

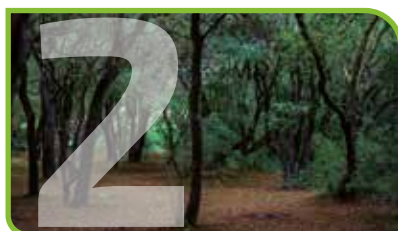


Annual Report

2022

Summary

Annual report **2022**



Foreword	5
1. Economic Report	6
1.1. LUMIN value chain in 2022	7
1.2. Markets and products	10
1.3. Impact on employment	12
1.4. Contractor and supplier companies	16
1.5. Productive promotion	17
1.6. Governance, stakeholders and communications matrix	18
2. Environmental Report	22
2.1. Certifications and sustainability	23
2.2. Management of biodiversity, flora, fauna and protected areas	24
2.3. Water quality monitoring	30
3. Social Report	32
3.1. Corporate Social Responsibility Initiatives	33
3.1.1. Education and Care activities	33
3.1.2. Health and Wellbeing activities	38
3.1.3. Social and labor inclusion activities	40
3.1.4. Community activities	43
3.1.5. Gender, diversity and inclusion	44
3.2. Labor Relations, Safety, Health and Training	46
4. ESG AND SDG Report	50



Foreword



Álvaro Molinari
LUMIN CEO

2022 was a great year for LUMIN. Our success reinforced the importance of maintaining a clear course of action and highlighted what we can achieve when we work together on our shared objectives.

From a market perspective, despite fluctuations in both international demand and prices, we managed to consolidate our work in the company's traditional markets. We had an excellent first semester and a challenging second semester, in which we continued working on expanding our product portfolio, efficiently adjusting to the needs of our customers, with a high level of service and delivering a differential value proposal.

Additionally, this year we have broken records in both forest harvesting and industrial production, managing to exceed 250,000 cubic meters of plywood panels in our main plant. This achievement has been possible thanks to improvements in production processes and the commitment of all our partners.

Likewise, our work was focused on the production of panels of TRP (Tropical Replacement Panel) plywood in our new thin peel plant. This product has proved to be very popular in high-segment international markets, complying with environmental regulations and all the technical and aesthetic requirements demanded by our customers. Other measures were implemented in our recently opened warehouse and storage center located on

Route 5 which helped to boost performance and generate greater efficiency in our logistics management.

When reflecting on our success in 2022, it is impossible to overlook our most important assets: our people – employees and contractors. We saw a record year for occupational safety, with one of the lowest recordable accident indicators in the company's history, both in the forestry and industrial sectors, as well as among our contractors.

We remained committed to our aim of improving the sustainability of our business, continuing with our carbon capture project through the bond market, as well as with our Net Zero strategy and the continuity of our policies for the accurate management of our biodiversity, water and energy in all our operations.

We continue placing our main emphasis on being a responsible contributor and a benchmark in the communities in which we operate, supporting projects that promote education, safety, health, gender equality, social and labor inclusion, as well as the training of people. We do all of this through initiatives in collaboration with local institutions or strategic alliances with relevant organisations at a local, national and international level.

Our success in 2022 gives us a clear course ahead and a new year to continue working together for a sustainable company that is committed to the community and its people! 🌱



1. Economic Report



1.1. LUMIN value chain in 2022

The Uruguayan forestry sector continues to be a fundamental factor in the economic development of our country and is therefore source of various activities in the primary, industrial and service sectors.

The sector represents about 3.8% of the country's GDP and has had a sustained growth in terms of exports: from representing 5% of the country's total exports in 2001, to about 20% in 2021. Likewise, approximately 1,700 companies work directly within the forestry sector, employing nearly 18,000 employees, plus all the productive linkages and the creation of over 25,000 indirect jobs that occur in other sectors and in the communities where these activities are carried out.^[1]

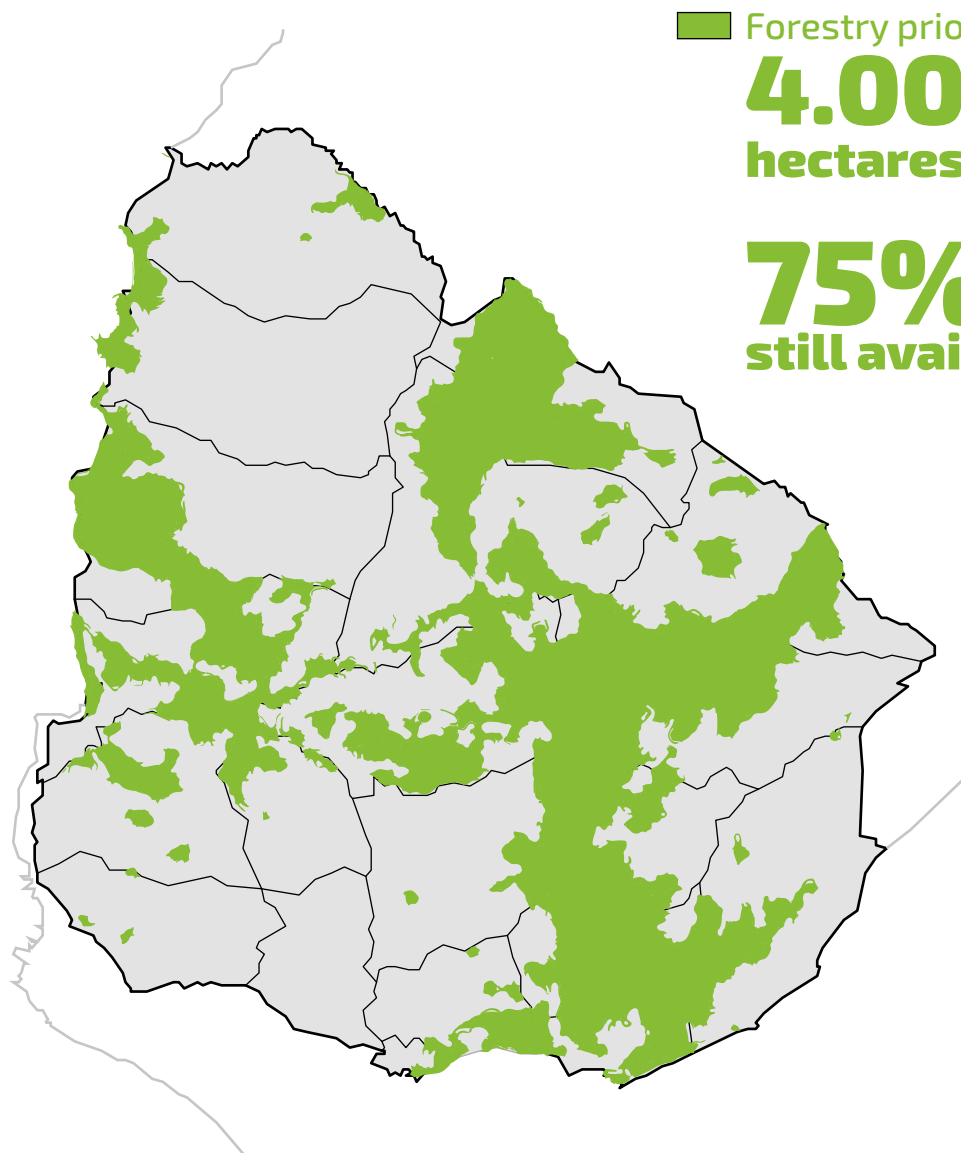
Currently, the effective area of forestry use is 1.09 million hectares, which represents 6% of the country's area. Although the forestry sector has 4 million hectares dedicated mainly to this activity, only around 25% is effectively planted.^[2]



¹ Forestry sector in Uruguay. Montevideo: Uruguay XXI, 2022.

² Uruguay XXI, 2022.

› Forestry priority areas



■ Forestry priority areas

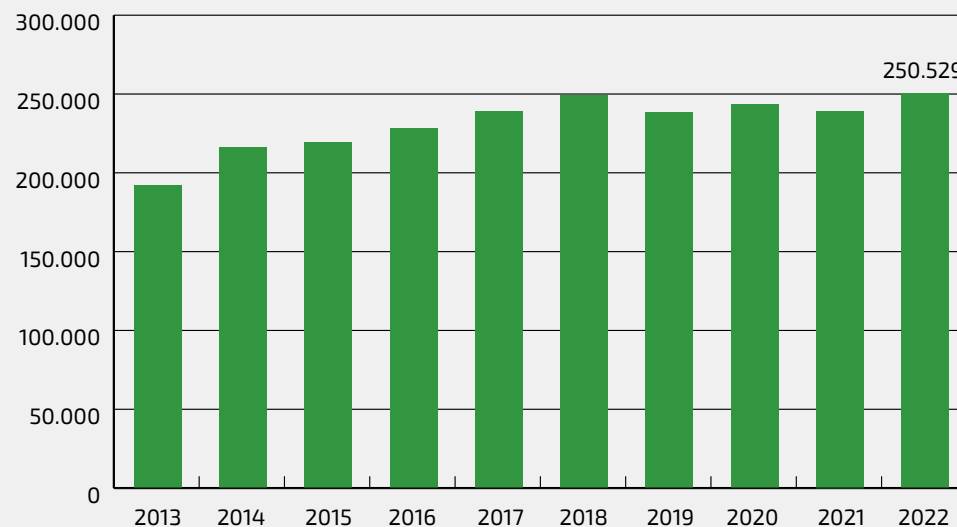
4.000.000
hectares

75% of the area
still available

In this frame, **the LUMIN production process** includes a nursery for the production of pine plants by seed and a clonal eucalyptus plant, to establish the plantations, the production plant for plywood boards and the new thin thickness plate production plant (thin peel), the export of logs of wood, the generation of energy with biomass, and the new logistics and storage hub near the port of Montevideo.

Due to improvements in the production process, in 2022, the company reached a new **record in the production volume of its main plant**, with a total of 250,529 m³ of plywood.

› Evolution of LUMIN production volume - 2013 - 2022



Main plant production volume (main plant only).

Production from the new plant containing the **third production line**, specialized in thin peel, panel production of 24,061 m³ and production of veneer was 8,687 m³, complying with the quality standard of the products and a higher volume than expected. The objective is to produce 34,000 m³ annually of LUMIN TRP panels and 30,000 m³ of veneer. This offers a long-term sustainable solution for global markets and also contributes positively to the Carbon Neutral Agenda.

This year, the **Logistics Center and Storage** located on Route 5, close to the port of Montevideo and close to the Central Railway was also fully operational, and with very good results. As part of the continuous investment process, a Bimodal Logistics Platform was installed in the center, which allows the automated loading of containers, a more efficient management process and greater traceability of the movement of stock.

In addition, other investments were made, such as the purchase of dryers, and continued investment to replant seedlings, harvest, and genetic improvement.



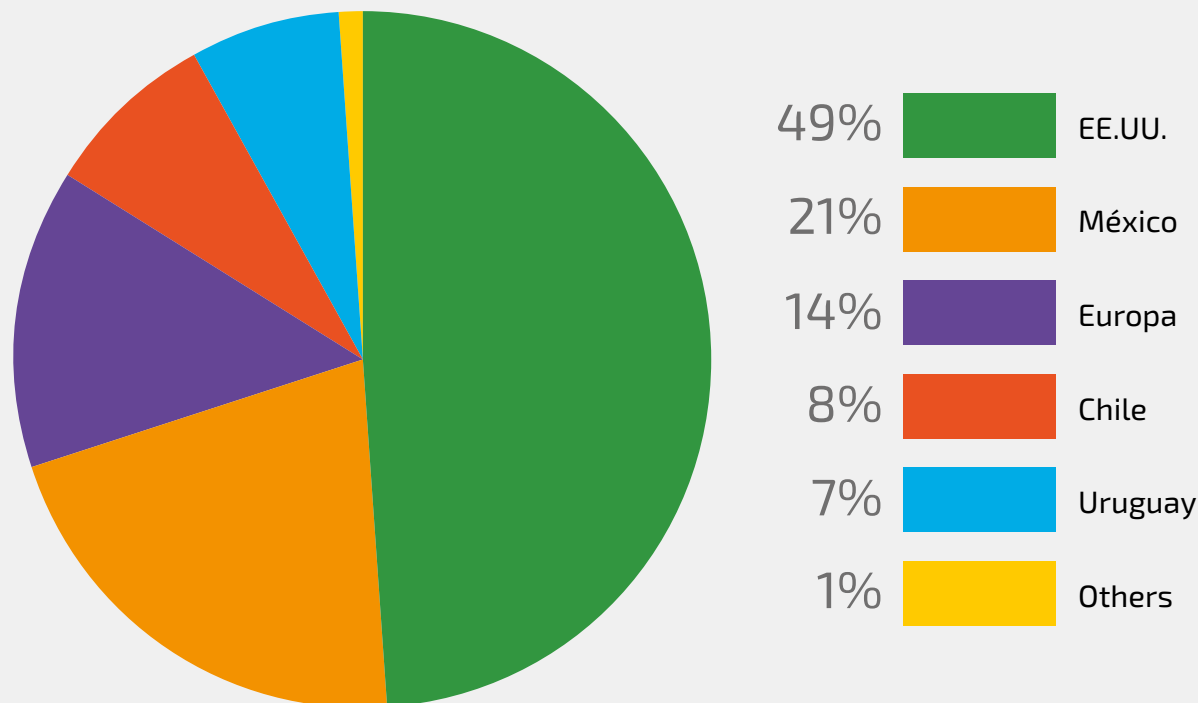
1.2. Markets and products

In a year marked by the consequences of the conflict between Russia and Ukraine, the COVID-19 pandemic and global inflationary processes, forestry exports had a record year, growing by 13% compared to the previous year. In the case of plywood panels, exports were at a historically high number. From January to September 2022, exports stood at US\$ 86 million; with the United States (58%) and Mexico (18%) continue being the two main destinations for this plywood.^[3]

LUMIN had a very good year, especially in the first semester, which represented the consolidation of the traditional export markets such as United States (49%), Mexico (21%), Europe (14%), Chile (8%) and the Uruguayan domestic market (7%).

The company sought to expand its product portfolio in order to achieve a greater scope and satisfy customer demands. As a result, this enabled us to work with metric boards to enter markets such as Germany and Poland. LUMIN has also entered other markets, such as South Africa, Australia and Central America.

› Total consolidated sales of LUMIN by destination in 2022 (in percentages)



As for the TRP line —designed for the European market and intended for a high-level segment, it has been very well received by our customers. Under development for over a decade, LUMIN TRP plywood panels directly address the urgent need for a sustainable alternative to traditional tropical species and addresses the challenge of giving the wood products industry access to a sustainable supply of product from a source which also makes a positive contribution to the net zero agenda.

By using thin peeling technology, the use of each log is maximized by producing more high-quality veneer sheets. As a result, we can deliver **a broader, cost-effective product range which, also achieves environmental benefits.**

With regards to **pine logs**, fluctuations were observed in the volume exported throughout the year, being considerably lower than what was exported in the previous year.

³ OPYPA Yearbook. Montevideo: MGAP, 2022.

This was mainly due to the difficulties of exporting logs to the Chinese market, which led to India becoming the main export destination.

LUMIN has a 5% share of the total Uruguayan pine log exports. During 2022, the company made two cargo shipments to Kandla, India: the first, of 22,000 m³ of pine, and the second, of 35,500 m³, which is equivalent to approximately 1,150 trucks of wood. It should be noted that all of this wood comes entirely from LUMIN forests.

The sector continues to face challenges in terms of logistics and transportation. However, some positive signs were observed in the months of September and October regarding the availability of ships and containers for cargo transportation.



1.3. Impact on employment

When analyzing LUMIN's direct workers' data from December 2022, the following information emerges:

A total of
779 people
worked directly at LUMIN:
› 112 are monthly workers and
› 667 are day laborers.

Most of them are from
the departments of
**Tacuarembó, Rivera,
Cerro Largo, Treinta y Tres
and Montevideo.**

The average age is
40 years.

There are **5 persons**
with disabilities working in the
company (three men and two women),
three in the nursery and two in the
industrial plant.

21%

of those who work at LUMIN
are female.



Information provided by the **contracting companies**, through the OVAL system, shows that:

The LUMIN contractor companies employed,
a total of 670 workers
(accurate in December 2022).

These are employed in three areas:
forestry, industrial and transport; although there are companies and workers that are employed in more than one area.

Most of the contractors come from **Rivera, Tacuarembó, Cerro Largo, Salto, Montevideo and Paysandú**.

Of the total number of workers,
7.6%
are female
an **increase from the 5%**
in 2021.

The average age of the workers of the contracting companies is
38 years old. However,
the average age of the female contractors is slightly older, at **40 years**.

Of the total number of employed people, **531 work in contracting companies in the forestry sector** (which also includes transportation and road maintenance).



The following table summarizes the main labor categories of these workers according to the Ministry of Labor and Social Security (MTSS), most of whom are laborers and specialized machine operators, followed by common laborers and drivers.

› **Contracting companies' personnel in the forestry sector, according to MTSS category, in 2022**

MTSS CATEGORY	Nº of workers
Specialized worker	102
Specialized machine operator	76
Regular worker	99
Driver (semi-trailer, truck, etc.)	114
Machine operator I	29
Machine operator II	12
Foreman	15
Supervisor	6
Other categories	12
Administrative	1
Unspecified	65

Source: Own elaboration based on LUMIN-OVAL data.



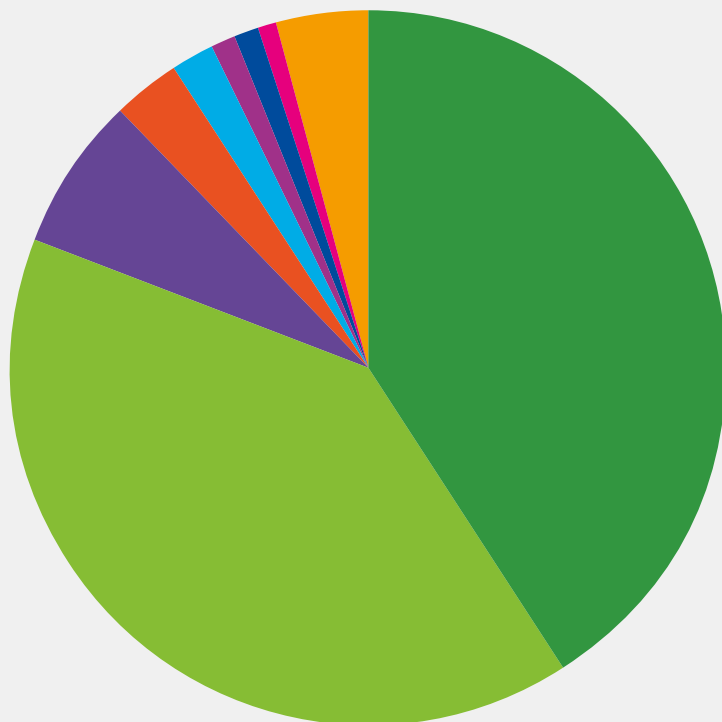
At the same time, **139 people work in the industrial sector**, which also includes passenger transport, security and services. Workers in the industrial sector are mostly drivers, security guards, service assistants, first and second technicians, millwrights, initial operators, etc.

Regarding the department of origin of the workers of the forestry contracting companies, most of them are from Tacuarembó, followed by Rivera, Cerro Largo, Salto and Paysandú. Growth is observed in the department of Cerro Largo compared to the previous year, in terms of the total percentage of male and female workers.

› **779**
direct jobs

› **670**
indirect jobs

› Departments of origin of workers of forestry contracting companies



Source: Own elaboration based on LUMIN-OVAL data.



1.4. Contractor and supplier companies

There are 58 contractor companies that work in the forestry sector and 11 in the industrial sector.

Most of the companies in the forestry sector are located in the department of Rivera, followed by Tacuarembó, Cerro Largo and Montevideo. Among the employment areas there are forestry services, cargo transportation, roads etc.

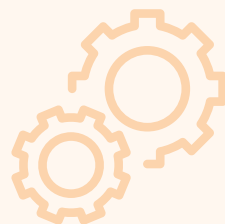
In the case of the industrial sector, most workers provide services within the following areas: technical, metallurgical, passenger transport, storage and logistics, machinery, assembly and equipment, and security. The companies are from Tacuarembó, Maldonado, Paysandú and Canelones.

Many of the contractor companies have been collaborating with LUMIN for a long time, which is why they participate in all of the training sessions and conferences carried out by LUMIN.

In recent years, these companies have joined in various activities with local communities that are promoted by LUMIN, such as training in herbicide management which encourages local job creation, or courses on occupational safety, such as first aid and cardiopulmonary resuscitation.

58
contractor
companies that
work in the
forestry sector

11
contractor
companies that
work in the
industrial sector



In relation to LUMIN's suppliers for 2022, there were 660 supplier companies, 86% of which are national companies and the remaining 14% are foreign companies. In turn, 42% of these companies were suppliers of the company's forest nursery.

Suppliers in 2022

86%
national
companies

14%
foreign
companies

It is also relevant to mention the company's drive to **foster the development of local suppliers**, since 18% of the supplier companies belong to the department of Tacuarembó. Local purchases include various products, such as tools, fuels and lubricants, cleaning items, stationery, electronics, medicines and various supplies.

As for the services provided by local companies, these are: cargo and personnel transportation, maintenance (electrical, mechanical), surveillance, cleaning, lodging, doctors (medicine and dentistry), engineering, gastronomy and other professional services.

1.5. Productive promotion

LUMIN continues to develop productive promotion programs based on work with **herders and beekeepers in the plantations' zone of influence**.

During 2022, the company worked with **237 herders in a grazing area of 26,986 hectares and with 93% of occupation**. Of these herders, 83 are from Cerro Largo, 82 from Rivera, 54 from Tacuarembó and 18 from Treinta y Tres.

Work also continues with productive development programs with two rural development organizations in the department of Treinta y Tres, with which there is a good relationship and fluid contact is maintained.



As far as beekeeping is concerned, **90 beekeepers installed 18,204 hives in LUMIN fields**, mainly in the department of Rivera (55 beekeepers), followed by Cerro Largo (22), Tacuarembó (9) and Treinta y Tres (4).

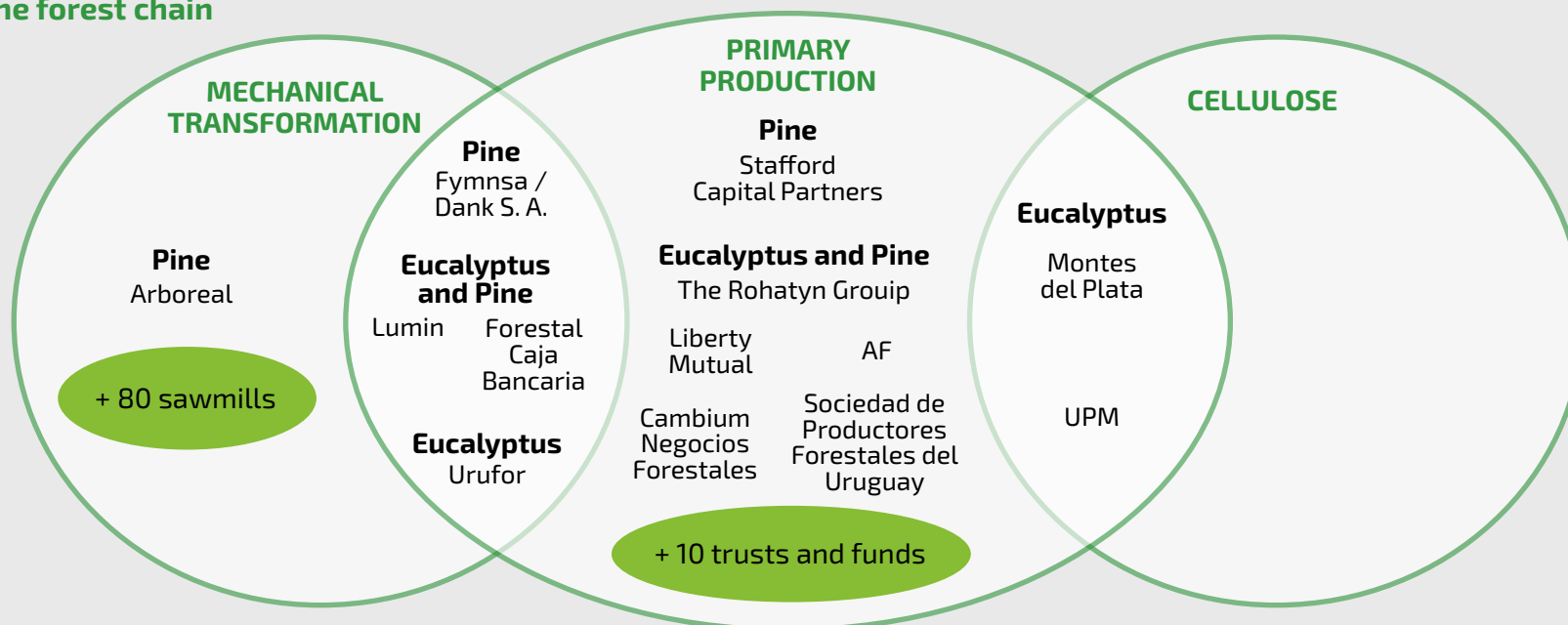
Most of the beekeepers who approach LUMIN do so because of the good references provided by other colleagues. The loan for the honey extraction room in the Tranqueras housing continues to thrive and around 20 beekeepers work there. In addition, during the year, support was provided to a project that surveyed the quality of honey in hives linked to eucalyptus forests in Cerro Largo, in the Cañas area.

The objective of this project is to obtain a glyphosate-free honey certification, since forestry production is one of the practices that uses this molecule the least. Obtaining this certification would allow producers to access many world markets that are currently limited. Of the total number of samples taken by LATU in these hives, 100% were below the detection levels of the sample, which allows further progress in a second stage. By continuing to monitor the hives and with the installation of an organic extraction room, there is an opportunity to boost the value of the beekeeping production in the area.

1.6. Governance, stakeholders and communications matrix

LUMIN is an extensive ecosystem linked to the forestry sector which covers various stages of the production cycle, as shown in the following table:

› Actors in the forest chain



Companies	FORESTRY 863	WOOD PRODUCTS 766	PAPER AND CELLULOSE 74	CHIPPERS 3
				Forestal Atlántico Sur, Foresur GIE, Grupo Forestal
Training offer	School of Agronomy	School of Engineering	School of Architecture, Design and Urbanization, UTEC	UTU, School of Chemistry, Universidad de la Empresa
Research	INIA	LATU	LATU	Universities, Interdisciplinary groups

Source:
Uruguay XXI (2022)

LUMIN integrates a broad ecosystem linked to the forestry sector, which interacts with over 60 organizations and institutions; from private associations that bring together forestry and industrial producers, contractors and suppliers, to academia, technicians, workers and research and innovation institutions; as well as local institutions with educational, social and community purposes; public sector agencies and national and local government actors.



› Map of the ecosystem

Government:

General Forestry Directorate (MGAP), National Rehabilitation Institute (MI), National Secretariat for Care and Disability (MIDES), MIDES Tacuarembó Territorial Office, National Customs Directorate (MEF), Ministry of Labor and Social Security, Ministry of Environment, National Sports Secretariat, National Directorate of Firefighters, INEFOP, LATU, BPS, ASSE, INACOO, ANDE, Sembrando Program, Departmental Administration of Tacuarembó, Departmental Administration of Rivera, Departmental Administration of Cerro Largo, Departmental Administration of Treinta y Tres, Municipality of Tranqueras, Municipality of Cañas, Municipality of Centurión, Municipality of Vergara, Municipality of Fraile Muerto, Municipality of Rincón, UN Women.

Civil associations:

Honorary Cardiovascular Health Commission, Unidos para Ayudar, Niños con Alas Foundation, APADISTA, Wood Workers Union Organization, SOIMA, Estudiantes Social and Sports Club, Tranqueras Rotary Club, Campo Limpio.

Academia, research, education:

CAMCORE, Universidad de Montevideo, School of Sciences (Udelar), School of Agronomy (Udelar), University School of Design, Tacuarembó University Center, Rivera University Center, ANEP, Tacuarembó Technological Pole, INIA.

Private sector:

Society of Forest Producers, Union of Exporters of Uruguay, Chamber of Commerce Uruguay - United States, local and national supplier companies, contractor companies.

Commissions:

Green Export Unit and Gender Commission of the Union of Exporters; PAIF Operation - Northern Forest Group, Communications Commission, Biodiversity working group in the Society of Forest Producers; Rainbow Center Commission; Tacuarembó Honorary Disability Commission; Forestry and Industrial Group group of Wage Councils in the MTSS; Commission for the Specific Area of Valle del Lunarejo and Sierra de los Ríos (Protected Areas).

A clear example of LUMIN's work and contribution to the forestry sector is the collaboration it has maintained for years integrating the technical group of coordinators that designs, sets up and supervises the development of the forest fire protection operation, today called **PAIF Operation**, that works in the orbit of the Society of Forest Producers.

LUMIN also contributes to the prevention and combat work in the eastern and southeastern areas, as well as in the Northern Forest Group in Rivera and Tacuarembó.

"LUMIN has supported and participated in this group from the very first moment"

Coordinator of the plan for the Society of Forest Producers

On the other hand, it is essential for LUMIN to maintain a fluid relationship with the interested parties, neighbors and various people involved in the operation of the company. Continuous communication is maintained through a **Communications Matrix, a List of Stakeholders, and a Survey of Neighbors**.

The mission of the **External Communications Matrix** is to receive messages from outside of the company through various means of communication; all of these are considered valid and include verbal communication, neighborhood surveys, telephone communication, billboards, memos, letters, emails, the website (www.lumin.com), talks, and training.

During 2022, **79 communications** were received consisting of: 2 thank you messages, 2 collaboration requests, 2 complaints, 2 invitations and 71 requests. This communications came from the following departments: 41 from Tacuarembó, 20

from Rivera, 12 from Cerro Largo, 3 from Treinta y Tres and 3 are national in scope.

In the case of **complaints**, these were related to truck traffic on local roads. Despite the fact that these vehicles were not exclusively linked to LUMIN's operations in the area, attention was given to both complaints. In one case, the company solved the problem by repairing the exit with its own materials and told the contractors that they should not use the alternative exit that passes in front of a school.

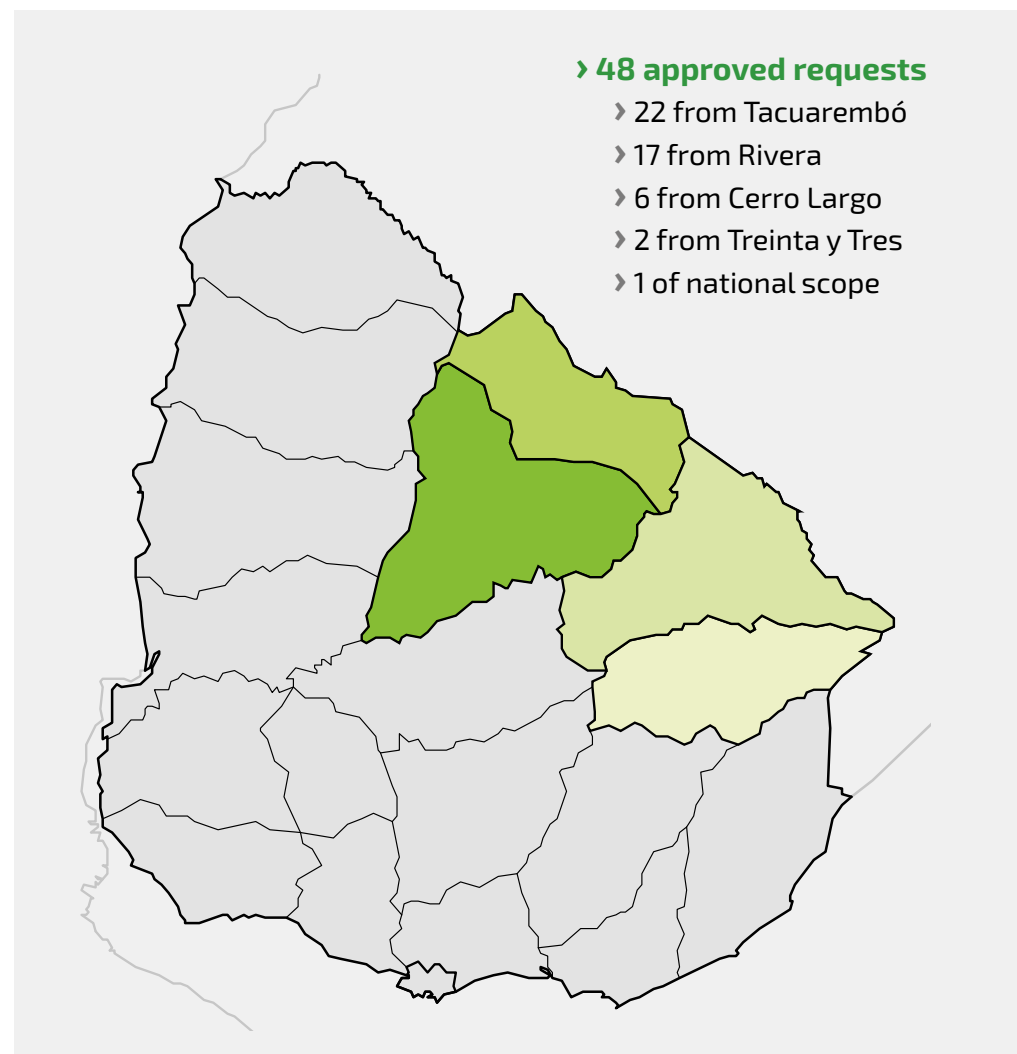
As for the **origin of the communications**, they come from agencies and institutions of the national government, such as the Fire Department, the Ministry of Industry, Energy and Mining, and the Ministry of Social Development; departmental and local governments of the area of influence; educational institutions, such as schools and universities, technologic hubs and research centers, as well as local clubs and institutions.

Of the total requests received, 48 were approved, 23 were not approved, and 8 were pending approval or analysis as of December 31, 2022. Most of the unapproved requests were rejected because they did not meet the support criteria established by the company, so requiring parties were notified of the resolution via an informative email. In the case of those pending, more time for analysis or more information or specifications were requested from the requesting party.



Source: ZSM Radio Photos: Joaquin Castro.

With respect to the **geographic scope** of the approved requests, the majority come from the department of Tacuarembó, followed by Rivera, Cerro Largo and Treinta y Tres.



Regarding the **topics of approved requests**, they have been grouped into the following areas:

Environmental	Relationship campaign between the native forest and the plantations on Cerro Buena Vista, maintenance of green space on Cerro Cuñapirú, thank you communication for the training on fire prevention.
Productive	Donation of materials for greenhouses, donation of board cutouts used by a group of local artisans for crafts making.
Social	Donation of equipment for the Fire Department, pruning trees or cutting grass near schools, donation of firewood, donation of sheets for the therapeutic center, picnic area supported by the Union, support for the purchase of equipment for sports activities.
Academic, Educational Research	Talks for students, invitation to forestry seminars, survey of perforations for final projects' work, donation of unused materials for educational purposes.
Community	Signage on rural roads near populated centers, roads and truck circulation, cleaning and opening of canals.

2. Environmental Report

2.1. Certifications and sustainability

- › In 2022, LUMIN carried out an audit **monitoring the national standard for forest certification in accordance with the principles and criteria of FSC®** (Forest Stewardship Council®/FSC-C162602), which verified compliance with said standard in the group forest management of the plantations managed by LUMIN in the departments of Tacuarembó, Rivera, Cerro Largo and Treinta y Tres in Uruguay for the production of pulpwood, sawmill and for energy from eucalyptus and pine trees.
- › Regarding the **carbon certificates** and standard **Climate, Community and Biodiversity (CCB)** certification, it is still **in process of assessment and approval** together with the La Pitanga project in the departments of Cerro Largo and Treinta y Tres. The implementation of this project seeks to highlight the positive and differential impact of forests in the eastern region on the carbon cycle, biodiversity and the community. Once the certification of said standard has been obtained, carbon certificates can be marketed in the global market with a differential value.
- › LUMIN has joined the **Net Zero** agenda, which seeks to strike a balance between the amount of greenhouse gas emissions produced and the amount removed from the atmosphere.



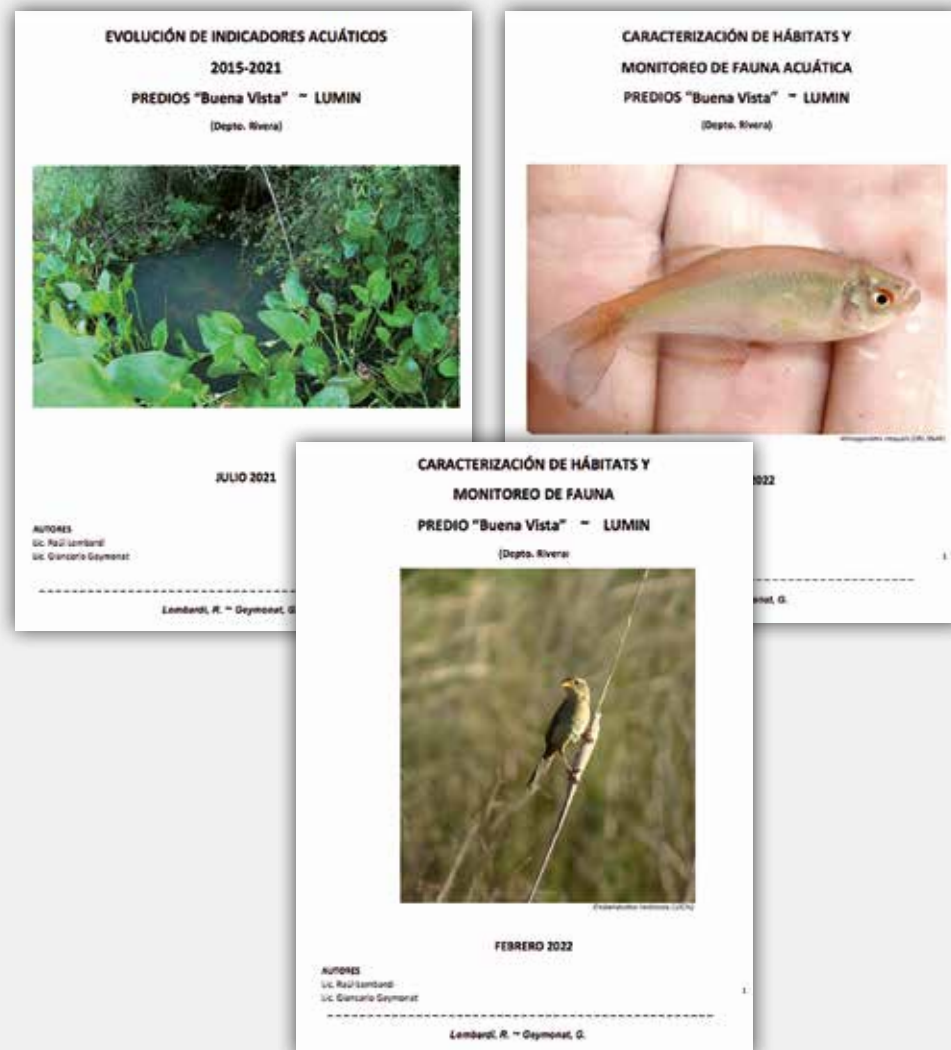
Wood is a material recognized for its sustainability, especially in a context in which the construction industry must move towards the Net Zero agenda in terms of greenhouse gas emissions. Given that the construction activity itself generates high levels of emissions, wood-based products are presented as a viable and environmentally friendly alternative, and, in the particular case of LUMIN TRP, as a substitute for tropical panels from *Eucalyptus grandis*. This constitutes a significant contribution to the goal of net zero in the coming years. Other business opportunities associated with sustainable production are also visualized, such as renewable energy projects, associated with biomass.



2.2. Management of biodiversity, flora, fauna and protected areas

LUMIN performs **annual monitoring of flora and fauna** in the sites identified as priority in terms of biodiversity and natural resource values, based on work and exchange with biologist experts. In 2022, eight flora and fauna monitoring assessments were carried out, and three specific surveys of the state of conservation of the different environments present on the property were implemented for the first time. This task will be carried out every three years. One of the cases to share is that of the Buena Vista property in the department of Rivera, which included a comparative report on the evolution of aquatic indicators for the 2015-2021 period, a characterization of habitats and monitoring of aquatic fauna, and another on fauna in general.

› Buena Vista property flora and fauna monitoring reports



The study of the evolution of aquatic indicators found an increase in the number of aquatic species observed on the property, together with the presence of some species intolerant to pollution, which is an indicator of well-preserved environments. In turn, among the species surveyed throughout the period, 14 priority fish species for conservation were found, which highlights these environments as reservoirs of biodiversity.

Regarding the characterization of the aquatic fauna, 46 invertebrates corresponding to 21 species (15 species of insects, 2 species of crustaceans and 4 species of mollusks) were surveyed. In addition, 124 fish were collected, corresponding to 29 species, among which 8 taxa intolerant to pollution and 8 priority species for conservation were found (according to the Project Strengthening the Implementation Process of the National System of Protected Areas of Uruguay).

These results confirmed that the watercourses studied in Buena Vista continue to present a very low or null level of contamination.



Landscapes in the Buena Vista lands.

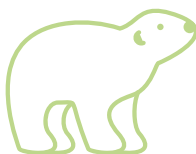
Source:
Lombardi and Geymonat (2022)

**21**

species of
invertebrates

29

species
of fish





In the characterization of the fauna, the number and proportion of rare, threatened or priority fauna species for conservation followed a stable evolution throughout the monitoring. On the other hand, **the indicators of biological diversity based on the richness and abundance of birds have remained in the area with very high levels compared to other regions of the country.** This allows us to infer that during the study period there were no significant changes or deterioration in the quality of the habitats within the study area, therefore portraying a stability in the general values of these indicators throughout the monitoring.



Birds in the Buena Vista Lands.
Source:
Lombardi and Geymonat (2022)



Another of the investigations that LUMIN has supported relating to fauna, has been carried out by the biologist Alexandra Cravino, whose objective was to assess the **presence of mammals in agroforestry landscapes** throughout the country, particularly, in this case, in the north and northeast of Uruguay.

For this purpose, cameras were placed not only in the native forest and meadow, but also in forest plantations, starting in May 2022, in properties located in Cerro Largo and Treinta y Tres, and, in September, in Tacuarembó and Rivera.

The images recorded by the cameras (which are activated by movement and temperature change) of the mammal species in the area were reviewed every three months, and they were moved to different places on the same property to cover the different environments on the site.



The study has found priority species for conservation such as the *paca*, the *tamanduá* (small anteater), the *tatú de rabo molle*, which appears in the northeast; and also, common species in forests such as the *guazubirá*, or felines from the mountain area such as the *margay*. Therefore, it is verified that the remaining

native ecosystems within the properties with forest plantations allow the species to maintain and interact with the plantations. Informative talks were also held with various local communities, as was the case of the presentation made for residents of the community of Cañas in Cerro Largo.

150

species
of birds

30

species
of mammals

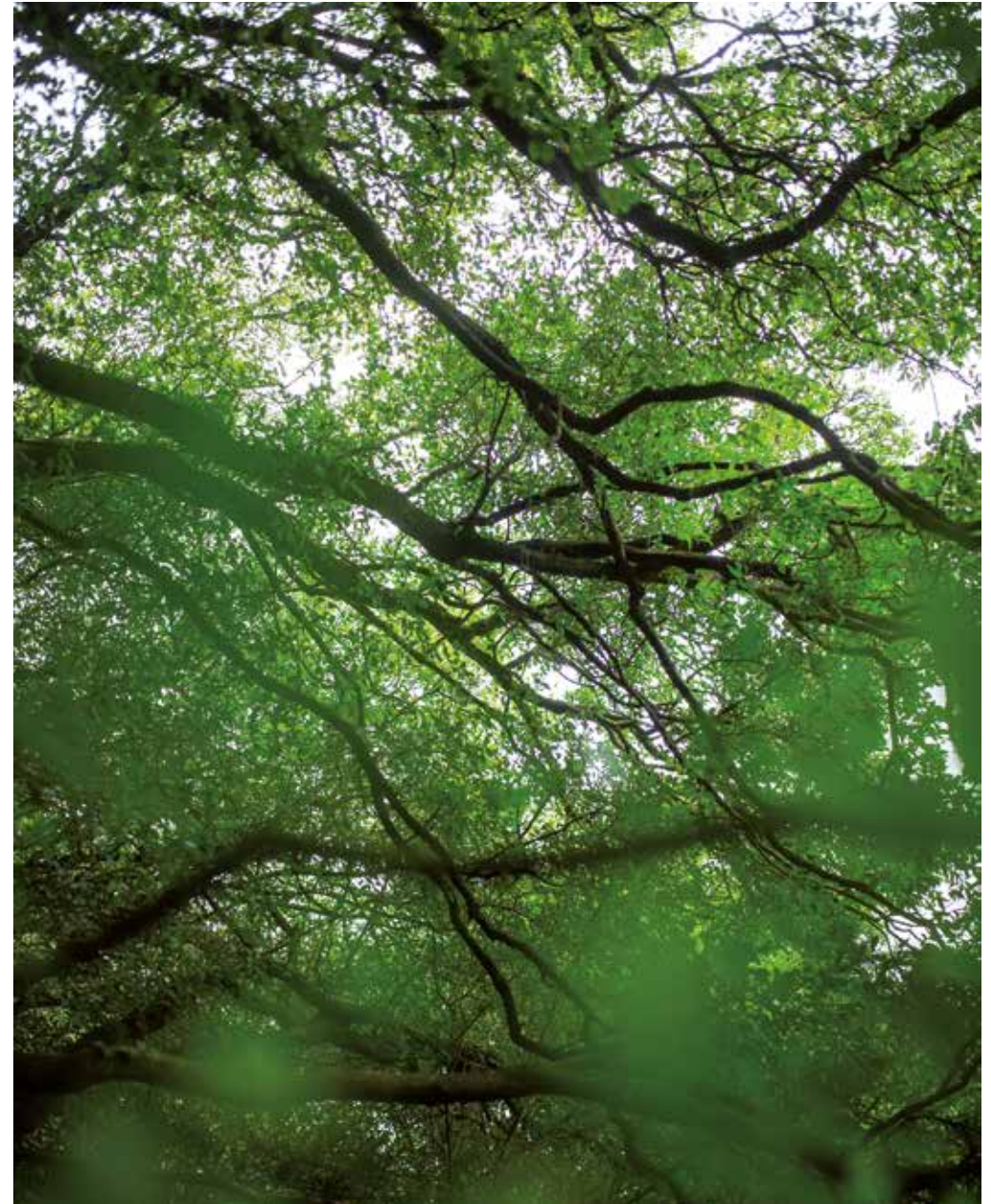
15

species
of amphibians

12

species
of reptiles

Support was also given to the final internship project promoted by a student of the Technician in Natural Resources Management and Sustainable Development of the School of Sciences of the Rivera University Center, which **systematized the existing flora and fauna in the property of La Corona in the last twenty years**. This study has verified the presence of 150 species of birds, 30 mammals, 15 amphibians and 12 reptiles in the area. Upon analyzing the behavior of these species over the years, significant conclusions have been obtained for the management of forest estates in the area and the importance of mosaics of landscape heterogeneity for the generation of biological corridors for mobility of the species in the region has been demonstrated.





During 2022, the study initiated in 2021 by the Universidad de la República (UdelaR) team called "The age of the trees: The dendrochronological potential of the native trees of Uruguay" was consolidated.

Dendrochronology is the scientific method of dating tree rings back to the exact year they formed. In addition to dating the trees, this can also provide information for dendroclimatology, which is the study of climate and atmospheric conditions during different periods in the history of the wood.

This research was led by Professor Ludmila Profumo from CENUR Northeast, who initially surveyed 18 species. This year, laurels were chosen as potentially timber species and a specific study was carried out, which allowed deepening the knowledge about the ecology of the native forest.



It is noteworthy that representatives of the LUMIN company continued participating in the Specific Advisory Commissions (CAE) of the Protected Landscape of the Valle del Lunarejo and more recently, the Protected Landscape of Paso Centurión and Sierra de Ríos.

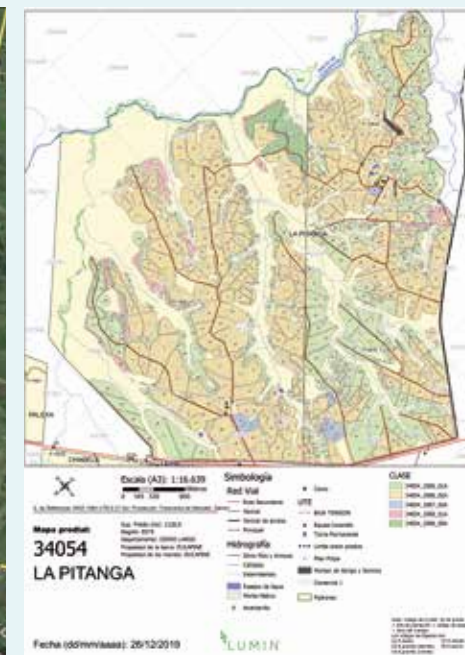
During 2022, there were two meetings attended by representatives of some ministries, neighboring delegates, producers, forestry companies and non-governmental organizations.



2.3. Water quality monitoring


A separate item is the water quality studies that LUMIN has been performing systematically. Specifically in 2022, an investigation was carried out based on the **monitoring of water quality in the Sauce de Conventos stream basin during the 2006-2022 period**.

This monitoring has been carried out repeatedly since 2017, in every season and with an annual frequency, at two monitoring points that are located upstream and downstream of the plantation located in the La Pitanga establishment, in Cerro Largo. As of 2020, on site pH, conductivity and temperature began to be measured, in parallel with the other monitored parameters. It should be noted that the property chosen to carry out the monitoring was selected because the company had already carried out a water quality assessment in 2006 before starting forestry activities in the area.



La Pitanga property and Conventos stream basin. Source: www.google.com.uy/maps | Armand Ugon (2022)

This previous evaluation was taken as a reference point to analyze how the impact of forest plantation has evolved in the affected watercourses in the area. In its early stages, this monitoring was designed at the request of the National Environment Directorate and following its guidelines, which meant monitoring upstream and downstream every time there was any intervention on the property (thinning, harvesting, clear felling, replanting). Then, with the creation of Forest Environmental Management Plans,

monitoring becomes annual and seasonal. Some of the most relevant results of the monitoring of the water quality of the Sauce de Conventos stream basin obtained in the 2006-2022 period, recorded high compliance with water quality standards.. , the watercourse showed better levels of compliance towards the higher part of the basin, with a gradual deterioration towards the mouth, a phenomenon that is natural in all fluvial systems due to the accumulation of loads as the system flows towards the mouth. 







3. Social Report

3.1 Corporate Social Responsibility Initiatives

During 2022, LUMIN supported 21 corporate social responsibility initiatives on various issues.

› **21**
CSR initiatives
in 2022



3.1.1. Education and Care activities

› ARCOÍRIS Center

Throughout the year, **the ARCOÍRIS comprehensive care center cared for 60 boys and girls from 0 to 3 years of age.** Of this total, 55% are boys and 45% are girls.

There is a maternal group, two level 1 groups, four level 2 groups and one level 3 group. Regarding the work team, there are currently ten educators, three service assistants, a social worker, a psychomotor specialist and a psychologist.

Some examples of activities carried out during the year included: the Family Day, the Heart Week Walk and the Baby Fair.

Workshops were also held with parents on topics such as limits, timely experiences, among others. Renovation and painting works have also been carried out, water tanks suitable for consumption have been installed and soft spaces have been incorporated into each room which allow the children to rest, play or read books. By 2023, it is projected to have a double shift in every care level, so that there is more availability for families.





› University School of Design Center

Since last year, in an agreement with the Departmental Office of the Ministry of Social Development (MIDES), and its *Uruguay Crece Contigo* program, LUMIN has established an alliance with the Udelar University School of Design Center to work on the design and construction of furniture for the program. This work is carried out inside the carpentry workshop of Unit 26. One of the innovative parts of this alliance was the School of Design.

When consulted, one of the four students participating in this experience pointed out the importance of “knowing the real world” and, in the case of the redesign of the child’s chair for eating, “the importance of interdisciplinary working, being able to have contact with all the parties involved, reaching a final product of participatory design, being able to work as a

team”. In this context, during 2022, an agreement was signed between MIDES, the Ministry of the Interior and LUMIN that is part of the local project “Cooking to grow” (MIDES Tacuarembó), which began last year.



› Technological Educational Pole of Tacuarembó.

LUMIN offers internship opportunities to those who study or graduate from the Pole, allowing them to obtain their first work experience in areas such as forestry, industrial electromechanical maintenance, and logistics. In addition, it has donated various devices and offers technical talks by company professionals.

An example of this is the student María Cristina Capra, who obtained a job in the company thanks to a labor intermediation process carried out by the National Institute of Employment and Vocational Training (INEFOP) and who benefited from Promotion of Employment Law 19,973, in the modality of young protected work. Native of Pueblo Centenario, she is staying at the University Residence and is an advanced student of Human Management at the Tacuarembó Technological Pole and of Technologist in Administration and Accounting at the Tacuarembó campus of Udelar.

› Tacuarembó University Residence

As part of its commitment of donating tools that are in good condition when replacing company equipment, LUMIN delivered three laptops in excellent condition and a new printer to students who use the facilities of the new University Residence of the Tacuarembó Departmental Administration.

Currently, there are 74 residents staying there (38 women and 36 men), who come from various departments of Uruguay, such as Durazno, Florida, Maldonado, Cerro Largo, Paysandú, Artigas and Tacuarembó, both from rural and urban areas, and who are studying different careers, either on the campus of the University of the Republic, at the Technological Pole or at the Teacher Training Institute.

In addition, the company continues to support students by offering the opportunity to exchange experiences with its employees and professionals, who are leaders in various topics relevant to academic training.



Source: UdelaR



› **74**
residents

› **38**
women

› **36**
men





› Project Árbol

LUMIN continues with this environmental education project, which highlights the importance of trees and the care of the native forest, in the schools of the communities in which it works. In Tacuarembó, the project visited the Rural Escuela N° 65 in Paso de las Arenas, and delivered an informative talk along with brochures, pencils and hats. The company also made a donation of eucalyptus saplings, plastic foam trays and seedling substrate, in order to collaborate with the orchard maintained by that educational community.

LUMIN also worked at the Escuela N° 48 of Cinco Sauces, Turupí; at Escuela N° 86 located in the urban area of the city, in the Centenario neighborhood, and a talk was given in the fourth year of elementary school at Colegio San Javier.



In the case of the department of Cerro Largo, the Árbol Project moved to Escuela N° 77 in Conventos, where emphasis was placed on the care of the native forest.

To achieve this objective, all the talks included an interactive activity in the classroom between boys, girls, teachers and LUMIN technicians. In addition, native trees were planted at the school, in order to raise awareness about the importance of protecting our native forests.

In all of these activities, 78 people participated, including students, teaching staff and neighbors of the communities.



› Educational centers visit LUMIN

LUMIN has also received visits from educational centers that want to know about the company's operations, mainly the nursery.

This year, 90 students and teachers from the Colegio Inglés of Montevideo visited the company's facilities, taking a tour from the nursery to the final product.



› Niños con Alas Foundation

This non-profit organization's fundamental objective is to encourage the educational continuity of boys and girls from vulnerable and high-risk neighborhoods., LUMIN continues to provide support through its participation in the Sponsorship program, committing itself to supporting the education of a goddaughter throughout her primary cycle.



3.1.2. Health and Wellbeing activities

› Cerca Center for Basic Cardiac Rehabilitation

LUMIN promoted the installation of the first Cerca Center in the department of Tacuarembó and continues to generate training opportunities in the department through alliances with local organizations such as the Municipality of Tacuarembó. During 2022, over 600 people were trained in basic cardiac rehabilitation and AED use, which included officials from the Sports Directorate and the Sports Center, the Police School, organizations linked to cycling and senior and master soccer players, in addition to reaching towns in the interior of the department, such as Ansina, Caraguatá and Fraile Muerto.



Under the **Cardioseguero Uruguay Program** and **United to Help** frameworks, External defibrillators (AEDs) continue to be donated to sports centers in towns in the center of the country, such as Las Toscas de Caraguatá and Fraile Muerto. As pointed out by the National Secretariat of Sport: "Without the support of LUMIN it would have been very difficult to reach locations in the deep rural parts of our country with AED and CPR training."

› Mini basket ball schools

LUMIN supported the mini-basket-ball initiative in Tacuarembó together with the National Sports Secretariat, the Departmental Administration of Tacuarembó, the Universidad del Trabajo del Uruguay, the National Organization for Children's Sports and other sponsoring companies such as Ta-Ta. The Mini-basket-ball Neighborhood Meetings project aims to democratize the sport, promoting the practice of physical activity in boys and girls through recreational meetings where they have the opportunity to integrate.

This project began with five neighborhood meetings in various parts of the city of Tacuarembó: Plaza de Deportes, Center of Neighborhood N° 1, López neighborhood, de Los Molles Center neighborhood and Plaza Artigas. Various groups of local clubs, public and private schools, as well as people from the towns of Tambores and Villa Ansina participated in these meetings; adding about 300 boys and girls between 6 and 12 years of age.

LUMIN collaborated with the purchase of boards to equip these spaces together with the metallurgical company and contractor SIMUR.



“LUMIN is a key advocate for our environment. It is always supporting this type of activity and the company is a reference for our department”

Director of Sports of the Municipality of Tacuarembó.



Source: Municipality of Tacuarembó



3.1.3. Social and labor inclusion activities

› Joint work with the National Rehabilitation Institute

In recent years, by virtue of its commitment to social and labor inclusion, LUMIN has been making a sustained contribution to the National Rehabilitation Institute (INR) in the city of Tacuarembó, within the framework of the Prison Dignity Plan.

For this reason, on the occasion of the inauguration of the new facilities of Unit 26 of the INR in Tacuarembó, the company was recognized by the Minister of the Interior, Luis Alberto Heber, who was received by LUMIN Human Resources manager, Mara Pisano. This new unit has capacity for 150 people deprived of liberty. It was transferred from the center of the city to a property on Route 31, so that it would comply with the rehabilitation requirements set forth in the Prison Dignity Plan, and it has over 1,000 square meters and public space for recreation.

LUMIN, through an agreement signed with the INR, donated wood for the manufacture of furnishings, such as bunks, furniture, tables and benches, which equip the facilities. Inmates built these items in the carpentry workshop promoted by the company since its inception. In addition, we have collaborated in their training in trades with rapid labor insertion, especially carpentry.





LUMIN has promoted a tripartite agreement with the UTU, in which the company is the promoter and the UTU provides the technician in charge of the training.

At the moment, 13 people have the accreditation and they also work with 120 inmates who are accredited through Educa Antel as suitable for carpentry with the support of an INR teacher. With a very basic investment, these people can start their own business.

The company has reaffirmed its commitment to promote the carpentry workshop by donating new equipment and tools. The objective of this commitment is to continue promoting the social and labor inclusion of persons who are deprived of liberty.

During 2022, **various social actions were supported**, and each group worked with a specific project that involved people deprived of liberty in specific lines of work. With the Mucho Bicho organization, 60 houses for pets were made with wood donated by LUMIN.

Another project consisted of working with the Chess for Coexistence program, whose objective was to donate chess games to secondary schools, cultural centers and youth offices, among others. Finally, another group of inmates worked with the My First Garden at School program, which consisted of donating seeds and a booklet made by the inmates themselves, to the schools. These projects involved a total of 22 people deprived of liberty.

› Steam generator operator course in Tacuarembó

LUMIN supported the development of the steam generator operator course (*foguitas*), through INEFOP and the UTU. Thanks to this joint effort, it was possible for the course to be taught in the city of Tacuarembó. The course lasted 10 weeks, in a hybrid model that combined online theoretical classes and face-to-face practical classes. Several companies from the industrial sector of Tacuarembó participated, including LUMIN which culminated in a final test to obtain the relevant skills needed to pass the course.



› Value added alternatives for forest by-products in Cerro Largo

During 2021 and 2022, in the department of Cerro Largo, and with the support of LUMIN, the Municipality of Cerro Largo, LATU and the Ministry of Industry, Energy and Mining, initiatives have been promoted to generate value-added alternatives for forest by-products, such as firewood or mushroom production.

Work began in collaboration with the community of Cañas, with the aim of identifying their needs. In addition, a study was carried out to analyze the opportunities to upgrade said by-products, in order to solidify the offer for the next five years.

A public presentation of the project was delivered and, as a result of this process, it was decided to



deliver a proposal to the **RIDE (Innovative Responses to Strategic Challenges) from INEFOP.**

This joint initiative between Agroempresa Forestal and LUMIN identifies various opportunities for



job creation, particularly through self-employment or small-scale ventures. For example, from the manual classification and extraction of wood pieces, it is possible to commercialize: industrial firewood, retail commercial firewood, retail and industrial coal, Shiitake mushrooms, products for sawmills, essential oils, pellets, etc.

Therefore, the development of actions in the towns of Vergara and Rincón (Treinta y Tres) and Plácido Rosas (Cerro Largo) is proposed, in order to create self-employment ventures adding value to the different forest by-products. This project was approved in 2022 and will be developed in 2023, involving approximately 60 people from the localities mentioned.



3.1.4. Community activities

› Donation of equipment to libraries in neighborhood centers and towns in Tacuarembó

During 2022, a new donation of computer equipment has been made to the Municipality of Tacuarembó, through its General Directorate of Education and Culture. The aim is to support centers in neighborhoods and towns within the department where computing classes are given, as is the case of Ansina.

Upon receiving the collaboration of the nine teams, the General Director of Education and Culture of the Municipality highlighted the continued response of LUMIN and the importance of this type of team to improve the services offered both in neighborhoods and in small towns in the area.

In turn, LUMIN's Human Resources manager, Mara Pisano, indicated that the company sought to encourage these computers to be used by children, teenagers, and adults for educational purposes, for research, and even for work.



› Training activities in the Municipality of Cañas

LUMIN has supported a chainsaw training course for eight residents of the Municipality of Cañas, so that they can not only join opportunities that arise from the forestry companies that operate in the area, but they can also foster their own initiatives for processing forest products.

The community of Cañas, is an isolated rural population which demands job opportunities, so having trained, local people will allow them to integrate into the job market within their own area. In turn, the department of Cerro Largo, with a long cattle tradition, has little knowledge of the uses of the forest, which is why this first training is the initial phase of this process.

The mayor of the town states having a very good relationship with the company, and they are now working on the placement of **rural signage and donating wood** for municipal lighting columns.

3.1.5. Gender, diversity and inclusion

› Gender equality at a corporate level

LUMIN continues to work actively with a gender equality approach, seeking coherence between the internal actions of the company with its employees and contractor companies, as well as the work with the institutions it supports, public policies and the community in which it carries out its activities.

Within the framework of its path for gender equality and its commitment to society, on November 23rd and 24th, 2022, LUMIN was invited to participate as one of the winning companies of the *El Talento no Tiene Género* (Talent has no gender) Award in a panel of experts from the private sector during the UN Women regional consultation meeting with the private sector in Panama. On this occasion, the company —the only one from Uruguay— was represented by its Human Resources manager, Mara Pisano. In addition to her, other experts from various countries in the region participated, as well as regional specialists from UN Women and the organization's regional director for Latin America and the Caribbean, the Uruguayan María Noel Baeza.



The experiences presented by LUMIN, which are aligned with the principles proposed by UN Women, were recognized, particularly those linked to the ARCOÍRIS Care Center and co-responsibility in care, special leaves for mothers and fathers and awareness-raising activities against gender violence among our employees and contractors. The final purpose of this meeting was to highlight that the inputs that originated from this regional consultation are key to be incorporated into the process of developing the global strategy of UN Women regarding its relationship with the private sector.



› Labor inclusion of people with disabilities

During 2022, LUMIN collaborated with MIDES in the labor inclusion of people with disabilities. Both institutions worked together in the selection process through the corresponding job offers, offering adequate treatment and support models. In addition, workshops were held with the staff and the people responsible for the different sectors to help raise awareness.

Currently, there are five people with disabilities working at LUMIN, some in the plant and others in the nursery. To guarantee their labor integration and adaptation to their positions, MIDES provides support in aspects such as communication, coexistence and adaptation of jobs, among others.

“LUMIN is a company that has always been interested in supporting people with disabilities it has very good initiatives and the supervisors themselves seek information and provide support”

Ministry of Social Development.

LUMIN also collaborated with the realization of the **National Deaf Futsal Championship** in the facilities of the Tacuarembó Sports Center.



For the second consecutive year, support was provided for the **Latin American Festival of Inclusive Economy**, regional event that seeks to raise awareness about the value of diversity and the inclusion of all people, including those with disabilities.



3.2. Labor Relations, Safety, Health and Training

LUMIN continues to reaffirm its commitment to the **health and safety policy**, both in forestry and industrial management. Thus, 12 years without accidents have been achieved in the forestry area for its direct employees, and accident indicators for contractors have had an excellent performance. Regarding industrial management, the best record was achieved in the industrial plant, with one of the lowest indicators for lost days of work.

These achievements are obtained thanks to an intense work of awareness and personal care, which includes training, five-minute talks and intervention to address various topics, such as the importance of working safely, returning home safe and sound every day, fire prevention, care for the environment and team collaboration to achieve our goals.

Two fundamental health prevention campaigns continued, such as internal campaigns to promote healthy habits in Heart Week and, in the month of October, the breast cancer awareness campaign, distributing relevant information on prevention, diagnosis and treatment.



LUMIN also worked on **training and education**, with a total of 96 training workshops and 1844 participants, both in the forestry and industrial areas. There were 30 training sessions in the forest area for internal staff and contractor companies, with a total of 920 participants, and 66 training sessions in the industrial area, with a total of 924 participants.

› **96**
trainings
↓
› **1844**
participants

Through the virtual platform, continuous training has been provided on a variety of topics, such as the prevention of musculoskeletal injuries, current national regulations and the safe use of chemical products.

Courses on sexual harassment were given, both in Tacuarembó and Rivera, dictated by trained technicians from INEFOP.



All forestry companies were trained in the incident command system (ICS), which is a key methodology for action in emergency situations.



Thanks to an agreement signed between INEFOP and the OSTM, it was possible to train 50, day laborer, middle managers in the industrial sector in the TEMPLAR program.

Such consisted of training in transversal skills, such as permanent learning, effective communication, resilience, collaborative work, critical thinking and creativity. It lasted five weeks, with 20 hours of training and one tutorial feedback per participant. In turn, LUMIN employees accessed courses on the Coursera platform on topics such as administration, customer service, basic English, sales and marketing, among others.

"LUMIN is a flagship company. It is one of the companies in the northern region that capitalizes on most of the products that the institute has to offer, with great receptivity on the part of the company"

INEFOP

Work is also underway with INEFOP on a training plan for 2023, that entails the signing of a tripartite agreement with the company's Union, by means of which the training is one hundred percent subsidized and benefits not only the LUMIN worker, but it can also be enjoyed by members of their family.

Con el compromiso de todos/as, es posible alcanzar grandes resultados

 **Miércoles 5 de Octubre**
 **16 a 18 hs.**


 **Polo Tecnológico de Tacuarembó, Sarandí s/n°
esq. Michelson (Barrio Montevideo)**

¡BIENVENIDO/A A TEMPLAR!!






As for the **Labor Relations**, within LUMIN, a remuneration policy was developed, based on surveys and remuneration for each position, the sector, the market and the competition in the market where the company is located.

A Goal Fulfillment Program was also implemented at the level of day laborers in the plant, with variable compensation depending on the achievement of goals. 



The background of the page is a photograph of two people working in a greenhouse. On the left, a woman with dark hair and glasses, wearing a red t-shirt with reflective stripes, is tending to a row of green plants. On the right, a man wearing a blue baseball cap and an orange long-sleeved shirt with reflective stripes is also working with the plants. The plants are in long, raised beds, and the greenhouse structure with its translucent panels is visible in the background.

4. ESG and SDG Report

LUMIN aims to provide its customers with high quality products, based on a sustainable development approach. To achieve this, it focuses on sustainable forest management and corporate social responsibility initiatives. Likewise, it works in collaboration with local communities to support their development and preserve a healthy environment for all people.

In this framework, we analyze how LUMIN's actions contribute to the **ESG** criteria, summarized in the following table:



- › Compliance with the national standard for forest certification in accordance with FSC principles and criteria®. In the process of approving the Climate, Community and Biodiversity (CCB) standard.
- › Commitment to the Net Zero agenda in processes and products.
- › Flora and fauna monitoring.
- › Water quality monitoring.
- › Studies on biodiversity: mammals in forest areas and age of trees.
- › Participation in Protected Areas commissions.



- › Generation of 779 direct jobs in the company (21% female) and 670 jobs in contractor companies (6.5% female).
- › 21 CSR initiatives supported in the areas of: education and care, health and wellbeing, social and labor inclusion, community, gender and diversity.
- › 96 training sessions for own workers and contractors and 1,844 participants.



- › More than 60 public and private institutions, NGOs, academia, are part of the company's ecosystem.
- › 79 communications were received and 48 requests were approved.
- › 12 years without work accidents in the forestry sector and improved safety figures in the plant.
- › Contribution to the construction of the global strategy of UN Women with the private sector.
- › Labor inclusion of people with disabilities.

Source: Own elaboration based on LUMIN-TIG data.



When analyzing the activities described in the reports of economic, social and environmental dimensions of the company; one can reflect on how each of these activities and processes actively contribute to the fulfillment of the **Sustainable Development Goals**:



ECONOMIC REPORT

LUMIN value chain in 2022

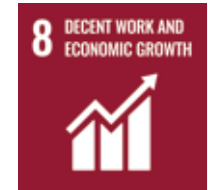
Markets and products

Impact on employment

Contractor and supplier companies

Productive promotion

Governance, stakeholders and communications matrix



ENVIRONMENTAL REPORT

Certifications and sustainability

Management of biodiversity, flora, fauna and protected areas

Water quality monitoring



SOCIAL REPORT

Corporate Social Responsibility Initiatives

Education and Care activities

Health and Wellbeing activities

Social and labor inclusion activities

Community activities

Gender, diversity and inclusion

Labor Relations, Safety, Health and Training



IRIS + metrics^[1], a set of results indicators used for impact investments that measure change at a social, environmental and financial level, and at the same time are associated with the SDGs, were introduced in these reports. In this case, two variables were used: **biodiversity and care**.

Biodiversity assessment: This metric indicates whether the organization has taken steps to assess biodiversity conditions and that the changes are being directly or indirectly controlled by the organization.

LUMIN manages the biodiversity of its properties, through numerous monitoring of flora and fauna and water quality in different locations; as well as through numerous investigations and academic projects linked to the management of biodiversity within the forest landscape.

Impact on the SDGs:



Trained people: Number of people who received training offered by the organization during the reporting period.

1,884 LUMIN workers and contracted companies participated in 96 training sessions offered by the company on various topics such as current national regulations, safe use of chemical products, workplace sexual harassment, incident command system, basic English, among others.

Impact on the SDGs:



¹ <https://iris.thegiin.org/document/iris-and-the-sdgs/>

 **LUMIN[®]**