking of new natural environments with surrounding nature reserves.
- Prevention of leakage (alternative felling elsewhere) and reduction of pressure on surviving primary forests.

The project aims to serve as an innovative example for Latin America of the successful integration of commercial plantation forestry combined with nature conservation and participation by the local population.

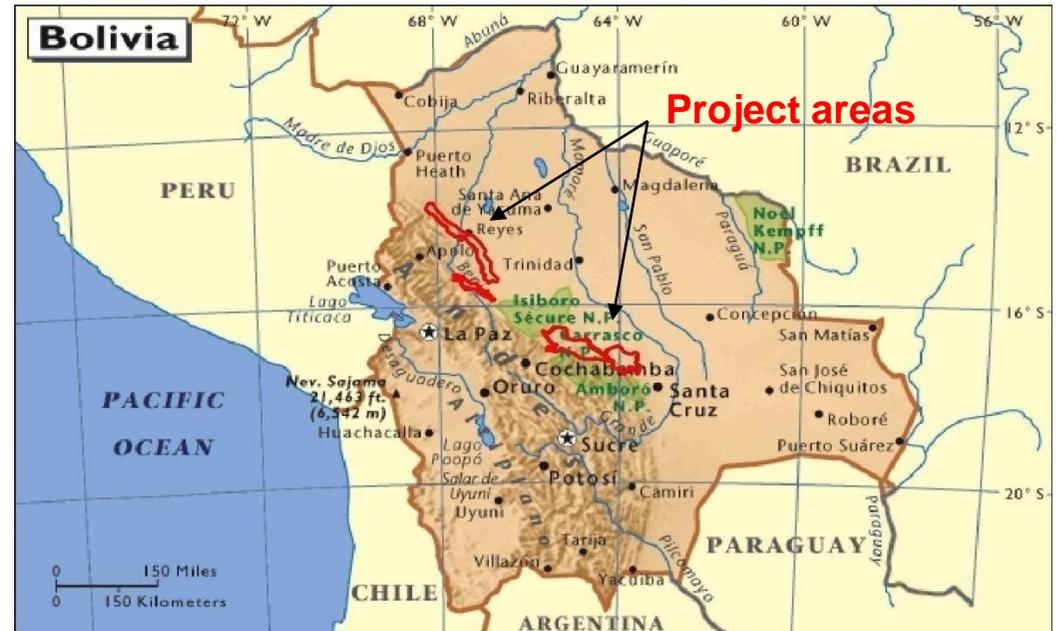
# 3. Project Building Blocks



Sicirec projects integrate Commercial Plantation Forestry, Conservation and Livelihood Improvement.

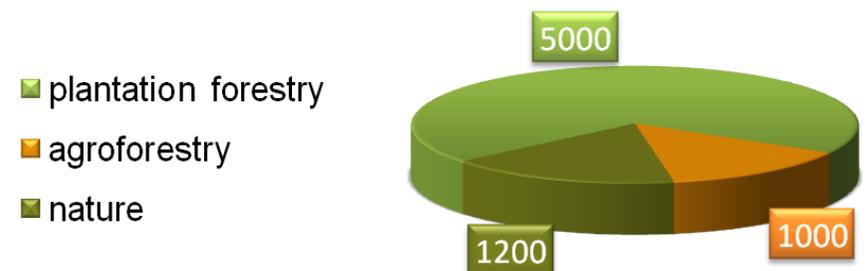
## 4. ArBolivia further Characteristics

- ArBolivia is an innovative 7,200 hectare project, with 5,000 hectares of commercial plantation forestry, 1,000 hectares of agroforestry and 1,200 hectares of mandatory nature conservation.
- The project is established on the land of over 1,500 participating smallholders. The smallholders receive payment for the labour they provide for tree planting and maintenance.
- The nature conservation component is mandatory for smallholders who wish to participate in the project.
- A project cycle of about 40 years with a focus on native hardwood tree species, utilising fast growing species for positive cash flow from year 10 onward.
- Integrated agricultural approach, developed in cooperation with the Food and Agriculture Organisation (FAO), with agroforestry, better land use, the introduction of new crops, and training of the participating farmers.
- Elaborated land use plans cover the farmer's whole property, which results in proper land use, higher yields and sustainability.
- Support from and the involvement of the Bolivian authorities.
- Project management is supported by the establishment of Forestry Committees, which are manned by representatives of AACs (see 7.), Farmers and Farmers Organizations.
- Strong positive effects on the incomes of participating farmers, on the preservation of primary tropical forest and on CO<sub>2</sub> sequestration.
- ArBolivia is externally certified according to **CCBA** standards and **FSC** criteria for sustainable plantation forestry and is registered under **Kyoto** (Certified Emission Reductions).



Project areas

### Distribution of project acreage in hectares



# 5. ArBolivia Organization

## General

- Sicirec provides capital, technical assistance and is responsible for project organization and timber sales.
- AACCS is responsible for project management. It finalises agreements with all participating parties.
- Smallholders provide land and labour. They are responsible for land preparation, tree planting and plantation maintenance.
- Contractors are hired for the elaboration of land use plans, capacity building, site selection, production and transport of trees and technical support to farmers.
- ArBolivia has a highly developed project data base which can be accessed on line ([www.arbolivia.org](http://www.arbolivia.org)).
- Land use plans are registered with the national authorities, through which they assume a legal status. This gives the project an instrument with which to enforce regulatory compliance.
- Farmers organizations are contracted to assist with coordination.
- Farmers of one or more communities together with representatives of AACCS and the Contractor form Forestry Committees. The committees oversee the due fulfilment of the contracts by the project partners. They also play an arbitrational role in some cases and have a decisive say in conflicts concerning plantations.

## Conservation / corridors / biodiversity

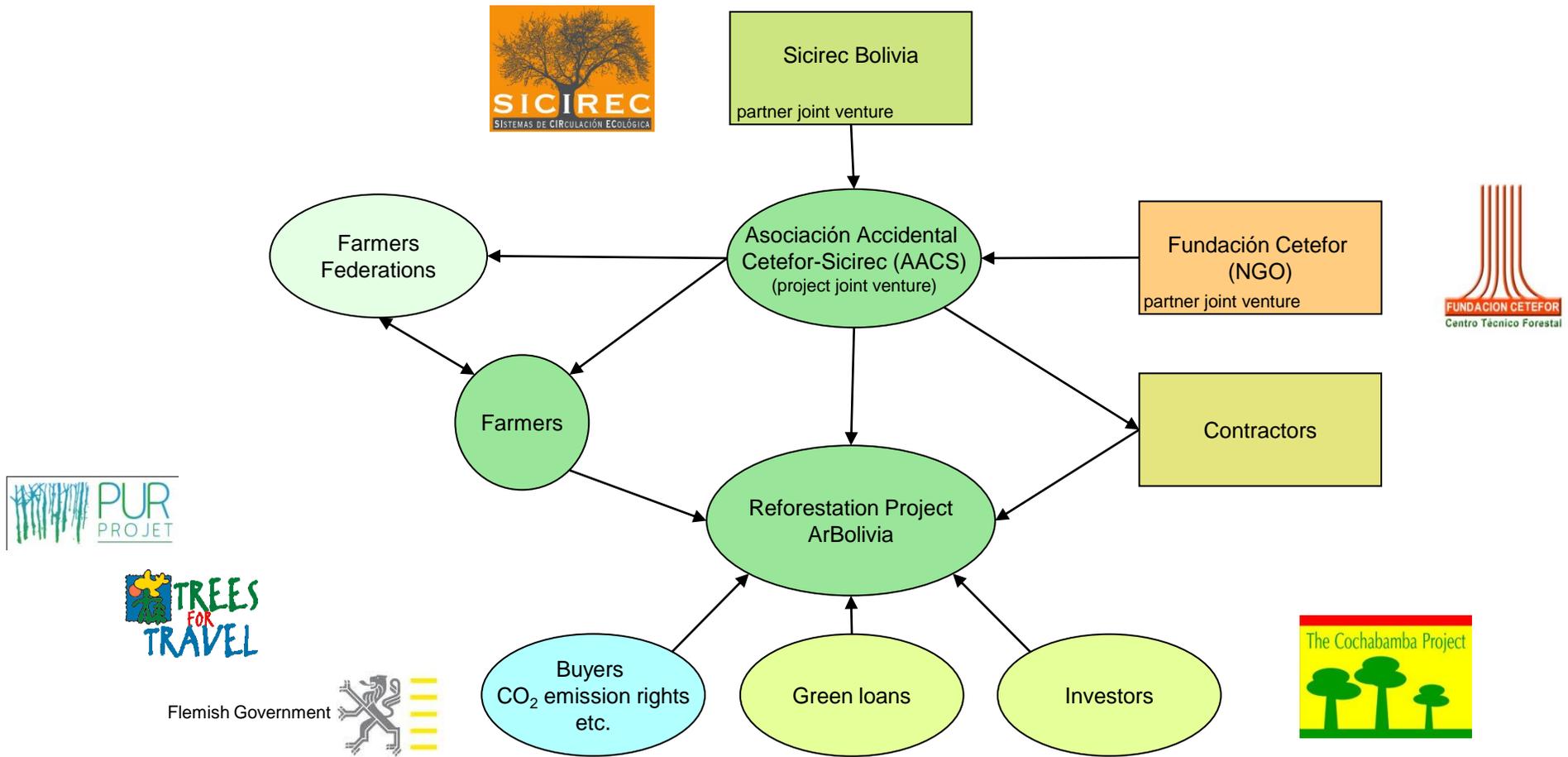
- Participating smallholders are obliged to designate at least 20% of the surface of the forest plantation they create for nature conservation and ecological repair.
- Technical support for improving agriculture and agroforestry prevents “leakage”.
- In some communities conservation areas are created on community lands which results in larger reserves in one unit.

## Finance

- All project finance is controlled by Sicirec Group B.V. in The Netherlands.
- Innovative financing through sales of carbon credits, payments for environmental services, green loans and equity investments.
- The farmers receive partial payment for land preparation, for tree planting, and for the annual plantation maintenance.
- The farmers receive 50% of the net timber revenues.
- A proportion of the revenue payments to the farmers is deferred, at the latest until the completion of the project, to stimulate compliance with obligations.
- Because of its conservation goals ArBolivia qualifies for green loans from Dutch “Green Funds”.
- The project helps farmers to improve agriculture and agroforestry practices. All agroforestry revenues accrue solely to the farmers.



# 6. ArBolivia Legal Structure



Fundación Cetefor and Sicirec Bolivia are the managing partners of the project. Their mutual obligations have been set out in an Asociación Accidental agreement.

The Flemish Government has bought part of the Certified Emission Reductions (CERs) in respect of its Kyoto obligations and the Dutch Trees for Travel Foundation has bought part of the Verified Emission Reductions (VERs) from the conservation areas.

France based The Pure Project has subsidised the planting of 400,000 trees, which in turn have been sold to Hugo Boss for its “One Fragrance, One Tree” initiative and Nestlé Waters France.

The UK based Industrial and Provident Society “The Cochabamba Project Ltd.” and Sicirec Group itself have provided the necessary investments until now.

# 7. ArBolivia Finance

On the basis of a realistic scenario the total project financing needed for ArBolivia until break even amounts to \$17.4 million. This is to be covered by equity investors, carbon credit sales and other environmental services, and green loans.

Project financing to date	Total
Investors	2,500,000
CO <sub>2</sub> credits	500,000
<b>Total USD</b>	<b>3,000,000</b>

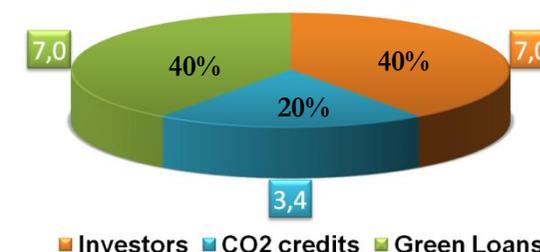
2010 = season 2010-2011

Project financing still needed	2010	2011	2012	2013	2014	Total
Investors	100,000	100,000	300,000	2,700,000	1,300,000	4,500,000
CO <sub>2</sub> credits	200,000	600,000	1,200,000	900,000	0	2,900,000
Green loans	2,400,000	2,200,000	2,400,000	0	0	7,000,000
<b>Total USD</b>	<b>2,700,000</b>	<b>2,900,000</b>	<b>3,900,000</b>	<b>3,600,000</b>	<b>1,300,000</b>	<b>14,400,000</b>

## Project financing and returns: realistic scenario

- Of the total investment of \$17.4 million, 40% is to be financed by equity investors, 20% is to be financed by sales of CO<sub>2</sub> rights and 40% is to be financed by green loans.
- A total of \$3.0 million has been invested into the project to date.
- The level of finance still required until the project breaks even is \$14.4 million.
- Almost 70% of this will come from carbon credit sales and green loans, and only \$4.5 million or less from investors.
- Investors will receive 26% of the revenues from 4,300 hectares. The equivalent price for 100% of the revenues per hectare therefore amounts to \$4,000.
- Since the investors only have to cover a small part of the project costs, the anticipated IRR over the period 2010-2048 is 16% or more
- Under this scenario investors will be fully repaid by 2023.
- The maturity of timber assets and positive cashflows beyond 2023 provide an attractive basis for a proposed trade sale at that time.

Total project financing by source in \$m.



## IRR upside potential

- The attractive social and environmental characteristics of the project together with CDM and CCBA accreditation may lead to higher prices for CO<sub>2</sub> rights than have been calculated, or earlier sales than forecast.
- Anticipated income from carbon credit sales has been based exclusively on sales of credits from the plantation and agroforestry hectares and does not include sales of credits from conservation hectares and revenues from other environmental services.
- Recently, interest in corporate sponsorship for tree planting has increased, which will further improve the IRR for the investors.
- For these reasons, the annual IRR over the full project cycle may increase to over 30%.

# 8. Project Risks

## General

- ArBolivia's risk-profile may be considered as high as it involves a plantation forestry project with a long cycle in a developing country. ArBolivia has however been developed in close cooperation with the local population and the Bolivian government.

## Risks of natural causes

- Thanks to the geographical locations hurricanes, volcanic eruptions, landslides and earthquakes are extremely unlikely to occur in the project areas.
- In some of the project areas floods occur once or twice a year. This factor is taken into account during the site selection process and where applicable, tree species are selected that are resistant to flooding. Therefore, damage by floods is also unlikely.
- Since the project areas are located in one of the most humid regions of the world, the likelihood of forest fire damage is low.
- Since the project areas are dispersed over several provinces and individual farms are not interconnected, it is impossible for isolated incidents to lead to the destruction of all the trees.

## Forestry risks

- The ArBolivia forestry risks are estimated as relatively low because a wide range of almost entirely indigenous tree species is used.
- In addition a comprehensive scientific process is employed to select appropriate sites and match the most suitable species to the soil conditions. The risk of disease and/or poor growth of the trees is therefore minor.

## Economic risks

- For a good picture of the economical risks we refer to the IMF country report 10/27 of 23 December 2009. A few citations:
- Despite the global crisis, the Bolivian economy has performed well in 2009, and Bolivia remains in a position of low vulnerability.
- Improving the investment climate remains one of Bolivia's top priorities.
- The authorities attach importance to strategic partnerships with the private sector to achieve sustained growth.
- In the financial sector, recent regulations to strengthen liquidity and credit risk management are appropriately focused.
- Standard stress tests suggest that the sustainability of Bolivia's public and external indebtedness is resilient to a series of shocks.



# 9. Risk-management

## Risk-management

- The project activities of ArBolivia are fully in line with the goals set out in Bolivia's National Development Plan.
- Bolivia's nationalisation policy regarding private companies is aimed at companies which have been privatised in the past. Nationalisation in such cases means that the Bolivian Government takes a 51% share in a company. ArBolivia however does not fit the profile of companies at risk of nationalisation.
- All participating farmers have been reviewed up front during an intake-period and their rights and obligations have been laid down in a contract.
- The plantations and the contracts with the farmers are registered with the Bolivian Authority for Forests and Territory. This gives ArBolivia a tool, in the event of illegal felling or timber trade, to prosecute the farmers under criminal law.
- Because ArBolivia can realise fair trade prices, the 50% of the timber revenues that accrues to the smallholders is three to eight times as much as they would receive on the free market from local buyers for 100% of the timber.
- The plantations may serve as collateral for microcredit loans to the farmers. This will stimulate the farmers to maintain the plantations in the best possible condition, since the higher the value of the plantations, the higher the possible credit for the farmer.
- As and when the production targets of the project are realised, through their umbrella organisations (cooperatives, villages), the farmers receive a 10% bonus on top of their earnings.
- The Forestry Committees, that are strongly related to the pre-existing organization structures of the farmers, are authorised to impose sanctions in cases where farmers breach the terms of their contract.
- Collapse of the carbon credit market is a possible risk to the extra financing opportunities of ArBolivia. This possible event is largely compensated by also arranging for the project financing through green loans, REDD, tree planting certificates and other environmental services.



# 10. Current Project Status

---

## Project Implementation

- Project operations started in September 2007.
- In 2007 the project signed an Emission Reductions Purchase Agreement (ERPA) with the Flemish Government.
- In 2008 the project also signed an ERPA with Trees for Travel Foundation from The Netherlands.
- In 2009 and 2010 the project signed contracts for tree planting subsidy schemes with The Pure Project from France.
- Currently some 100 people are working on the project implementation.
- To date a total of 1,000 smallholders have been contracted to participate in the project.
- To date a total of about 1,600 of the 5,000 plantation hectares have been planted.
- Four large scale corridors have been designed around streams and rivers.
- 400 conservation hectares have been selected and registered.
- Since early 2009 the project has its own website ([www.arbolivia.org](http://www.arbolivia.org)), which is linked to the project's database.

## Project Finance

- The first project activities have been financed with revenues from carbon sales to the Flemish government.
- About 25% of the project costs to date were financed by Sicirec Group.
- The largest investor to date is the Industrial & Provident Society, The Cochabamba Project from the United Kingdom.
- In January 2010 the project received the “Green Status” from the Dutch government. It therefore now officially qualifies for green loans from Dutch investment bank “green funds”.
- The project may apply for green loans up to an amount of 5.4 million Euros (7 million US dollars).
- Equity financing is now sought for the remainder of the project.
- In addition, the project is looking for parties that will act as a guarantor for part of the “Green Loans”.

## Project Certification

- In 2009 the first Project Design Document (PDD) was registered with the UNFCCC.
- Registration of another two PDDs is now in progress. Registration is expected by October 2010.
- Climate Community and Biodiversity Alliance (CCBA) certification is expected shortly. It is evident that the project will obtain a Gold Rating.



# 11. Sicirec Group

---

Sicirec was established in 1991 as a Costa Rican S.A. and started off as a consumer organization for investors in hardwood plantations.

In 1996 it received authorisation from the Dutch National Bank (DNB) under the Act on the Supervision on Collective Investment Schemes.

Sicirec's main activities over this period were: fund management, management of a trading platform for plantation forestry investments and looking after the interests of plantation forestry investors.

Sicirec has been a key figure in the plantation forestry investment business for fifteen years and is highly regarded for its opinion on plantation forestry companies and the investment schemes they offer.

Sicirec developed a proprietary Rating System for rating plantation forestry companies.

Sicirec Group B.V. was established in 2007, together with Sicirec Investment Management B.V. (fund management), Sicirec Forestry Consultancy B.V. (consultancy) and EcoSafe Trust B.V. (custodian).

Sicirec, now an entrepreneur, initiates its own plantation forestry projects, in which it juxtaposes commercial plantation forestry parcels with nature conservation areas. For Sicirec this combination is a sine qua non.

The emphasis in Sicirec's projects is on the combination of attractive financial returns for investors, poverty alleviation and lasting preservation of biodiversity.

Transparency and integrity are the backbone of Sicirec's business practice.

For further information about Sicirec please visit **[www.sicirec.org](http://www.sicirec.org)**.

