TREE PLANTATIONS FOR THE CARBON MARKET

Why, how and where are they expanding?



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Tree plantations for the carbon market. Why, how, and where are they expanding?

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World Rainforest Movement

- ⊘ Av Bolivia 1962 BIS
 - CP 11500 Montevideo, Uruguay
- S Ph.: +598 2605 6943
- Wrm@wrm.org.uy
- www.wrm.org.uy

Introduction

The carbon offsetting business has proved to be a very efficient mechanism for companies to profit from climate chaos, either directly – through the sale of carbon credits – or indirectly –, allowing companies to continue their fossil fuel-based activities. In the rush to expand this business, tree plantation projects have attracted a growing number of profit seekers such as speculators, carbon consultants, forestry companies and oil corporations. As a result, tree plantations for carbon offsetting now represent increasing threats to land-dependent communities.

After an initial push around the 2000s, we are now seeing a new round of tree plantation initiatives for the carbon market. In the past three years, the number of plantation projects for voluntary carbon markets has more than doubled. These projects have not only increased in number, but also in scale. Developers claim that their tree planting projects have one of the highest average ratios of emission uptakes/reductions when compared to other types of projects.

This briefing provides an overview of the expansion of tree plantations aimed at carbon markets. Where are these plantations located? What do they look like? Who is profiting from them? What have been the impacts for communities living on the lands these projects occupy? And what international initiatives are taking place to boost tree plantations for carbon offsetting? These are just a few of the questions explored on the following pages.

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Carbon, land and trees

1

Climate chaos requires that companies stop extracting and using petroleum and other fossil fuels. This would, of course, shake the foundations of a global economy built on cheap energy generated by burning fossil coal, gas and oil, while also threatening the profits of some of the planet's wealthiest corporations.

To delay the inevitable and discourage governments from passing laws that require companies to actually reduce their emissions in line with what is needed to avoid uncontrollable climate chaos, corporations, together with the US and other governments, have devised the mechanism of **carbon offsetting**.

The trade in carbon offsets has grown rapidly following the signing of the Paris Agreement in 2016, and it has seen scandals and widespread criticism. With a turnover of US\$ 2.4 billion in 2023¹, the voluntary carbon market has turned into a promising profit opportunity for companies taking part in it. On the one hand, giant corporations producing emissions from fossil fuel-based activities can continue and even expand their businesses, claiming their emissions are being offset. They benefit from the claim that buying carbon offsets makes them **'carbon-neutral**,' suggesting that they are doing their part to tackle climate change².

However, polluters who buy carbon offsets are not the only ones profiting from this new business opportunity. Many other 'players' – such as carbon firms, traders, auditors, rating agencies, certification consultancies, and investment funds – have discovered that there is quick money to be made from generating and marketing carbon credits.

The more this market grows, the more it diverts and delays industrial countries – most responsible for the climate chaos – from attacking the root causes of the problem and taking measures such as leaving fossil fuels in the ground.

1.1- Carbon offsetting and trees in a nutshell

The logic of offsetting emissions through projects that prevent deforestation or by planting trees is based on the fact that trees absorb carbon from the atmosphere and store it in their leaves, trunks and roots. As such, anyone who plants extra trees and claims they would not have been planted without the expected income from the carbon market can earn money by selling carbon credits to companies that claim they are unable to reduce their own emissions. The extra carbon allegedly stored by planting extra trees cancels out – or 'offsets' – the extra fossil carbon. On a balance-sheet, the result of the calculation is (net) zero. This is why many polluting companies have published 'net-zero' emission promises rather than 'zero emission' promises: adding the 'net' allows them to continue polluting as long as they purchase enough carbon credits.

WHY ARE CORPORATIONS SO INTERESTED IN CARBON OFFSETTING?

Mineral coal, fossil oil and gas are made up of ancient biomass that lived millions of years ago. The carbon stored in this fossil biomass is released into the atmosphere when these fossil fuels are burned. Because so much fossil carbon has been added to the atmosphere, the climate is rapidly changing. The solution is to stop putting fossil carbon into the atmosphere by turning off the fossil fuel tap. However, many corporations would see their profits drop sharply if they stopped burning fossil fuels. It is therefore very convenient for them to claim that other initiatives (such as planting trees) can remove carbon from the atmosphere, making room for their additional carbon discharges. The corporations argue they do not cause damage to the climate even if they keep pumping fossil carbon into the atmosphere.

The misguided concept of offsetting emissions by planting or conserving trees has many contradictions. The most basic of these is the fact that its logic completely ignores the fundamental differences between "fossil carbon" and "biotic carbon," which are also called slow and fast carbon cycles (see more about the differences in <u>Is All Carbon the Same?</u>). In addition, the certification of carbon offsetting projects – in particular avoided deforestation and tree planting projects – is also contradictory and <u>intrinsically incapable</u> of doing what it set out to do.

As a result, tree-based projects have generated millions of "phantom" credits – that is, credits not backed by any extra carbon stored in trees. Beyond the profusion of phantom credits, other recurrent impacts of these projects include land grabs and other forms of violence against communities that occur when such projects are implemented (<u>click here to review a bank of evidence</u>). Finally, the idea of carbon offsetting makes all the other impacts of fossil carbon extraction invisible.



1.2- Creating and trading carbon credits

Carbon credits are the tradeable units that make up carbon markets. In theory, a carbon credit represents the reduction or removal of one ton of carbon dioxide from the atmosphere. In other words, one carbon credit works like a voucher for its holder to emit one ton of carbon dioxide, hence the term 'offsetting.' Thus, when a company claims to be "net-zero" or "carbon-neutral," it is usually because it has bought as many carbon credits as the carbon emissions that it continues to produce.

Rather than a physical product or commodity, a carbon credit resembles instruments traded in financial markets such as stocks, bonds and other securities. It explains why carbon credits are not only purchased by companies and individuals who want to offset their emissions, but also by traders and speculators. One carbon credit is currently worth somewhere between less than US\$ 1 and many dozens of US dollars. In any case, once the emissions to be offset occur, the 'license to pollute' given by the carbon credit terminates, and the carbon credit is removed from the market – or 'retired,' to use carbon market jargon.

Carbon credits are generated by projects that claim to remove carbon dioxide from the atmosphere or to prevent new carbon emissions. For such a scheme to count as an offsetting project and participate in carbon markets, it must be certified as such. Typically, there are three different mechanisms under which these projects can be developed to generate and sell carbon credits: • Mechanisms established by international treaties (such as the United Nations Clean Development Mechanism –CDM – and the Paris Agreement); • Mechanisms developed by regional, national, or sub-national governments; • Private mechanisms offered by entities such as Verra that create and manage independent (and highly unregulated) standards for carbon credit project certification. Over the last five years, this mechanism has accounted for most of the volume of carbon credits issued³.

Once generated, carbon credits are traded on two kinds markets:

• So-called "**voluntary**" **markets** in which companies buy credits for the purpose of complying with self-established mitigation commitments, avoiding regulation, obtaining finance for the expansion of their fossil fuel intensive production, and allowing them to advertise their products and services as 'carbon neutral.' Carbon credits traded in voluntary markets are mainly derived from private carbon standards.

• **Compliance markets** created by international, national or regional public policies that require companies to reduce or offset their emissions. One such example is the European Union Emissions Trading System (EU ETS). There is also a strong pressure to include carbon offsetting in the UN Paris Agreement. When people speak about "Article 6" of the Paris Agreement, they are referring

to the controversial negotiations about the extent to which countries can use carbon offsets to achieve their emission reduction targets under the UN Paris Agreement.

1.3- Why are most carbon credits issued by land-based projects?

A wide range of activities can be used to apply for generating carbon credits. Examples include wind and solar energy projects, waste management, distributing 'efficient' cookstoves to communities, industrial carbon capture and enhanced industrial technologies, to mention just a few. However, the projects that lead the generation and sales of carbon credits are framed as so-called '**Forestry & Land Use**' using carbon market jargon.

Agriculture Carbon Capture & Storage Chemical Processes Household & Community Industrial & Commercial Forestry & Land Use Renewable Energy Transportation Waste Management

Quantity of carbon credits issued by scope

Through December 2023. Source: Voluntary Registry Offsets Database.

In the current carbon rush led by companies that want to be seen as carbon neutral, **forest conservation** and **tree plantation** projects have features that make them very attractive to investors. Compared to other categories, they generally require lower investments in relation to the number of credits they can generate. In addition, it is easier to manipulate the calculation of the volume of carbon credits that these land-based projects can generate. In doing so, project developers can exaggerate the carbon savings and thus increase the volumes of credits they can sell. (For more on this methodological issue, see Section 3.1).

It is no coincidence that **forest conservation projects** that sell carbon credits have attracted the attention of dozens of investigators and researchers in recent years. These projects claim to **reduce** carbon emissions by avoiding deforestation. However, studies and articles have revealed fraud and chronic overstatement of the reduction in deforestation – that is, the stated goal of these projects, on which the calculation of their carbon credits is based⁴. As a direct consequence of these investigations, the demand for "nature-based"⁵ credits fell sharply. The category of avoided deforestation projects, which held the largest share on the voluntary carbon market in 2022, became the least significant in 2023, according to the price reporting service Quantum Commodities Intelligence (QCI).⁶

Given that the main standard body for such forest conservation offset projects, Verra, was forced to put many projects "on hold", there was also a decrease on the supply side, with the issuance of credits from avoided deforestation projects shrinking abruptly by more than 40 percent in the same period. In response, carbon market profiteers launched a series of what they term 'integrity' initiatives. The promise of these initiatives is to deliver "high-quality" credits – and thus restore the reputational damage caused by the many cases of phantom credits. The inherent flaws of carbon offsetting, however, remain untouched by these initiatives.

These conservation projects claiming to avoid deforestation have been in the spotlight because it became clear that many are based on implausible stories about the threat of deforestation, overstating the emission reduction as a result of the project activities. With the climate crisis quickly accelerating, international climate discussions started to focus more on projects that could **remove** 'excessive' carbon from the atmosphere rather than just **reduce** the release of more carbon dioxide into the atmosphere. Therefore, 'carbon removals' (rather than the reduction of carbon dioxide emissions claimed by conservation or avoided deforestation projects) is quickly becoming the favoured type of carbon credit.

One project category profiting from this new interest in activities that remove carbon from the atmosphere is "**afforestation and reforestation**", in which **tree monocultures** are included. Both the number and size of these tree plantation projects have grown significantly in recent years, attracting new types of investors and revealing new strategies used to profit from the lucrative trade in carbon offsets.

Tree plantations for the carbon markets

Large-scale tree monocultures aimed at the production of pulp, timber and biomass have long been promoted and developed by companies. These monocultures have proven very harmful to neighbouring rural communities and the natural environment.⁷

The link between these plantations and carbon offsetting as a way of generating extra profits for the plantation industry is also not new. The first wave of tree plantation ventures for carbon offsetting appeared around the 2000s and was promoted by the UN's Clean Development Mechanism (CDM). The CDM was one of three carbon trading instruments under the UN Kyoto Protocol and existed from around 2000 until 2023. In a very controversial move, the CDM accepted afforestation and reforestation, including in industrial tree plantations, as a project category that could generate carbon credits, allowing the compensation of emissions in the Global North through tree planting in the global South. It is important to remember that many of these projects had disastrous consequences for the territories where they were set up.

HISTORY REPEATS ITSELF

The first push for carbon offsetting projects involved a global wave of plantation initiatives around the 2000s. Many of these projects were characterized by conflicts with local communities and environmental impacts.

For example, in the 1990s, the <u>FACE-Profafor</u> project started to establish agreements with dozens of communities in the Ecuadorian Andes in order to set up pine plantations financed with Dutch capital to offset the emissions of a thermoelectric plant in the Netherlands. As a result, traditional communities lost the right to use their own lands, water sources dried up, and they were forced to rent land for their own animals to graze on.

Also in the 1990s, a similar project in <u>Uganda</u> established a eucalyptus plantation that led to abuses. Local villagers were beaten, shot, and blocked from entering their own land. Animals were confiscated by armed rangers protecting the "carbon trees."

Another example of this first push for tree plantation projects for carbon offsetting is that of the French-based steel producer <u>Vallourec</u>. This initiative also sought to sell carbon credits within the scope of the CDM. The company's investments in eucalyptus plantations for offsetting emissions in Brazil led to violent conflicts with traditional communities, fraudulent land acquisitions and the expansion of a green desert in the region.

Unlike previous initiatives, the new round of expansion of such plantations is being developed mainly through private carbon standards but often based on methodologies and calculations developed under the CDM. These new schemes are selling carbon credits mostly in voluntary markets. In addition, they are diverse in their design (see section 3) and have grown significantly in number, area and geographical scope.

2.1- How many tree plantation projects exist? How big are they?⁸

In the past three years, the number of applications to register tree plantations under private carbon standards has risen sharply (see graph below). In addition to the solid increase in the number of projects, it is important to note that the average 'size' of the projects is also increasing in terms of estimated emissions reduction. This suggests that the projects are growing in scale.



Afforestation/Reforestation projects for carbon offsetting

The graph includes data from the following four carbon standards: VCS-Verra, Gold Standard, American Carbon Registry (ACR), and Climate Action Reserve (CAR).

By February 2024, there were 492 afforestation and reforestation projects listed in eight private carbon standards (see table below). More than half of these projects are at different stages of implementation and therefore have not yet received approval to start issuing carbon credits. As such, they are not yet allowed to sell the carbon credits.

Carbón Standard	No. of projects (all stages)	Share of total carbon credits issued
Verified Carbon Standard (VCS-Verra)	334	49%
Cercarbono	39	25%
BioCarbon*	21	10%
American Carbon Registry (ACR)	13	10%
Gold Standard	54	6%
Climate Action Reserve (CAR)	17	0%
Social Carbon	5	0%
Plan Vivo	9	**
Total	492	

Afforestation and reforestation projects in private carbon standards (Feb 2024)

* Oil palm projects listed as Agriculture, Forestry and Other Land Use were not considered.

**Issuance data at Plan Vivo not considered, as it is available only on a project-byproject basis.

There are less than 500 tree plantation projects registered in the voluntary carbon market. This number is much lower than other categories of projects, such as **Renewable Energy** – which includes windmills, hydropower and solar panel projects – or Household & Community projects – e.g. cookstoves and biodigester projects. In February 2024, there were 2,300 projects from each of those two categories. However, tree plantations projects, included in the Afforestation/Re forestation category generate significantly larger volumes of carbon credits on average.⁹ Combined with the sustained increase in the number of tree plantation projects in recent years, as shown in the graphic above, this indicates that the extent of land used by these plantations is also increasing.¹⁰

2.2- Where are tree plantations for the carbon market located?

When we look at the location of afforestation and reforestation projects in the registries of private carbon certification standards, the predominance of projects in countries in the global South is noticeable. Countries in the global South currently host most of the initiatives. Among the leading countries are India (75 projects), Colombia (74) and Brazil (32). The African continent as a whole also accounts for a significant number of projects (88). Finally, China is the country that concentrates more projects on its territory, with 76 initiatives.

Distribution of afforestation and reforestation projects by country



Data compiled from eight carbon standards: VCS, GS, Cercarbono, BioCarbon, CAR, ACR, SocialCarbon and Plan Vivo (Feb 2024).

Appendix presents a list of all afforestation and reforestation projects indexed by country according to the databases of the eight private carbon standards analysed.

2.3- Who profits from tree plantations projects for the carbon market

Many different organisations and companies are directly involved in the implementation of tree plantations for carbon market. The first category consists of project proponents and developers:

• Timber and pulp & paper companies ranging from smaller entities to giant transnational corporations. Examples include the Brazilian company Suzano (which has claimed to be the world's largest cellulose producer), Miro and Green Resources (the self-proclaimed largest forestry groups in West and East Africa, headquartered in Europe) and Klabin (which claims to be Brazil's largest paper producer and exporter). They all have projects registered or under validation with Verra's carbon standard VCS (Verified Carbon Standard). They also share a track record of violating communities' rights. (Use these links to learn more about <u>Suzano, Green Resources, Miro</u> and <u>Klabin</u>).

• 'Climate companies' ranging from small carbon consultancies to large companies such as the world's largest carbon trader, South Pole, whose co-founder and CEO resigned in 2023 after in-depth investigations pointed to fraudulent overstatement of credits in the company's main project¹¹. Another example is KlimatX, a company with a track record of taking over community land based on false promises. It recently rebranded as Carbon Done Right and now describes itself as 'the world's first smallholder farmer carbon credit reforestation company.' ¹²

• Companies from various sectors with big carbon footprints. They directly own plantations or have access to carbon credits from plantation projects through investment funds that finance these initiatives. Examples include Total Energies, Eni, Danone, SAP, Michelin, Apple, Mars and many others.

• NGOs – Large conservation NGOs can be either project developers, such as TNC (The Nature Conservancy) and EcoTrust, or partners in the implementation of plantation projects, such as WWF (World Wide Fund for Nature Inc.). Other examples are NGOs with a history of working closely with corporations that have become involved as technical advisors, such as Namati and Solidaridad.

• Governments, through public companies (e.g. Colombia's Ecopetrol and PetroChina) or directly through its departments.

Another set of entities who directly benefit from tree plantation initiatives for carbon offsetting are entities involved in the process of creating carbon credits. These include the organisations that own the certification standards and the auditors hired to carry out the validation and verification procedures required by the certification standards. As shown in Table 1 (Section 2.1 above), in the case of

afforestation and reforestation projects, Verra's carbon standard stands out with nearly 70 percent of the projects and almost 50 percent of the credits issued to date.

VERRA AND CARBON CERTIFICATION

The world's largest creator of carbon offsets from land use activities is Verra. At the end of 2023, it had issued more than 1.2 billion carbon credits. Although it promotes itself as a non-profit organisation, it operates like a company. Verra charges project proponents US\$ 0.20 for each credit issued, among many other fees.¹³ With compensation and benefits over US\$ 400,000 a year,¹⁴ its founding CEO resigned in 2023 after scandals revealed that projects using Verra's methodologies had sold millions of junk carbon credits. The scandals involving Verra projects include the <u>Kariba project</u> in Zimbabwe, the flagship initiative of the world's largest carbon trader, South Pole. With a gaping hole in Verra's certification system that went unnoticed for 10 years, the project actually resulted in more carbon emissions. Another investigation analysed 32 Verra projects and concluded that 94 percent of the credits issued were overestimated and should not have been approved, and that only six projects did not have their effectiveness overestimated. However, the problem goes beyond Verra. The process of certifying carbon projects has inherent flaws that make it a complete farce. To better understand how the carbon certification process works, see Carbon Certification: "The Emperor's New Clothes."

Appendix includes a list of all project proponents listed on the databases of the eight private carbon standards analysed.

What are the main types of tree plantation projects for the carbon market?

Afforestation and reforestation projects for carbon offsetting are diverse in their design. They vary in terms of cultivation systems (species planted and how these are cultivated) and with regard to their "social design" (who owns the land; who works on it; who will hold the rights over the credits, etc.).

With regard to the cultivation systems, pine tree monocultures currently account for 50 percent of the supply of carbon credits from projects with fast-growing species, followed by eucalyptus and china-fir, with around 20 percent each. Based on data from Verra's Verified Carbon Standard (VCS), the share of carbon credits generated by pine tree monocultures is expected to increase considerably over the next 10 years, reaching around 75 percent of the total, according to QCI.

Perhaps concerned about the negative image of industrial tree monocultures because of the ecological, social, economic damage and land conflicts they cause, carbon market promoters paint a different picture. Plantations are often described as "planted forests" in the project descriptions that offer carbon credits, and statistics hide monoculture plantation projects behind 'multispecies' project categories.

DIVERSIFIED PLANTATIONS? WATCH OUT FOR TRICKY STATISTICS

It is important not to draw misleading conclusions from the limited information available in the project documents. Data available from QCI, for example, indicates that more than 50 percent of the supply of credits from Verra's afforestation and reforestation projects currently comes from 'multispecies' projects. This information does not suggest monoculture tree plantations but rather diversified plantations or restoration projects with native species. The reality is quite different. For example, one of Suzano's projects in Brazil, the "ARR Horizonte Carbon Project," ¹⁵ consists of more than 15,000 hectares of plantations, of which an overwhelming 93 percent is a green desert of one single exotic species – eucalyptus. The same goes for Green Resources' "Bukaleba Project" in Uganda, where, according to information in the project description, 95 percent of the planted area is cultivated with pine and eucalyptus monocultures. Nevertheless, as these projects comprise small areas planted with indigenous species, the whole project (and therefore the credits it generates) falls into the category of 'multispecies' projects. Regarding the 'social design,' projects vary in terms of the people and organisations involved, the ownership of the land, the rights over the carbon credits generated and over the trees themselves. In many projects, proponents carry out the planting through hired labour on their own private lands or on land concessions. In other cases, they seek to establish contracts with smallholders, indigenous or traditional communities. If the latter is the case, the communities are usually responsible for planting the trees, while the rights to sell the carbon credits remain entirely or largely with the companies running the carbon project. Although these agreements also vary a lot in their terms and rules, they often include illegal or abusive clauses, and are sometimes even fictitious, as we point out below.

Thus, the category of afforestation and reforestation projects for carbon offsetting covers a wide range of cultivation systems and social designs. These include large-scale industrial tree plantations by transnational companies; monoculture plantations by forestry companies through agreements with smallholder farmers; small-scale agroforestry plantations by smallholder farmers through contracts with either carbon start-ups or well-known forestry companies; native vegetation restoration projects; and so on.

Due to insufficient information in the datasets made available by the carbon standards, it is not possible to accurately estimate and compare the amount of land occupied by different types of projects, such as monocultures vs. diversified/restoration plantations; commercial vs. non-commercial plantations; private plantations vs. smallholder schemes, etc. However, analysis of a sample focused on projects with high estimates of carbon uptake, makes it possible to identify project patterns with common key characteristics: ¹⁶

- Large-scale tree monocultures for carbon on privately owned lands;
- Tree plantations on communities' lands:

- Schemes with smallholder farmers in which companies seek to sign contracts with local communities and small farmers to establish either commercial monocultures or diversified plantations on their lands;

- Long-term leases of community lands

The following sections illustrate the three types of projects described above, showing that any consistent analysis will find both structural and circumstantial problems that stand in contrast to the romantic descriptions that companies and certifiers publish about their projects. Information and data were obtained mainly from the documents available at private carbon standards, particularly_<u>Verra's VCS</u> and <u>Cercarbono</u>).

3.1- Large-scale tree monocultures for carbon on privately owned lands

Industrial tree plantations of pine trees and eucalyptus are among the most common and largest projects for carbon offsetting under the category afforestation and reforestation. Particularly in South America, these projects are usually carried out on privately owned lands or in association with large landowners.

SUZANO PROJECTS IN BRAZIL

One example is the world's largest project in terms of estimated annual removal. Promoted by Suzano, one of the largest pulp and paper companies in the world, the project consists in planting 38,708 hectares of one single species – eucalyptus – in the state of Mato Grosso do Sul, Brazil. According to the project description, the carbon credits will be a result of the change in land use in previous pasture areas, with plantations being developed with "good forestry practices" certified by "sustainable programs." Suzano also owns another similar and already registered project of 14,427 hectares of eucalyptus monocultures in the same state, for which the first issuance of credits took place in July 2023. The project allows the company to claim that it is offsetting its emissions and to generate an extra income by selling credits to entities like the UK-based Standard Chartered Bank.

Industrial tree plantations like the ones from Suzano's projects have so many problems and can be questioned from so many angles that they help to expose the fantasy of carbon offsetting. First, it would be possible to question the exaggeration in the carbon removal estimate. In line with other phantom credits from land-based projects exposed in 2023¹⁷, the removal rate claimed by Suzano in this afforestation project (184.7 tons of CO2 per hectare per year) is nearly 5 times higher than what is pointed out in scientific literature¹⁸. But even more serious is the fact that the auditors did not question the additionality of the project (see box below), which is a fundamental condition of any carbon offset project.

ADDITIONALITY OF CARBON OFFSETTING PROJECTS

To be additional means that a project would not have happened if not for the expectation of revenue from the sale of carbon credits. In theory, any plantation that sells carbon credits only exists because of the opportunity presented by carbon markets. In other words, the plantation would not have taken place for other reasons such as timber or pulp production – even though once it takes place the company might take advantage of these products as well.

The concept of additionality is always based on a baseline scenario, which is a reference for what presumably would have happened in the area if the project had not taken place.

Given that Suzano has been aggressively expanding its plantations to feed its new mill under construction in the municipality of Ribas do Rio Pardo – the same location of the project –, the company's story that it would not establish the eucalyptus plantation if it was not for the money it can obtain from selling carbon credits, is ridiculous. The fact that Suzano carries on 1.4 million hectares of eucalyptus plantations in Brazil to supply its 11 pulp mills¹⁹ make clear that the project would take place anyway to feed the profitable pulp production of the company, whose net profit in 2023 was approximately US\$ 2.8 billion.²⁰ It is no coincidence that there are more companies expanding their eucalyptus plantations and building pulp mills in the region of Suzano's project.



Suzano's giant trucks. Photo: volvogroup.com

The impossibility to prove additionality is not exclusive to Suzano. It is shared by any carbon offset, and thus by all large-scale monoculture tree plantations promoted as carbon projects.

URUGUAY

In Uruguay, 12 of the 14 current afforestation projects selling or preparing to sell carbon credits in voluntary carbon markets are owned by companies with longestablished wood, pulp or biomass for energy production – which is explicitly described in the projects' documents as their primary objective. Selling carbon credits for their owners is the 'cherry on the cake,' extra profit. Moreover, without exception, these 12 projects use the somewhat simplistic argument that they will be implemented on degraded grasslands, disregarding the extremely high plant diversity of South America's native grasslands²¹ and ignoring the drastic reduction in biodiversity caused by monocultures, especially by the involuntary spread of several species of pine trees. This did not prevent several of these projects in Uruguay from obtaining the CCB (Climate, Community and Biodiversity) standard, which stands for carbon projects that, among others, supposedly conserve biodiversity.

One example is the project by the company Guanaré SA, whose 21,200 hectares of pine and eucalyptus monocultures produce wood and cellulose to be exported to Asia, while the carbon credits are sold to transnationals such as Mitsui and Aldi.²² With a crediting period of 60 years since it started in 2006, this is the afforestation project that has issued the most carbon credits in the world, despite being "fundamentally unadditional," that is, "it would likely have happened regardless of the voluntary carbon markets." ²³

COLOMBIA

Other examples include the project Bosques de la Primavera S.A. in Colombia, a joint venture between forestry companies registered under the Biocarbon certification scheme. This has been the most productive Biocarbon afforestation and reforestation project in terms of the number of credits generated, with almost 20,000 hectares of industrial plantations of exotic species (pine, eucalyptus, acacia and teak) in the Llanos region. Also in Colombia – and very similar – are the five largest afforestation and reforestation projects of the certifier Cercarbono, two of them developed by South Pole – the company that faced criticism for continuing to sell carbon credits from the Kariba REDD project in Zimbabwe even after the company had become aware that the alleged carbon savings were exaggerated. Together, the five projects add up to more than 30,000 hectares of industrial tree plantations, especially pine and eucalyptus. The overriding interest in profit is expressed quite clearly in the criteria adopted by the developers of the Bosques de La Primavera S.A. project, who make it explicit that the plantation owners will constantly compare the net income from the sales of the wood with the net income from leaving the trees standing and sequestering carbon. "They will select the alternative which produces the greatest net income." ²⁴

Furthermore, the very methodology used by most industrial tree plantation initiatives for carbon offsetting presents a number of highly subjective criteria that can be used as conveniently as possible by project proponents and developers.

CONVENIENT METHODOLOGIES IN AN INTRINSICLY FLAWED SCHEME

The "AR-ACM0003" methodology accounts for more than 50 percent of all afforestation and reforestation projects for carbon offsetting listed in eight certification standards analyzed. It is a methodology for large-scale projects with highly subjective criteria.

For example, one of the documents that comprise the methodology is a guide to identifying the baseline scenario and demonstrating the additionality of the project – two elements that determine whether the project will or will not be accepted to offset emissions, as well as the amount of credits that the plantation will generate. Applying this section of the methodology requires the project developer to arrive at five concrete outcomes:

 $\mbox{``-List}$ of credible alternative land use scenarios that would have occurred on the land $[\ldots]$

- List of plausible alternative land use scenarios [...]

- List of barriers that may prevent one or more land use scenarios [...]

- List of land use scenarios that are not prevented by any barrier [...]

- Identification of the most economically and/or financially attractive land use scenario [...]"

The range of qualitative factors used to get to each one of these outcomes is so broad that it provides enormous flexibility for the project developer to draw up the arguments that best support their analysis, whatever it may be. However, the lack of quantitative variables and objectivity in plantation (and conservation) projects' methodologies is not the major problem. The unsolvable issue here is that the claim that the project will sequester a certain number of emissions is based on predictions, hypotheses – and therefore do not represent reality itself – about what would or would not have happened in the region of the project in an expected period of many decades, sometimes 100 years. Unavoidably, such long-term scenarios depend on several unpredictable economic, social, political and environmental variables. To top it all off, as mentioned above, the entire application of the methodology is validated by an intrinsically flawed certification system that substantially jeopardizes the credibility of the information provided by project proponents and certifiers.²⁵

Large-scale tree monocultures have existed for a long time. However, the examples mentioned above – and many others among the list in Appendix 1 – show that with the creation of the carbon offset mechanisms, forestry and pulp & paper companies can now profit from a new product without much effort other than doing paperwork along with carbon certification schemes.

LONG BEFORE THE CARBON FALLACY

Carbon offsetting is not just a problem in and of itself. In the case of plantations, it has exacerbated existing problems. Either directly or indirectly, large-scale tree monocultures have long been the cause of evictions of grassroots communities, land grabs, water grabs, deforestation, biodiversity loss, and often raging fires that not only release carbon back into the atmosphere. They also cause the destruction of livelihoods and deaths. These impacts are often kept hidden behind corporate lies. More information can be found here: What could be wrong about planting trees?, and 12 replies to 12 lies about industrial tree plantations. There is also a considerable record of devastation and violations caused specifically by the above-mentioned Suzano

(see What you need to know about Suzano).

3.2- Schemes with smallholder farmers

A considerable number of afforestation and reforestation projects are implemented using schemes with smallholder farmers. Such projects share two characteristics. First, the plantations are set up on land not owned or tenured by the project proponent. Second, the labour required for the planting and management of the tree plantation is provided by the communities or smallholders themselves. These plantations can be either commercial monocultures or multiple-species plantations aimed at different purposes besides generating the carbon credits.

INDIA

One example is the project led by the Paris-based entity Livelihoods Fund, through which companies like Danone, Michelin, Hermès, SAP, Mars, Chanel, and 'development' banks like Germany's KfW (through its subsidiary DEG Invest) are investing in plantations in India. According to the project description, which is available in Verra's <u>VCS registry</u>, the initiative consists of having more than 9,700 farmers from 333 villages in the Araku Valley plant fruit trees on more than 6,000 hectares of tribal (sic) community land – of which the project classifies 60 percent as "barren land". The project states that communities have signed 20-year legally binding agreements accepting that the rights over the carbon credits that the project will issue are assigned exclusively to the Livelihoods Fund. For their part, the communities remain only in possession of the fruits and "other valorised outcomes" generated by the project once the distributed saplings have grown.

A recent <u>report</u> shows that farmers involved are not aware of carbon credits, much less the fact that companies on the other side of the world are benefiting from carbon-neutral claims by selling a new product generated by their labour on their land. Furthermore, the report shows that the 'additionality' claim of the project is questionable: a government agency – and several other private agencies, according to villagers – have been providing free saplings and training to tribal farmers (sic) long before the project's arrival.

A similar example, also in India, is that of nine ongoing projects of Core CarbonX Solutions, a small company with close connections to the financial sector. These projects include the third largest afforestation/reforestation project in the world based on estimated carbon uptake. In the project descriptions, the company claims to have entered into *"individual*" agreements with tens of thousands of *"selected subsistence*" farmers from over 8,000 villages. It also claims that workshops, consultation and training were conducted at the village level and that it distributed saplings for small agroforestry areas. Altogether, the projects supposedly cover an area of over 400,000 hectares(!) of allegedly degraded or fallow lands, spread across six states in India. According to the projects, 60 percent of the income from the sale of carbon credits would go to the farmers.

One of the many inconsistencies in the description of Core CarbonX projects stands out: the text describing the meetings supposedly carried out for local stakeholder consultation is exactly the same **for all projects**. This is curious – to say the least – considering half of the projects embrace more than 1,000 villages each, with one listing 4,000 villages alone. In any case, it is hard to believe that the inflated figures of area and villages embraced, as well as of carbon uptake of the project presented by the company and obtained at Verra's VCS registry, are not just another case of exaggeration with no concrete grounds, just as several other land-based carbon projects have been proved to be after having been already 'approved' by the certification process. It is equally hard to believe

that conditions will then be in place for the thousands of 'subsistence' farmers (as referred to in the project description) involved in these projects to be able to properly assess the distribution of the carbon credit income promised by the company.



One of the only two pictures chosen by Core CarbonX Solutions to illustrate the project Core Carbon Vanam in Jharkhand State, India, which lists and allegedly encompasses nearly 4,000 villages and more than 20,000 hectares. Photo: Verra VCS

UGANDA

In central Uganda, New Forests Company states that its carbon project does not focus on its own commercial plantations, but it actually involves an "Outgrower Afforestation Programme." The company intends "to share their passion for tree growing and support rural livelihoods" through the program in close cooperation with WWF. In practice, New Forests Company has donated seedlings to communities living next to the company's plantations for them to establish plantations of interest to the company – pine and eucalyptus – but on the farmers' own land, with their own labour.

New Forests Company claims to be the "1st option to buy mature trees" from the farmers. However, experience with such outgrower schemes <u>elsewhere</u> shows that companies are the ones who will most benefit from the sale of the timber in such arrangements. As for the carbon credits, the company claims to have signed an agreement with each out-grower association, through which the farmers will receive 60 percent of the carbon credit income. Once again, questions arise: should the project ever sell carbon credits? How will farmers know they are really getting their fair share given sales prices are rarely disclosed? What costs will be deducted from and reduce the 60 percent promised to the associations? Finally, and perhaps more importantly, what other overlooked impacts will remain for the communities once land used for "subsistence" activities is suddenly occupied by monoculture plantations?

The impressively high figures of the many smallholder's schemes projects in terms of numbers of farmers and rates of carbon sequestered raise questions about their verifiability and whether they actually exist in the terms described in the project documents. They also raise deeper questions of to what extent these projects are not new forms of colonialism and appropriation of labour and land in the global South.

The severity of impact that tree planting for carbon projects can pose for food sovereignty of peasant families entering such carbon contracts has recently been exposed in relation with a carbon offset project in western Uganda. Farmers initially persuaded to plant trees for a carbon offsetting project by the NGO Ecotrust have started cutting down the trees as they could no longer grow **food** to feed their families once the trees took over the land. A recent investigation shows that the consequences of engaging with the project have not been the promised benefits, but rather hunger and poverty. A community leader who joined the project himself and has acted as a spokesperson for other participants estimates that of the hundred farmers he is in contact with, only six or seven are happy with the project as "they had unused land to plant on and were paid better. The rest of us are much poorer than before. Almost everyone has started cutting down the trees or is planning to do so".²⁶ Ironically, the project is called "Trees for Global Benefits" and supposedly offsets emissions of a European fastfood company.

Such consequences cannot be considered accidental or unexpected outcomes. In 2017, researchers had already raised concern over the risk that the Ecotrust project in Uganda locks small farmers "into a type of land use for a long time that reduces their ability to adapt to deal with temporary crises as well as long-term changes, which in the worst case can mean long-term negative effects on their life situation".²⁷ The research also raised concerns on the lack of transparency, poorly informed consent and widespread confusion about what the carbon offsetting project is basically about. The early indications corroborate the fact that failures in these tree planting projects for carbon offsetting are not circumstantial but structural and predictable.

3.3- Long-term land leases

Often, tree plantation initiatives for carbon offsetting are also established through land leases or concession agreements signed by the companies with national governments. In these cases, even when the countries' laws or the agreements (or the entity who certifies the carbon project) establish that the company's project can only go ahead with the approval and/or free, prior and informed consent of the communities living on that territory, in practice this virtually never happens. Rather, the company will use several tactics to convince the customary leadership of communities in the concession area to accept their project and claim the community support, as it is also the case in other types of projects. $^{\mbox{\tiny 28}}$

GREEN RESOURCES IN UGANDA AND TANZANIA

In eastern Africa, the company Green Resources has implemented carbon projects in Uganda and Tanzania. The latter is a 10,814 hectare pine and eucalyptus plantation for the manufacturing of wood products (the company's core business), with a duration of 99 years. In the project description, the company acknowledges that the land was under customary law and occupied by villages "but remained idle." It further claims that it followed the required steps to acquire the land under a 99-year lease agreement with the Tanzanian government. The company states that the project will bring socio-economic development to local communities. However, evidence collected in an investigation by the Oakland Institute revealed that the activities of Green Resources have been "marred by social disruption, adverse livelihood impacts, and environmental problems" such as biodiversity loss and water contamination by agrochemicals.²⁹

Other forestry companies have similar and more recent ongoing tree plantation ventures for carbon offsetting on the African continent.

MIRO FORESTRY IN GHANA AND SIERRA LEONE

In West Africa, the UK-based company Miro Forestry has been expanding its commercial plantations at a rate of 3,000 hectares a year. This expansion has involved large amounts of public money from European banks (Finland's FinFund, the UK's CDC and the Netherlands' FMO) channelled through the Arbaro Fund, whose plantations have already been exposed for abuses and damage to rural communities in Africa and South America.³⁰

Taking advantage of the carbon market opportunity, Miro Forestry has launched two projects in Ghana and Sierra Leone, which 'add' the new product "carbon credits" to the expansion of its timber business. Together, the projects will cover an area of around 26,000 hectares mainly occupied by monocultures of eucalyptus (60 percent) and Gmelina arborea (30 percent). In the case of the Sierra Leone project, the area has been used by at least 80 communities for generations, with no such information in the description of the Ghana project. Both projects will last for 30 years.

Miro Forestry claims they have long-term formal agreements with traditional landowners and Chiefdom Councils through which all of the land used in the projects is leased to the company. However, the fact that these communities' livelihoods are customarily as well as intrinsically bound up with diversified land use for meeting nutritional and other needs – and also because of what is shown in many other cases such as the ones mentioned above – makes it difficult to believe there was an informed and free decision by a sufficiently representative portion of the communities.

REWILDING MAFORKI IN SIERRA LEONE

The Rewilding Maforki Company's 50-year project is also located in Sierra Leone. t consists of 25,000 hectares of plantations on community land supposedly leased from dozens of chiefdoms. Rewilding's associate company Carbon Done Right has said that it had "secured access to 57,000 hectares" in Sierra Leone, but in reality no leases have been registered with local authorities.³¹ A recent investigation by the HEKS/EPER and SiLNoRF³² that surveyed residents from 25 villages affected by the project strongly also points to non-compliance with Sierra Leonean land law when it comes to informing and obtaining the consent of communities when leasing their territories. Furthermore, while in the company's project the lands are described as unproductive, the villagers emphasize their use of the land for producing food for their own consumption.

WOMEN EXCLUDED FROM DECISIONS

The investigation into Rewilding Maforki's project in Sierra Leone also exposes a pattern that is not limited to carbon offsetting projects. When outside companies come in and try to impose their will, women are often excluded from discussions and decisions around land. The investigation highlights that most women were never asked about nor did they give their consent to Rewilding Maforki's project. This shows how project developers benefit from or even take advantage of dominant patriarchal structures that exclude women from decisions over land even where women depend on that land to grow food.



Rewilding Maforki seems different from the other companies mentioned in this section, in the sense that it was created with a focus on the carbon market, not timber. However, its project description shows that most of the plantations have also the purpose of commercializing the wood, just like Miro's. In addition, it is no coincidence that 49 percent of the company that holds Rewilding's shareholding control (Aristeus LTD) is being transferred to other companies including Developers Africa LTD, which in turn is owned by people who are also on Miro's Board.

Once again, projects of this kind immediately raise concerns. First, there are clear signs that they are not 'additional' projects. Second, projects of such magnitude in terms of the number of communities involved – and which frequently claim to have a "robust FPIC [Free, Prior and Informed Consent]" and a "participatory, inclusive, and collaborative approach" – are usually just tossing out catchphrases that are nothing more than buzzwords, as described in Rewilding Maforki's project.

"INDEPENDENT" PROJECTS ARE ALSO A PROBLEM

Projects aimed at carbon markets and registered with private certification mechanisms such as Verra are not the only problem. Some of the largest companies in the world are investing in "independent" industrial tree plantations to offset their emissions. For example, in the Republic of Congo, communities have nowhere to grow their food because oil giant TotalEnergies is taking over the land to set up 40,000 hectares of tree monoculture so that their damages (and profits) from oil and gas extraction can continue under the argument that they are making up by planting trees.

International, regional and national initiatives that promote tree plantations for the carbon market

At the international level, corporate lobbies and major conservation NGOs push States and international negotiations to push for tree plantations as a legitimate compensation mechanism for carbon emissions.

4.1- The Africa Carbon Markets Initiative

One example is the Africa Carbon Markets Initiative (ACMI) launched in 2022 during the UN Climate Summit. The initiative aims to accelerate the growth of Africa's voluntary carbon markets, channelling "billions of climate financing into Africa" and establishing "carbon credits as one of Africa's top export commodities." ³³

In its roadmap, ACMI points to tree plantations in cropland and other socalled "forestry and land use" projects as those with the greatest potential for generating carbon credits. It also identifies 10 countries as the most relevant to this type of project: Democratic Republic of Congo, Madagascar, Republic of Congo, Angola, Zambia, Nigeria, Cameroon, Central African Republic, Mozambique and Sudan. The initiative also claims that there is "significant potential to scale up carbon credit generation with smallholder farmers," which currently live and work on around 80 percent of Africa's agricultural land.³⁴

The ACMI is sponsored by several international donor agencies and philanthropic organisations and has "corporate non-profits" such as Verra and Conservation International on its Steering Committee. The fact that the initiative is underpinned by analyses conducted by McKinsey, a US-based consulting firm with vested interests in expanding voluntary carbon markets in Africa, is worthy of note.³⁵ The firm has also strongly influenced the Africa Climate Summit, where carbon offsetting and financing has also been pointed out as major direction.³⁶

Hundreds of African civil society organisations have denounced carbon markets as the new scramble for Africa, exposed the western interests foregrounded by such "climate positive" agendas, and called for the rejection of the polluter schemes.³⁷

4.2- The African Forestry Impact Platform

The financial sector and investment firms are major drivers of the current expansion of tree plantation ventures in the global South for offsetting carbon emissions of the Global North. One example is the US\$ 200 million pledged by Norway's Norfund, Finland's Finnfund, and the UK's British International Investment to the African Forestry Impact Platform (AFIP, which is actually a private fund rather than a platform), following a commitment made during COP 26 to expand the "sustainable forestry" sector.³⁸

AFIP was launched by New Forests (which is different from the New Forests Company mentioned in section 3.2). The entity is the world's second-largest forestry manager and investor, and is owned by Japanese financial groups Mitsui and Nomura Holdings, closely related to the fossil fuel industry.³⁹ AFIP's "naturebased solutions" plan is to develop industrial tree plantations aimed at carbon markets, hence guaranteeing large amounts of funding from "development" finance institutions. As a result, AFIP recently bought Green Resources, as mentioned in section 3.3.

4.3- The Trillion Trees initiative

Another example is the Trillion Trees idea, which was launched in 2018. Since then, it has been endorsed by economic and political elites represented by the World Economic Forum, the United Nations Environmental Programme (UNEP) and major conservation NGOs such as WCS, WWF and BirdLife. The naive and dangerous initiative of massive tree planting as a solution to climate chaos fits very well with the interests of several of the world's largest corporations and billionaire donors and has inspired them to get on board.⁴⁰

OIL COMPANIES SAY THANKS

Distractions such as Trillion Trees are very effective at diverting attention from the need to curb fossil fuel emissions. It is worth remembering that not long after the Trillion Tree idea appeared, <u>Eni</u> and <u>Shell</u> (the two largest buyers of carbon credits in Africa⁴¹) announced that they would set up their own tree plantations to offset their emissions. The Colombian company Ecopetrol has joined the Trillion Tree campaign, <u>pledging</u> to plant 12 million trees and offset 2 million tons of carbon between 2020 and 2030. The proposal has inspired significant criticism within the scientific community since it was launched as likely the most effective way to limit the rise of carbon dioxide concentration in the atmosphere, diverting the attention from the imperative need to reduce fossil fuel emissions.⁴² Nevertheless, this criticism is overshadowed by the widespread favourable media coverage a result of the financial support raised by the authors⁴³ of the misleading idea that "massive afforestation and the resulting timber industry can create hundreds of millions of jobs and wealth in the global South."⁴⁴ With the growth of carbon markets, initiatives within the scope of the trillion trees illusion are increasingly associated to carbon offsetting.⁴⁵ In 2023, more than one third of the corporations promising to plant trees under the <u>1t.org</u> campaign were doing so to offset emissions.⁴⁶

4.4- Initiative 20 x 20

Initiative 20 X 20 is being developed in Latin America and the Caribbean. Its goal is to protect and restore 20 million hectares. It encompasses several tree plantation projects developed to generate carbon credits for the voluntary carbon market. Calling for "finance for restoration and conservation to bring about net-zero carbon emissions across the region,"⁴⁷ it is supported by national governments from the Global North (donations from Germany, Norway, and Luxembourg), corporations such as Cargill and Nestlé (through Nespresso), carbon market companies such as South Pole and Ecosecurities, among others. Once again, the net-zero illusion encourages movement in the wrong direction by strengthening and benefiting from the misleading idea of offsetting fossil fuel emissions by planting trees.

4.5- National policies

Many national governments and lawmakers have done their part to promote tree plantations as a way to offset carbon emissions. Examples include:

In New Zealand, the state emissions trading scheme rewards landowners who invest in pine monocultures. This is a central piece of the government's roadmap to emissions reduction. Such government support has driven a sharp increase in such monocultures; this has dissolved communities and caused huge social and cultural losses.⁴⁸

Paraguay's Proeza project guides the State's institutional policy for forestry and is based on the expansion of industrial eucalyptus plantations to meet the country's National Determined Contributions (NDC).⁴⁹ Projects have been financed by the Green Climate Fund and carried out through the Arbaro Fund, whose plantations have been exposed for abuses and harm to communities in the South American and African countries where it operates.⁵⁰ India's parliament approved the Forest Conservation (Amendment) Bill in 2023, which lowers restrictions for establishing tree plantations on certain types of land. This could trigger a considerable expansion of afforestation and reforestation projects under the guise of planting trees to help the country achieve its net-zero emissions target by 2070. Estimates indicate that India would have to change the way nearly 60 percent of its land is used in order to meet those goals.⁵¹

These are just a few examples of national government initiatives that promote and encourage industrial tree plantations as a way of hitting their offsetting targets. As the number of countries with initiatives to regulate their national carbon markets grows, it is safe to expect the number of national policies going into this direction will continue to rise, especially in the global South.

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9 The average estimate of emission equivalent reduction per project per year is as follows:

-225,040 tCO2 for Afforestation/Reforestation projects;

-187,259 tCO2 for Household & Community projects;

-119,397 tCO2 for Renewable Energy projects.

The figures are based on the database developed by the Berkeley Carbon Trading Project: https://gspp.berkeley.edu/research-and-impact/centers/cepp/projects/berkeley-carbon-trading-project/offsets-database.

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Appendix

6

Afforestation and reforestation projects for the carbon market listed by country

• The table below summarizes information obtained from the following private carbon standards registries:

- ACR (American Carbon Registry)
- BioCarbon
- CAR (Climate Action Reserve)
- Cercarbono (Cercarbono Ecoregistry)
- GOLD (Gold Standard)
- Plan Vivo
- Social Carbon
- VCS (Voluntary Carbon Standard Verra)

• The information was retrieved from <u>Voluntary Registry Offsets Database</u> (VCS, GOLD, CAR, ACR) and from the online registries of BioCarbon, Cercarbono Ecoregistry, Social Carbon and Plan Vivo on February 6, 2024.

• The information presented by the different carbon standards on their registries does not have a standardised pattern, particularly in relation to the terminology used for designating the entities involved in a given project. Most of the datasets consulted inform the "developer" of the projects, but some present rather, or in addition, the "holder", "proponent", "owner", or "operator" of the project. Also, in several cases, the information regarding the companies or entities involved in the project is displayed as "Multiple proponents". Nevertheless, by consulting

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
Albania	ACAP Albania Vjosë-Nartë A/R project	VCS	Carbon Sink Group s.r.l.	Registered
Argentina	Afforestation project with native and exotic species on degraded grasslands in Northeast, Argentina.	VCS	Vista Energy Argentina SAU	Under validation
Argentina	Unitán afforestation and reforestation of grazing lands project	VCS	UNITAN SAICA	Registered
Australia	Australian Yarra Yarra Biodiversity Project	60LD		
Australia	Land Life Keiorestation and Kestoration on Degraded Land in Australia Wheathelt Rindiversity Carhon Credit Droiect	557	Land Life Company BV Decarbonology Dty I td	Under validation
Bangladesh	CREATING LIVELING OF OPPORTUNITIES AND CARBON CREDIT INCOME FOR SMAIL HOLDER FARMERS THROUGH HORTICITI TURAL PLANTATIONS IN RANGI ADFSH	H VCS	Varaha ClimateAg Private Limited	Under development
Bolivia		Plan Vivo	The Cochabamba Project	Active
Bolivia	ArBolivia- Phase II	GOLD	The Cochabamba Project	Certified Project
Brazil	ARR SLB Paraná	VCS	SLB International S.A.S.	Under validation
Brazil	Boa Vista A/R	ACR	F.I.T Timber Ltd	Canceled
Brazil	Carbon Project in the Emas-Taquari Biodiversity Corridor, Goiás and Mato Grosso do Sul, Brazil	VCS	Multiple Proponents	Registered
Brazil	Carbono Verde Afforestation Project	Cercarbono	Carbon Commodity Trading Services LLC	Certified
Brazil	Carbono Verde AR Project	VCS	Amazon Reforestation Consortium.	Registered
Brazil	Corridors for Life ARR Grouped Project	VCS	Multiple Proponents	Registration requested
Brazil	Cristalino Carbon Removal Project	Social Carbon	Future Carbon Removals	Listed
Brazil	Fazenda Boa Vista afforestation project	VCS	CARBON CREDITS CONSULTING S.R.L.	Under validation
Brazil	Fazenda Cristal: Conservation and Bamboo Afforestation	Social Carbon	VERT ECOTECH AS	Listed
Brazil	Fazenda J. Crestani Conservation Project	Social	VERT ECOTECH AS	Listed
-		Carbon		
Brazil	Fazenda Nascente do Luar Agroforestry Project	VCS	CARBON CREDITS CONSULTING S.R.L.	Registered
Brazil	Fazenda Paraíso Conservation and Carbon Removal	Social Carbon	VERT ECOTECH AS	Listed
Brazil	Fazenda Sao Paulo Afforestation	VCS	CARBON CREDITS CONSULTING S.R.L.	Registered
Brazil	FUTURE GREEN CARBON PROJECT	VCS	Eldorado Brasil Celulose S.A.	Under validation
Brazil	Grouped Project Serra do Sudeste	VCS	The Green Branch	Registration requested
Brazil	Grouped Project Sul da Bahia	VCS	The Green Branch	Under development
Brazil	Macaúba as a Productive Second Floor	VCS	INOCAS	Rejected by Administrator
Brazil	Multi-Species Reforestation in Mato Grosso, Brazil	VCS	Multiple Proponents	Registered
Brazil	Nature Conservation Reforestation project - Caatinga Biome, Ceara	GOLD	CO2logic	Certified Design
Brazil	Raízes do Bem Grouped ARR Project	VCS	Future Carbon Holding S.A.	Under development
Brazil	RE.GREEN AMAZON FOREST REFORESTATION/RESTORATION PROJECT	VCS	ke.Green Participações S.A.	Under validation
Brazil	RE.GREEN ALLANTIC FUREST REFURESTATION/RESTURATION PROJECT	202	Ke. Green Participações S.A.	Under validation
Drazil	KEHOLEStalliterito de Impacto no Brasil Project. Deforentation for multinla numores as a means of custainable develonment		Multiple Proportents Vishin SA	Under validation
Drazil	Notor ostation (Fraimed Dreiset at Dratiti Environmental Dratection Area Deferentation (Fraimed Dreiset at Dratiti Environmental Dratection Area	500	Multiple Deconomic	Desistered
Brazil	ketol estation of oupeu Proyect at Pradigi Erivii orinieritai Protection Area Deforeetetion of land for multinle nees	50	Multiple FLopolients Lacan Investimentos e Darticinacões Etda	Inder validation
Brazil	Notion estation of raina for manape uses ReferesTerra Grouned Project	NCS N	Reformed Frita – Restauración de Fronsistemas Florrestais I tda	Under development
Brazil	Restoring Degraded Lands for Biodiversity Conservation and Livelihood Development in Brazil	il VCS	Saving Nature. Inc.	Under development
Brazil	Serra do Sudeste Landscape Restoration and Reforestation Project	VCS	The Green Branch	Under validation
Brazil	Symbiosis Continuous Cover Forest Project	VCS	SYMBIOSIS INVESTIMENTOS E PARTICIPAÇÕES S.A.	Under validation
Brazil	The ARR Cerrado Carbon Project	VCS	Suzano SA	Registration requested
Brazil	THE ARR HORIZONTE CARBON PROJECT	VCS	Suzano SA	Registered
Burkina Faso	Rehabilitation and sustainable management by AGED of degraded pastures in the Sahel region of Burkins Esco	n Plan Vivo	ONG - AGED	Active
Rurkina Faso	or burkling raco Rehabilitation and sustainable management hy RFACH Italia of degraded pastures in the Sahel	I Plan Vivo	REACH italia	Artive
	הקווומטווומטוטו מום סטטנווומטיט וזומו ופטינוועני עד זער זער זער זער וישט מענע עשט מענע איז איז איז ערייזיי. רפיוסה of Burkina Faso			Junio Contra Con

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
Cameroon Canada Canada C. Afr. Dout-blic	Greenzone Reforestation Project Afforestation in the Montreal Metropolitain area Irokko GHG Compensation ARR BOUTILI AFFORESTATION & AGROFORESTRY PROJECT	VCS GOLD VCS VCS	Multiple Proponents CO2 Environnement GSF Irokko inc. CENTRAFOREST	Registration requested Certified Design Listed Validation
Chile Chile Chile Chile Chile	ECO2 INTERNATIONAL-FUNDO LOS CULENES Proventus Grouped Project Reforestation of degraded lands in the Valle California of Patagonia, Chile Reforesting Degraded Lands in Chile through the use of Mycorrhizal Inoculation	BioCarbon VCS VCS VCS	ECO2 INTERNATIONAL OFFSET NFC Green SpA Agrícola y Forestal SNP Ltda Mikro-Tek Inc.	Listed Under validation Registered Registered
China China China China	Afforestation on Degraded Lands in Mountainous Areas of Northern Guangdong, China Afforestation Project Afforestation Project in Tongliao, Inner Mongolia Afforestation Project in Xining City	GOLD GOLD VCS VCS	FDF Multiple Proponents Climate Bridge (Shanghai) Ltd. Qinghai Forestry Ecological Construction and Investment Co.,	Certined Project Rejected by Administrator Certified Project Registered
China China China China	Anhuang Afforestation Project Baoxing Afforestation Project Carbon Sink Afforestation Project in Tongyu County, Jilin Province Central Yan'an Afforestation Project	VCS VCS VCS	utu. Guizhou Xinzhanxin Agricultural Technology Co., Ltd. Sichuan Jiajinshan Forestry Bureau Forestry Bureau of Tongyu County National Forestry and Grassland Administration Northwest Investigation and Planning Institute	Registered On Hold Under validation Registration and verification annroval
China	Chongqing Kaizhou Afforestation Project	VCS	National Forestry and Grassland Administration Northwest Investigation and Planning Institute	requested Under validation
China China	Chudu Afforestation Project Eastern Yan'an Afforestation Project	VCS VCS	Xichuan Rongda Agriculture and Forestry Co., Ltd National Forestry and Grassland Administration Northwest Investigation and Planning Institute	Registered Registration and verification approval requested
China China China China	Fangchenggang Mangrove afforestation project Gansu Dingxi Afforestation Project Gansu Lanzhou Afforestation Project Gansu Longnan Afforestation Project	VCS VCS VCS VCS	Fangchenggang Xinggang Agricultural Development Co., Ltd Dingxi City Chankou Forestry Proving Ground Lanzhou Landscaping And Greening Service Center Longnan State Capital Investment Management Company Limited	Under validation Registered Registered Under validation
China China China China	Gansu Tianshui Afforestation Project Gansu Xiaolongshan Afforestation Project Gansu Zhangye Grouped Afforestation Project Guangdong Huidong Afforestation Project	VCS VCS VCS	Tiamshui Forestry Science Institute Multiple Proponents Zhangye Academy of Forestry Sciences Juno Carbon Investment & Environmental Technology (Beijing)	Registered Under development Under development On Hold
China China China China	Guinan Afforestation Project Guiyang Afforestation Project Guizhou Xingren Afforestation Project Haidong Afforestation Project	VCS VCS VCS	Guizhou Baiheng Fertiliser Co., Ltd Guizhou Baiheng Forestry Industry Development Co., Ltd Xingren Lishuping State owned Forest Farm Qinghai Forestry Ecological Construction and Investment Co., 140	Registered On Hold Under development Registered
China China China China	Hechu Afforestation Project in Anhui Province HENAN FANGCHENG AND TANGHE AFFORESTATION PROJECT Henan Luoning Afforestation Project Henan Nanzhao Afforestation Project	VCS VCS VCS	ucu. Beijing Qianyuhui Environmental Technology Co., Ltd. Guizhou Qianhe Carbon Technology Co., Ltd. Beijing Pingtouge Forestry Carbon Technology Development CoLtd	Registered Registered Inactive Registered
China	HENAN SONGXIAN AFFORESTATION PROJECT	VCS	Guizhou Qianhe Carbon Technology Co., Ltd	Registration and verification approval
China China China China	Henan Tongbai and Zhenping Afforestation Project HENAN YIYANG AFFORESTATION PROJECT Huadu Afforestation Project Huinan County Afforestation Project	VCS VCS VCS	Beijing Qianyuhui Environmental Technology Co., Ltd. Guizhou Qianhe Carbon Technology Co., Ltd Guizhou Xinzhanxin Agricultural Technology Co., Ltd. Jinyongli Carbon Oxygen Technology (Jilin) Co., Ltd.	Under validation Registered Registered Under validation

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
China	Hunan Northern and Northwestern Area Afforestation Project	VCS	Jilin Forest Industry Environmental Technology Co., Ltd.	Registered
China	Inner Mongolia Alihe-Jiwen Afforestation Project	VCS	INNER MONGOLIA DAXING'ANLING CARBON SINK TECHNOLOGY CO.LTD	Under validation
China	Inner Mongolia Yitulihe-Genhe Afforestation Project	VCS	INNER MONGOLIA DAXING'ANLING CARBON SINK TECHNOLOGY CO.LTD	Under validation
China	Jilin Baishishan Afforestation Project	VCS	Jilin Forest Industry Environmental Technology Co., Ltd.	Registration requested
China	Jilin Linjiang Afforestation Project	VCS	Jilin Forest Industry Environmental Technology Co., Ltd.	Registered
China	Jillin Quanvang Afforestation Project	VCS VCS	Jillin Forest Industry Environmental Technology Co., Ltd.	hegisti ation requested Inactive
China	Jilin Sanchazi Afforestation Project	VCS	Jillin Forest Industry Environmental Technology Co., Ltd.	Registered
China	Jilin Wangou Afforestation Project	VCS	Jilin Forest Industry Environmental Technology Co., Ltd.	On Hold
China China	Liangdu Afforestation Project	VCS	Guizhou Xinzhanxin Agricultural Technology Co., Ltd.	Registered
China	Liaoyuan Afforestation Project	S)	Envision Energy Co. Ltd	Under validation
China	Lugui Afrorestation Project Miaoline Afforestation Project	522	Guangxi Balxin Agricultural Technology Co., Ltd. Guizhou Xinzhanxin Agricultural Technology Co. 1 td	Registered Registered
China	ORDOS CITY AFFORESTATION PROJECT IN INNER MONGOLIA AUTONOMOUS REGION	VCS	Ordos Guorui Carbon Asset Management Co., Ltd.	Under validation
China	Puwangzi Afforestation Project	VCS	Guizhou Yuanda Carbon Forestry Development Co., Ltd	On Hold
China	Puzhen Afforestation Project in Guizhou Province	VCS	Guizhou Baiheng Fertiliser Co., Ltd	Registered
China	Qianbei Afforestation Project Diaminan Afforestation Droiset in Cuithou Drovince	VCS	Guizhou Xinzhanxin Agricultural Technology Co., Ltd.	Registered
	Qinghai Afforestation Project	VCS	Qinghai Forestry Ecological Construction and Investment Co.	Registered
China			Ltd.	
China	Qinghai Haixi Ulan Afforestation Project	VC5	National Forestry and Grassland Administration Northwest Investigation and Planning Institute	Under validation
China	Reforestation in Mountanous Communities of Yunnan	GOLD	Initiative Developpement	Certified Design
China	Reforestation Project in Qinghai Province 2012	VCS	Multiple Proponents	Registered
China	Reforestation Project in Yingjing County, Sichuan Province	VCS	Multiple Proponents	Registered
China	Shanxi Jingle Afforestation Project	VCS	Jingle County Sailing Carbon Sink Development Co. LTD	Rejected by Administrator
China	Shanxi Loufan Afforestation Project	VCS	Loufan County Forestry Workstation	Registered
China	Shanxi Qinyuan Afforestation Project	VCS	Shanxi Qingze Yangguang Environmental Protection Technology Co., Ltd.	Under development
China	Sichuan Yuexi Afforestation Project	VCS	Lingguan State-Owned Forest Protection Bureau of Yuexi	Registration requested
			County	
China	SULIGE AFFORESTATION PROJECT IN INNER MONGOLIA AUTONOMOUS REGION	VCS	PETROCHINA Changqing Oilfield Company	Under validation
China	Wuwei City Afforestation Project in Gansu Province	VCS	Multiple Proponents	Registered
China	Alguan Anorestation Project in Guiznou Province Via liana Mabit County Afforestation Carbon Securestration Deviant	222	Guizhou Baineng Fertiliser Co., Lta Mabit Base hunian Cattan Induistar Co. 14d	Denistered
China	XIIJJANG MAKIT COUNTY WINDBREAK AND SAND FIXATION ECOLOGICAL FOREST	VCS VCS	Shenzhen Vanke Millennial Development Co. Ltd.	Under validation
CIIIId	CONSTRUCTION BASE PROJECT			
China	Xinzhou Echeng Afforestation Project	VCS	Jingle County Sailing Carbon Sink Development Co. LID	Under validation
China	Yan'an Aerial Seeding Afforestation Project	VCS	National Forestry and Grassland Administration Northwest Investigation and Planning Institute	Registration requested
	Yan'an Wuqi Afforestation Project	VCS	National Forestry and Grassland Administration Northwest	Registration and
China			Investigation and Planning Institute	verification approval requested
China	Yunnan Qiubei Afforestation Project	VCS	Multiple Proponents	Registered
China	Yunnan shizong Afforestation Project	VCS	Multiple Proponents	Under development
China	Yunnan Yulong Afforestation Project Zhanaiishau Chanadi Afforestation Droiest in Hahai Drovince	222	Yulong State Owned Capital Investment and Operation Co., Ltd. Zhanarishou Sailin Landeraning Co. 1+d	Un Hold Under validation
China	Zhangjiakou Shongir Anorestation ri ojece in redet ri ovines Zhangijakon Wanghan District 2017 Afforestation Project	NCS NCS	Zitarigiakou saitti Lartuscapiris Co., Ltu. Zhangijakou Sailin Landscaping Co. 1 td	On Hold
China	Zhangjiakou Yuxian Afforestation Project in Hebei Province	VCS	Zhangjiakou Sailin Landscaping Co., Ltd.	Under validation
China	Zhangjiakou Zhangbei County 2017 Afforestation Project	VCS	Zhangjiakou Sailin Landscaping Co., Ltd.	Registered
China China	Zhangye City Afforestation Project in Gansu Province ZhaoOu Afforestation Proiect	VCS VCS	Zhangye Academy of Forestry Sciences Yunnan Ruihan Agricultural Technology Development Co., Ltd.	Registered Under validation

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
Colombia	AFFORESTATION OF DEGRADED GRASSLANDS IN VICHADA. COLOMBIA	VCS	Forest First Colombia SAS	Registered
Colombia	Bonos de Carbono Caracoli	Cercarbono	Reforestadora Caracolí S.A.S.	Verification
Colombia	Bonos Verdes Colombia Grupo Custodiar S.A.	Cercarbono	South Pole Carbon Asset Management	Certified
Colombia	Carbon In Flavor and Arome Forests (C-BOSAR)	VCS	Multiple Proponents	Registration requested
Colombia	Carbono Agroforestal La Argentina	Cercarbono	Forestry Consulting Group S.A.S.	Certified
Colombia	Carbono Agroporvanda	Cercarbono	Agroporvanda S.A.S	Certified
Colombia	Carbono Agrorios	Cercarbono	Inversiones Agrorios S.A	Certified
Colombia	Carbono Bagatela	Cercarbono	Forestry Consulting Group S.A.S.	Certified
Colombia	Carbono Flor y Nuevo	Cercarbono	Fernando Escorcia Aramburo	Certified
Colombia	Carbono FOCOLSA	BioCarbon	Focolsa S.A.S.	Deregistered
Colombia	Carbono Ganados y Bosques	Cercarbono	Forestry Consulting Group S.A.S.	Certified
Colombia	CARBONO GRESCO2	Cercarbono	PRO ORIENTE SAS	Certified
Colombia	Carbono Hass	Cercarbono	Forestry Consulting Group S.A.S.	Validation
Colombia	Carbono Inmunizar	Cercarbono	Forestry Consulting Group S.A.S.	Certified
Colombia	Cardono La Puya y san Lorenzo	Cercarbono	Forestry Consulting Group S.A.S.	Vorification
Colombia		Cereta Dollo		
Colombia	Cardono Nueva esperanza ΓΔΔΡΩΟΝΟ ΟΧΙΩΕΝΟ ΡΔΡΔ ΤΟΠΟς	Cercarbono	FOFESTLY CONSULTING OF OUP 3.A.3. INIVEDSIONES FODESTALES I A CARAÑA SAS	Certified
Colombia	Carbono Para Perdida	Cercarbono	Forestry Consulting Group S A S	Certified
Colombia	Carbono Rancho Victoria	Cercarbono	Agroreforestadora Rancho Victoria S.A	Validation
Colombia	Carbono Reforesta	Cercarbono	Forestry Consulting Group S.A.S.	Certified
Colombia	Carbono Reforestadora El Guásimo	Cercarbono	Reforestadora el Gúasimo SAS	Certified
Colombia	Carbono Refosinu	Cercarbono	Reforestadora del Sinú S.C.	Retired
Colombia	CARBONO RINCCO	Cercarbono	Rincco S.A.S	Certified
Colombia	CARBONO SANTA INES	Cercarbono	AGROINDUSTRIAS SANTA INES S.A.S AGROSI S.A.S.	Certified
Colombia	Carbono URANORTE	BioCarbon	Juan Camilo Restrepo	Deregistered
Colombia	Carbono Verde	Cercarbono	Tekia S.A.S	Certified
Colombia	Carvida Duratex	Cercarbono	Duratex S.A.	Certified
Colombia	CO2Bio P2-2	BioCarbon	FUNDACION CATARUBEN	Registered
Colombia	Commercial reforestation on lands dedicated to extensive cattle grazing activities in the region	n BioCarbon	ONF INTERNATIONAL	Registered
Colombia	of Magdalena Bajo Seco			Ľ,
Colombia	Conservation and reforestation of degraded areas in Barbosa, Colombia	GOLD	Deactivated Projects	Certified Project
Colombia	CultivO2 Project 1	BioCarbon	FUNDACION CATARUBEN	Registered
Colombia	Cumare carbon project	VCS	Reforestadora Cumare S.A.S.	Registered
Colombia	Finca la Paz II	VCS	Multiple Proponents	Under development
Colombia	Forestry Project "More Forests for Medellin"	VCS	Secretaria del Medio Ambiente del Municipio de Medellin	Withdrawn
Colombia	Forestry Project for the Basin of the Chinchina Kiver, an Environmental and Productive Alternative for the City and the Region	5	Multiple Proponents	kegistered
Colombia	Grouped Project for Commercial Forest Plantations Initiatives in the Department of Vichada	VCS	Multiple Proponents	Registered
Colombia	Grouped Project for restoration of degraded lands in Jaguar Corridors, Colombia	VCS	Multiple Proponents	Registered
Colombia	Más Bosques para Medellín	BioCarbon	Más Bosques para Medellín	Registered
Colombia	MultiAntioquia	Cercarbono	Forestry Consulting Group S.A.S.	Certified
Colombia	Programa de Compensación de Emisiones Cipreses de Colombia S.A.	Cercarbono	Cipreses de Colombia S.A	Certified
Colombia	Programa de Compensaciones de Gases de Efecto Invernadero (GEI) – Ketorestadora Caceri ς Δ	Lercarbono	Forestry Consulting Group S.A.S.	Certified
Colombia	Project for Forestry Restoration in Productive and Biological Corridors in the Eastern Plains of	ElioCarbon	Bosques de la Primavera S.A	Registered
	Colombia			
Colombia	PROYECTO ASOCIATIVO PROGRAMATICO ZONA ANDINA Y COSTA ATLANTICA - FCG	Cercarbono	Forestry Consulting Group S.A.S.	Certified
Colombia	Proyecto Cardono CAS DROVECTO DE C'ARRONO FORESTAL ORGANIZACIÓN LA DRIMAVERA	RinCarhon	compania Agricola de la Sierra Sucursal Colompia ORGANIZACIÓN LA PRIMAVERA SA	Registered
Colombia	Provecto de Carbono Forestal Vichada Alianza Fiduciaria S A	BioCarbon	Alianza Fiduriaria SA - Fideiromiso	listed
Colombia	Provecto de mitigación de cambio climático Región Caribe	BioCarbon	South Pole Carbon Asset Management S.A.S.	Registered
Colombia	Proyecto de mitigación en el sector del uso del suelo cambio en el uso del suelo y silvicultura	Cercarbono	Sociedad Agropecuaria YUMA SAS	Certified
COULINIA	por remociones debidas al establecimiento de sistemas forestales de Hevea brasiliensis en el municipio de Barrancabermeja, Santander, Colombia.			

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
Colombia	Proyecto de Mitigación Forestal Bonanza Verde	Cercarbono	South Pole Carbon Asset Management	Certified
Colombia	Proyecto Forestal Alcaraván Orinoquía	BioCarbon	CO2CERO S.A.S.	Listed
Colombia	Proyecto Forestal CO2Cero Caucho El Viento	BioCarbon	Ecologic S.A.S.	Deregistered
Colombia	Proyecto Forestal CO2Cero Caucho PL UNO	BioCarbon	Ecologic S.A.S.	Deregistered
Colombia	Proyecto Forestal CO2CERO Meta09	BioCarbon	CO2CERO S.A.S.	Deregistered
Colombia	Proyecto Forestal CO2Cero Reforestadores Vichada-Meta	BioCarbon	Ecologic S.A.S.	Deregistered
Colombia	Proyecto forestal de mitigación de cambio climático "Forestal de La Orinoquía"	Cercarbono	Forest First Colombia S.A.S.	Certified
Colombia	Proyecto Forestal de Mitigación de Cambio Climático en áreas degradadas por ganadería	Cercarbono	South Pole Carbon Asset Management	Certified
Colombia.	Fincas La Clara y Suebra	Distration		Least of the second sec
Colombia	Proyecto Forestal Fundación Obra Social Regeniorista Senor de los Millagros Descrete Eseretal MANANTE en alentaciones de Caucha natural	DioCarbon	רטחמפרוסה שמר אסטרופו אפטפרונסרוגנים ארוסים ואווופגרטג בסביביקים אאמאלא דב כי אי כ	Desistered
Colombia	r i uyoutu i u catali MAYALLE di pialitaciu ica uo dauciju itatuli al Decoveru of deeradad areas with arrofarestru sustems in Calombia	VCC	Jourdiau Mint Artet J.A.J. Multinle Dronoments	Derictered
COLONINIA	recover y or uegraned area with agrouor earry systems in Colonnua Decimeración de suelos deeradados con el uso de incentivos financieros en el centro v oriente	Cercarhono		Certified
Colombia	recepti actori de succes degradados con er dao de incentições intantere os curei contra y oriente de Colombia			
Colombia	Reforestación Comercial en Meta	Cercarbono	South Pole Carbon Asset Management	Certified
Colombia	Reforestación de suelos degradados por la ganadería y la agricultura en Antioquia	Cercarbono	South Pole Carbon Asset Management	Certified
Colombia	Reforestation Project in Colombia 01	GOLD	BaumInvest AG	Certified Design
Colombia	Reforestation with Rubber on degraded lands of Colombia	VCS	NACOBENA SAS	Registered
Colombia	Regenerating Colombian Coffee Ecosystems	VCS	The PURE PROJECT SAS	Registered
Colombia	Restoration of degraded areas and reforestation in Cáceres and Cravo Norte, Colombia	VCS	Asorpar Ltd.	Registered
Colombia	Saving Colombia's Cloud Forest	VCS	Saving Nature, Inc.	Under validation
Colombia	SKCARBONO	Cercarbono	Reforestadora Andina S.A.	Certified
Colombia	Sustainable Agroforestry Cacao Meta, Colombia	VCS	Multiple Proponents	Under validation
Colombia	THE FOREST CARBON PROJECT AGROREFORESTADORA RANCHO VICTORIA S. A	VCS	AGROREFORESTADORA RANCHO VICTORIA S.A	Rejected by Administrator
Colombia	Vegachi, ecological restoration of degraded lands	GOLD	Swiss Carbon Value Ltd.	Certified Design
Colombia	Vichada Climate Reforestation Project (PAZ)	GOLD	Forest Finest Colombia	Certified Project
Colombia	Yagual - Carbon Sequestration Grouped Project for the Restoration, Conservation and	VCS	Société de gestion de projets ECOTIERRA Inc.	Registered
COLOUINIA	Sustainable Production in the Guerrero, Sumapaz and Rabanal Paramo Systems			
Costa Rica	BaumInvest Forest Landscape Restoration Programme	GOLD	BaumInvest AG	Certified Design
Costa Rica	BaumInvest Reforestation Project	GOLD	BaumInvest AG	Certified Project
Costa Rica	Reforestation Project in Costa Rica 01	GOLD	BaumInvest AG	Certified Design
Costa Rica	VisionsWald - VisionForest	GOLD	Querdenker GmbH	Certified Design
Côte d'Ivoire	Karidja forest restoration project	VCS	aDryada	Under development
DRC	EcoMakala Virunga Reforestation project	GOLD	CO2logic	Certified Project
DRC	Kwango River Project, Democratic Republic of Congo	VCS	FRM Commitment	Under validation
Ecuador	Conversion of intensive agricultural systems to dynamic agroforestry systems for sustainable	GOLD	South Pole Carbon Asset Management Ltd.	Listed
	cocoa production in Ecuador Deferentation with Native Sneniae in the Dachinal and Mina Diver Waterchede for Carhan	VCs	Multinla Dronoments	Inder development
Ecuador	ncero estation with rative openes in the racingal and rain a fiver water sheas for carbon Retention			
Ecuador	San Pablo del Lago reforestation project	GOLD	South Pole Carbon Asset Management Ltd.	Listed
Egypt	SEKEM tree project	GOLD	SEKEM for Land Reclamation (SLR)	Certified Design
Estonia	Arbonics afforestation project one	VCS	Arbonics OÜ	Under validation
Estonia	Ecobase Europe Afforestation Project	VCS	ECOBASE (PROJECT SPRUCE OU)	Under validation
Estonia	Project 1	VCS	MAA RESTORATION LLC	Rejected by Administrator
Estonia	Project 2	VCS	MAA RESTORATION LLC	Rejected by Administrator
Ethiopia	East African Afforestation, Reforestation and Revegetation Program	VCS	Horn of Africa Regional Environment Center and Network (HoA- RFC&N)	Registration requested
Ethiopia	Humbo Ethiopia Assisted Natural Regeneration Proiect	GOLD	World Vision Australia	Certified Project
Ethiopia	Restoration and Conservation of Dry Afromontane Forest in the Highlands of Eastern Tigray	VCS	WeForest ASBL	Under development
Ethiopia	Small scale community-based afforestation program in Ethiopia	GOLD	Stiftung Menschen für Menschen	Listed
Ethiopia	Small scale community-based afforestation program in Ethiopia - Konea	GOLD	Stiftung Menschen få%r Menschen	Listed
Ethiopia	Sodo Ethiopia	GOLD	World Vision Australia	Certified Project
Cabon	Leconi Agroforestry Project in Haut-Ugooue (LAPHU)	S N	AEKA Group	Under development

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
Georgia	Afforestation with Hazelnut Plantations in Western Georgia	GOLD	Ferrero Trading LUX S.A.	Certified Project
Germany	humusCO2mp	GOLD	humusCO2mp Gmbh	Listed
Ghana	Bandai Hills Bamboo Reforestation Project, Ghana	VCS	EcoPlanet Bamboo Group	Registration requested
Ghana	Community Restoration of Native Ecosystems in Ghana	VCS	Multiple Proponents	Registration requested
Ghana	JOII Jatropha plantation in Ghana	GOLD	JOIL (S) Pte. Ltd.	Certified Project
Ghana	Kwamisa/Other reserves community Forest Project	VCS	Multiple Proponents	Under development
Ghana	North Bandai Bamboo Reforestation Project	VCS	EcoPlanet Bamboo Group	Registration requested
Ghana	REFORESTATION OF DEGRADED FOREST RESERVE AREAS IN GHANA, WEST AFRICA	VCS	Miro Forestry Developments Limited	Registered
Ghana	Reforestation of Degraded Forest Reserve Land in Ghana	Cercarbono	Mere Plantations Limited	Certified
Ghana	Reforestation of Degraded Forest Reserves in Ghana	VCS	Form Ghana Ltd	Registered
Guatemala	Agroforestry and forest restoration for ecological connectivity, poverty reduction and	VCS	Livelihoods Fund SICAV SIF	Registered
Cuatciliaia	biodiversity conservation in Cerro San Gil, Caribbean Guatemala			
Guatemala	Agroforestry System Languin, Alta Verapaz, Guatemala	VCS	Multiple Proponents	Under development
Guatemala	ECO2 Rubber Forests Guatemala	VCS	Negocios Energeticos De Occidente, S.A.	Registered
Guatemala	Promoting Sustainable Development through Natural Kubber I ree Plantations in Guatemala		Negocios Energeticos de Occidente S.A.	Kegistered
Honduras	Api osada Ketorestation Projecu, community rerorestation and agronorestly with simali-scare cocoa farmere in Honduras	GOLD	טווגווטאוו דו טובנו בכיפוטבו	
Ireland	Arctic Afforestation in Fast Iceland	GOLD	Yøødrasill Carhon ehf	listed
India	Afforestation project by Cropcity Agrovet Pyt. Ltd. Mahogany trees	VCS	Cropcity Agrovet Pvt. Ltd	Rejected by Administrator
India	Agroforestry Plantation of ITC Limited In Selected Regions of North India	VCS	ITC Limited	Under validation
India	Agroforestry plantations in India	VCS	Shivbhadra Agro Private LTD	Under validation
cipul	AGROFORESTRY PLANTATIONS TO ENHANCE THE LIVELIHOOD OF RURAL	VCS	Infinite Environmental Solutions LLP	Under development
IIMIA	COMMUNITIES IN INDIA			
India	Araku Valley Livelihood Project	VCS	Livelihoods Fund SICAV SIF	Registered
India	ARAKU VALLEY REFORESTATION PROJECT	VCS	CropZone Agro Forestry Private Limited	Under validation
India	Bagepalli CDM Reforestation Programme	GOLD	Agricultural Development and Training Society	Certified Project
India	Bamboo plantations by farmers and community in the country	VCS	Infinite Solutions	Under development
India	Ban Odisha 01	VCS	Core CarbonX Solutions Pvt. Ltd.	Rejected by Administrator
India	Ban Odisha 02	VCS SOL	Core CarbonX Solutions Pvt. Ltd.	Rejected by Administrator
India	Ban Odisha 03	VCS VCS	Core CarbonX Solutions Pvt. Ltd.	Rejected by Administrator
India	Ban Odisha U4	5	Core CarbonX Solutions PVt. Ltd.	Rejected by Administrator
India	Ban Ouisna UD Ban Odisha Ok	50	Core CarbonA Solutions PVL Ltd.	Rejected by Administrator Dejected by Administrator
India	Ban Odisha OO Ban Odisha O7	227	Core Carbon Solutions Evi. Ltd. Core Carbon X Solutions Dyf 1 td	Rejected by Administrator
India	Ban Odisha Of Ban Odisha O8	NCS N	Core CarbonX Solutions Pvt. Etc.	Rejected by Administrator
India	Ban Odisha 09	VCS	Core CarbonX Solutions Pvt. Ltd.	Rejected by Administrator
India	Ban Odisha 10	VCS	Core CarbonX Solutions Pvt. Ltd.	Rejected by Administrator
India	Carbon Sequestration through Agroforestry by farmers in Telangana State	VCS	Core CarbonX Solutions Pvt. Ltd.	Under development
India	CLIMATE SUSTAINABILITY THROUGH HORTICULTURE PROJECT IN INDIA	VCS	Tata Communications Limited	Under validation
India	Community Based Forest Plantation in India	VCS	Greenovation Sustainability Solutions Private Limited	Under validation
India	Community Forestry Initiatives in India	VCS	SAUNIA GAUNIA FOUNDATION	Under validation
India	COMMUNITY PARTICIPATIVE FORESTRY/AGROFORESTRY DEVELOPMENT PROJECTIN	۲C>	Indian Farm Forestry Development Co-operative Ltd.	Registration requested
	Community-based reforestation project on degraded lands in Uttar Pradesh India hy Indian	VCS	Indian Earm Forestry Develonment Co-onerative Limited	Registered
India	Farm Forestry Development Co-operative Limited	3		
India	CORE CARBÓN SERICULTURE PLANTATION IN ODISHA STATE	VCS	Core CarbonX Solutions Pvt. Ltd.	Under development
India	CORE CARBON VANAM IN ANDHRA PRADESH	VCS	Core CarbonX Solutions Pvt. Ltd.	Under development
India	CORE CARBON VANAM IN JHARKHAND STATE	VCS	Core CarbonX Solutions Pvt. Ltd.	Under development
India	CORE CARBON VANAM IN JHARKHAND STATE 2	VCS	Core CarbonX Solutions Pvt. Ltd.	Under development
India	CORE CARBON VANAM IN ODISHA STATE	VCS	Core CarbonX Solutions Pvt. Ltd.	Under development
India	CORE CARBON VANAM IN TELANGANA STATE	VCS	Core CarbonX Solutions Pvt. Ltd.	Under development
India	CORE CARBON VANAM IN WEST BENGAL AND TAMIL NADU	VCS	Core CarbonX Solutions Pvt. Ltd.	Under development
India	CORE CARBON VANAM(SERICULI UKE) IN OUISHA SI AI E	S) \	Core CarbonX Solutions Pvt. Ltd.	Under development
India	Developing Climate Kesilience Of The Kesidential Society in Hyderabad Througn Miyawaki Afforestation: Urban Forest Development	SUN	SOW AND KEAP AGKU PV I LIU	Under development

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
India	Enhancing Livelihoods of Farmers in Guiarat through Agroforestry Plantations by SHBVM	VCS	Multiple Proponents	Under validation
India	Enhancing rural livelihoods of farmers through carbon finance	VCS	GKF Agroforestry Pvt Ltd	Under validation
India	Enhancing Rural Livelihoods through Carbon Sequestration by adopting Agro-forestry	VCS	VEDA CLIMATE CHANGE SOLUTIONS LTD	Rejected by Administrator
India	FVI RAMROD AFFORESTATION PROJECT IN INDIA	VCS	Emergent Ventures India Private I imited	Rejected by Administrator
India	Enrect Plantation Project in Iliain India	NCS VCS	Uliain Smart City I imited	Inder develonment
India	Forest Trees and Sustainable Livelihoods	GOLD	Society for the Up infimment of Villagers and Development of Hinalavan Areas (SUVIDHA)	Listed
India	GROUPED AGROFORESTRY PROJECT IN VARIOUS STATES OF INDIA	VCS	Infinite Solutions	Under development
India	GROUPED ARR PROJECT IN TELANGANA	VCS	Multiple Proponents	Under development
India	Grouped plantation activity in various states of India	VCS	Infinite Environmental Solutions LLP	Under development
India	Grouped project for reforestation on degraded and non-forest lands	VCS	EKI Energy Services Limited	Under development
India	Grouped Reforestation Project by Cropzone Agro Forestry Private Limited	VCS	CropZone Agro Forestry Private Limited	Registered
India	Grouped Reforestation Project in Indore, India	VCS	EKI Energy Services Limited	On Hold
India	Grouped Sustainable Agroforestry Project	VCS	Multiple Proponents	Under validation
India	Himalayan Oak Restoration Project	GOLD	Value Network Venture Advisory Services Pte. Ltd.	Certified Design
India	Improving livelihoods through Agroforestry Plantations in India	VCS	Infinite Solutions	Under development
cipul	Improving rural livelihood through agroforestry practices in Punjab, India- I	VCS	Department of Forests and Wildlife Preservation, Punjab	Registration and
				requested
India	Improving rural livelihood through agroforestry practices in Punjab, India- II	VCS	Department of Forests and Wildlife Preservation, Punjab	Registration and verification approval
				requested
India	KOSHER BLUE CARBON -1	VCS	Kosher Climate India Pvt. Ltd.	Under validation
India	Mahogany Plantation in India	VCS	Mahogani Vishwa Agro Pvt Ltd	Registration and verification approval requiected
India	Plantation Project on wastelands hy Sun Plant Aero I imited	VCS	Sun Plant Aero I imited	Registered
India	Reforestation of degraded land by MTPL in India	VCS	Mangalam Timber Products Limited	Registered
India	Reforestation of degraded land in Chhattisgarh, India	VCS	Prakash Industries Limited	Registered
India	Reforestation Project in Meghalaya by Shillong Bamboo	VCS	Shillong Bamboo	Under development
India	Regeneration Meghalaya	VCS	Multiple Proponents	Under development
India	RESTORATION OF DEGRADED LAND TO ENHANCE TREE COVER AND IMPROVE LIVELIHOODS OF FARMERS IN INDIA	VCS	Pernod Ricard India Foundation	Under validation
India	RESTORATION OF HOMESTAED LAND OF POOR RURAL COMMUNITIES IN ASSAM AND MEGHALAYA	VCS	Multiple Proponents	Under validation
India	SMG - Bamboo Plantations for a better tomorrow	VCS	OYU Green Private Limited	Under validation
India	Solve for Carbon Neutrality - LTI's Afforestation Program	VCS	Multiple Proponents	Under development
India	Strengthening rural livelihood through carbon finance : Agroforestry practices in Meerut	VCS	Department of Environment, Forest and Climate Change,	Under validation
	Forest circle of Uttar Pradesh	VICE	Government of Uttar Pragesh	
India	strengthening rural livelihood through carbon finance to agroforestry practices in Saharanpur Forest Circle of Uttar Pradesh	S	Department of Environment, Forest and Climate Change, Government of Uttar Pradesh	Under validation
India	Strengthening rural livelihood through carbon finance: Agroforestry practices in Bareilly Forest Circle of 1 Hrar Pradesh	VCS	Uttar Pradesh Forest Department	Under validation
India	Strengthening rural livelihood through carbon finance: Agroforestry practices in Gorakhpur Forest Circle of Uttar Pradesh	VCS	Department of Environment, Forest and Climate Change, Government of Uttar Pradesh	Under validation
India	Strengthening rural livelihood through carbon finance: Agroforestry practices in Lucknow Forest Circle of Uttar Pradesh	VCS	Department of Environment, Forest and Climate Change, Government of Uttar Pradesh	Under validation
India	Strengthening Rural Livelihood Through Carbon Finance: Agroforestry Practices In	VCS	Department of Environment, Forest and Climate Change,	Under validation
citor	Moradabad Forest Under UT Uttar Pradesn Ctrooothoning rund likudihoods of smallholder formars in trihol districts of Odisha India	VICC	Government or Uttar Pragesn	Indoevalidation
India	ou crigurching ruran inventioous or sinaminouen rarmers in urbar uisurus or Outsha,mura Tsear Forract Carbon Droiact	52		Under validation
India	TIST Program in India, VCS 001	NCS V	Clean Air Action Corporation	Registered

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
India	Trees for Livelihood in Madhva Pradesh. India	VCS	Value Network Venture Advisory Services PTF_LTD	Under validation
India	Voluntary Carbon Market Project for Agroforestry Plantation in Anand and Kheda. Guiarat	VCS	Guiarat Forest Department	Under development
India	Voluntary Carbon Market Project for Agroforestry Plantation in Godhra. Guiarat	VCS	Guiarat Forest Department	Under development
India	Voluntary Carbon Market Project for Aeroforestry Plantation in Surat Guiarat	VCS	Guiarat Forest Department	Under development
India	Voluntary Carbon Market Projects for Agroforestry Plantations in Mehsana Guiarat	VCS	Guiarat Forest Department	l Inder development
Indonecia	Agroficestry and Deforestation for Carbon Sequencian in Indonesia	NCS		Degistration regiseted
Indonesia	רקטוריו רטון לא מוע ארוטי באפתטון וטן כאו סטון טכקעכטנו אנוטין וווועטוויטוא ביון בירין בהילו בהיריה דייריייטיו			A office
				Acuve
International	BARRY CALLEBAUI CUCUA	GULD	Barry Callebaut	Certified Project
Italy	BAMBOO MONTEMILONE	VCS	Societa' Agricola Bambu' SRL	Rejected by Administrator
	BISIGNAND AND MESORACA PROJECT OF AFFORESTATION OF THE AGRICULTURAL	VCS	GAIA s.r.l. Società Agricola	Registration requested
Italy	COMPANY GAIA SRL RAMBOO PLANTS	}		
Italy	PIMBOSCHIMENTO PROGETTO DELLA SOCIETA' AGPICOLA GAIA SPI RAMBOO PI ANT	VCC	GAIA e r l'Società Agricola	I Inder validation
Italy		507		
Kenya	Hongera kelorestation Project (ivit Kenya and Aberdares)	202		
	Komaza Smallholder Farmer Forestry Kenya	VC5	Komaza Group Inc.	Registration and
Kenya				verification approval
Vania	l dia Mainandra Ducia Duciante		Guidae Cambara Malura Ltd	requested
Kenya	Lake Nalvasha basin Kelof estation Project	COLD		
Kenya	Papariko - Kesioration ol Degraded Mangrove Areas In Kenya	202		
Kenya	Restore Atrica: Restoring trees and livelihoods in Kenya	VCS	Global Evergreening Alliance	Under development
Kenya	IISI Program in Kenya, VCS 001	VCS	Clean Air Action Corporation	Registered
Kenya	TIST Program in Kenya, VCS 002	VCS	Clean Air Action Corporation	Registered
Kenya	TIST Program in Kenya, VCS 003	VCS	Clean Air Action Corporation	Registered
Kenva	TIST Program in Kenva. VCS 004	VCS	Clean Air Action Corporation	Registered
Kenva	TIST Program in Kenva, VCS 005	VCS	Clean Air Action Corporation	Registered
Venus		NCC .	Clean Air Action Corporation	Deristand
Vonto	TICT Drown in View of	50	Cicali Ali Action Composition	Domintoriod
NGIIYa		507		register cu
Kenya	151 Program in Kenya, VCS-CCB 010	202	Clean Air Action Corporation	Kegistered
Laos	Afforestation in Eucalyptus and Acacia plantations for Burapha Agroforestry Co., Ltd.	VCS	Burapha Agroforestry Co. Ltd	Registered
SUC	Mitigation of GHG: Rubber based agro-forestry system for sustainable development and	VCS	Lao Thai Hua Rubber Co. Ltd	Registered
Laus	poverty reduction in Pakkading, Bolikhamsay Province, Lao PDR			
Laos	SCALA LAOS AGROFORESTRY PROJECT 2	VCS	SilviCarbon Lao Sole Company Ltd.	Under validation
Latvia	Not Hot Afforestation project	VCS	Not Hot Environmental Solutions	Under development
Madagerar	Ankotrofotsy Community-based Reforestation and Carbon Offset Project, Menabe region,	ACR	Tany Meva Foundation	Inactive
Iviauagascai	Madagascar			
Madagascar	Reforestation of deforested land in Madagascar	VCS	EcoFormation	Registered
Madagascar	Societe VERAMA Madagascar Afforestation Project	ACR	Societe VERAMA	Inactive
Malawi	Fuelling a greener future for farmers in Malawi through the use of Jatropha curcas	VCS	Bio Energy Resources Limited (BERL)	Registered
Malawi	Trees of Hope	Plan Vivo	William J. Clinton Foundation	Active
Malaysia	PRJ10-Forest Reserve - Gurun, Kedah, MY	BioCarbon	Carbon Vault Sdn Bhd	Listed
Malaysia	PRJ11-Forest Reserve - Kluang, Johor, MY	BioCarbon	Carbon Vault Sdn Bhd	Listed
Mali	Bougouni-Yanfolila Forest Project, Mali	VCS	Multiple Proponents	Under development
Mali	Jatropha Curcas grouped project in Mali	VCS	Multiple Proponents	Registered
Mali	ZANBAL	GOLD	Zanbal	Certified Design
Mexico	Fresh Breeze Afforestation Project	VCS	Proteak UNO S.A.B. de C.V.	Registered
Mexico	Guadalupe Zaiú. Chaniul. San Antonio Chicharras	CAR	Toroto SAPI de CV	Listed
Mexico	La Gloria de Gante	CAR	Toroto SAPI de CV	Listed
Mexico	Reforestation with Teak CO2e TEAKMEX	VCS	Agropecuaria Santa Genoveva S.A.P.I. de C.V.	Registered
Mexico	Reforesting the Land of the Jaguar	CAR	PLANALTO S.P.R. DE R.L.	Completed
Mexico	Reforesting the Usumacinta River Delta	CAR	PLANALTO S.P.R. DE R.L.	Listed
Mexico	Scolel té Natural Resources Management and Carbon Sequestration Project (Scolel té Natural	Plan Vivo	Sociedad Cooperativa Ambio	Active
	Resources Management and Carbon Sequestration Project)			
Mexico	Sustainable Climate-Friendly Coffee (CO2 Coffee)	VCS	Multiple Proponents	Registered
Mexico	TabasCO2 Afforestation Project	VCS	Forestaciones Operativas de México S.A. de C.V.	Under validation
Mexico	XiCO2e: Mexican Reforestation Project	VCS	FORLIANCE GmbH	Under development

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
Mozambique	Revegetation with fruit Trees in North Manica Province, Mozambique	VCS	Agrimoz S.a r.l.	Registered
Myanmar	Restoration of Degraded Mangroves and Sustainable Development in Myanmar	VCS	Worldview International Foundation	Registration requested
New Zealand	The New Zealand Iransitional Afforestation Project	VCS	New Zealand Forestry Removals Limited	Under development
Nicaragua	EcoPlanet Bamboo Central America - Kerorestation Project	50	EcoPlanet Bamboo Group	Deristered
Nicaragua	iiitegi ateu Project ion Keiorestation ariu Agi ororesti y ori Degi aucu iarius iiri Nical agua Deforestation grouped niroiert Norteak Nicaragua	52	Murteak Nicaragua S.A.	Register eu Degistered
Nicaragua	Reforestation Program in the Southeastern Region of Nicaragua on degraded pastureland	GOLD	Across Forest	Certified Project
Nicaragua	Sustainable cocoa plantation system (agroforestry) in East Nicaragua	GOLD	Alfred Ritter GmbH	Certified Project
Nicaragua	Sustainable Forest Plantations Leon	GOLD	Fundacion DIA	Certified Design
Nicaragua	The Native Ecosystem Restoration in Nicaragua Project	VCS	Multiple Proponents	Registration requested
Niger	Niger Acacia Senegal Plantation Project	VCS	Achats Service International	Registered
Niger	Niger Acacia Senegal Plantation Project - CER Conversion	VCS	Converted from other GHG program	Units Transferred from
				Approved GHG Program
Nigeria	NIGEK DELIA MANGKOVE PROJECI	VCS VCS	everi GmbH	Registration requested
Pakistan	Agro ForestryUL ACD Sustainable Fastat Carrar Fatabliahmant Designt		Multiple Proponents	Under development
Denemo			Autoriudu uci Carial uc Fariania (ACF) Eoroat Einonon CCE	
Danama	COLOL ITUPICALIYIA	ACC -	Europeine Dorano Do Constrationed	Derictored
Danama	Generation Forces of oup Frights		ruiuduoii posque De Gerici duoies Donomo Deforectation Services S A	negistereu Lietad
Paraguay	Afforestation and restoration of degraded forests in Eastern Paraguay or Forestal Azul Carbon	on VCS	Forestal Azul S.A.	Registered
Devention	r 1 Ujou Affaraatatian in aanaratian with laad landawaaa far Earaatal Can Dadra C A	N/CC	Economic Con Dodro C A	Devictored
Daraguay	Altorestation of degraded gracelands in Casava and Cunicá	52	roi estal sali reul u s.A. Millar Eoraet Invactment AG	Degistered
Deroguay	Arrowski Annovi of vege adve grassianius in vaazapa aniu Ouan a Decembral Annovi Cerbon Decisert	201		Domintorod
Daraguay	roi estal Apepu dai bori ri ofect Escortal Dia Amidahan (EDA)	50	r oi estal Apepu Abhal woode international AC	Detected by Administrator
Devocine	רט באנמו אטראקטומעסומר (דיראל) האמא ליד הרבילאדולא האין אידור לידאלים ההסיורלד	507		Desistantion reasonated
Devocine	Mind abating of acting and any acting gradies in Descripted	DisCorbon	Investancia Paraguay 3.A.	Registri ation requested
Daraguay	Mixed pianung of nauve and non-nauve species in rai aguay-i Daracal ADD Carbon Earactor Diraioct	VICC	DESALI UNOS IMAUEI EL US J.A. DADA/CEL CA	
Daraguay	Fal acti AKK Cal DUIT FUTESULY FLUJECU Suithorn Daramiau Suitainabla Affariatation Disiont	50		Domictored
Development	Judicent ranged yousian and constantion regions of the constant of the constan	507		
Paraguay Deru	The Paraguayan Unaco Neem Rejorestation Project	202	El Keuro D.A. Dur Draiet	Registration requested
Doru	Alto Hudyabaliliba Evensionatal reconstrict of diverse ferents on abandoned martures in Danariana. Deriv		Panariana Chiftinar	Inder development
Deri	Experimental regeneration of alverse for ests on abandoned pastures in Pariguaria, Peru	507	Pariguaria Surturig	
Peru	Jubilacion Segura : Agronorestry And Reforestation With Smallscale Farmers In Peru		Pur Projet	C-416-4 D-1-
Peru	Kana Smallholder Attorestation Project	GOLD	VVORIG VISION AUSTRALIA	
Peru	Planting for the Future: Financially sustainable agrotorestry systems and payments for	272	Plant your Future	Kegistered
	ecosystem services Deferentiation of mating lands on the Dominian Northern Andre "Econdary DDADICAM"	NCC	Multiple Provincete	Domistorod
Peru	Kerorestation of pasture ratius on the fiel uvian inor them have findes find each field of Counceder Grouped Project	5		no ioisigou
Peru	Reforestation of pastures in Campo Verde with native species. Pucallpa. Peru	VCS	Bosques Amazónicos	Registered
4	Reforestation of pastures in Sociedad Agrícola de Interés Social "José Carlos Mariátegui" -	VCS	SAIS José Carlos Mariategui	Registered
Peru	Joven Forestal Project, Perú		2)
Peru	Reforestation Sierra Piura	GOLD	Claudia Vasquez	Certified Project
Peru	Shade Coffee & Cacao Reforestation Project	VCS	Société de gestion de projets ECOTIERRA Inc.	Registered
Philippines	Lanao del Sur Bamboo Reforestation Project	VCS	EcoPlanet Bamboo Group	Registration requested
Philippines	Mindanao Forests for People and Sustainable Livelihoods (MinFor)	VCS	Multiple Proponents	Under development
Philippines	Mindanao Tree Planting Program for our Climate and Communities (MinTrees)	VCS	Multiple Proponents	Registered
Rep. of Congo	Agroforestry plantation Bateke Plateaus	VCS	FRM Commitment	Registered
Rep. of Congo	OKA 2 PROJECT	VCS	Acacia Batéké Capital	Registration requested
Romania	AK - Komania I Cerban sourcetration via efferzation in Siberian cottlomonte	COLD	MYKVAL CONSULI SKL NCO Contor for Emilionmental Invession	Listed
Dwondo	cal DOI sequesti auon via anoi estation in operiali settienients Arroforoctor Exclibroade Droioct	ROLD	I would find the find official fillovation	Deiected by Administrator
Rwanda	Agrorotesuly roli Livelinous Project Rwanda Rinarian Restoration Project	SOV	EroPlanet Bamboo Group	Rejected by Autilities ator Registration reguested
Senegal	Jatropha Agroforestry Senegal	VCS	African National Oil Corporation s.a.r.l.	Registered
SierraLeone	Reforestation of Degraded Lands in Sierra Leone	VCS	Miro Forestry Developments Limited	Registered

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South Africa	Baviaanskloof Carbon Project	VCS	Baviaanskloof Bewarea NPC	Under development
South Africa	CSA Carbon	VCS	C-SA Properties (Pty) Ltd	Under development
South Africa	Eastern Cape Bamboo Forestry Project, South Africa	VCS	EcoPlanet Bamboo Group	On Hold
South Africa	Eastern Cape Restoration Project, South Africa - Makhanda	VCS	EcoPlanet Bamboo Group	Under validation
South Africa	Eastern Cape Restoration Project, South Africa - Somerset East	VCS	EcoPlanet Bamboo Group	Under validation
South Africa	Kuzuko Lodge Private Game Reserve thicket restoration project	VCS	Spekboom Trading (Pty) Ltd	Registered
South Africa	Peri-urban bamboo planting around South African townships	VCS	Multiple Proponents	Registered
South Africa	Renencom Afforestation/Reforestation Grouped Project	VCS	Renencom	Registered
South Africa	Spekboom Regeneration and Carbon Sequestration	Social	Spekboom Net Zero	Listed
		Carbon		
South Africa	TERRAGRN - Land Regeneration through Agroforestry in Mpumalanga South Africa	GOLD	TERRAGRN PRIVATE LIMITED	Listed
South Africa	TERRAGRN - Land Regeneration through Agroforestry in Mpumalanga South Africa - VPA 01	GOLD	TERRAGRN PRIVATE LIMITED	Listed
South Africa	Tree Planting in South African townships	VCS	Food and Trees for Africa (FTFA)	Registered
Spain	MOTOR VERDE FORESTRY CARBON PROJECT - GRANDAS DE SALIME (SPAIN)	VCS	Multiple Proponents	Under validation
Spain	Reforestation of degraded land in Spain	VCS	Land Life Company BV	Under validation
Sri Lanka	Establishing a Rubber Cultivation Project with Community Engagement in the Eastern & Uva Provinces of Sri Lanka	VCS	Rubber Reseach Institute of Sri Lanka	Registration requested
Tanzania	Emiti Nibwo Bulora	Plan Vivo	Vi Agroforestry	Active
Tanzania	Reforestation of degraded grasslands in Uchindile & Mapanda, Tanzania	VCS	Green Resources Tanzania Ltd (GRL)	Registered
Tanzania	Udzungwa Corridor Reforestation	VCS	Udzungwa Corridor Limited	Registration requested
Timor-Leste	HALO VERDE TIMOR COMMUNITY FOREST CARBON	Plan Vivo	F-COTÌ	Active
Timor-Leste	Rai Matak (Green Lands)	GOLD	xPand Foundation	Listed
Timor-Leste	Rai Matak Covalima Community Forestry Program	GOLD	xPand Foundation	Listed
Timor-Leste	WithOneSeed Timor Leste Community Forestry Program	GOLD	xPand Foundation	Certified Project
Togo	PlanTogo	VCS	Sequoia Plantation Togo	Under validation
Togo	PROJECT TOGO	GOLD	Unknown Project Developer	Certified Design
Uganda	1MTN Uganda Bamboo Planting Project	VCS	1MTN Uganda OU	Under development
Uganda	Agroforestry and reforestation with small-scale farmers in Uganda	VCS	The PURE PROJECT SAS	Registered
Uganda	Bukaleba Forest Project	VCS	Busoga Forestry Co. Ltd (Subsidiary Green Resources)	Registered
Uganda	Kijani Forestry smallholder farmer forestry project	VCS	Multiple Proponents	Under validation
Uganda	Kikonda Forest Keserve	GOLD		
Uganda	Natural High Forest Kenabilitation Project on degraded land of Kibale National Park	50	Greenchoice	Registered
Uganua	TIST PLOGIAIITII UGAIIUA, V.CS UUT	50	Clean Air Action Compartion	Dorictorod
Uganda	TIST Program in Header VCS 002		Clean Air Action Corporation	Domintorod
Ilganua	TIST Program in Heanda, VCS 004	50	Clean Alt Action Corporation	Registered Degistered
	TIST Droaram in Haanda VCS 005	SUV	Clean Air Action Corporation	Nuceistand Degistared
Uganda	TIST Drogram in Heanda, VCS 005	202	Clean Air Action Corporation	Registered
Uganda	TIST Program in Uganda. VCS-CCB 010	VCS	Clean Air Action Corporation	Registered
þ	TIST Program in Uganda, VCS-CCB 011	VCS	Clean Air Action Corporation	Registration and
Uganda	c Ç		c	verification approval
Uganda	Trees for Global Benefits	Plan Vivo	ECOTRUST	Active
UA Emirates	Afforestation activity on deserted wasteland in the Arab peninsula (Ghaba)	VCS	Dake Group	Under development
United States	Afforestation on the Big Island of Hawaii: Restoring native hardwood forests and enhancing	GOLD	HTH	Certified Project
	multiple ecosystem services	ACD A		
United States	Angeles National Forest Carbon Demonstration Project	ACK	National Forest Foundation	Listed
United States	bayou bartholomew Climate Action Project		The Nature Conservancy	Kegistered
United States	Camp Reio	CAR	Sierra Pacific Industries	Listed
United States	CHU Kefo Charterist Cristelinable Desteration Designt		Siefra Pacific Industries	Listed Listed
United States	Criestriut Dustairiaure restori auori r'i oject. Colline - Modor Reforestation	CAR	FOEST CALIUULI YYUIKS PDC RenewMeet	Lisicu Registered
United States	Devil Fire Reforestation	ACR	W. M. Reaty & Associates. Inc.	Inactive
United States	Devil Fire Reforestation Compliance Project	ACR	W. M. Beaty & Associates, Inc.	N/A

Country	Project Name	Standard	Developer (ACR, CAR, GOLD, VCS, Plan Vivo, Social Carbon), Proponent (Cercarbono) or Holder (Biocarbon)	Voluntary Status
United States	GreenTrees ACRE (Advanced Carbon Restored Ecosystem)	ACR	GreenTrees, LLC	Registered
United States	LOWER MISSISSIPPI VALLEY GROUPED AFFORESTATION PROJECT	VCS	The Nature Conservancy	Registered
United States	Lower Mississippi Valley Reforestation	ACR	Entergy Services, Inc	Registered
United States	Reforestation Across the Lower Mississippi Valley	VCS	Dynegy Inc.	Registered
United States	REGENERATING DEGRADED LANDS IN FLORIDA THROUGH PONGAMIA	VCS	Multiple Proponents	Under development
United States	San Juan National Forest Carbon Demonstration Project	ACR	National Forest Foundation	Canceled
United States	San Juan National Forest Carbon Demonstration Project (II)	ACR	National Forest Foundation	Listed
United States	Sheep and Dixie Fire Project	ACR	W. M. Beaty & Associates, Inc.	Listed
United States	SPI Wildfire Reforestation Project #1	CAR	Sierra Pacific Industries	Completed
United States	SPI Wildfire Reforestation Project #2	CAR	Sierra Pacific Industries	Completed
United States	SPI Wildfire Reforestation Project #2	CAR	Sierra Pacific Industries	Registered
United States	SPI Wildfire Reforestation Project #3	CAR	Sierra Pacific Industries	Completed
United States	SPI Wildfire Reforestation Project #3	CAR	Sierra Pacific Industries	Registered
United States	SPI Wildfire Reforestation Project #4	CAR	Sierra Pacific Industries	Completed
United States	SPI Wildfire Reforestation Project #5	CAR	Sierra Pacific Industries	Completed
United States	SPI Wildfire Reforestation Project #5	CAR	Sierra Pacific Industries	Registered
United States	SPI Wildfire Reforestation Project #6	CAR	Sierra Pacific Industries	Completed
United States	Storrie Fire Reforestation	ACR	W. M. Beaty & Associates, Inc.	Inactive
United States	Storrie Fire Reforestation Compliance Project	ACR	W. M. Beaty & Associates, Inc.	N/A
United States	Tensas River Basin Project	VCS	The Nature Conservancy	Registered
United States	The Cuyamaca Rancho State Park (CRSP) Reforestation Project	CAR	CA Department of Parks and Recreation	Registered
United States	Working Trees supporting eastern US Silvopasture, Project 1	VCS	Working Trees	Under development
Uruguay	'El Arriero' Afforestation on degraded grasslands under extensive grazing project	VCS	Forestal El Arriero SRL	Registered
Uruguay	'Guanaré' Forest Plantations on degraded grasslands under extensive grazing	VCS	Guanaré SA	Registered
Uruguay	Bosques del Uruguay Afforestation through High Quality Timber in Grasslands Project	VCS	Agroempresa Forestal S.A.	Registered
Uruguay	Bosques del Uruguay II (BDU II) Afforestation through High Quality Timber in Grasslands Project	VCS	AGRO EMPRESA FORESTAL SA	Registered
Uruguay	Bugnavilla Afforestation Through High-Quality Timber Over Degraded Grasslands	VCS	Bugnavilla SAS	Under validation
Uruguay	El Espinillar	VCS	Kattegat S.R.L.	Under development
Uruguay	Forteko afforestation on degraded grasslands under extensive grazing	VCS	Multiple Proponents	Registered
Uruguay	HG Afforestation Through High Quality Timber Over Degraded Grasslands	VCS	Pike Carbosur S.A.	Registered
Uruguay	IBERPAPEL SILVIPASTURAL SYSTEM ON DEGRADED LAND	VCS	Los Eucaliptus S.A.	Registered
Uruguay	ITAA afforestation on degraded grasslands under extensive grazing	VCS	Intercontinental Timber Asociacion Agraria	Registered
Uruguay	Lumin/Eucapine Uruguay Forest Plantations on degraded grasslands under extensive grazing	VCS	EUCAPINE S.R.L	Registered
Uruguay	Montes del Este afforestation through high quality timber in degraded grasslands	VCS	Fideicomiso Financiero Forestal Montes del Este	Registered
Uruguay	Silvopastoral carbon project of Uruguay	VCS	Climit	Under validation
Uruguay Zambia	Lerraligna Aftorestation Over Degraded Grasslands Tombwe Smallholder Reforestation Project	222	Fideicomiso Financiero Forestal Terraligna Tombwe Processing Limited	Under validation Registration requested
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