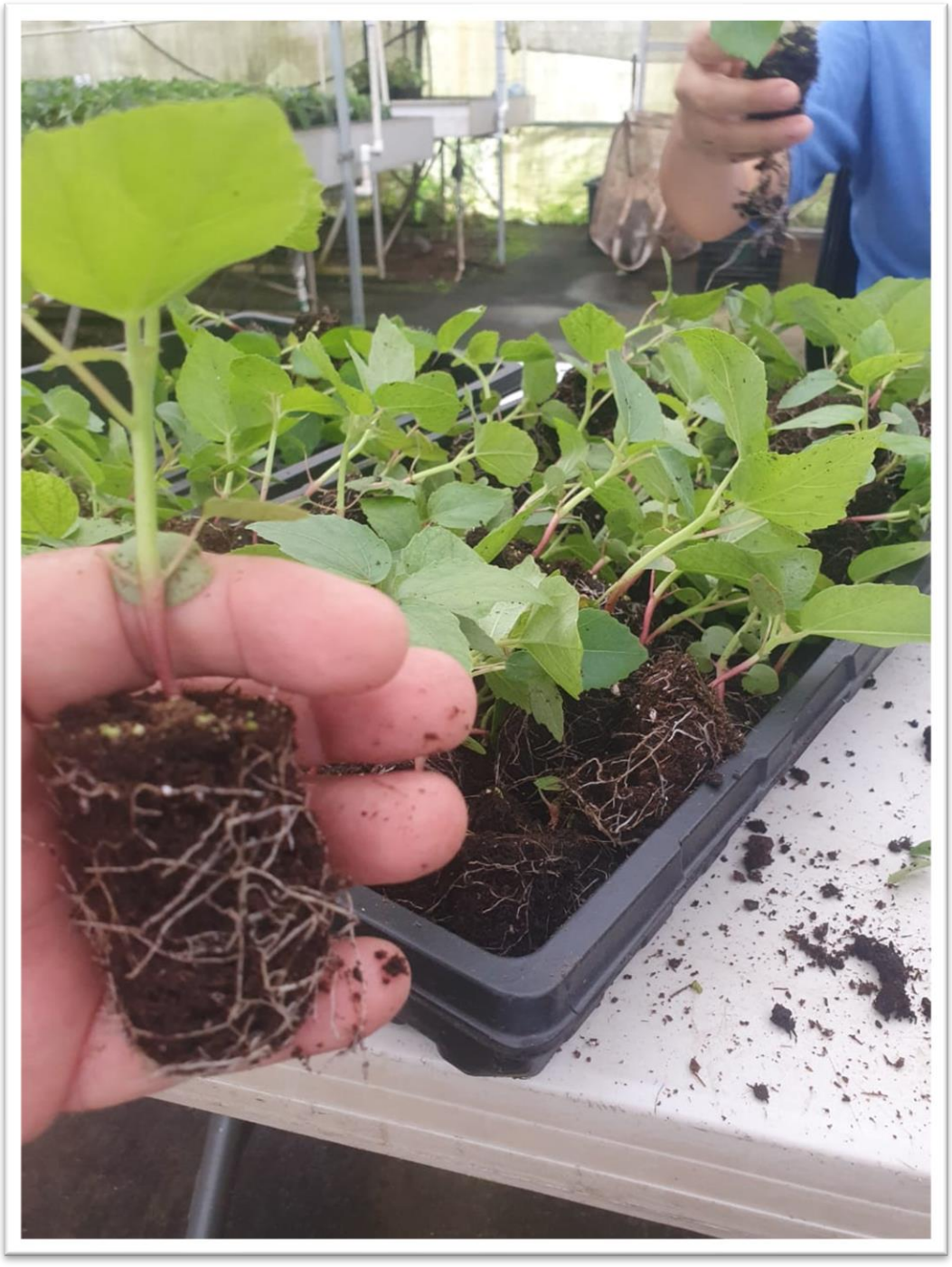
We can reforest with Balsa Wood in half the time thanks to the development of our own technology. We offer a golden opportunity to generate a profitable local business with global reach that will contribute to the conservation of the planet with the generation of clean energy, the fight against global warming and the generation of green projects with a very high social impact (employment and well-being).

Balsa Wood Reforestation and Marketing Project

Executive Summary

Grupo LIGHTHOUSE – LEXCO
Nov, 2023



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Introduction; The future in the hands of balsa wood reforestation

Until very recently, balsa wood was relegated to very simple uses such as the manufacture of rustic boxes for fruit packaging or handicrafts. For this reason, its demand and use was timid and absent in studies with the aim of creating processes and techniques that would allow it to be reforested in a controlled manner for large-scale industrial consumption.

Little by little, qualities have been discovered in wood (low weight, flexibility and the possibility of achieving different types of densities depending on the use to be provided) which has extended its interest in the use of multiple industrial activities and much more complex products such as, mainly, in the generation of wind energy (tower blades), the aeronautical industry, etc. computer chips and even glass replacement in some areas affected by strong winds.

At present, basically, balsa wood is one of the most sought-after and needed products, however, its conscious production by the hand of man is almost zero due to important challenges in general terms; (i) Very low percentage of success in seed germination (less than 10 percent), i.e., less than every hundred seeds manage to germinate after being sown, (ii) Very low percentage of success in the growth of the few germinated seeds, i.e., of the few germinated seeds, less than 20% of them become suitable trees for cutting and wood production, (iii) Relatively long tree growth time (6 years) at best, (iv) Natural conditions of latitude, climate, temperature and access to necessary water reduce the possibility to very few countries in the world. This new "revolution" of balsa wood has almost entirely consumed the world's pre-existing reserves of wild wood, with no successful replenishment initiatives to date to meet current demand.

This executive summary must show the success obtained by our business group thanks to more than five years of technical and scientific studies in the field with very important achievements of almost one hundred percent effectiveness in the germination and growth of the trees, as well as an evident reduction in the growth time for an adequate cut of only 3 years (three years).

In our business plan, a very important opportunity will be evidenced through reforestation with balsa wood, a business that will additionally allow income from

additional financial instruments for the generation and commercialization of assets, credits or credits resulting from the placement of carbon in the environment for the reduction of greenhouse gases (GHG). In addition, it introduces a social project for the generation of more than a thousand sources of direct employment and five thousand indirect jobs that will go hand in hand with the development of housing, education and economic activation projects in one of the most needy areas of Costa Rica (Province of Guanacaste).

Balsa Wood (General Characteristics)

Balsa wood (Ochroma pyramidale) is the balsa wood that grows most easily in Central America and several South American countries such as Colombia and Ecuador.

Balsa wood is the lightest wood known, with a density ranging from 0.10 to 0.15 g/cm3 (100 kg/m^3 to 150 kg/m^3), making it lighter than cork. The tree reaches an average height of 20 to 25 meters, with trunks 75 to 90 cm in diameter.

Characteristics:

- Correct Density
- Heart without water
- Unblemished roots
- Zero rot, fungus, and insect pests (when properly treated)

These characteristics make the foray into the international market successful. According to the National Forestry Office (ONF), the growth of this sector is significant. Thus occupying an important place among balsa exports to the world. Wood worldwide is being needed by many industries, including paper, which had a great impact with the arrival of the pandemic due to the large generation of packaging and having shortages of it, either for recovery (recycling) or directly from the wood industry.

Balsa wood is highly valued worldwide thanks to its weight and ease of molding, its flexibility and durability. Among the properties of balsa wood, its color stands out, which varies from white to pale gray, its structure or grain is soft, its texture is thick and

uniform, with an absent or non-distinctive smell, its straight grain is used in the thickest part of the trunk to work it, flavor is absent or non-distinctive, The brightness is high, the durability is low or medium, it is very susceptible to attack by insects such as beetles of the class Ambrosia Longhorn, fungi and termites. workability; It is flexible, it is the lightest wood in commercial use and its weight varies between 0.04 to 0.32 g/cubic centimeters, there is no problem in its mechanical or artisanal handling, but it is advisable to use saws, sharp and thin tools so as not to damage the wood, in gluing and impregnation it does not present any difficulty.

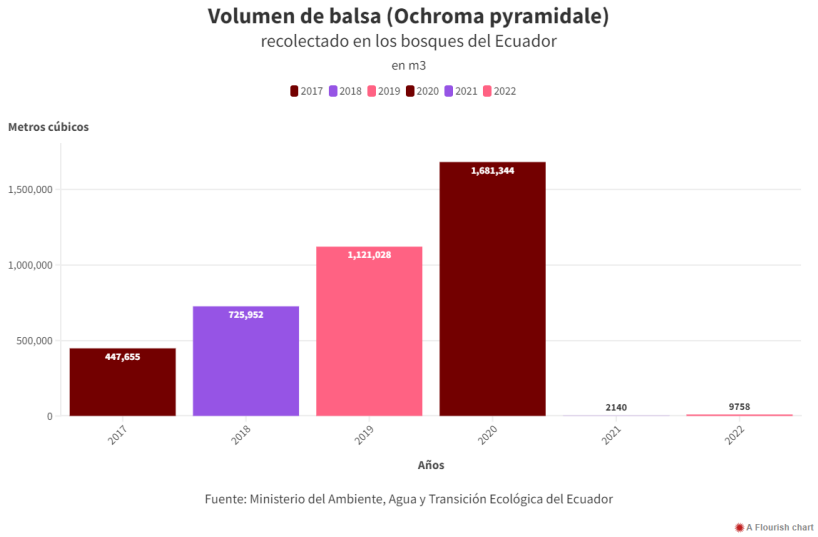
The main applications of wood are in: (i) **Aeromodel-grade**: This type of wood is used to make short-range launch rockets, coatings, flexible balsa wood panels, wind blades and nacelles, components of ships, railways and airplanes among others, (ii) **Industrial application:** For application in the manufacture of loading pallets, toys, used by the furniture industry in the creation of shelves, furniture and office furniture, scale models and models, acoustic equipment, handicrafts, surfboards among other applications.

The elements that characterize the raft are the degree of lightness and density that is regularly referred to by some professionals in architecture to design models, on the other hand, this type of wood is demanded to be implemented in the following sectors: Architecture, Entertainment, Industrial, Scientific Equipment, Offices, Surgical, etc.
The timber industry has a high demand since over the years there are fewer companies that invest in reforestation, worldwide this being a desired model to reach the international market with high utility costs for the target market, currently it has become one of the sectors with a high rate of progressive and growing production, showing external and internal potential.

Current supply and demand of Balsa Wood

A few years ago, Ecuador became the largest exporter of balsa wood in the world, [1]however, more than 85% of the exported wood corresponds to wild balsa wood, which pre-existed mainly in the Amazon, being almost entirely destroyed.

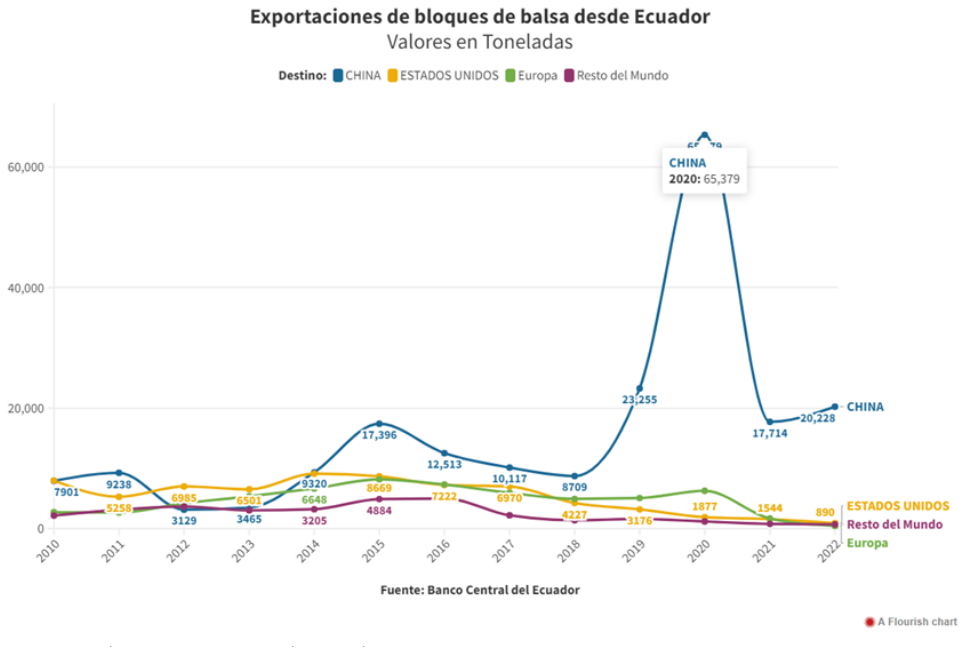
[1] https://www.codigovidrio.com/code/la-energia-eolica-de-china-arrasa-con-la-balsa-ecuatoriana/



The scarcity of balsa wood has raised its cost in the production process to over US$500 per cubic meter in simple planks and up to US$2000 per cubic meter in the finished process. This madness of the international market to meet its needs has led countries such as Ecuador to [2] cut down trees that were not yet at their ideal point, which generated environmental devastation[3] since it has not been possible to reforest adequately to counteract the impact caused[4]. Estimates from the Costa Rican Foreign Trade Office (PROCOMER) indicate that during 2020 Ecuador exported[5] more than 74 thousand tons of balsa wood.

Currently, China and the United States are the main buyers of balsa wood, the former with more than 95% of the wood presented in blocks and 66% in that produced in flexible panels.

[2] https://es.mongabay.com/2021/07/madera-balsa-ecuador-deforestacion-amazonia/
[3] https://www.youtube.com/watch?v=1U5PYa2LZuk
[4] https://wwflac.awsassets.panda.org/downloads/analisis_explotacion_balsa.pdf
[5] https://sistemas.procomer.go.cr/EstudiosMercados


Exportaciones de bloques de balsa desde Ecuador
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Fuente: Banco Central del Ecuador
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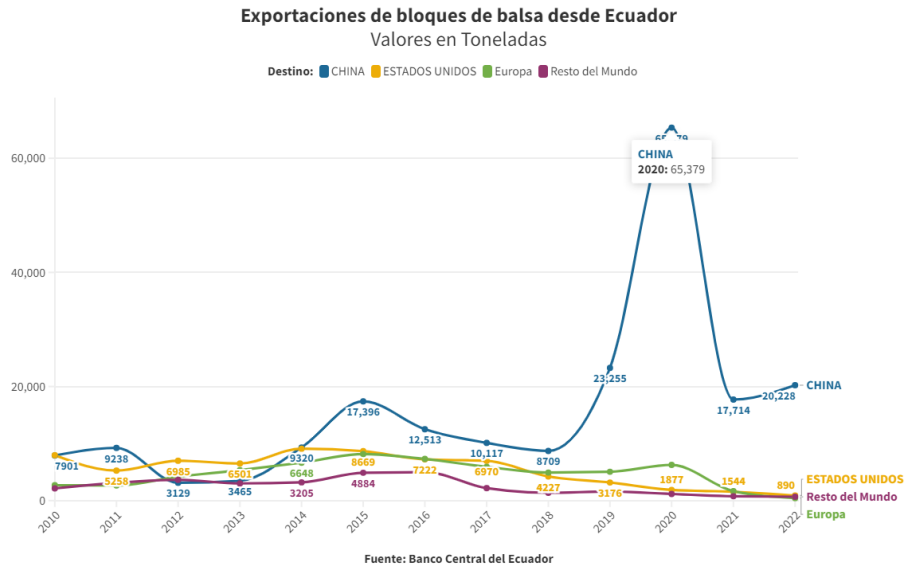
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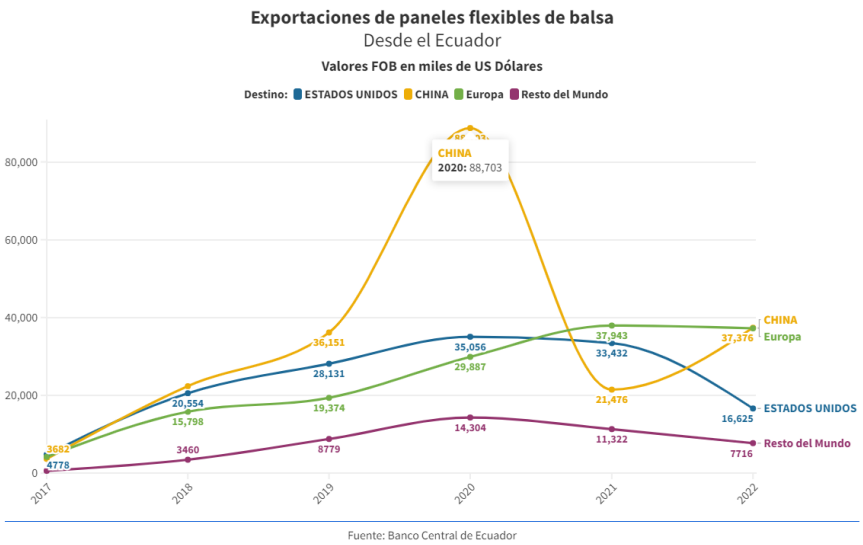


It is estimated that to provide electricity to the development of cities such as "The Line" in Saudi Arabia, no less than 40 thousand containers of balsa wood (about 39,350 m3 of wood) are required for the necessary wind swarm. "The Line"; A long metal line in the middle of nowhere begins to be built and is a futuristic city without cars, totally self-sustainable and consists of an isolated city 200 m wide by 170 kilometers long. All amenities for its inhabitants will be within easy reach and there will be no personal transportation; All needs will be covered by electric public transport. The city can be explored from end to end in less than 20 minutes.

"Asia will be the undisputed leader in wind energy by 2050", according to specialized magazines[6] , pointing out that the continent will have more than 50% of all onshore wind capacity and more than 60% installed worldwide;

- Overseas, Asia would cover more than 60% of global installations, followed by Europe (22%) and North America (16%).

[6] https://www.ambientum.com/ambientum/energia/asia-sera-lider-indiscutible-de-energia-eolica-en-2050.asp

- Within Asia, **China would take the lead with 2525 GW of installed onshore and offshore wind capacity by 2050**, followed by India (443 GW), Republic of Korea (78 GW) and Southeast Asia (16 GW).
- Globally, the levelized cost of electricity (LCOE) for onshore wind will continue to fall to 2-3 US cents/kWh in 2050 compared to 6 US cents/kWh in 2018. Offshore wind costs will decrease significantly to 3-7 US cents/kWh by 2050 compared to 13 US cents/kWh in 2018.
- The size of wind turbines for onshore applications will increase, from an average of 2.6 megawatts (MW) in 2018 to 4-5 MW for commissioned turbines in 2025.
- Offshore applications will likely increase to 15-20 MW in a decade or two.
- Floating wind farms could cover around 5-15% of the world's installed offshore wind capacity (almost 1,000 GW) by 2050.

According to IRENA (International Renewable Energy Agency) "it is estimated that, by mid-century, ***wind could cover one-third of the world'***s energy needs and, combined with electrification, deliver one-quarter of the energy-related carbon emission reductions needed to meet the Paris climate targets."

There is not enough balsa wood known in the world to satisfy this and other overseas projects such as the Korean, Chinese and Japanese ones that are underway, which places our business model as a unique opportunity at this time to develop large reforestations, in different countries simultaneously, that allow us to meet current and future demand in a sustainable and sustainable way.

An innovative and revolutionary business model

Below, our business model is summarized, which is initially based on, but not limited to, the scope of the technical and empirical knowledge obtained in our nurseries and experimental farm located in San Mateo de Alajuela, Costa Rica. The business intends to start in a controlled manner in Guanacaste as described below, without prejudice to being able to operate, manage and manage parallel projects in other countries such as Panama, Colombia and Ecuador.

Knowledge and Technique Acquired (In the process of registration)

Clear of the importance and dynamics of current supply and demand, our balsa wood project is unique in the world, which is why it is described below:

1. We have our own research of more than 5 years in the improvement of the technique (know how) with the following results obtained:
    a. Knowledge in processes and technique to germinate almost 100% (one hundred percent) of the seeds,
    b. Knowledge in processes and technique to harvest almost 100% (one hundred percent) of the trees planted,
    c. We managed to cut the harvest time in half (from 6 to 3 years),
    d. Improvement in the quality and straightness of the trees, which facilitates their processing (in planks or sheets) after cutting, which improves process times and makes them more efficient.
2. Our model can be replicated in countries with very large areas of land such as Panama, Colombia and Ecuador.
3. We can take knowledge as a tangible asset and market it under one of the following schemes:
    a. Licensing to different producers in the world, which would guarantee us an important participation and income on their effort (authorize and share knowledge)
    b. Exclusively maquila the seedlings to sell them to any project in the world ready for planting, (leave the knowledge only internally)

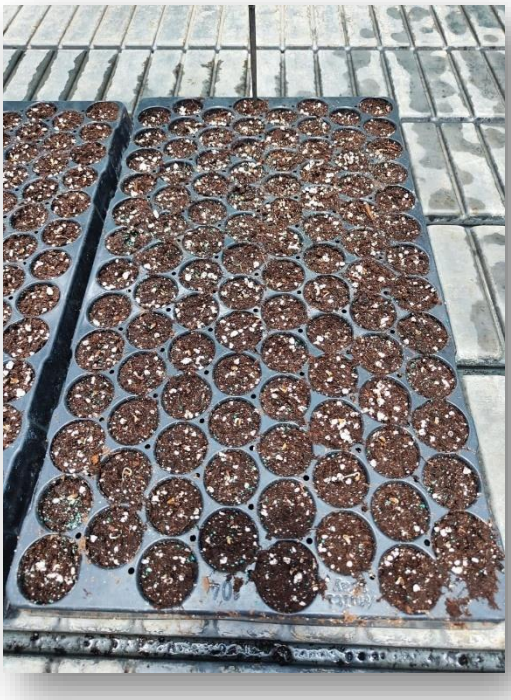
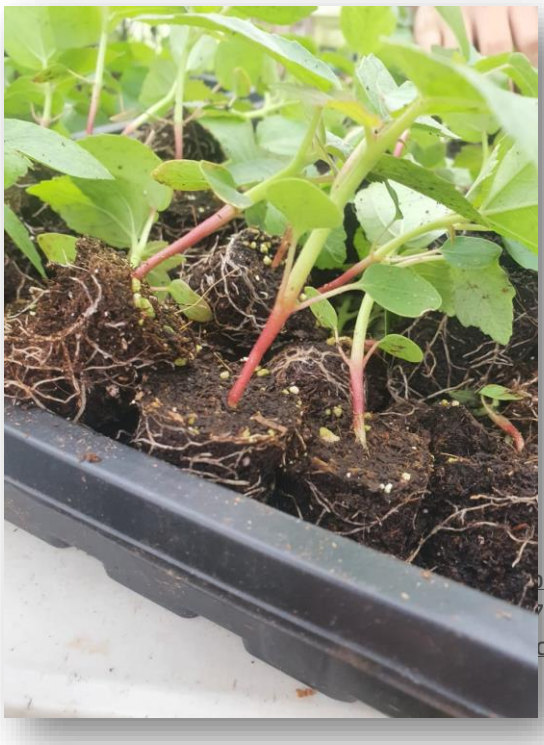


Image 1. Balsa seeds in the process of germination.



Images 2 and 3. Germinated seedlings in the process of reaching ideal size to be planted on dry land. Images 4 and 5. Experimental farm in Alajuela. Raft trees less than 3 years

old with more than 15 meters in height and circumferences greater than one meter are shown

Project Description and Approach

Our competitive advantage is to have seedling production processes that guarantee growth in half the normal time than in other countries (3 years instead of 6), which would allow us to have cycles of planting, cutting and sale of wood more followed and continuous over time, that is, while planting, A tree grows, is cut and sold in other countries (6 years), our project is able to carry out this same cycle twice, which makes us much more efficient than any other initiative known in the world so far.

The terrain

The project is set to start with the purchase of a property of 4296 hectares located in Cañas, Guanacaste, Costa Rica that is currently dedicated to the cattle industry (an activity that would be eradicated in its entirety), of which 3600 would be used in balsa wood reforestation. The rest of the land would be used for conservation (retreats and areas untouchable by law along its rivers), Research (creation of nurseries for the production of seedlings, experimental planting and other related areas), Construction of industrial wood processing plants, Construction of administrative offices, Construction of a Housing Project for employees, Construction of School, Health Center, Sports Areas and other social benefit projects, Workshops for heavy equipment and general maintenance.

Some features:

1. It currently has a water concession of 1000 litres per second that feeds almost the entire estate by gravity, and offers a total of 4 internal springs that can be used eventually.
2. Its topography is mainly flat throughout, with slight changes in level.
3. The average temperature and height above sea level are ideal for reforestation with this type of wood.
4. Access to Ports: Its strategic location in front of the national route with exit close to the new Barranca – Liberia highway, will allow access to the Port of Caldera (Main port in the Pacific) in approximately one hour and to the Port of Moín (Atlantic) in approximately three hours without having to use routes through the

Greater Metropolitan Area, saving more than 4 hours of transportation. It is also located just a few kilometers from the Interoceanic Dry Canal project[7] projected to link both oceans (La Cruz Guanacaste with Parismina in Limón) in northern Costa Rica.

5. Possibility of acquiring surrounding land to increase production.

Planting & Production

There is installed capacity to manually sow 100 hectares per month, however, there is the possibility of purchasing a specialized machine that allows you to increase to 500 hectares of planting per week. Assuming such a purchase, it could be estimated that in a little less than 8 months the entire 3600 hectares would be planted, which would significantly increase production and income generation by reducing the cutting time by almost two years, that is, instead of cutting one hundred hectares per month from month 37 and so on month by month until month 72, All 3600 hectares would be cut between month 37 and month 44, which in turn would allow the start of the new planting cycle much earlier than normally projected.

The project would include:

- Seeding control,
- Control of crediting times,
- Growth control,
- Nutrient control by location,
- Monthly statistical checks of development,
- Organizational platform to measure and manage sustainable development goals with the 17 steps created by the United Nations,
- INS (National Insurance Institute) insurance for the entire plantation,
- Cessation of flow insurance,
- Density control,
- Endorsement from the National Forestry Office (ONF),
- Traceability certificates,

[7] https://www.presidencia.go.cr/comunicados/2016/11/cnc-dio-a-conocer-propuesta-de-canal-seco-interoceanico-con-un-valor-de-16-billones/

- Fully Organic Planting,
- Satellite Monitoring System

Description of product lines

All wood will be subjected to a curing process to eliminate fungi and insects. The final product will have two presentations: (i) 1.20 X 3" or X 4" planks, (ii) 1.22 cm x 2.44 cm flexible sheets.

Industrial Plants and Other Buildings

The activity on this scale will require at least two industrial production plants located in strategic locations on the property where cutting and processing activities will be carried out in two different types of finishes; (i) Planks and, (ii) Sheets.

Each warehouse would have an approximate area of 15 thousand m2 (1.5 hectares) where all kinds of cutter saws (laser and mechanical) would be housed, as well as the number of ovens necessary for the drying and curing of the wood.

In addition, the following buildings will be constructed:

1. Nursery with the capacity to initially produce 5 million seedlings per year.
2. Research laboratories,
3. Employee Barracks with dormitories, showers and restrooms, living and kitchen areas,
4. Administrative offices with training rooms and employee canteens.
5. 144 Shelter Centers or Booths (1 for every 25 hectares) that will serve as shelter for the laborers in case of storm or lightning, and will also have sanitary services and a dining area.
6. Workshops for maintenance of heavy equipment, various warehouses.
7. Sewage treatment plant,
8. Collection and recycling center,

9. Housing projects, health center and sports areas.

Purchase of machinery

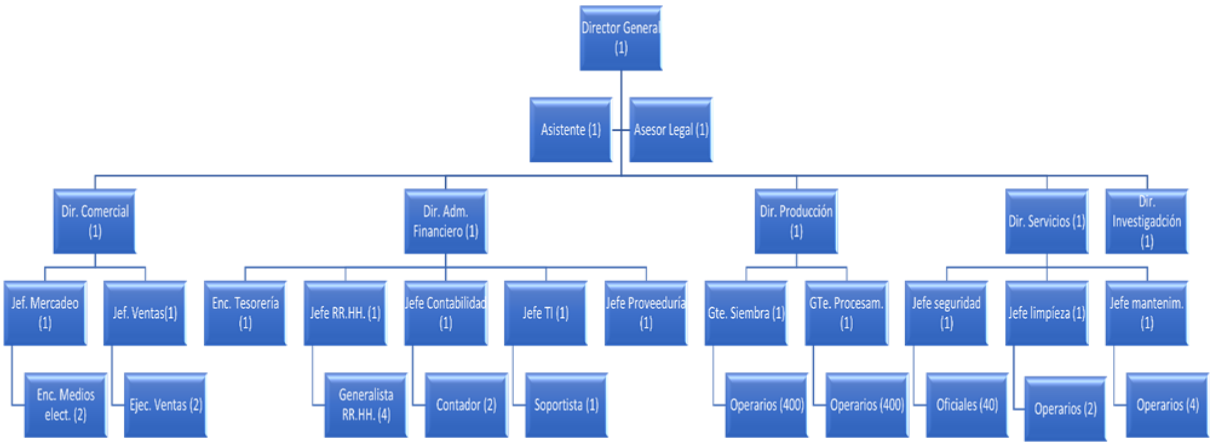
The business requires having assets from the outset, with the largest investment in heavy machinery including tractors (regular and specialized for planting), back hoes, trucks, all-terrain vehicles, rotavid, ATVs for transfers, chainsaws and others. It also requires a series of specialized industrial cutting equipment for wood of this type, German-made kilns and more.

Generation of Employment and Wealth

The project will generate about eight hundred jobs directly, that is, direct employees of the company, as well as generating an indirect impact of about 5 thousand additional jobs.

Of the total number of employees, almost half will correspond to field laborers for forced manual work (planting, cutting and security) and around three hundred jobs will be destined to plant processes where more than 80% will be women. The remainder will correspond to administrative work on site or at central offices in the Greater Metropolitan Area.

The proposed internal organization scheme is as follows:



Definition of Target Market

Primary Market

According to what the market currently sets and what is indicated in previous lines, our potential clients are, in order, the United States, China and Asia in general, and Europe.

The profile of the main buyers would be companies or governments involved in the generation of wind energy.

Secondary Market

Other industrial uses, such as the generation of paper, computer chips, production of glass substitutes and others, would constitute a secondary market.

Summary of Economic Studies

Investment Required

As can be seen in the summary of the economic studies, assuming the purchase of all the assets (including the value of the land as the main and most expensive item within the investment), the hiring of all the personnel contemplated, the project would generate investment in its first 6 years for the sum of **US$217,720,066 (TWO HUNDRED AND SEVENTEEN MILLION SEVEN HUNDRED TWENTY THOUSAND SIXTY-SIX US DOLLARS).**

Its cash flow would be negative for the first three years since it would not generate any direct income except those that could be generated by the constitution of collateral or carbon asset instruments (sale of bonds, certificates or other related items) that are not contemplated within the economic study. From year 4 onwards, income from the sale of timber (at current values) would be estimated **at US$373,243,140 (THREE HUNDRED AND SEVENTY-THREE MILLION TWO HUNDRED AND FORTY-THREE THOUSAND ONE HUNDRED AND FORTY DOLLARS**), which would allow us to conclude a priori that the project needs for its development, at least, an investment corresponding to the first 4 years of operation, corresponding to **US$170,392,152 (ONE HUNDRED AND SEVENTY MILLION THREE HUNDRED AND NINETY-TWO THOUSAND ONE HUNDRED AND FIFTY-TWO U.S. DOLLARS)** which include a reasonable percentage for contingencies.

Projected Accumulated Expenses and Revenues

To carry out the financial studies, two cycles of sowing and cutting have been assumed at a rate of 100 hectares per month, that is, from month 1 to 36 the 3600 hectares are planted, and from month 37 onwards each of them is cut and processed in order, simultaneously with the felling. The cut hectares are being replenished (planted).

If the automatic seeding machine were available, income would increase exponentially as it would be sown much faster (3600 ha in just 8 months)

Rubro	Totales anuales						Total General
	1	2	3	4	5	6	
Recursos Humanos	$2.196.793	$3.840.773	$5.273.786	$7.898.542	$11.284.016	$13.783.019	$44.276.929
Siembra	$5.885.145	$6.578.992	$7.293.655	$7.464.498	$7.640.466	$7.821.713	$42.684.468
Instalaciones y Compra tierra	$59.730.987	$30.027.608	$10.728.752	$2.355.458	$840.909	$857.029	$104.540.743
Maquinaria	$4.514.716	$359.847	$370.642	$381.762	$393.215	$405.011	$6.425.193
Subtotal	**$72.327.641**	**$40.807.221**	**$23.666.835**	**$18.100.260**	**$20.158.605**	**$22.866.772**	**$197.927.333**
Imprevistos	$7.232.764	$4.080.722	$2.366.683	$1.810.026	$2.015.860	$2.286.677	$19.792.733
Total	**$79.560.405**	**$44.887.943**	**$26.033.518**	**$19.910.286**	**$22.174.465**	**$25.153.449**	**$217.720.066**
Total acumulado							
Árboles producidos							
Árboles prod. Acumulados							
Ingresos	**$0**	**$0**	**$0**	**$391.343.400**	**$391.343.400**	**$391.343.400**	**$1.174.030.200**
Resultado flujo	**-$72.327.641**	**-$40.807.221**	**-$23.666.835**	**$373.243.140**	**$371.184.795**	**$368.476.628**	**$976.102.867**

The **INTERNAL RATE OF RETURN (IRR)** for the project at year **5 is 88%.** At the same time, the **NET PRESENT VALUE (NPV)** is positive ($778,413,101) which in financial terms makes it a project that adds enough value.

Carbon Neutrality; A true environmental solution

Measurement of human activity in the environment; Another big deal

Concomitant with the big business that represents in itself the production and commercialization of balsa wood, its reforestation under certain parameters also represents a solution to combat the effects of greenhouse gas (GGI) and avoid global warming, since the reforestation of large areas previously dedicated to other polluting activities will represent a large placement of carbon both under the soil and in the atmosphere. which in a measurable way will allow collateral generation of financial instruments such as assets, bonds, certificates or carbon credits that are currently traded on specialized stock exchanges in Europe, Top Banks around the world and private transactions.

Paris Agreement

The 2015 agreement aims to reverse climate change, which is considered to be the

greatest threat to humanity and therefore, among other activities, obliges all signatory countries not to falter in the search for clean technologies. Currently, more than one hundred countries have committed themselves to respect and work on the objectives of the agreement, including Costa Rica, which promoted it from the beginning due to its role and recognized image in the conservation and use of clean energy. The public policies of all the signatories will gradually entail the obligation of all public and private organizations and activities to be inescapably CARBON NEUTRAL, that is, that all human activity within a very few years must, at least, compensate for the pollution it generates.

What is Carbon Neutral?

The principle behind carbon neutrality consists of offsetting the carbon dioxide emissions of a company or country, through a series of activities such as: reduction in carbon dioxide emissions (pollution), reforestation with appropriate species, purchase of carbon certificates, conservation of native forests, investment in adaptation to climate change, promotion of renewable energies, among others.[8]

Steps to Carbon Neutrality

According to the Ministry of Energy and Mines of Costa Rica (MINAE),[9] there are five categories of the carbon neutrality process for any type of industry, company or activity.

Carbon Inventory:
It consists of the methodical reporting of greenhouse gas emissions.

Carbon Reduction:
It involves the reporting of GHG emissions and the implementation of actions to reduce those emissions.

Carbon Reduction +:
The company makes other efforts that go beyond the established requirements.

[8] Portilla Pastor, University Weekly. May 2016.
[9] https://www.larepublica.net/noticia/mas-oportunidades-para-ser-carbono-neutro

Carbon Neutral:
The company brought its emissions to zero.

Carbon Neutral +:
In addition to achieving carbon neutrality, it carries out additional measures to reduce the presence of carbon in the atmosphere.

Problematization

This is how the UN has expressed[10] it: "Carbon dioxide is inside carbonated beverages, it is part of the compounds present in fire extinguishers, it is used as a coolant, it serves to form laser beams, and it is even used as a contrast agent in medical examinations. It is an abundant gas on the planet, plants need it to photosynthesize, it is present in the air we exhale and in numerous organic compounds. **It is indispensable to life as we know it.**

However, and despite being naturally present on the planet and being so useful to us, it is a gas that retains heat and, together with others, such as methane, contributes to forming a layer in the atmosphere that prevents its exit and increases the temperature of the Earth's surface, causing climate change.

This gas is part of a biochemical cycle that passes through the layers of the atmosphere, the ocean and the land, and that allows life to be sustainable on the planet, but human activities, such as the burning of fossil fuels, **have unbalanced its proper measure**, causing much more CO2 to accumulate than is possible to eliminate naturally.

This phenomenon, and the fact that, as scientists from the Intergovernmental Panel on Climate Change (IPCC) have said repeatedly, "every degree of **warming matters**," because every degree can have devastating effects, has led to the nations of the world finally starting to take action to reduce carbon emissions.

[10] UN News, October 30, 2019: https://news.un.org/es/story/2019/10/1464591

The science doesn't lie, if countries don't increase their commitments beyond the Paris Agreement signed in 2015, through increased dependence on renewable energy, humanity **is in for a bleak outlook.**

More intense heat waves, droughts, stronger hurricanes, melting glaciers and ice sheets, an inevitable rise in sea levels, and all the destruction of ecosystems that this entails, will be just some of the consequences of not acting in time."

During the Climate Action Summit convened by Secretary-General António GUTIERREZ, 77 countries and more than 100 cities pledged to reduce greenhouse gas emissions to zero by 2050."
Likewise, Costa Rica has defined the panorama of climate change as follows[11]: "The phenomenon has resulted in an increase in the average temperature of the Earth by about 0.74 ºC in the last century (an increase unparalleled in the last 10 centuries); it has caused snow and ice cover to decrease and the average sea level to rise by 10 to 20 cm over the course of the 20th century; In addition, the warm El Niño current has become more frequent, intense and prolonged. These changes are sufficient to cause abrupt changes in the rainfall pattern, with prolonged droughts in some regions and heavy flooding in others.

These phenomena threaten human lives and damage crops, create an increasingly imperceptible division of the seasons, an environmental imbalance that threatens terrestrial and marine species, a rise in water levels that endangers islands and coastal regions, and the presence of increasingly frequent and destructive climatological phenomena such as hurricanes. cyclones, heavy snowfall and river overflows.

In freshwater ecosystems, especially coastal and groundwater, saltwater seepage is likely to occur as a result of rising sea levels, resulting from melting ice at the poles and water expansion due to rising temperatures. Ecosystems as fragile as coral reefs would be endangered, as well as numerous species, many of which are part of humanity's diet. Terrestrial species accustomed to colder environments would

[11] https://cambioclimatico.go.cr/cambio-climatico/generalidades/

tend to seek a higher altitude, which may not provide them with the conditions they need, including the required forest or habitat extension.

The problem of climate change is not merely a meteorological problem, it is a central development problem in both industrial and developing countries."

Justification

Costa Rica represents a unique opportunity for the creation of a comprehensive platform for the promotion of carbon neutrality, first of all, because of its image; In the world, when we talk about a green country, we automatically think of Costa Rica for its efforts and achievements in terms of conservation, innovation and sustainability, not only in its flora and fauna but also in the country's goal of carbon neutrality set for the year 2050.

Costa Rica has managed to generate clean energy for more than a year in a row and that has earned it the first "Champion of the Earth" award in 2019[12].

While it is possible to find several companies and non-profit organizations dedicated to carbon conservation or measurement, there is currently no integrated platform that makes an effort to capture land, certify it and promote its own green bond issuances. On the one hand, we find NGOs that contribute money to public and private programs for conservation, but do not follow up on their contributions, on the other hand, we find efforts by companies that claim to certify carbon emissions, but do so reactively and not proactively, so it becomes a business only when third parties pay them for their services. Likewise, within the latter it is possible to evidence certain levels of credibility of certificates, which to a large extent justifies the market value that is paid for each of them. The greater the credibility of the quality of the certification (ISO processes and guarantees), the higher the price that can be achieved for each bond issued.

Business Model and Initial Investment

[12] https://www.presidencia.go.cr/comunicados/2019/09/costa-rica-recibe-maximo-galardon-ambiental-honrando-su-legado-y-trabajando-por-el-futuro/

The business would consist of the creation of an internationally certified entity with the necessary accreditations to carry out measurements and constitute carbon certificates, assets or credits both in Costa Rican balsa wood reforestation projects and in all projects in which it participates.

The numerical projections assume only the certification of 3600 ha of Balsa corresponding to our project in Guanacaste, Costa Rica over the first ten years. No additional revenue is contemplated and international prices per ton of carbon are assumed at $50 on average.

The operation would require facing the processes and costs of international accreditation, the hiring of professionals in different fields (forestry engineers, biologists, geologists and trained personnel with experience in carbon matters, among others).

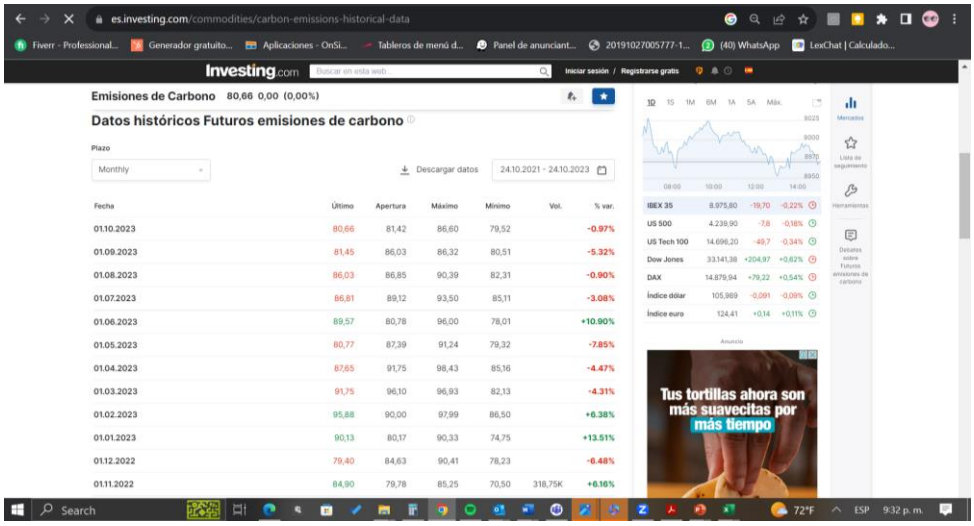
It would also require the purchase of specialized technology for the field measurement of biomass and other elements, licenses and software for the use of real-time information from specialized satellites, among other assets, and the opening of simultaneous offices in Costa Rica and the United Arab Emirates for the promotion of services worldwide, as well as the commercialization of carbon assets and the sale of balsa wood.

The estimated investment for the development of the carbon certifier is **US$18 million**, a sum that also includes the operation of the first 5 years.

Current price per ton of carbon

According to investing.com[13] the average value of a tonne of carbon has been set at between 80 and 90 euros throughout 2023.

[13] https://es.investing.com/commodities/carbon-emissions-historical-data



Cost Benefit

With the current average value, and thinking only about the certification of **3600 ha** corresponding to the proposed balsa wood project (without considering extensions of the project in Costa Rica or other projects outside the country), revenues from carbon certificates could be projected for a cumulative value over the next 10 years of almost US$150 million.

Potencial Acumulado en $ a 10 años											
	Año 1	*Año 2*	*Año 3*	*Año 4*	*Año 5*	*Año 6*	*Año 7*	*Año 8*	*Año 9*	*Año 10*	*Total*
Cantidad Has	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	18.000
Toneladas CO2*	97.200	97.200	97.200	97.200	97.200	97.200	97.200	97.200	97.200	97.200	486.000
Monto $	**$7.776.000**	**$7.776.000**	**$7.776.000**	**$7.776.000**	**$7.776.000**	**$7.776.000**	**$7.776.000**	**$7.776.000**	**$7.776.000**	**$7.776.000**	**$77.760.000**
Acumulado	$0	$7.776.000	$7.776.000	$7.776.000	$7.776.000	$7.776.000	$7.776.000	$7.776.000	$7.776.000	$7.776.000	***$69.984.000***
Total	***$7.776.000***	***$15.552.000***	***$15.552.000***	***$15.552.000***	***$15.552.000***	***$15.552.000***	***$15.552.000***	***$15.552.000***	***$15.552.000***	***$15.552.000***	***$147.744.000***

If one were to think about covering a total of **50 thousand hectares** between Costa Rica, Panama and Colombia, the revenues would be projected at more than two billion dollars:

Potencial Acumulado en $ a 10 años											
	Año 1	*Año 2*	*Año 3*	*Año 4*	*Año 5*	*Año 6*	*Año 7*	*Año 8*	*Año 9*	*Año 10*	*Total*
Cantidad Has	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	250.000
Toneladas CO2*	1.350.000	1.350.000	1.350.000	1.350.000	1.350.000	1.350.000	1.350.000	1.350.000	1.350.000	1.350.000	6.750.000
Monto $	**$108.000.000**	**$108.000.000**	**$108.000.000**	**$108.000.000**	**$108.000.000**	**$108.000.000**	**$108.000.000**	**$108.000.000**	**$108.000.000**	**$108.000.000**	**$1.080.000.000**
Acumulado	$0	$108.000.000	$108.000.000	$108.000.000	$108.000.000	$108.000.000	$108.000.000	$108.000.000	$108.000.000	$108.000.000	***$972.000.000***
Total	***$108.000.000***	***$216.000.000***	***$216.000.000***	***$216.000.000***	***$216.000.000***	***$216.000.000***	***$216.000.000***	***$216.000.000***	**********	**********	***$2.052.000.000***

If the possibility of reforesting the devastated areas of the Amazon with rafts were

taken into account and taking it up to **200,000 hectares,** the projection of income from carbon credit certification alone would be multiplied by 4:

Potencial Acumulado en $ a 10 años											
	Año 1	*Año 2*	*Año 3*	*Año 4*	*Año 5*	*Año 6*	*Año 7*	*Año 8*	*Año 9*	*Año 10*	*Total*
Cantidad Has	200.000	200.000	200.000	200.000	200.000	200.000	200.000	200.000	200.000	200.000	1.000.000
Toneladas CO2*	5.400.000	5.400.000	5.400.000	5.400.000	5.400.000	5.400.000	5.400.000	5.400.000	5.400.000	5.400.000	27.000.000
Monto $	**$432.000.000**	**$432.000.000**	**$432.000.000**	**$432.000.000**	**$432.000.000**	**$432.000.000**	**$432.000.000**	**$432.000.000**	**$432.000.000**	**$432.000.000**	**$4.320.000.000**
Acumulado	$0	$432.000.000	$432.000.000	$432.000.000	$432.000.000	$432.000.000	$432.000.000	$432.000.000	$432.000.000	$432.000.000	***$3.888.000.000***
Total	***$432.000.000***	***$864.000.000***	***$864.000.000***	***$864.000.000***	***$864.000.000***	***$864.000.000***	***$864.000.000***	***$864.000.000***	**********	**********	***$8.208.000.000***

The profitability of the business would rise even more if we take into account that the certifier could provide carbon credit measurement and certification services to third parties anywhere in the world, assuming that more than one hundred countries have committed themselves to take every possible action to mitigate global warming, which is necessarily the first step for any of them. Measure the pollution footprint (carbon footprint) and then offset it with activities such as reforestation or the purchase of certificates or carbon credits.

In any of the scenarios, the comparison of income versus expenditure makes developing the carbon certifying unit a perfect and necessary complement that must, inevitably, go hand in hand with reforestation with balsa wood.

Conclusions

According to the above business plan, it is possible to conclude the following.

1. There is a latent and urgent need worldwide for reforestation practices that help mitigate the effects of greenhouse gases and global warming.
2. The lack of application of sustainability standards, good practices and traceability by buyers and exporters in the international market significantly causes deforestation associated with the production of balsa, which translates into contradiction when deforesting to produce inputs that generate clean energy.
3. Balsa wood is undoubtedly a very important product both for its current commercial value, its future need and its contribution to the environment as long as it is produced sustainably and sustainably.

4. The business model proposed by our group not only offers a profitable business from a commercial point of view due to the competitive advantages of being unique and achieving much more evident results and in less time than all other currently known raft projects (Investment of $217,720,066 against projected revenues of $1,174,030,200 in 6 years, with an IRR of 89%), but will contribute to the environment thanks to good practices in the process of reforestation and carbon sequestration.
5. Balsa wood is one of the species that makes the greatest positive contribution to the environment.
6. Our business model aims to further enhance the contribution to the environment as it considers displacing livestock activity (highly polluting activity) as far as possible.
7. The business model will not only generate ostentatious income from the production of balsa wood but also from the generation of carbon assets associated with reforestation projects.

Pending any concerns in this regard,

Your most attentive and secure servants,

MR. JONATHAN PÉREZ UGALDE

MR. JAMES J. JIMENEZ CAMPOS