FORESTRY
SECTOR
IN URUGUAY

MARCH 2025

Uruguay XXI
PROMOCIÓN DE INVERSIONES, EXPORTACIONES E IMAGEN PAÍS

CONTENT

WHY INVEST IN URUGUAY?

FORESTRY SECTOR

Uruguay constitutes a strategic and competitive destination for investment in the forestry sector, underpinned by its political, economic, and social stability, as well as a robust and transparent regulatory framework.

The country has established a world-class forestry industry, built upon a sustainable model that integrates high environmental standards with productive efficiency. Since the implementation of the Forestry Law in 1987, the sector has grown exponentially, establishing itself as a key driver of the Uruguayan economy and an international benchmark in the field.

A favorable environment for investment

- Uruguay ensures equal conditions for both national and foreign investors, with clear and long-term regulations that promote business confidence.
- The Investment Promotion Law (16,906), the Industrial Parks Law (19,784), the Free Trade Zones Law (15,921), and the Forestry Law (15,939) provide tax benefits, exemptions, and favorable customs regimes, driving investment and industrial development.
- There are no restrictions on the purchase, sale, or transfer of foreign currency, thus enabling the free flow of capital, profits, and dividends.
- Uruguay is one of the leading exporters of cellulose pulp and solid wood, with a focus on expanding markets such as China, India, the United States, and Europe.

A sector with exceptional growth potential

Uruguay offers an abundant and certified supply of raw materials, with over three million cubic meters of pine wood available annually, surpassing the installed industrial capacity. This potential supports the development of mechanical processing industries and high value-added products, such as plywood panels, structural timber, and construction materials.

The country features a diversified productive ecosystem, ranging from cellulose pulp and paper production to sawmilling, panels manufacturing, biomass energy generation, and the growing wood construction sector.

Investment in second processing technologies and biomass energy generation enhances the sector's competitiveness, fostering industry diversification and the efficient use of forest resources.

Strategic location and advanced logistics

Uruguay serves as the gateway to the Southern Cone, offering preferential access to the markets of Argentina, Brazil, and Paraguay. Its state-of-the-art logistics infrastructure supports multimodal solutions integrating railway, land, and sea transport, ensuring competitive costs and export efficiency.

The recent expansion of the railway system and the modernization of the Port of Montevideo further strengthen the connectivity of the forestry sector with key international markets.

Furthermore, the country has an energy matrix based on renewable sources, positioning itself as a regional leader in clean and sustainable energy in Latin America.

International competitiveness and sustainability

Uruguay provides productive conditions comparable to those of other leading forestry regions in the Southern Hemisphere, such as Australia, New Zealand, South Africa, and Chile, ensuring high productivity and global competitiveness.

90% of the country's plantations hold international certifications for responsible forest management (FSC and PEFC), facilitating access to markets that require high environmental standards.

Additionally, the production of solid wood contributes to carbon capture and storage, aligning with global trends in sustainable construction and the circular economy.

- For further information, please contact our sector specialists here.

EXECUTIVE SUMMARY

The forestry sector has become one of the most dynamic drivers of Uruguayan economy this century. Following the implementation of the Forestry Law in 1987, plantations grew significantly, leading to the establishment of relevant investments in the sawmilling and cellulose pulp industries, as well as the development of services and infrastructure.

The Uruguayan forestry sector is a key economic driver, enhancing production and contributing to interconnected economic activities. Over 4,000 companies are directly related to the forestry sector and employ more than 18,000 people. Foreign investment has played a key role in its expansion, facilitating improvements in efficiency and quality through economies of scale and adhering to international standards.

Forestry exports have demonstrated remarkable performance, with cellulose pulp becoming the country's primary exported product, reaching US$ 3,007 million, which represents an increase of 27% compared to 2023. Moreover, the growth of products such as sawn wood, chips, and roundwood has increased the sector's contribution to the total exports of goods, underscoring its growing importance to the Uruguayan economy.

An analysis conducted by Uruguay XXI on the impact of the sector on the exported gross value added (GVA) highlights that the cellulose pulp industry generated US$ 827 million in 2022, representing 36% of the total agro-industrial sector. However, due to its advanced level of automation, the industry's impact on employment has been moderate. In contrast, the wood industry, being labor-intensive, provided employment for 6,735 individuals, which represented 20% of the total agro-industrial employment; however, its contribution to the exported GVA was only 7%. Furthermore, production within the forestry sector boosts other areas, such as modern services and transportation, which are indispensable for both export activities and the creation of value throughout the entire production chain.

THE FORESTRY SECTOR IN URUGUAY

SECTOR DESCRIPTION

The forestry sector in Uruguay encompasses several activities ranging from seeds and plants production to the industrial phase, transport and commercialization of end products. The sector is divided into four categories:

- Cellulose-Paper Chain: includes the production of untreated roundwood, chips, cellulose pulp, paper, cardboard and other related products.

- First Mechanical Transformation: includes activities that take wood from its initial state up to intermediate products such as boards, posts, wooden sheets, particles, among others.

- Second Mechanical Transformation: this phase focuses on the use of products obtained from the first transformation in order to manufacture goods such as panels, construction carpentry, glued laminated timber beams and boards.

- Energy: this category includes products such as chips, firewood, pellets and the energy production from biomass, among others.

The sector's activities can also be grouped into three types of phases according to the value-added chain.

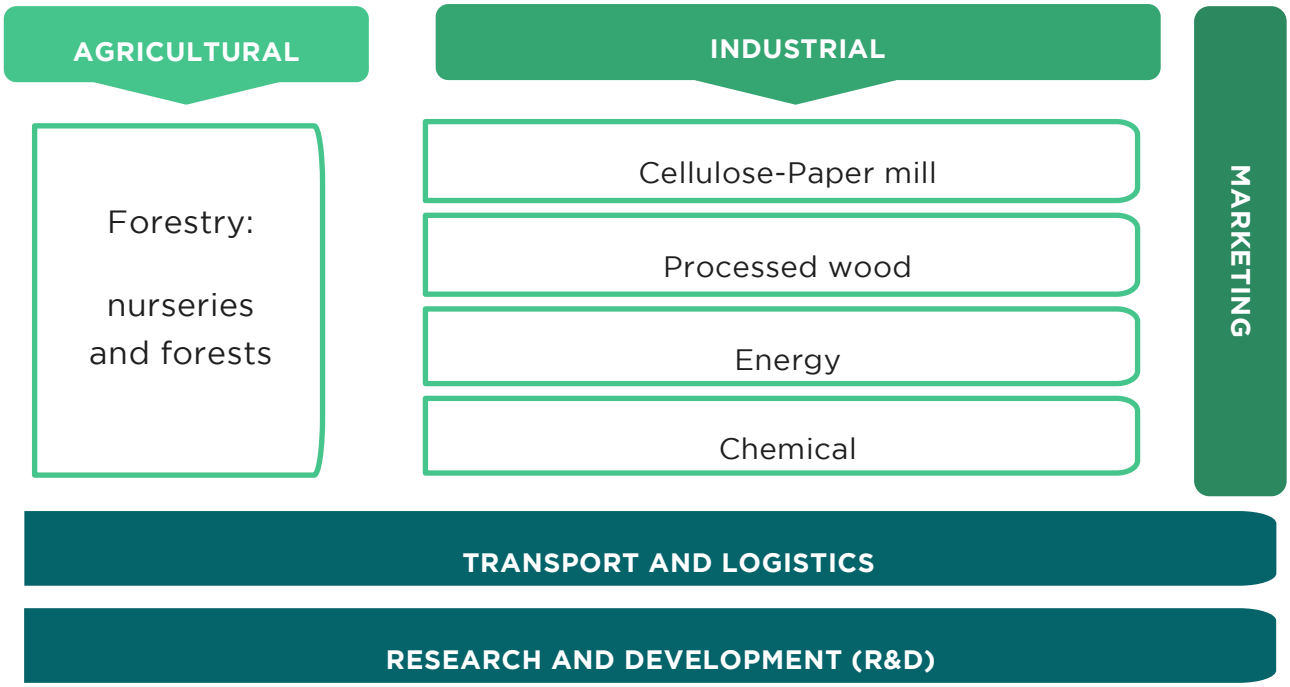
Primary Phase (Agriculture): includes the production of reproductive material and plants in nurseries, the planting and intermediary forestry treatments of the forests, as well as the harvesting of forestry products.

Secondary Phase (Industrial): includes the chemical or mechanical wood processing activities carried out in different lines, including the marketing of end products.

Logistics, Transportation and Associated Professional Services: covers a wide range of activities crucial to the efficient management and operation of the forestry industry. This includes the planning and execution of the supply chain logistics, the transport of raw materials and forest products, as well as professional services such as forestry consulting,

environmental engineering and sustainable management of forest resources. As a whole, this sector plays a key role in the flow of forest products, from the forest to markets and end

1 Main activities of the Forestry Sector



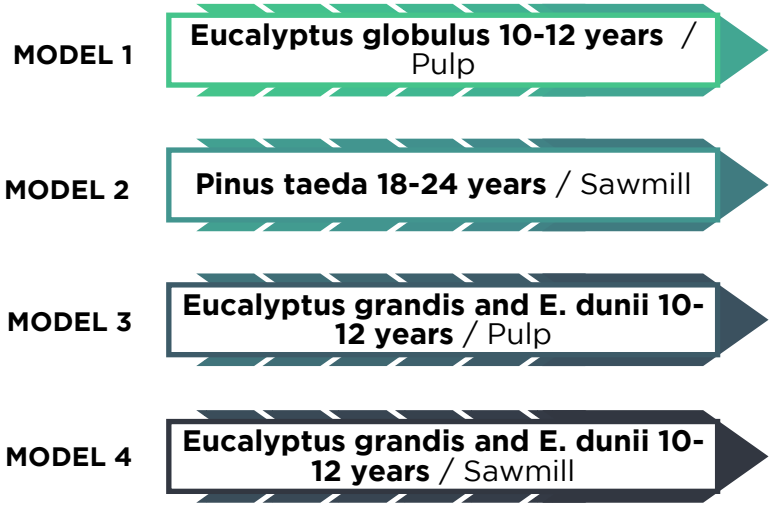
consumers, ensuring the sustainability and profitability of the industry.

Source: Uruguay XXI based on the document in the Industrial Plan 1 of the Productive Office - Ministry of Industry, Energy and Mining (MIEM) - National Directorate of Industries.

The forest products industry in Uruguay has large companies vertically integrated that span from agricultural production to the final marketing step. Some of the main exporters are largely supplied by their own raw material. The largest and most productive sawmills mainly use national raw material and export their products. On the other hand, smaller companies focus on selling their products primarily in the domestic market and are not fully vertically integrated.

There are two main industrial chains in Uruguay: the cellulose chain and the mechanical transformation chain. In addition, other activities such as chips and roundwood exports are carried out, which may also be destined for pulp production or for sawmilling activities.

2 Main forestry models of Uruguay



Source: Uruguay XXI based on the document in the Industrial Plan 1 of the Productive Office - (MIEM) - National Directorate of Industries.

These models emerged to meet the changing demands that were a direct result of the Forestry Act of 1987 (No. 15,939) in Uruguay. Initially, wood exports were the basis and first way in which the local sector entered the international market for forest products.

The relative weight of eucalyptus roundwood exports, which was originally destined for cellulose pulp production (E. globulus: model 1), gradually decreased with the emergence of local cellulose projects. Uruguay has the capacity to export almost two million tons of chips annually, although the local demand increasingly absorbs these products as input.

Sawtimber (E. grandis: model 4) has become a brand that mainly serves the Southeast Asian markets, serving as raw material for furniture industries targeting exports to Europe. However, its annual volume is highly variable and depends on trade prices in Asia.

Regarding process costs (which are the same for each individual stage of industrial transformation), 55% of the total cost for a 20-year cycle starts at “year zero”, mainly due to land acquisition and initial plantings.

The forestry chain, regardless of its industrial transformation purpose locally, keeps a relatively simple structure that encompasses the following phases:

- **Nurseries:** includes seedlings production and genetic improvement activities (breeding).

- **Forestry:** covers land preparation, planting and forestry management, including pruning and thinning, among other practices.
- **Harvest:** has to do with tree felling and timber harvesting in the field.
- **Timber loading and transportation:** involves the timber transport to industrial facilities by either land or riverways.
- **Industrial transformation:** here the activities are divided into:
    - Cellulose mills.
    - Primary mechanical processing.
    - Secondary mechanical processing.
- **Energy Production:** includes generating energy by burning black liquor in cellulose mills as well as by burning solid biomass such as chips and sawdust.
- **Export:** end products are exported from ports in Montevideo, Nueva Palmira or Punta Pereira.

FOREST NURSERIES

A total of 22 operational nurseries distributed across ten different departments within the country were identified according to the most recent survey conducted by the General Directorate of Forestry[1]. In the year 2022, the total production of seedlings ready for field planting reached 98 million, with the majority belonging to the *Eucalyptus* and *Pinus* species.

The *Eucalyptus* genus exhibited a clear dominance, accounting for 98% of the total with 96 million seedlings, while the *Pinus* genus constituted the remaining 2%.

3 | Nursery gardens production by department
Millions of Saplings

Department	Eucalyptus total production	Pinus total production	Total
Colonia	0.4		0.4
Florida	0.7		0.7
Treinta y Tres	4.7		4.7
Tacuarembó	3.6	1.7	5.3
Durazno	5.9		5.9
Lavalleja	9.5		9.5
Rivera	9.5		9.5
San José	10.4		10.4
Río Negro	15.8		15.8
Paysandú	35.9		35.9
Total	**96.4**	**1.7**	**98.1**

Source: Uruguay XXI based on the survey conducted by the General Directorate of Forestry, MGAP.

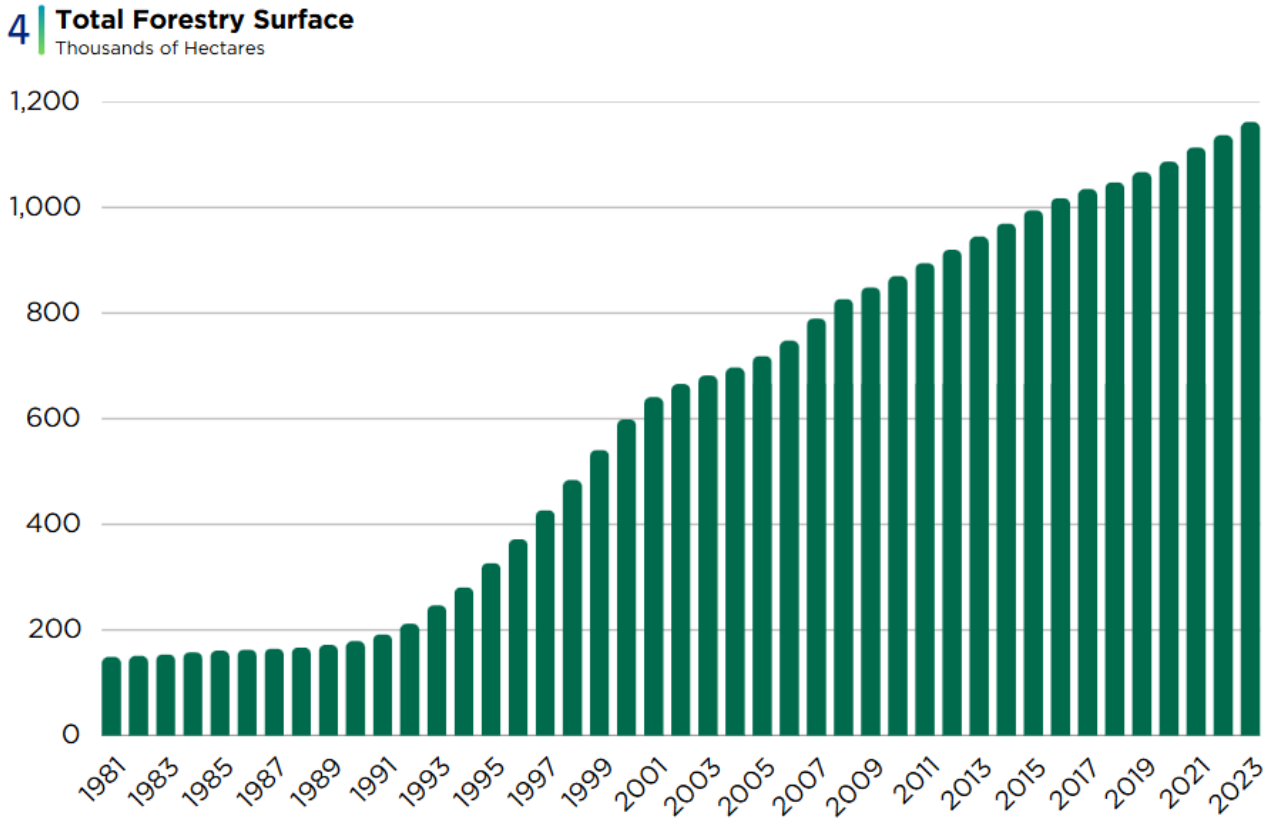
Paysandú stood out as the department with the highest level of seedling production, followed by Río Negro and San José. Rivera and Lavalleja also recorded significant production figures, while other departments reported comparatively lower volumes.

When examining the distribution by genus, *Pinus* had a more limited presence, primarily concentrated in Tacuarembó and, to a lesser extent, in Rivera. Whereas, *Eucalyptus* production was widespread, with Paysandú as the leading producer, followed by Río Negro and various other departments with smaller production levels.

[1] Forest Nurseries Survey 2022 - General Directorate of Forestry, MGAP

PLANTED AREA

The total area covered by forest plantations has increased sevenfold since the implementation of the Forestry Law in 1987. By the year 2024, the estimated area of planted forest reached 1.16 million hectares, which constitutes 6.6% of the total national territory. This area includes various categories of planted forests, such as commercial plantations, shelterbelts and shade-providing forests, windbreaks, parks, and planted coastal forests.



Source: General Directorate of Forestry – MGAP

Although the sector has maintained a consistent growth pattern, the expansion of new forest areas remained moderated in recent years. In 2023, 24,914 additional hectares were added to the total planted area, which aligns with the trend observed over the preceding five years.

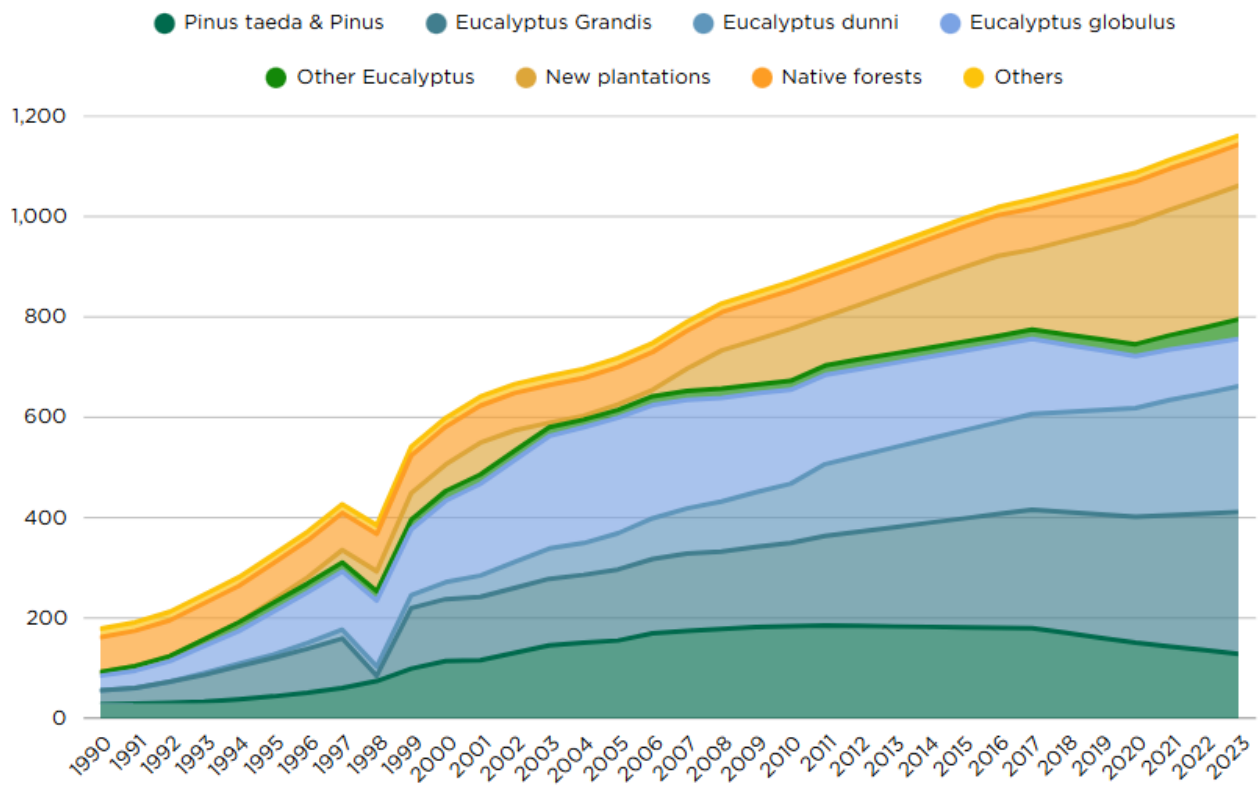
5 Total surfaces by type
Hectare and percentage

Department	Hectares	Percentage
Uruguay total surface	17,502,000	
Planted forest surface	1,161,851	6.6%
Native forest surface	847,181	4.8%
Total forested surface	2,009,169	11.5%

Source: General Directorate of Forestry – MGAP

Eucalyptus plantations account for 72% of the planted forest area, while pine plantations account for 19%. Eucalyptus species such as E. dunnii, E. grandis, E. globulus and others are used for cellulose pulp extraction. The main crop is E. dunnii.

6 Total surface by species
Thousands of Hectares



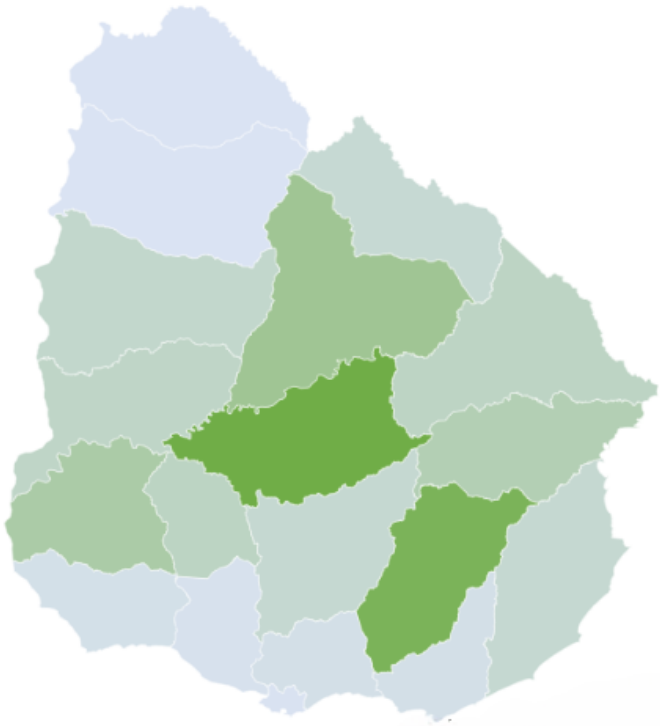
Source: compiled by Uruguay XXI based on data from the General Directorate of Forestry - MGAP

In comparison with the previous census conducted by the General Directorate of Forestry within the Ministry of Livestock, Agriculture and Fisheries (MGAP), the total planted area

experienced an increase of around 7%. Similarly, the overall forest area expanded by 0.4%, which corresponds to an additional area of 74,741 hectares. The departments of Durazno and Lavalleja exhibited the most significant variations in this growth.

7 | Planted surface variation between 2021 and 2024

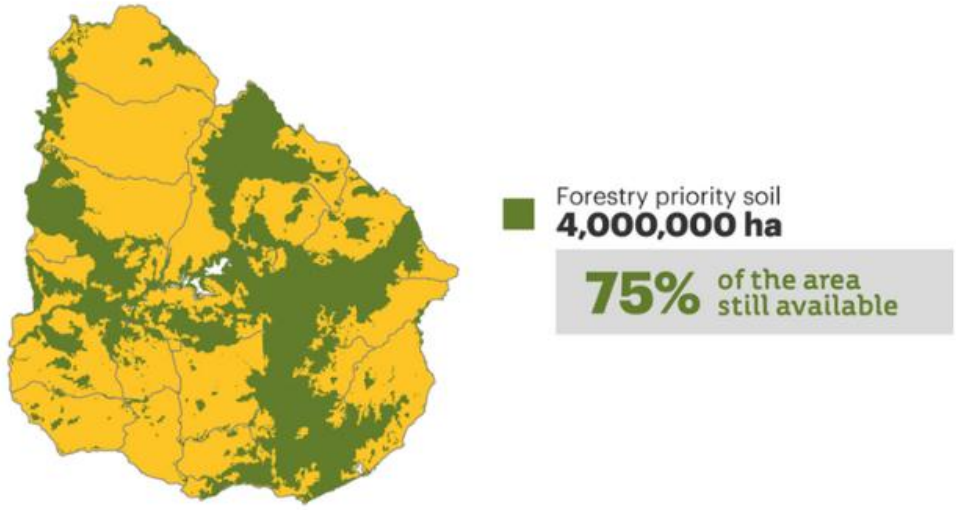
Department	Surface variation (ha)
Durazno	14,620
Lavalleja	13,084
Tacuarembó	8,061
Soriano	6,456
Treinta y tres	5,380
Flores	4,065
Cerro Largo	3,960
Río Negro	3,724
Paysandú	3,325
Florida	2,921
Rocha	2,895
Rivera	2,721
Canelones	1,005
Maldonado	992
Colonia	917
San José	477
Montevideo	148
Salto	-3
Artigas	-5
Total	74,741



Source: compiled by Uruguay XXI based on data from the General Directorate of Forestry - MGAP

The Uruguayan MGAP established priority forestry zones based on the suitability of soil for forestry activities, in accordance with Forestry Law No. 15,939. These soils, identified through the CONEAT (National Commission for the Agronomic Study of the Land) system, encompass groups such as 2.11b, 2.20, and 4.2 that can be integrated with other productive endeavors. Currently, the area of land declared a forestry priority reaches 4 million hectares, representing 25% of the total agricultural area of the country.

8 | Forest Priority areas



Source: compiled by Uruguay XXI based on data from the General Directorate of Forestry - MGAP

SAWMILLS

According to the latest survey carried out by the General Directorate of Forestry[2], there are approximately 80 active sawmills in Uruguay. Most focus on processing a single species or group of species like pine or eucalyptus. The main demand for sawtimber can be found in three specific areas:

- **Tacuarembó-Rivera**
- **Paysandú**
- **Metropolitan Area**

The sawmills with the largest capacity are mainly found in the first area, which is also the most dynamic in terms of forestry activity. Among the most prominent sawmills in the area are:

- **Lumin** (700,000 cubic meters/year): started by Weyerhaeuser in 2006, then acquired by BTG Pactual Timberland Investment Group (TIG) and British Columbia Investment Management Corporation (BCI) in 2017. This project uses around 500,000 cubic meters

[2] General Directorate of Forestry – "2020 Sawmill Survey" - The surveyed companies are all those identifies as "Mechanical wood processing industries", specifically sawmill industries, solely primary wood processing (carpentries, wood soaking mills and board mills are excluded). The companies that were not surveyed are divided into: 1) small, informal companies that could not be identified and thus are hard to reach, 2) companies that did not agree to participate in said survey.

of wood[3], where approximately 55% is pine wood and the rest is eucalyptus. They produce different plywood that has several categories and "faces" of pine and eucalyptus. In 2019 the company invested around US$ 48 million in a new production line for high-quality panels. For a total of US$ 136 million, in 2023 the company then invested in a third mill for the production of plywood in the department of Cerro Largo.

- **Arboreal** (570,000 cubic meters/year): this company acquired Frutifor in 2020. This sawmill, located in Tacuarembó, uses pine wood and has implemented a highly automated production process. All of its production consists of dry boards of different categories that are exported to China or Vietnam. In 2021, the company doubled its capacity and invested in a solid wood manufacturing facility (CLT and Glulam), the first in the country and largest in the region. In 2023 they obtained a certification from the Material Testing Institute of the University of Stuttgart confirming that the structural timber manufactured at their sawmill complies with European standards
- **Urufor** (400,000 cubic meters/year): located in Rivera, Urufor and Cofusa are part of the same economic group involved in forestry production, industrialization and marketing of high-quality Eucalyptus Grandis (Red Grandis®) timber. They are a vertically integrated unit and produce kiln-dried sawn boards and glued laminated timber products, used in the construction and furniture industries. Approximately 90% of its production goes to the international market and 10% is sold locally.
- **Dank** (265,000 cubic meters/year): located in the department of Rivera, this company was one of the precursors of forestry in the area. It produces pallet wood, re-manufactured wood, engineered wood and offers drying capacity.
- **Forestal Caja Bancaria** (120,000 cubic meters/year): this pension fund has pine and eucalyptus plantations in Paysandú and Durazno. It exports most of its production.
- **Kluntex** (84,000 cubic meters/year): pine sawmill specialized in products such as clear wood for the European market, intended for furniture and packaging.
- **Valetor** (50,000 cubic meters/year): located in the department of Tacuarembó, dedicated to processing Elliottii pine wood.
- **IMNSur** (40,000 cubic meters/year): this sawmill uses primarily pine, but also eucalyptus, and mostly exports its products to Mexico and the United States in the form of pallets and pallet wood.

Like other industries in the sector, sawmills faced challenges as a result of the demand for eucalyptus wood from cellulose mills. Many of them made changes in order to modernize their processes and those who survived are basically those who have their own forests. The largest

[3] Lumin to invest US$ 136 million in a new plywood production unit in Uruguay, increasing their capacity to 500,000 cubic meters

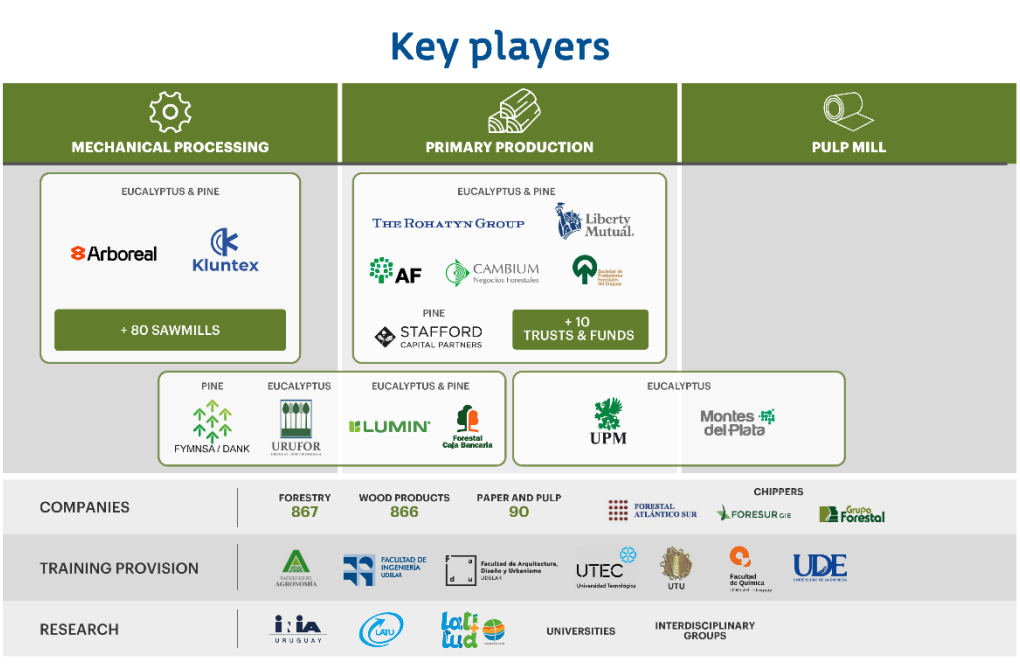
sawmills that process pine experienced few challenges, since the pine wood supply far exceeds the demand and many are also forest owners.

The largest local sawmills consume anywhere between 100,000 and 500,000 cubic meters of roundwood per year and are divided into four categories: Arboreal and FYMNSA, that exclusively process pine wood (mainly Pinus taeda); URUFOR, that exclusively processes Eucalyptus Grandis, and LUMIN (previously Weyerhaeuser), that manufactures plywood from both species. Caja Bancaria and INMSUR are sawmills with processing capacities of between 40,000 and 100,000 cubic meters of roundwood per year, that combine pine and eucalyptus in different proportions.

CELLULOSE PULP

The growth of the forestry sector gave way to a thriving cellulose industry. In 2007, UPM's mill began its production and exports. In 2009, it expanded its production capacity to 1.4 million tons of cellulose. Montes del Plata began production in Colonia in 2014 and in 2020 it reached a production of 1.4 million tons.

With a total investment of US$ 3.47 billion, UPM opened a second mill in Paso de los Toros in 2022. This facility consumes 7.5 million tons of wood annually and produces 2.1 million tons of pulp. With all three mills in operation, nearly 17 million tons of wood are consumed annually



which then become 4.8 million tons of pulp. The cellulose production chain exported US$ 2.546 billion which represented 85% of the total value exported by the forestry sector.

This investment consolidated cellulose as the main export product in the country and may position Uruguay as the second largest global supplier of short-fiber cellulose in the coming years.

ENERGY PRODUCTION FROM FORESTRY RESOURCES

Within the activities related to the industrial phase, the production of energy from forest by-products such as biomass and by-products of mechanical and chemical transformation is noteworthy. This activity has taken on a key role and has promising perspectives due to the increase of available raw material and energy-related governmental policies. In 2022, 39% of the energy matrix supply was sourced from biomass residue[4].

POWER GENERATION PLANTS FROM FORESTRY RESOURCES

Certain companies in the sector have biomass power generation plants:

- **UPM:** the UPM mill in Fray Bentos has the capacity to generate 161 MW of electric power, most of which is used to fuel its operations. Around 20 MW are sold to UTE (National Administration of Power Plants and Electrical Transmissions, the Uruguayan state-owned company responsible for the generation, transmission, distribution, and commercialization of electricity). UPM's second mill in Paso de los Toros generates a power surplus of over 110 MW.
- **Montes del Plata:** this company has an installed capacity of 180 MW, of which around 80 MW are fed into UTE's grid.
- **Fenirol:** located in the department of Tacuarembó, Fenirol has an installed capacity of 10 MW, of which half is supplied to UTE's power grid. This mill uses mainly chips, eucalyptus sawdust and bagasse as fuel sources.
- **Bioener:** located in the department of Rivera, Bioener has a 12MW capacity.
- **Lumin:** Lumin's plywood plant, located in Tacuarembó, is self-sufficient in terms of energy, using waste from the industrial process in its boiler and supplying energy (in steam form) to the industrial process itself. The installed energy capacity is 12MW.
- **Ponlar:** located in the department of Rivera, Ponlar uses by-products from the Dank sawmill as a source of energy and has an installed capacity of 7.5 MW.

[4] Source: Uruguay XXI based on UTE.

ECONOMIC RELEVANCE

The cellulose pulp industry plays a crucial role in Uruguay's economic development, while also enhancing local value chains, creating quality jobs, and establishing the country as a key strategic partner in global trade.

GROSS VALUE ADDED OF VARIOUS SECTORS

Uruguay XXI conducted research into the impact of exports on GVA[5]. The findings indicate that the agro-industrial sector in Uruguay, which includes activities related to the production and exports of wood, cellulose pulp, and paper, constitutes a substantial portion of the exported GVA. In 2022, the cellulose pulp industry generated an exported GVA of US$ 827 million, representing 36% of the total agro-industrial sector, thereby establishing itself as the largest contributor in terms of value. Nevertheless, with 2,824 workers its impact on employment was relatively low, due to the high degree of automation and capital-intensive nature of its production processes. In comparison, the wood sector employed 6,735 workers (20% of agro-industrial employment) but accounted for US$ 158 million in exports, or 7% of the exported GVA, highlighting its labor-intensive nature despite its lower added value.

Wood and cellulose pulp are integrated within the agro-industrial sector, which transforms these raw materials into products with higher added value, thus impacting the value chain. The input-output matrix reveals that forestry production generates significant demand in other segments of the economy, including modern services and transportation, which are essential for exports.

The CERES Institute[6] also conducted research into the economic impact of the forestry sector in Uruguay, given its production growth and the interconnectedness it fosters within the broader economy. In 2022, direct exports of cellulose pulp and solid wood reached US$ 1.913 billion and US$ 557 million, respectively. When considering their indirect effects, these figures rose to US$ 1.855 billion and US$ 707 million, resulting in a total exceeding US$ 5 billion, excluding the induced impact. The research highlighted that the forestry sector has one of the highest indirect impact multipliers in the economy, with solid wood leading at 1.27, followed by cellulose pulp at 0.97, and forestry at 0.95. This contrasts with the general average of 0.60,

[5] Gross Value Added in Exports - Uruguay XXI
[6] Forestry production in Uruguay: a leading and sustainable sector - CERES

highlighting the sector's strong productive integration and significant potential for further development.

EMPLOYMENT

According to data provided by the Ministry of Labor and Social Security (MTSS) the sector employs 18,000 workers directly. It is important to highlight that this number does not include indirect jobs that the sector generates, which includes transportation, logistics and related services.

Also, it is important to note that 15% of the country's population resides in the departments with the largest forested hectares, which underscores the economic and social relevance of this industry in Uruguay[7].

9 | Employment of the Forestry Sector (direct)

	2023	2024
Forestry phase		
Forestry and related services	4,054	4,044
Wood extraction	2,272	2,262
Harvesting of forestry products (excluding wood)	32	31
Support services	1,893	1,923
Industrial phase		
Sawmills	2,974	3,249
Fabrication of wooden products	1,471	1,452
Furniture manufacture	2,713	2,722
Chemical Transformation		
Manufactura de papel y cartón	2,351	2,313
	17,996	**17,760**

Source: General Directorate of Forestry based on information from the Ministry of Labor and Social Security (MTSS).

TRAINING

Highly trained human resources play a key role in the development of the forestry sector, given the high technological level required and the potential increase in productivity that they can bring.

[7] Source: National Statistics Institute (INE) - Final results - Census 2023

University education and technical training have adapted to meet the demands of this industry, preparing chemical engineers for cellulose production and architects specialized in wood construction.

The Labor University in Uruguay (UTU) also developed academic programs related to forestry and the timber industry. In the department of Rivera, one of the main centers of forestry activity, the Wood Technologist career is offered, which aims to train professionals capable of working in technologies, forestry harvesting and industrial wood engineering.

A summary of the educational offers relating to the forestry industry can be found in this annex. This indicates that, although there are still opportunities for improvement, the growth of the sector has led to the creation of technical and university level training alternatives, as well as the issuance of specific diplomas related to this industry.

ENTREPRENEURIAL ECOSYSTEM

According to data from the Ministry of Labor and Social Security, the forestry complex in Uruguay encompasses over 3,916 companies and individual entrepreneurs. Of this total, 92% are micro and small businesses that employ less than 20 workers.

In terms of activities, the forestry sector is divided into forestry and manufacture of wood products. The first subsector concentrates 52% and the second one, 44% of the total sector. On the other hand, cellulose and paper production represents 4% of the companies.

10 Direct employees by subsector and size

Subsector	Micro & Small	Medium	Large	Total
Forestry	1,965	74	13	2,052
Wooden products	1,703	24	-	1,727
Paper production (excluding Celullose)	117	14	6	137
Total	3,785	112	19	3,916

Source: Uruguay XXI based on information from the MTSS - 2024.

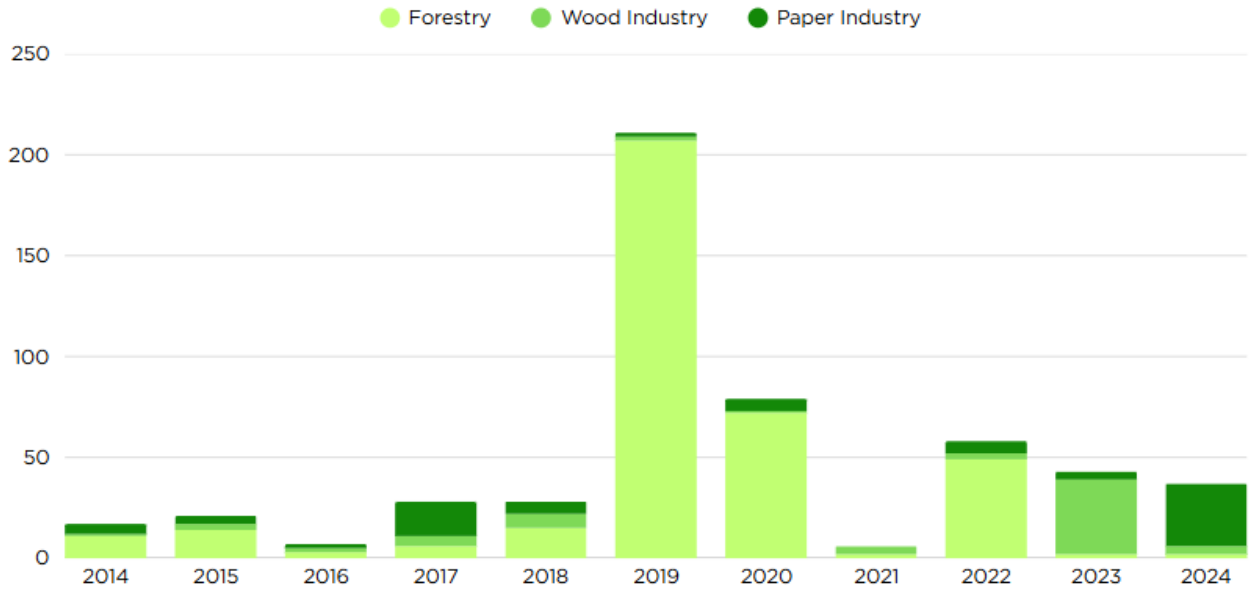
Among exporting companies, cellulose pulp producers UPM and Montes del Plata are the leaders. Together they accounted for 85% of the total value of the sector's exports in 2024.

SIGNIFICANT INVESTMENTS IN 2024

Following the announcement of UPM's second plant construction, forestry-related projects experienced considerable momentum. Accumulated investments **between 2019 and 2022 amounted to US$ 354 million**, marking a 35% increase compared to the previous decade (2009-2018). In recent years projects associated with forest tree nurseries, sawmills, wood brushing and wood machine work took center stage.

Recent data reveal varying trends across the different subsectors within the forestry industry. In 2023, total investments in the sector reached **US$ 43.5 million**, with **sawmills** contributing significantly amounting to **US$ 36.9 million**, followed by the **paper industry** at **US$ 4.4 million**.

11 Promoted investment projects in the Forestry Sector - COMAP
Millions of US$



Source: Yearbook 2022, Office of Agricultural Programming and Policy - (OPYPA), Uruguay XXI

MAJOR INVESTMENTS IN THE FORESTRY SECTOR

UPM

The Finnish company UPM is one of the world's leading cellulose producers, operating in 12 countries with a total of 54 production facilities and employing around 18,000 people. In 2009 it acquired a majority stake in Botnia S.A. in Uruguay (now UPM Fray Bentos).

In July 2019 UPM confirmed the establishment of its second cellulose mill in Uruguay. The total investment was of US$ 3.47 billion. This is not only the largest foreign investment ever received by Uruguay, but also the largest investment made by UPM in its over 100 years of history.

In February 2023 the company opened its third eucalyptus nursery in Sarandí del Yí, Durazno. This required an investment of US$ 25 million and it created new job positions in construction and operations[8].

The investment of the second mill also required the creation of a specific cellulose terminal in the deep-water port of Montevideo, as well as investments in infrastructure and local facilities in several regions of the country.

In Uruguay UPM is an important player in the economy, over 15,000 people have worked at the mills and over 3,700 indirect jobs were created through its operations, whilst working with 235 contractors. The personnel are engaged in different stages of the production cycle, including activities in nurseries, forestry plantations, transport, mill operations and port activities.

With regards to primary production, UPM operates a subsidiary in Uruguay (UPM Forestal Oriental) which has over 30 years of experience in the country and supplies wood to the Fray Bentos mill. Approximately 70% of the wood comes from UPM plantations, while the other 30% is obtained from over 700 rural producers that participate in the company's Forestry Development Program. In 2022 an estimated 4.4 million tons of wood were sent from Uruguay to UPM.

UPM's industrial complex in Fray Bentos, inside the Río Negro department has a eucalyptus short-fiber cellulose mill with a capacity of 1.3 million tons. Most of this cellulose is exported and the shipping process requires transporting it by barge down the Uruguay river to the port of Nueva Palmira, where it is loaded onto transatlantic vessels bound for Europe or Asia. Aside

[8] Lacalle Pou inaugurated UPM nursery in Sarandí del Yí - Office of the Presidency

from cellulose production, the mill in Fray Bentos also houses a biomass power generation unit.

UPM's industrial complex in Paso de los Toros has an eucalyptus short-fiber cellulose mill with a 2.1 million-ton capacity. The location selected for the project is in the area bordering the departments of Durazno and Tacuarembó, specifically in Pueblo Centenario. The location was selected considering the availability of forest resources as well as the goal to promote social and economic development to a region that historically has faced socioeconomic challenges. The departments that directly benefit from this investment - Durazno, Tacuarembó, Cerro Largo and Rivera- are areas with lower employment rates, less favorable education indicators and higher poverty levels compared to other parts of the country. The construction and operation of the facility is expected to have a significant impact on the economic growth and local development of this region.

Activities related to UPM's second mill in the value chain would result in a 2.4% increase of the GDP and would create 9,000 permanent job positions. The impact assessments suggest that cellulose production adds greater value, generates more employment and contributes to more tax revenue by hectare compared to other forms of land use.

12 Economic Impact of the UPM investments

	UPM Fray Bentos	UPM Paso de los Toros
% of GDP	1.40%	2.40%
Total jobs (inc. indirect)	7.000	9000
Taxes	US$ 90 million	US$ 124 million

Source: study prepared by CPA Ferrere.

MONTES DEL PLATA

The cellulose production company settled in Uruguay in 2009, as a result of an equal partnership between two of the most prominent companies in the global forestry sector: Arauco (Chile) and Stora Enso (Sweden-Finland).

The company manages around 165,000 hectares of forestland including its own and third-party properties in 13 of the country's departments. In addition, 35% of the properties handled by the company are protected areas for biological conservation, including native forests and endemic species subject to conservation and monitoring plans. In 2022, four million tons of timber were required to supply the Montes del Plata mill.

The company's industrial complex is in Punta Pereira, in the department of Colonia. It includes a mill with the capacity to produce 1.4 million tons of cellulose annually, a biomass power generation unit and a port terminal. The company directly employs around 620 workers and the production chain generates around 6,500 jobs[9].

LUMIN

Lumin, a company with an outstanding track record spanning over two decades in the Uruguayan market, is a leader in the forestry sector and in the manufacturing of wood-related products. Its main focus is the manufacture of plywood, made from pine and eucalyptus wood.

The company settled in Uruguay in 1996 under the name Weyerhaeuser. In 2017 it concluded the sale of its operations in Uruguay to a consortium led by Timberland Investment Group, part of the Brazilian group BTG. Lumin owns extensive forestry areas in Uruguay distributed in the departments of Rivera, Tacuarembó, Cerro Largo and Treinta y Tres, totaling approximately 120,000 hectares, which include both pine and eucalyptus plantations. The industrial mill, located in Tacuarembó, has a panel production capacity of 270,000 m^3. In 2023, Lumin announced a US$ 136 million investment in a new plywood mill that will expand the previous capacity.

The company also operated a clonal nursery focused on growing trees specifically destined for the forestry industry and has a power generation plant that is supplied by factory waste and biomass. The generated energy is used to power the industrial plant and is fed into the power grid. Lumin employs 779 people directly in the five departments where it has operations[10].

ARBOREAL

In 2021 Uruguay witnessed the arrival of Arboreal, a project with significant impact in the country's timber industry by increasing the sawmill's drying capacity. This capacity increase gave way to an increment in annual production, reaching 570,000 cubic meters. This milestone had a positive effect on exports of processed wood products from Uruguay. The total investment for the project was almost US$ 60 million, because it included the purchase of Frutifor for US$ 25 million, a new CLT plant for US$ 22 million, a drying unit and another automatic plank sorting facility, each for US$ 6 million.

In addition, in the second half of 2022 it opened the largest mill in South America dedicated to the production of solid wood, using technologies such as cross-laminated timber (CLT) and

[9] Our company - Montes del Plata
[10] Annual Report 2022 - Lumin

glued laminated timer (Glulam). These technologies allow the construction of high-rise buildings and represent a major breakthrough in the forestry industry.

This investment not only contributed to strengthening Uruguay's forestry industry, but it also positioned the country in the global cross-laminated timber market by deploying the largest and most advanced CLT facility in South America.

KLUNTEX[11]

Kluntex Lumber, located in Rivera, is a United States capital company that produces sawn wood and clear board with pine wood. In March 2022 it invested US$ 7 million for the construction of a productive mill and currently produces around 84,000 m^3 of end product per year, with a 160,000 m^3 consumption.

In February 2024, the Kluntex Lumber sawmill was inaugurated in Rivera. With an investment of US$ 8 million from United States and Chilean capital, the project includes two plants located in Rivera and Tranqueras. This sawmill added approximately 7,000 m^3 of pine wood to its monthly production. The operation generated 200 direct jobs[12].

OJI HOLDINGS

In May 2024, Oji Holdings Corporation, one of Japan's leading pulp and paper companies, announced the creation of Oji Uruguay Forest Company S.A.S. (OUFC) to acquire a forest plantation in the departments of Tacuarembó and Rivera, in northern Uruguay, for US$ 288 million[13].

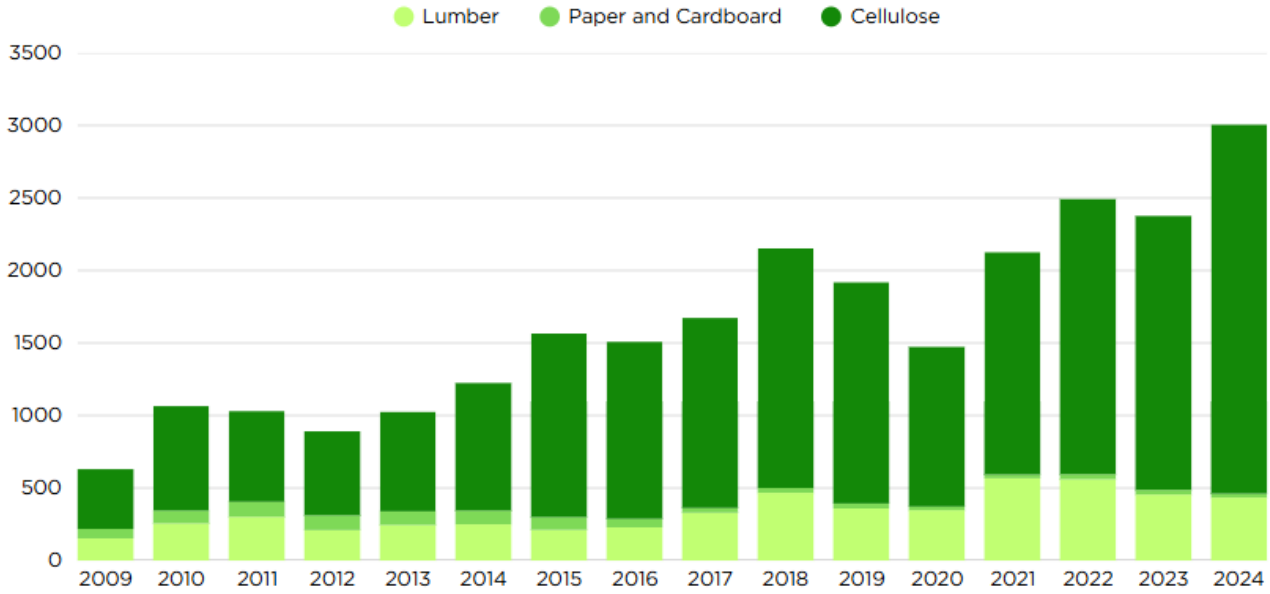
The acquired forest assets include pine and eucalyptus plantations previously managed by The Rohatyn Group (TRG) since 2013. During TRG's management, these plantations were oriented toward solid wood production, with commercial thinning operations and log exports primarily to the Chinese and Indian markets.

[11] Mayor announces a US$ 5 million investment and the creation of 70 new job positions
[12] New foreign-owned sawmill chooses Uruguay to process pine – Uruguay XXI
[13] Oji Holdings Press release - May 2024

FOREIGN TRADE

The forestry sector's exports demonstrated a notable performance in 2024, primarily driven by the expansion of cellulose pulp, which solidified its position as the country's leading export product, totaling US$ 3.007 billion, a 27% increase from the previous year.

13 Uruguayan exports - Forestry Sector
Millions of USD



Source: Uruguay XXI based on data from the National Customs Directorate (DNA), Central Bank of Uruguay (BCU) and Montes del Plata.

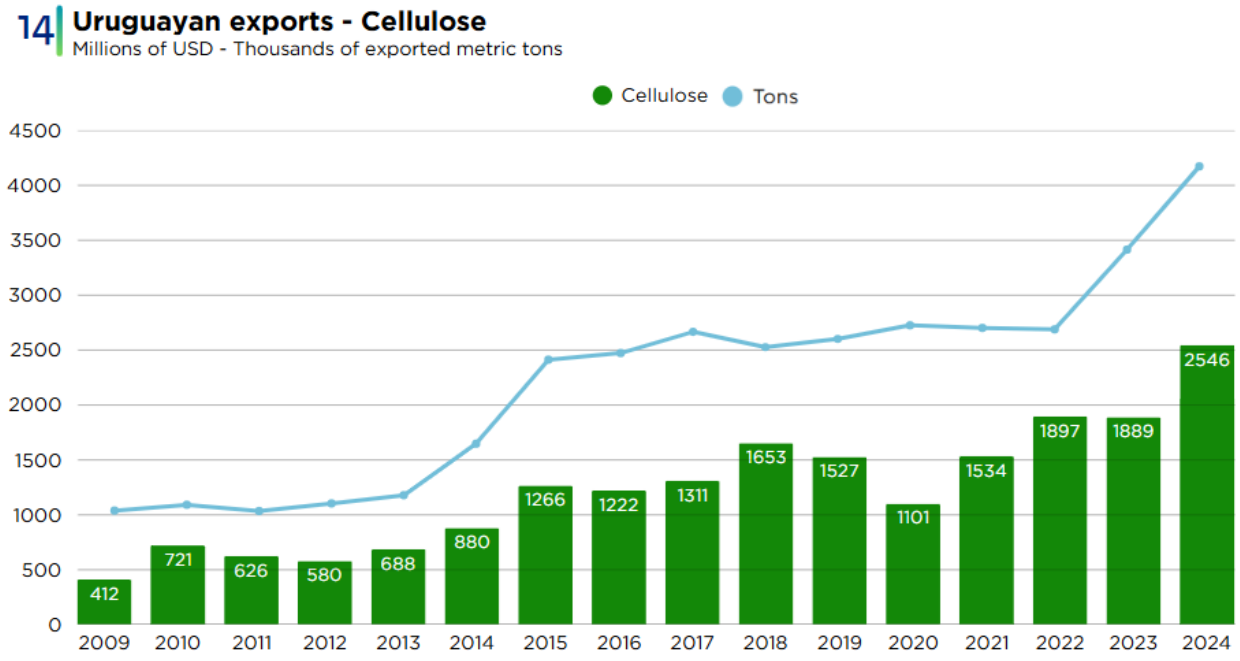
The primary destinations for 72% of wood and cellulose pulp products exports were China and the European Union. In both markets, cellulose pulp was the main exported commodity. China accounted for 37% of these exports, valued at US$ 1.122 billion, while the European Union represented 35% of the total, reaching US$ 1.043 billion.

CELLULOSE EXPORTS[14]

Cellulose pulp is the main component used to manufacture paper and cardboard. In 2024, cellulose exports totaled US$ 2.549 billion, which accounted for a 35% increase compared to 2023. As a result, cellulose has become the third most exported product by Uruguay.

This growth was attributed to higher average export prices, coupled with increased export volumes following the operational launch of UPM's second plant and the subsequent marketing of its products.

Export prices saw a significant rise of **24%**, increasing from **US$ 553** per ton in 2023 to **US$ 610**. This was accompanied by a significant **22%** growth in the volume of exports.

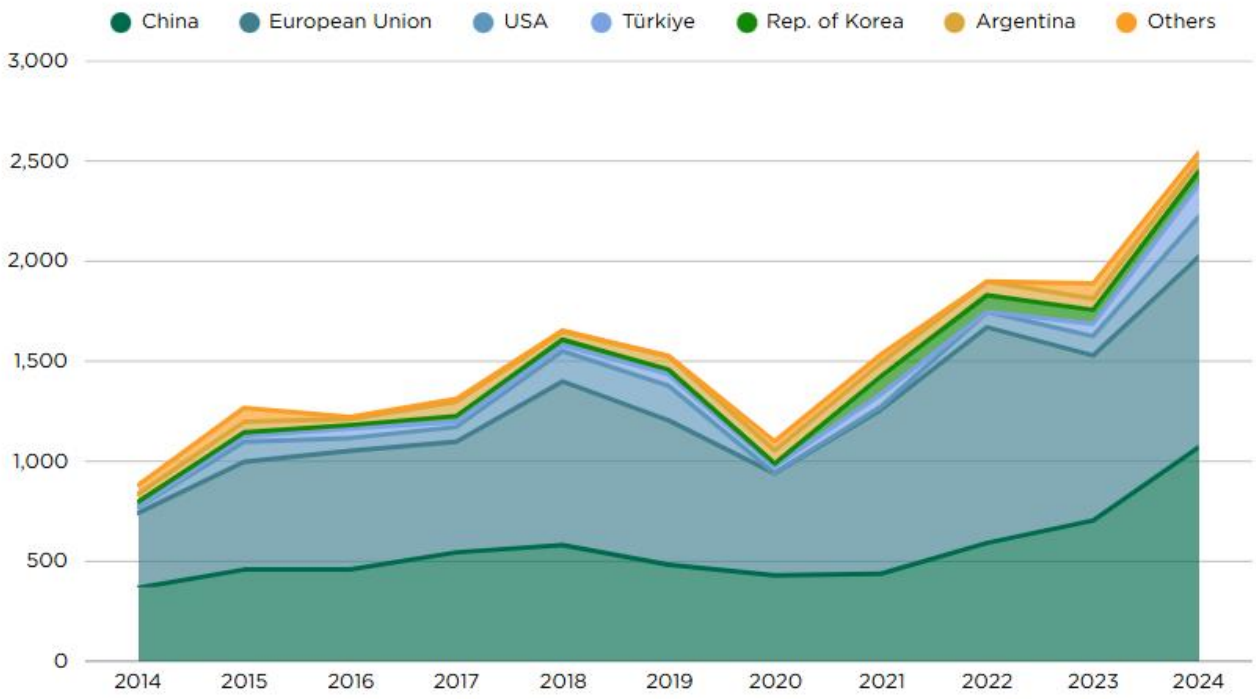


Source: Uruguay XXI based on data from the DNA, BCU and Montes del Plata.

Cellulose paste exports are carried out from three free trade zones in Uruguay. Montes del Plata operates within the Punta Pereira free trade zone, utilizing its own port terminal for international shipments. UPM Fray Bentos transports its output to the Nueva Palmira free trade zone before loading onto deeper-draft vessels, while UPM Paso de los Toros transports its production to the port of Montevideo. Furthermore, direct road shipments to Argentina are facilitated from the free trade zones of both UPM Fray Bentos and Montes del Plata.

[14] Exports of goods with free zones 2023 - Uruguay XXI

15 **Cellulose exports by destination**
Millions of USD

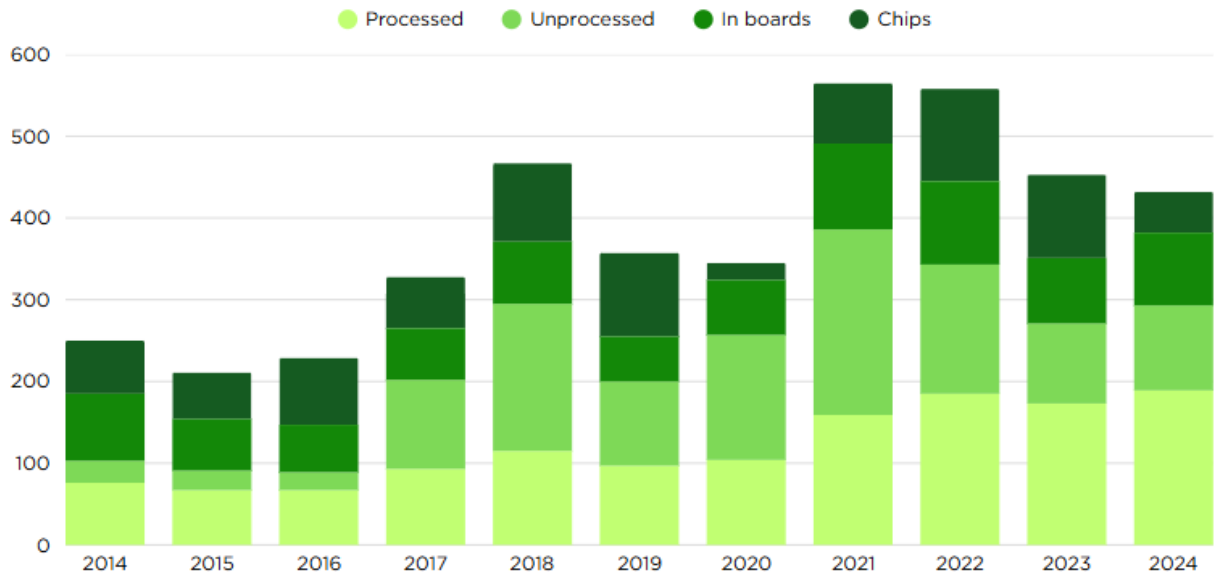


Source: Uruguay XXI based on data from the DNA and BCU.

WOOD EXPORTS

Exports of wood products experienced a remarkable surge over the past five years. The sales during the 2020-2024 period were 48% higher than in the preceding five-year period of 2015-2019. This expansion resulted from both an increase in export volumes and higher price levels. Roundwood was the primary contributor to this performance, with sawn wood and chips also making contributions, though to a lesser extent.

16 **Timber and timber by-products exports (without Free Trade Zone)**
Millions of USD



Source: Uruguay XXI based on data from the DNA and BCU.

In 2024, timber exports and timber by-product exports reached a value of US$ 434 million (excluding inputs destined for free trade zones). This number is 5% lower compared to 2023, when a record number of US$ 560 million in wood products and by-products were exported. The slight decline in exports is due to a marked fall of roundwood exports to China, a destination that played a key role in the 2021 record number.

In 2024, the export distribution of wood products, excluding cellulose pulp, demonstrated greater diversification. Of the total US$ 461 million in exports, 20% went to the European Union, followed by another 20% to the United States. India accounted for 16% of sales, while China received 11%. The remaining percentage was distributed among various other markets.

SAWN WOOD

Sawn wood accounted for 44% of Uruguayan wood exports in 2024, reaching a total of UDS 189 million and surpassing 300 thousand tons. The sales of this product increased 10% in terms of year-on-year comparison.

The main destinations for this product were the United States (25%), China (17%) and Vietnam (9%). Sawn wood is one of the products that adds the most value to Uruguayan exports in the sector, which is shown in its export price, totaling US$ 630 per ton in 2024.

PLYWOOD PANELS

Wood-based panels represent another high value-added product in the sector. In 2024, plywood panels exports reached US$ 89 million, marking a slight decrease of 10% compared to the previous year. This increase was driven by an 11% growth in export volume, which manifested despite a 6% year-on-year decrease in prices compared to the same month of the previous year, settling at approximately US$ 674 per ton. The main destination for boards was the United States, accounting for 41% of exports followed by Mexico with 37% and United Kingdom with 7%.

CHIPS

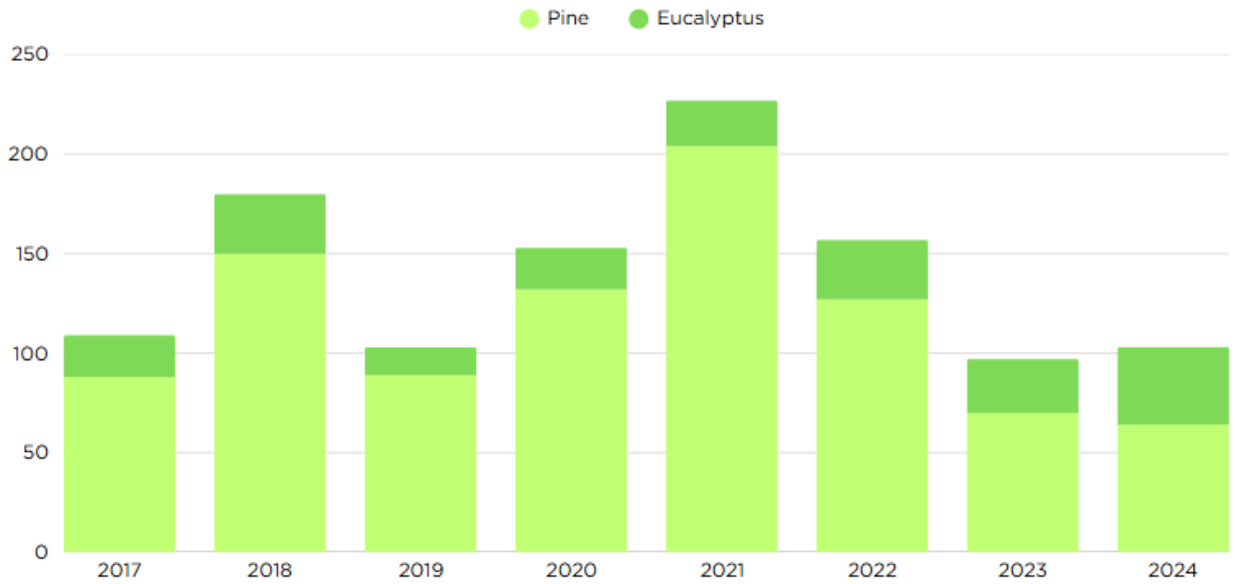
In 2024, sales of chips experienced a significant year-on-year contraction of 51%, totaling US$ 50 million. The volume of these exports also saw a similar year-on-year decrease of 48%. This decline was primarily due to reduced exports to Portugal and China.

Specifically, the value of exports to Portugal decreased from US$ 76 million to US$ 45 million, while no exports to China were recorded in 2024. The average placement price in the last decade has remained approximately US$ 100 per ton. In 2024 the average price was US$ 109 per ton.

ROUND WOOD

Foreign sales of this product grew sharply from 2016 onwards due to an increase in India's and China's demand. The total value of exports reached US$ 103 million in 2024, representing a 6% increase compared to the previous year. This growth was primarily driven by the exports of pine, which totaled US$ 65 million, and eucalyptus, which reached US$ 39 million. In terms of volume, these exports amounted to 1.1 million tons, indicating a stronger demand in the main target markets. India solidified its position as the primary buyer, absorbing 70% of the total exported value, while China was the second-largest market with a 14% share.

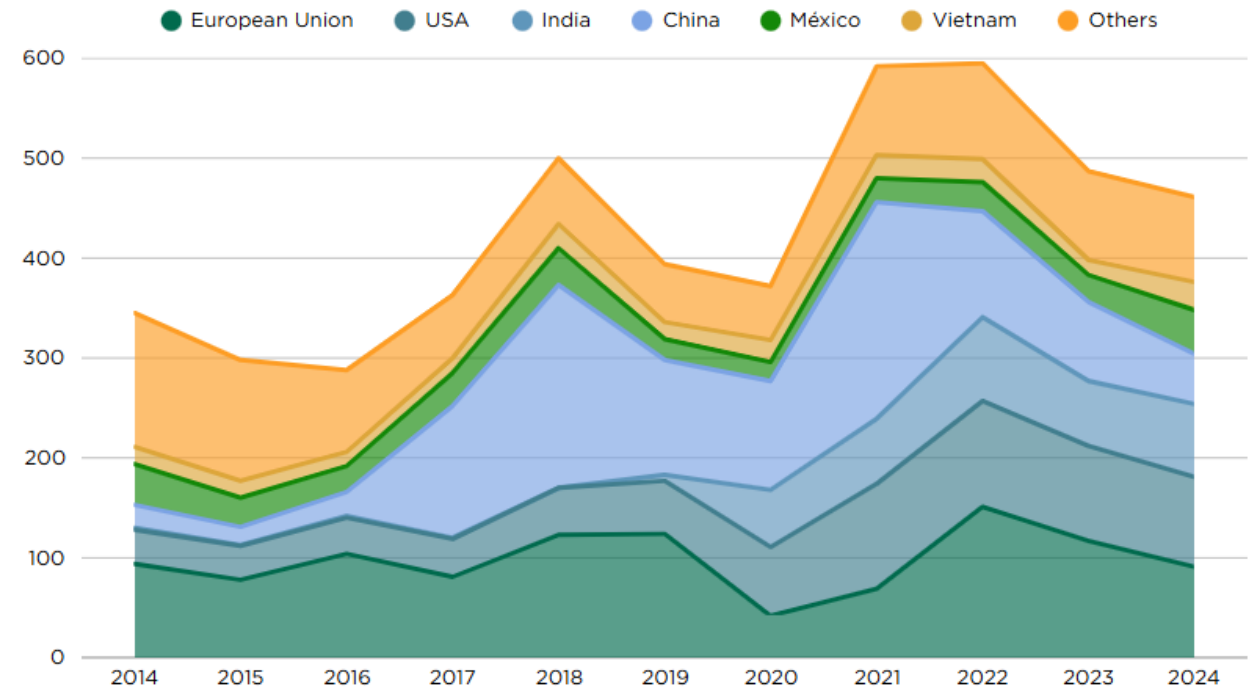
17 Unprocessed lumber exports by species
Milllions of USD



Source: Uruguay XXI based on data from the DNA and BCU.

Regarding the composition of these exports, pine has historically been the predominant species in these shipments. In 2024, it accounted for 76% of the exported volume, with the remaining 24% consisting of eucalyptus. The distribution of these shipments is shaped by the harvesting cycles of the plantations as well as external demand, both of which influence fluctuations in supply and the destination of these exports.

18 Timber and Paper products exports by destination
Millions of USD



Source: Uruguay XXI based on data from the DNA and BCU.

WOOD CONSTRUCTION[15]

The use of wood in construction has historically been less common in Uruguay, where a preference for construction methods involving heavier materials has been prevalent over the past few decades. This is a significant cultural barrier that hindered research and progress in the use of wood as a building material and delayed its development as a major component in construction projects at a national level.

Growth of the domestic market is critical in order to expand the export of engineered wood products in the future. Increased local demand not only provides a solid foundation, but it also allows for better adjustment to the demands of other markets, while potentially generating economies of scale in an export-oriented industry. The local supply of raw materials, the ongoing development of related industries and the need for housing all offer significant potential for investment, exports and local housing.

These construction methods add a second mechanical processing to the material, adding value to the end product. In addition, wood production in construction promotes a sustainable system, with carbon sequestration throughout the production chain.

However, there are still certain challenges, such as the need to harmonize national and departmental regulations[16], and to promote the use of wood in business and civil construction, as well as in public works projects. It is worth noting that several institutions, mainly academic, have been analyzing the possibilities of wood construction for several years and support the widespread use of wood in housing construction.

Internationally, countries with a long-standing tradition in the use of wood for construction have made significant progress. Technological progress in structures has enabled the construction of multi-story wood buildings, supported by building codes that increasingly allow more levels, confirming the structural safety of this material and challenging cultural misconceptions that have limited its development.

[15] Sources referenced: Matías Marchesoni, Sophia Evans – "Wood construction in Uruguay - A pending story" || Forestry Magazine – "Wood construction: challenges and opportunities in Uruguay"
[16] The construction systems are validated through the Technical Aptitude Document (DAT), which validates the technical suitability and enables evaluation, technical and administrative instruments for these construction systems.

Projections indicate an increase in the global use of wood as a building material, with an annual growth rate of 5% until 2027. The increase is particularly noteworthy in regions such as Latin America, the Middle East, Asia and North America.

19 | Market income of engineered wooden construction products by region
Millions of USD

Region	2021	2022	2023	2024	2025	2026	2027
North America	9,333	9,934	10,444	10,938	11,410	11,855	12,269
Europe	5,545	5,850	6,097	6,328	6,541	6,733	6,902
Asia-Pacific	49,630	53,139	56,205	59,218	62,150	64,973	67,659
Latin America, Middle East and Africa	7,033	7,596	8,105	8,615	9,120	9,617	10,100
Total	71,541	76,519	80,851	85,099	89,221	93,178	96,930

Source: AMR Analysis.

The global engineered wood products (EWP) market was valued at approximately US$ 284 billion in 2019 and is projected to reach US$ 400 billion by 2027. Although it spans several segments, construction is one of the leading segments, driven by improved building aesthetics and the renovation of aging structures in North America and Europe.

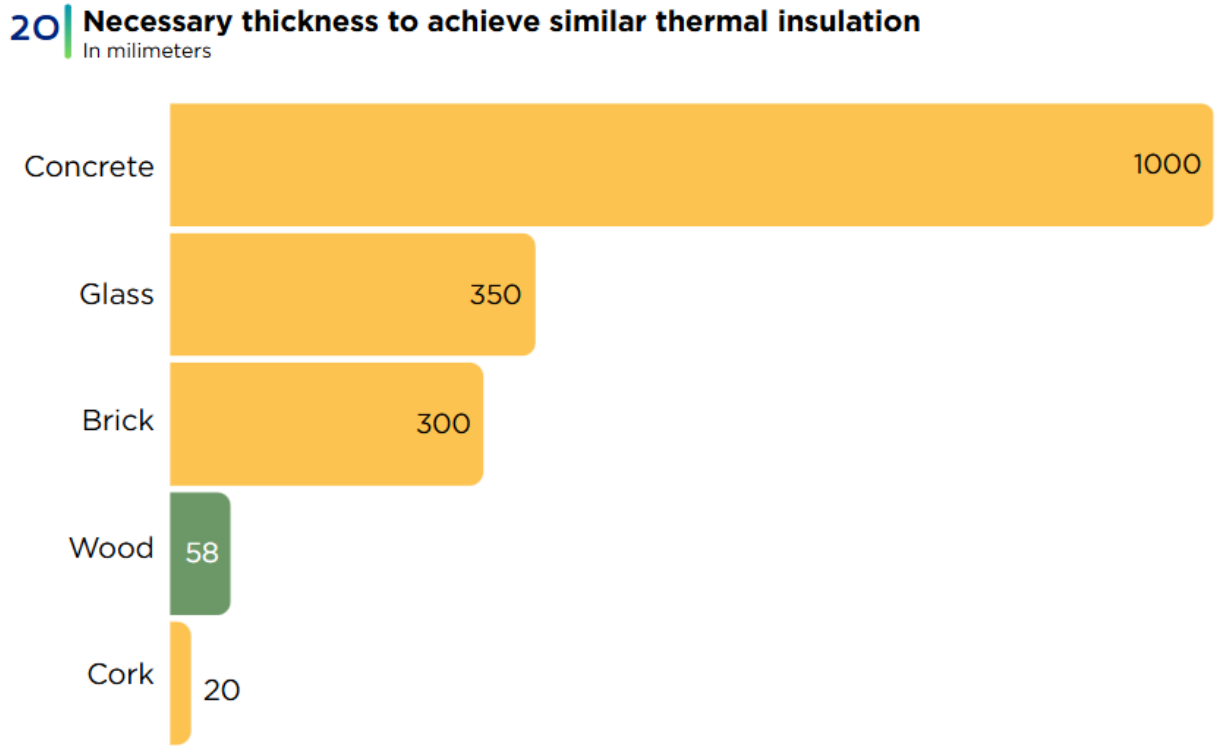
Major companies in the sector include Boise Cascade, Arauco, Huber Engineered Woods, Louisiana-Pacific Corporation and Weyerhaeuser[17]. Stora Enso[18] also has initiatives in this market, with a particular focus on cross-laminated timber (CLT) products [19].

In several countries like Canada, Norway, Austria, the United States and even China, the trend shows an annual increase in the use of wood in construction. In the region, Brazil and Chile are the main markets, although they still fail to fully cover their local demand for EWP.

The "wood revolution" has many benefits. First, it accelerates the construction process by up to five times the speed of traditional methods[20], which leads to savings in labor costs and other aspects of the process. The technology applied to construction also improves efficiency and reduces errors compared to traditional methods, which simplifies assembly and generates less waste.

[17] Source: AMR Analysis – "Global Engineered Wood Market, 2020-2027".
[18] Source: Stora Enso – Wood Products.
[19] Source: Tardáguila – "CLT gains a foothold in the market and Stora Enso starts exporting to the United States".
[20] El Observador – "Wooden housing: the "stigmatized" material that the government wants to bet on".

Another major benefit of wood construction systems is its thermal insulation capacity, as wood requires significantly less thickness than other materials to achieve the same insulation efficiency, both in cold and warm climates, which contributes to greater energy efficiency in buildings. The history of wood as a building material in cold climate regions highlights the importance of its thermal insulation. Graph No. 11 compares wood thermal insulation capacity with other materials.



Source: Jorge Calderón - "Design, manufacture and assembly of solid cross-laminated timber boards - CRULAMM & JMS" based on Holzbau, Grupo Rubner, Univ. Trento.

In the past, the main objections to the use of wood as a building material centered on safety concerns compared to other conventional options. Today, fire resistance regulations[21] guarantee greater structural strength over some of the more traditional building materials. Wood is a renewable resource that promotes sustainability in construction processes and, in addition, captures one ton of carbon dioxide[22] in every cubic meter. It is also known for its low energy consumption during production and throughout its life cycle. Compared to other

[21] Fire resistance is understood as the ability of an element to maintain its structural properties for a given time in the presence of fire.
[22] Source: Michael Green: Why we should build wooden skyscrapers. || Mechanical processing generates products called Harvested Wood Products, which can be included in National Greenhouse Gas Inventories. See National Greenhouse Gas Inventories.

building materials that generate significant emissions during their manufacture, wood performs a reverse process by sequestering carbon.

These aspects align with the objectives of several ministries, including the Ministry of Environment, which seeks to promote environmentally sustainable production and consumption practices. In the United States, 47% of greenhouse gas emissions come from construction.[23]

Uruguay faces a housing deficit of approximately 65.000 homes and a qualitative housing deficit of 169,573 homes[24]. Wood is a natural alternative to address these problems, however, some challenges have yet to be overcome. First, it is necessary to advance in the standardization of structural wood in order to certify its use in construction, which would add value for both domestic demand and export. The UNIT committee for structural timber approved five standards since 2017 and further progress towards standardization is planned.

In addition, in 2020 the Honorary Timber Commission was established, which works to promote wood as a building material in Uruguay. In 2022, to address the standardization issue, the board introduced the project "Base Document for the Standardization of Wooden Buildings and Constructions", with the objective of increasing "the inclusion of domestically sourced timber in housing and building construction".

Some of the main engineered wood products include:

- **Cross Laminated Timber (CLT):** this building product is formed by joining panels of dry wood boards, in which one layer of boards is arranged perpendicular to the next. The boards are assembled laterally with glue on the edges and then joined to the next layer by applying glue across the width.

- **Laminated Veneer Lumber (LVL)**: LVL is produced by gluing several sheets of wood together with a variety of bonding adhesives. The main characteristic is that the sheets in LVL are all aligned parallel to each other, while in plywood they are arranged at right angles to the next layer or in alternating orientation.

- **Glued laminated timber (Glulam):** this engineered product consists of two or more sheets of wood arranged in the same direction as the fibers and joined together by their surfaces. The sheets are assembled at their ends by means of notched joints and shorter pieces of wood. The benefit of Glulam lies in the possibility of obtaining lengths

[23] Michael Green: *Why we should build wooden skyscrapers.*
[24] Five-year Housing Plan for 2020-2024 - MVOTMA

and sections that are not found in sawn wood, in addition to allowing the manufacture of curved elements.

- **Nail Laminated Timber (NLT):** this material is formed by stacking lumber on edge and securing it with nails. Plywood is often used to make it into wall panels. It provides a solid, sturdy structure and is typically used for floors, decks, roofs and siding.

- **Dowel Laminated Timber (DLT):** is created by joining several blocks of wood with hardwood pegs. These are assembled into panels by means of a hydraulic press that joins the different layers by friction. The planks contract and the pegs expand. DLT is used in walls, floors and ceilings.

- **Plywood:** In Uruguay, Lumin produces structural plywood panels made from pine and eucalyptus. This will also be the case at the future Garnica plant in the department of Treinta y Tres. These facilities offer a variety of panel grades with various combinations of veneers. The panels are solid, light, durable and available in different aesthetic finishes. They are certified for use in construction in the United States and Europe and comply with the environmental regulations of several countries.

PROMOTING THE USE OF WOOD IN CONSTRUCTION

In May 2022, the Ministry of Housing and Land Management (MVOT) submitted a roadmap for the construction of social housing in wood, with support from the Inter-American Development Bank (IDB) [25].

The document recognizes that, although Uruguay is not a country with a long-standing tradition of wood construction, it is necessary to promote this construction material, especially in housings and buildings.

In order to provide 105,545 housing solutions, the objective is to "promote the use of wood of national origin in construction solutions". This roadmap also establishes the inter-institutional work needed to achieve the objective: working jointly with the National Housing Agency (ANV) and other social actors such as the Movement for the Eradication of Unsanitary Rural Housing (MEVIR).

[25] Roadmap for the construction of social housing in wood in Uruguay - MVOT

In January 2023, MEVIR opened the first nine dwellings of its sustainable wooden housing program in the department of Rivera. The program is centered on bringing together intergovernmental cooperation with the private sector[26].

COSTS AND INDUSTRIAL DEMAND

LAND COSTS

Apart from the operating expenses, it is essential to obtain an accurate estimate of the cost of land acquisition. This cost will be included in the "year zero" budget, which is the period in which approximately 55% of the total cost for a 20-year cycle is generated.

Soil characteristics in Uruguay sometimes make forestry develop as the main activity, but it is also combined with agriculture or livestock farming. Most plantations are located on soils designated as priority soils for afforestation, which are part of the CONEAT (National Commission for the Agronomic Study of the Land) soil classification. However, in the southern and central regions of the country, where CONEAT 5 soils predominate, afforestation has experienced significant growth in recent years.

Several factors affect the value of land for afforestation, including the type of soil, the distance to ports or industrial facilities, and the percentage of the total area that can be allocated to plantations.

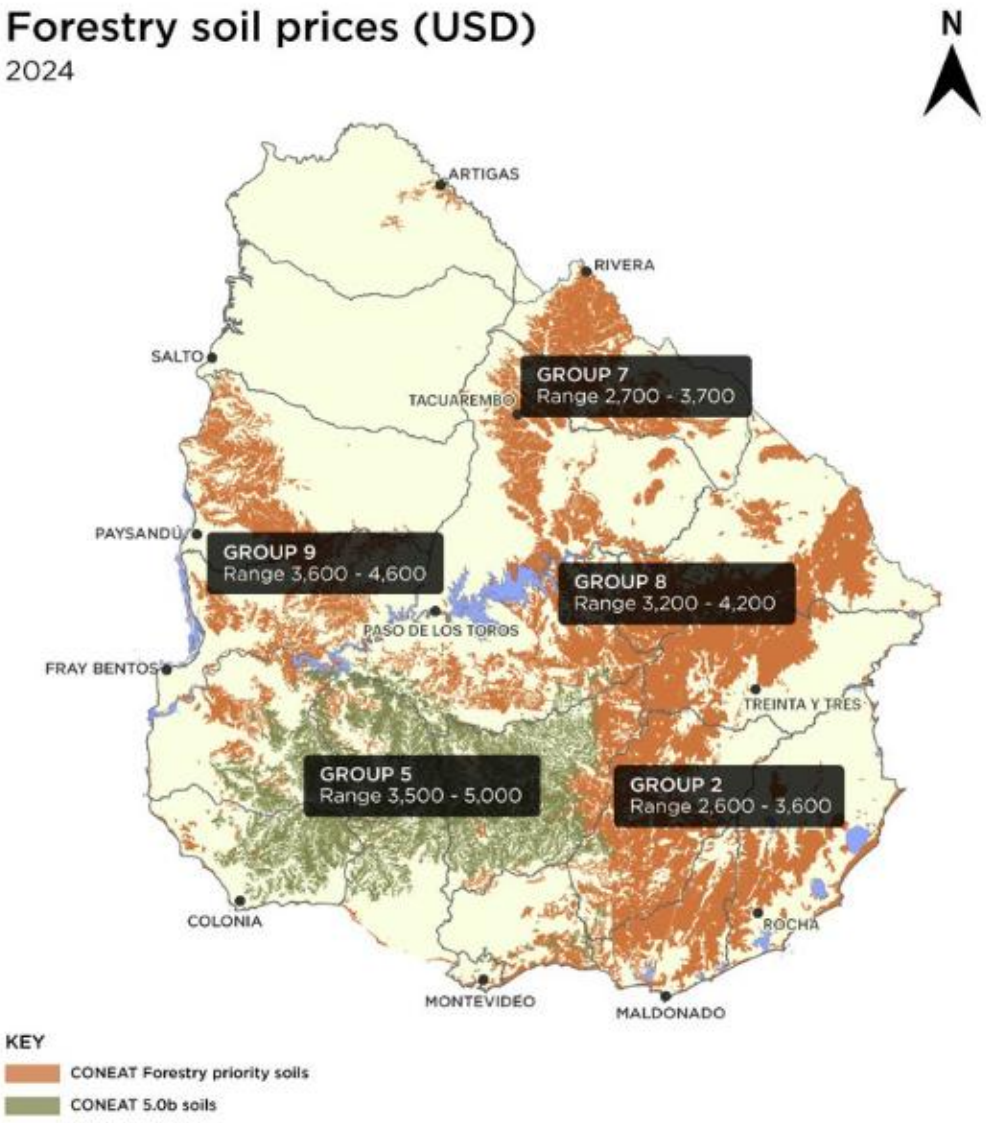
There is a forestry land rental market in the areas near cellulose mills, mainly in the coastal regions, the southern coast and the center of the country. This makes it possible to lease portions or all of the land for eucalyptus plantations, as long as a certain minimum scale is reached.

On the other hand, in the eastern and northern regions, where plantations are mainly geared towards the production of high-quality timber, most of the companies involved in the business are also landowners.

[26] The first integrated plan composed of sustainable wood housing by MEVIR - MEVIR

The valuation of forestry land becomes complex, as multiple variables must be taken into account. The following map provides price references for properties where forestry is the main activity.

21 Price references by ground-type
Price range by hectare based on recent sales
in US Dollars



Source: Agroclaro, based on metadata from the Ministry of Livestock, Agriculture and Fisheries (MGAP) and the Uruguayan Agency for Digital Government, the Information and Knowledge Society (AGESIC) / National Institute of Colonization (INC).

It is important to note that the land market in Uruguay experienced a significant increase in prices during the decade ranging from 2004 to 2014, largely driven by the boom in grain crops. However, land destined for forestry had a more moderate increase during that period

and showed greater stability in terms of prices. As of 2019, there is a rise in demand for land, which led to an increase in property prices, especially in agricultural areas, in response to high grain prices. The upward price trend continued in 2022, where the price increased 7% compared to 2021.

DEMAND FOR INDUSTRIAL WOOD

There is a constant demand for raw material in the industrial forestry sector. Sawmills and mechanical processing plants require approximately 1.8 million cubic meters of wood per year. The cellulose mills of UPM Fray Bentos and Montes del Plata each need about 4.5 million cubic meters, while the third mill requires an additional 7.5 million cubic meters. In total, the forestry industry demands about 17 million cubic meters of raw material[27].

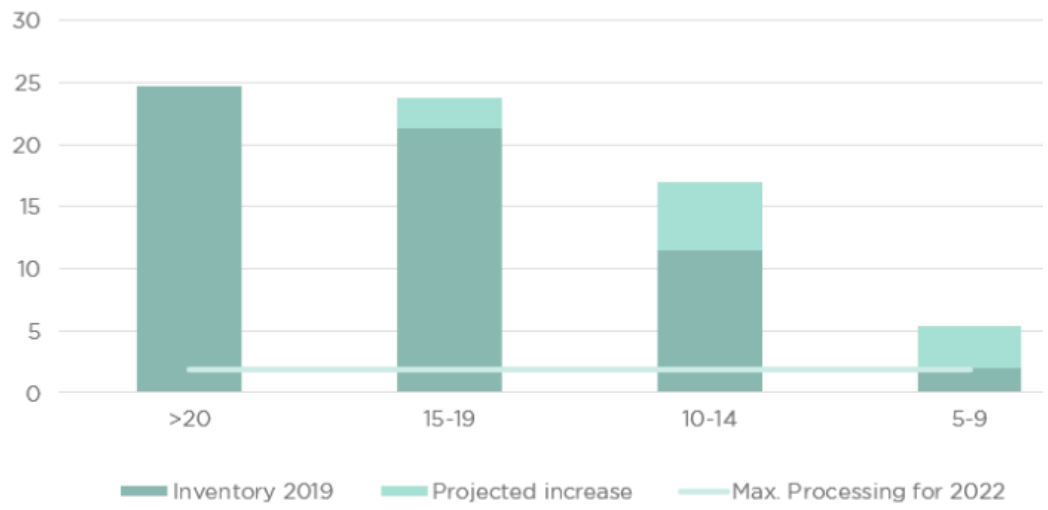
In order to estimate future eucalyptus and pine timber volumes, especially towards 2050, it is necessary to consider several factors ranging from the length of forest cycles in Uruguay to the current available data and the possible directions in which the Uruguayan forestry sector could develop.

In general terms, the duration of forest cycles in Uruguay tends to be between 10 and 20 years, depending on whether the purpose of production is for pulp or sawmilling. In addition, an average annual increment for each species of eucalyptus and pine must be taken into account in order to adequately calculate the projection.

Although pine plantation experienced a gradual decline in recent years and its importance decreased, the planted areas in the past guarantee a significant availability in the next 15 years, with considerable volume peaks in the near future.

[27] Future of Forestry: current status and future outlook for the forestry sector in Uruguay

22 | Pine inventory and sawmill demand
Millions of cubic meters

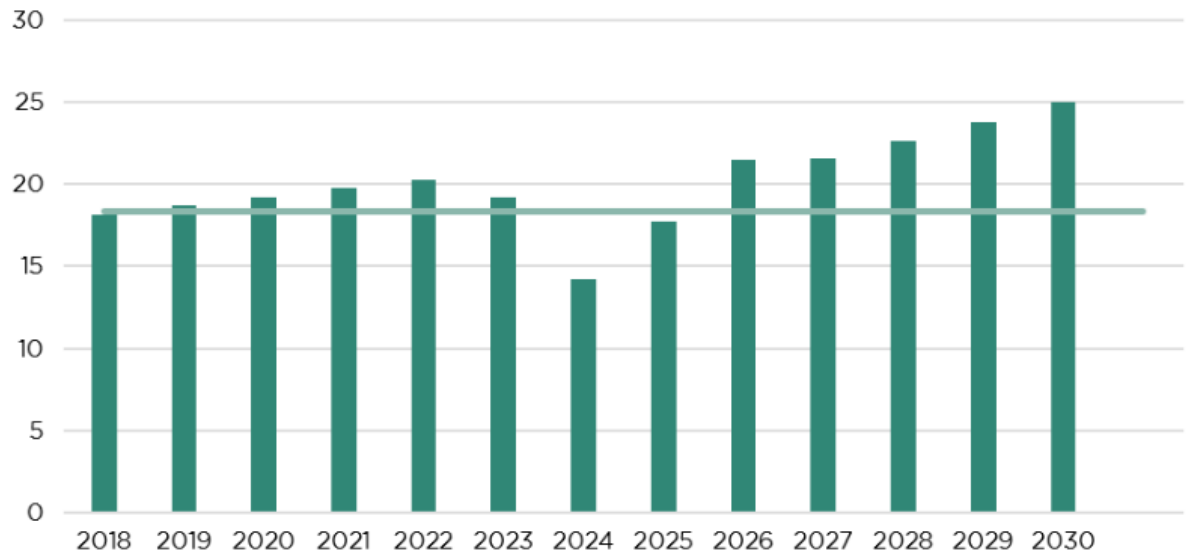


Source: Uruguay XXI based on Faroppa and Barros.

The capacity of local sawmills to process pine allows the consumption of between 3,000 and 4,000 hectares of mature forest, which is equivalent to one million cubic meters per year. To cover this demand, the area used for pine plantations would have to be between 60,000 and 80,000 total hectares. This figure is currently double of what is needed to meet the demand.

There are two scenarios for the demand for eucalyptus wood: a short-term scenario in which there could be a temporary shortfall in supply, as well as a long-term scenario in which supply far exceeds the existing demand for the three mills. This mild shortfall may put some pressure on other uses of eucalyptus, but by 2026 the stock would again far exceed the demand of the cellulose mills.

22 | Eucalyptus supply and industrial demand
Millions of cubic meters



Source: Uruguay XXI based on Faroppa and Barros.

INFRASTRUCTURE

Uruguay has an extensive and well-developed road network that spans approximately 8,833 kilometers. This is equivalent to a ratio of 45 kilometers of paved roads per 1,000 square kilometers of surface area. This solid road infrastructure facilitates the connection of the main production centers and storage areas with the country's most important ports.

In addition, Uruguay has 15 ports, eight of which are considered commercial ports and are distributed in various regions of the country, including Montevideo, Nueva Palmira, Colonia, Fray Bentos, Paysandú, Juan Lacaze and La Paloma -which operate under a free port regime-, as well as Salto. Of these, the ports of Montevideo, Nueva Palmira and La Paloma have the deepest draft, which makes them essential for port operations.

Nevertheless, the significant growth in production and exports led to considerable challenges in terms of infrastructure, especially in relation to roadways. In response to this demand, the country is working on important projects to improve and expand its infrastructure in order to have a first-class transportation network.

SPECIALIZED FORESTRY PRODUCTS AND BULK SOLIDS TERMINAL

In October 2022, a specialized cellulose port terminal was completed in the port of Montevideo. The 24-hour terminal is expected to receive cellulose from UPM Fray Bentos via the Central Railway. The capacity of this new terminal is two million tons per year, which will enable it to load about 100 ships per year[28]. The specialized terminal occupies a 7.5-hectare area and is located at the northern end of the port of Montevideo. Its main purpose is to serve as a stockpiling and shipping point for wood chips and bulk products in general, with a storage capacity of up to 7,000 tons. It also has a fully automated facility for grain storage. This terminal is designed to operate with two conveyor belts and three platforms with lifting towers, allowing loading at a speed of up to 2,400 tons per hour. It also has a berthing dock suitable for Panamax interoceanic vessels.

ROAD NETWORKS[29] AND NATIONAL HIGHWAYS

Due to the increase in the volume of transported goods, driven by the development of the agricultural and forestry areas, the need to establish efficient connectivity between production terminals and production units was identified.

In this context, the first Public-Private Participation (PPP) project in road infrastructure was carried out, which included improvements to Route 21 from the city of Nueva Palmira to Mercedes, as well as Route 24 between Highway 2 and Highway 3. Route 21 is mainly used by bulk trucks going to the port of Nueva Palmira, while Route 24 is predominantly used for transporting lumber cargo.

In addition to these initiatives, the five-year plan for 2020-2025 of the Ministry of Transportation and Public Works (MTOP) was implemented, which at the end of the cycle is expected to accomplish the following:

- Maintenance works on 4,440 kilometers of roads throughout the country.
- A change of standard, improving 2,610 kilometers of national roads.
- 642 kilometers of new works.
- The paving of 375 kilometers of gravel roads, eliminating gravel from national highways.
- Works on 227 bridges, including new bridges.

In total, 7,692 kilometers of roads will be intervened in five years, equivalent to 81% of the roadway network. In 2022, US$ 1.708 billion was invested in this plan.[30]

[28] UPM opens specialized cellulose terminal at the Port of Montevideo - UPM
[29] Please, refer to: Uruguay XXI – PPP Roads
[30] The largest works plan in recent times - MTOP

RAILWAY DEVELOPMENT

The most important project in the railway sector in Uruguay is the Central Railway (Ferrocarril Central) project[31], which involves a significant renovation of the country's railway network. This project comprises the construction and reconditioning of 273 kilometers of track connecting the port of Montevideo with Paso de los Toros (Tacuarembó). It also includes the rehabilitation of the Rivera line and the Litoral line, which connects Piedra Sola with Salto. These combined efforts will expand the supply of rail transportation in Uruguay, complementing the existing modes of transportation to date.

The Central Railway project will allow freight trains to run at a speed of 80 kilometers per hour and with a load capacity of 22.5 tons per axis. This will significantly benefit agricultural, mining, industrial, and forestry businesses located in the vicinity of the rail lines. The project includes an initial 26-kilometer section of double track, as well as multiple secondary tracks to facilitate train crossings and more than 40 rail bridges, some of which will be reinforced and others newly constructed. Overpasses are also planned due to the interaction with populated areas, which will have a significant impact during the construction phase.

At present, Uruguay's railway network covers an extension of 1,652 kilometers and has a fleet of 52 mainline locomotives and 764 railcars. This network connects with the railroad networks of Argentina through the El Precursor branch, which crosses the Salto Grande dam and connects the cities of Salto and Concordia with equal gauge in both countries, as well as with Brazil at the Rivera-Livramento border crossing, where there is a different gauge. However, current technology makes it possible to resolve this difference in track width.

In summary, the Central Railway represents a significant breakthrough in promoting a complementary, competitive and sustainable mode of transportation, which will have a positive impact in terms of costs, travel times and logistical efficiency. The train is expected to be operational by December 2023.

[31] Central Railway Project - https://www.gub.uy/ministerio-transporte-obras-publicas/ferrocarril-central

MAIN CERTIFICATIONS

FOREST PRODUCTS CERTIFICATIONS

Forest certification is the independent evaluation of an entity's operations according to standards previously established by external agencies. In general, this certification process acts as an incentive to improve forest management practices. There are international certifying entities that are responsible for assessing compliance with these requirements.

FORESTS CERTIFICATION

In a global context where significant deforestation trends are still evident in several countries, certification is offered to identify products that come from sustainably managed forests and in compliance with regulations. In addition, certification has become increasingly important as a market tool to differentiate products in the eyes of consumers who are increasingly aware and avid of sustainable production.

Uruguay has followed a forestry policy that ensures sustainable management in cooperation with its main companies, which have extensive experience in this area. Virtually all of Uruguay's forestry production and associated industries have obtained certification from the two main global agencies: the Forest Stewardship Council (FSC) and the Program for the Endorsement of Forest Certification (PEFC).

CERTIFICATION OF WOOD PRODUCTS

In terms of wood products certification, the Technological Laboratory of Uruguay (LATU, for its acronym in Spanish) plays a key role in supporting and promoting the development of the wood value chain. In this regard, LATU has a sawmill and lab where research is carried out on the physical, mechanical and chemical properties of timber from national plantations.

Although currently LATU does not carry out certifications of international scope, it has the technical capacity to do so, as it offers high quality analysis and testing services. A lab was recently added to carry out various tests on furniture and openings, with the capacity to certify European standards related to this type of products.

CARBON CERTIFICATES

Due to the growing importance of international initiatives to reduce greenhouse gas (GHG) emissions, companies and other entities are increasingly seeking strategies and measures to offset the environmental impact of their production activities. In this context, carbon certificates have acquired global relevance and have become a crucial component of the forestry industry.

The carbon market operates in line with the Kyoto Protocol as a mechanism that facilitates flexible transactions in which GHG emissions are traded through the purchase and sale of permits to emit CO2. This trade system allows governments, companies and individuals to purchase or sell GHG emission reduction units to meet their current and future environmental commitments.

Specifically, carbon credits act as tools that allow their holders to meet their environmental objectives by offsetting GHG emissions. In the case of forestry companies, trees capture CO2 during the photosynthesis process. In order to issue a carbon credit, it is necessary to register the plantation, carry out monitoring and obtain certifications that confirm the capture of a certain amount of carbon from the atmosphere.

Given this context, the growth of pine and eucalyptus plantations in Uruguay, which for over a decade have accumulated carbon in the forests, has had a positive impact on the environment by contributing to the balance of GHG emissions. Currently, more than five forestry projects in Uruguay issue carbon certificates. In addition to the participation of these forestry projects, companies that specialize in measurement, comparison and advisory services in this area have emerged.

At the beginning of 2021 Uruguay entered the international carbon credit market for the first time, with an exclusive focus on forestry plantations. This was achieved through Agroempresa Forestal's sale of 210,000 tons of carbon[32], with an approximate value of US$ 10 million. This inaugural sale abroad offers a glimpse of the potential market that the country could explore.

Currently, Uruguayan projects related to carbon certificates are managed through the Verra platform. Of the registered projects, nine are associated with forestry production, covering a total of 80,000 certified hectares and an estimated annual emissions reduction of 333,000 tons of CO2 (Verra, 2021). At similar sales prices, this could represent additional revenues of

[32] https://www.af.com.uy/

approximately US$ 16 million. Although regulations vary according to the end use of forest resources, this initiative offers a meaningful opportunity for the sector nationally[33].

INSTITUTIONAL FRAMEWORK AND ACTORS IN THE SECTOR

- **General Directorate of Forestry (DGF) - Ministry of Livestock, Agriculture and Fisheries (MGAP)**

The DGF is the main authority responsible for forest policy in accordance with the provisions of Law No. 15,939. Among other tasks, it is responsible for approving plans for the use and extraction of forest resources.

Website: https://www.gub.uy/ministerio-ganaderia-agricultura-pesca/direccion-general-forestal

[33] Future of Forestry: current status and future outlook for the forestry sector in Uruguay

- **Forestry and Timber Technological Center**

Established through the Investment Agreement between Uruguay and UPM, the Forestry and Timber Technological Center (CTFM) operates via a trust and the Sectoral Innovation Fund (FIS). Its governance structure includes representatives from the Ministry of Industry, Energy and Mining (MIEM) in the presidency, the Ministry of Livestock, Agriculture and Fisheries (MGAP), the Planning and Budget Office (OPP), the Society of Forestry Producers (SPF), and the Association of Wood and Related Businesspeople (ADEMA). The center's mission is to foster collaboration among stakeholders in the forestry and timber sector, promote innovative solutions, enhance competitiveness, and advance sustainable development.

Website: https://ctfm.uy/

- **Honorary Timber Commission**

It reports to the DGF and its purpose is to prepare, coordinate and monitor a plan for the promotion and development of the use of national timber for construction purposes, both for housing and furniture, among other uses. It is composed of representatives of the MGAP, the Ministry of Housing and Land Management (MVOT), the Ministry of Environment, the Ministry of Industry, Energy and Mining (MIEM), the Congress of Mayors, LATU, the University of the Republic and private universities.[34]

- **Other institutions**
  - Society of Forestry Producers (SPF): www.spf.com.uy
  - Association of Woodworking and Allied Industries (ADIMAU): www.adimau.com.uy
  - Chamber of Wood Processing Industries
  - National Agricultural Research Institute (INIA) - www.inia.uy
  - Technological Laboratory of Uruguay (LATU) - www.latu.org.uy
  - Uruguayan Chamber of Industries (CIU) – www.ciu.com.uy
  - National Energy Directorate (DNE - MIEM) – www.dne.gub.uy
  - National System of Protected Areas - MVOTMA (SNAP) - http://www.mvotma.gub.uy/snap
  - National Agency for Research and Innovation (ANII) - www.anii.org.uy
  - National Development Agency (ANDE) - www.ande.org.uy
  - School of Architecture of the University of the Republic http://www.fadu.edu.uy

[34] Source: Forestry Magazine – *"Let's study wood".*

- School of Engineering of the University of the Republic https://www.fing.edu.uy
- Litoral Norte University Center of the University of the Republic - http://www.unorte.edu.uy
- School of Architecture of ORT University - https://fa.ort.edu.uy/
- Ministry of Housing and Land Management - https://www.gub.uy/ministerio-vivienda-ordenamiento-territorial
- Architects Society of Uruguay - https://www.sau.org.uy/

ANNEX

REGULATORY FRAMEWORK

To see the annex with information on the regulatory framework of the Uruguayan forest sector, go to the following link: regulatory framework.

THE URUGUAYAN FOREST

Uruguay shares the same latitude and climate zone as southern Australia, New Zealand, South Africa and central regions of Argentina and Chile, where some of the main forestry projects in the southern hemisphere are located. These climate and soil conditions guarantee forest industry stakeholders outstanding levels of competitiveness at global level. The wood produced in Uruguay's plantations is high-quality, both the wood used for cellulose pulp production as well as the wood used for the manufacture of solid wood products.

FORESTRY PRIORITY AREAS

Forestry activity in the country has grown steadily over the last 25 years, during which time the planted area has increased 30-fold. The planted area is now about 1.1 million hectares (affected area[35]). On the other hand, the area of land declared a forestry priority reaches 4 million hectares[36], 25% of the total agricultural area of the country.

Soil type, climate and distance to production outlets have an impact on the characteristics of forest plantations. This divides the country into **three regions** according to the criteria set by the General Directorate of Forestry:

[35] Notes: It includes roads and firebreaks.
[36] Decree No. 191/006, available at: http://www.impo.com.uy/bases/decretos/191-2006/1

24 Forested area and forestry-priority areas by region
Thosands of Hectares

Zone	Departments	Native forests	Forested surface	Forestry-priority areas
Center-North	Artigas, Rivera, Tacuarembó, Durazno, Cerro Largo y Treinta y Tres	354	465	2.200
West	Salto, Paysandú, Río Negro y Soriano	208	297	639
South-West	Colonia, Flores, San José, Florida, Canelones, Montevideo, Lavalleja, Maldonado y Rocha	273	273	1.351
	Total	835	1.035	4.190

Source: General Directorate of Forestry – MGAP[37]

The **Southeast** region is the closest to the port of Montevideo. It is known for its strong maritime influence that avoids the existence of extreme temperatures, determining a better adaptation of species such as Eucalyptus globulus and lately E. dunnii has been included due to its productivity and adaptation to all soils. The main purpose of the plantations in this area is the production of pulp to supply the UPM mill in Fray Bentos and the Montes del Plata mill in Punta Pereira, Colonia, as well as the export of wood chips. The plantations destined for cellulose production have a short production cycle (10 to 12 years). In this region, the departments with the largest forest area are Lavalleja (83,000 ha), Rocha (52,000 ha) and Florida (50,000 ha).

The **Central-North** region is the largest forested area, concentrating 43% of the planted forests in Uruguay. It is known for its heavier frosts in winter, higher temperatures during the summer and the prevalence of sandy soils, which are conducive to the development of Eucalyptus grandis and Pinus. The main outlets for timber production in this region are Paysandú, Fray Bentos or Montevideo, depending on the location and type of product. The departments with

[37] Native Forest: Source: based on the 2016 native forest mapping carried out by the REDD+ Uruguay Project (MGAP-MVOTMA), the General Directorate of Forestry made the estimation of the area pertaining to each department.
Forested area: compiled based on digital processing and interpretation of Sentinel 2 images (2017 and 2018). Information from the Evaluation and Information Division of the General Directorate of Forestry - MGAP. Based on forest nursery surveys conducted annually, it is estimated that 33,662 hectares of new plantations may be added in the 2018-2019 period, bringing the area devoted to forest plantations to 1,068,374. The numbers will be updated in 2021.
Forestry priority soils: estimate of the total surface area broken down by departments of forestry priority soils set by the regulations in force, Decree No. 220/10.

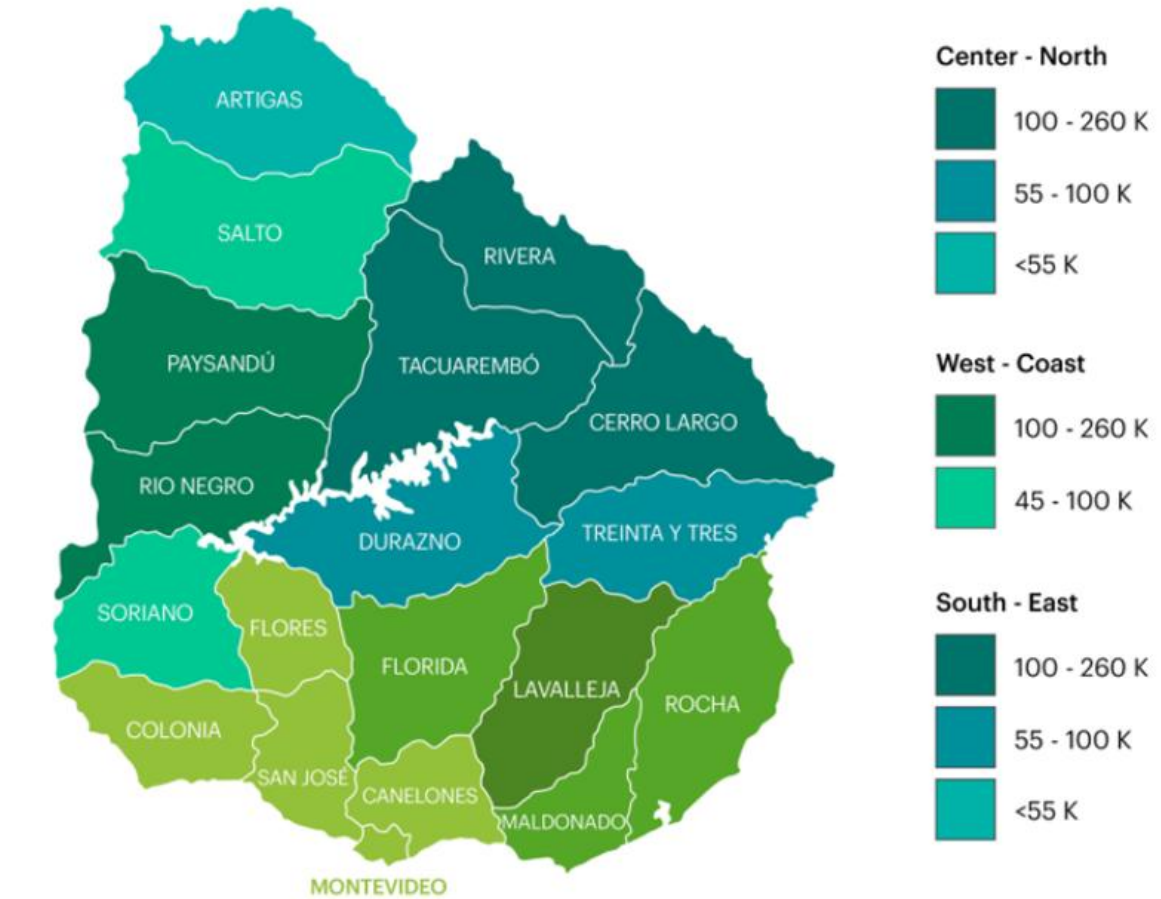
the largest forested areas in this region are Tacuarembó (123,000 ha), Rivera (137,000 ha) and Cerro Largo (87,000 ha).

The **West-coastal** region is also characterized by the presence of frost and sandy loam to sandy soils. This area is dominated by different species of Eucalyptus and to a lesser extent Pinus. Both have a slightly lower yield in this area compared to the north.

The ports and bridges used to transport forest products are Fray Bentos, Nueva Palmira and Paysandú. In this region, Río Negro (162,000 ha) and Paysandú (125,000 ha) are the departments with the largest forested areas.

Finally, Figure No. 8 shows the forested area of the country by region. Excluding native forest, 79% of the total forested area has the genus Eucalyptus planted (with a majority presence of three of its subspecies), while the genus Pinus accounts for the other 21% of the area.

25 | Forested areas by region



Source: compiled by Uruguay XXI based on data from the General Directorate of Forestry - MGAP

In this link you will find the Forestry Geoportal developed by the General Directorate of Forestry, which geographically locates forest plantations, native forests and industrial facilities associated with the sector.

TYPES OF FOREST

The Forestry Law (Law 15,939) establishes different types of forests:

- **Protective forests:** their main purpose is to protect soil, water and other renewable natural resources. The destruction of these forests is strictly forbidden, but their exploitation is not. This means that pruning, thinning and replacement of old trees with new ones is allowed, without threatening the survival of the forest.
- **Yield forests:** the main purpose of these forests is the economic exploitation of the trees. They can be composed of any species suitable for the production of wood or wood material.[38]
- **Native or indigenous forests[39]:** natural forests with endemic species. Any cutting or other activity that threatens their survival is forbidden.
- **General forests:** those not included in the previous categories.

FORESTRY TRAINING PROGRAMS:

Careers related to the forestry sector

- **Agronomy School of the University of the Republic:** it is the most traditional and oldest of the training opportunities related to the forestry sector. It offers the Agronomy degree (five years), which concludes with a degree in agricultural engineering. In the fourth year of the course, students have the possibility to choose between the agricultural, livestock, horticultural, fruit and forestry fields. The graduate who chooses the forestry option is called a forestry agronomist.
- **Forestry Engineering** (University of the Republic - College of Agronomy, College of Engineering and College of Chemistry):[40] the profile of graduates of the Forestry Engineering course requires a solid background in the basic and applied sciences necessary for their scientific and professional careers, with an in-depth focus on specific forestry areas and industrial processes related to the sector, observing aspects of the environment, especially social, environmental and sustainable management of natural

[38] Decree 191/06.
[39] Although they are included in the protective forests, Law No. 15,939 and Decrees 22/93, 24/93 and 330/93 establish specific regulations on the protection of indigenous forests.
[40] Source: UdelaR

resources, in order to allow critical and creative action in the identification and solution of problems. The course is taught at the University Center of Tacuarembó. The first student of this career graduated at the end of 2020.

- **Master's Degree in Cellulose and Paper Engineering** (Engineering College - University of the Republic):[41] the objective is to add to and deepen the scientific training and technique of the professionals in the cellulose and paper production engineering field, obtaining a greater specialization than the one received in the graduate degree. The curriculum of the Master's Degree in Cellulose and Paper Engineering spans over two years and consists of programmed activities and a thesis. For each generation of students, a training plan of programmed activities (actualization and/or postgraduate courses, seminars, etc.) is established. The programmed activity is organized in a set of key subjects to broaden and deepen basic knowledge in the thematic area and a second set of specialized technological subjects.
- **Civil Engineering** (School of Engineering - University of the Republic): in this course there is a subject titled "Wooden Structures", which is mandatory for the structural profile, in order to train engineers in the use of domestic wood as a structural material. The Master's Degree in Structural Engineering also includes subjects related to structural calculations with wood.
- **Chemical Engineering** (School of Engineering - University of the Republic): in this course, there is an optional subject called "Fundamentals of Cellulose and Paper Production", which aims to introduce the student to the processes developed in cellulose pulp (particularly Kraft) and paper production mills.
- **Forestry Technician** (University of the Enterprise - UDE): this career offers a two-year program, which was the first alternative to agronomy offered by a private institution, directly focused on the needs of the forestry sector. The program covers all the steps in the forestry chain, except for chemical processing. The UDE also offers a course in Agronomy, but unlike the University of the Republic, it does not cover subjects directly related to forestry production, although it does cover plant production and protection.
- **Forestry Technician / Wood Technologist** (Labor University of Uruguay - UTU): the first, which lasts for two years, covers the entire forestry chain, from nursery and field work to forestry industries. The Wood Technologist program is developed in six semesters of related basic sciences, such as physics and mathematics, and a broad spectrum of subjects related to forest harvesting, mechanical wood processing and forest industry management.

[41] Source: School of Engineering

- **Specialization Diploma in Design, Calculation and Construction with Wood** (DEEM) (School of Architecture - ORT University + School of Engineering - University of the Republic): although it is not directly linked to the traditional forestry chain, it seems important to mention this degree. It is taught jointly by the University of the Republic and the ORT University. It is a course specifically designed to provide knowledge about an area that is little explored by the current Uruguayan forestry sector, such as the use of part of the existing raw material to cover the needs of housing, civil construction, bridges, etc. in the country, both from solid wood and engineered wood products.

TAX TREATMENT OF THE SECTOR

PRIMARY PHASE

Since the enactment of Law No. 15,959 in 1987, the forestry sector has been subject to a distinct tax framework, incorporating exemptions and subsidies designed to stimulate production. Under the Corporate Income Tax (IRAE), any income generated from artificial forests classified as protective forests, or from MGAP-certified projects prior to harvesting, is exempt from taxation.

Furthermore, activities such as debarking, bucking, and the sale of timber may also qualify for exemptions. Regarding the Patrimony Tax (IPAT), areas afforested in priority zones are not deemed taxable, even though the forests incur a surcharge of between 0.7% and 1.5%. The Tax on the Sale of Agricultural and Livestock Goods (IMEBA) levies a 0% rate for forestry products, while other agricultural commodities face rates as high as 2%.

OTHER TAXES

The forestry sector does not receive specific benefits concerning the Primary Education Tax; however, waivers are available for small-scale producers. Since 2007, properties designated for forestry purposes are subject to a rural property tax of 1.25% of their cadastral value, except for quality timber projects and forests declared as protective forests. Additionally, companies with holdings exceeding 500 hectares are liable for a tax allocated to MEVIR (Movement for the Eradication of Unsanitary Rural Housing). In terms of employer contributions to social security, the forestry sector adheres to the same regulations as other agricultural activities.

INDUSTRIAL PHASE AND FREE TRADE ZONES (ZZFF)

Forest industries are required to pay IRAE, IPAT, and VAT under the general tax regime, although they can avail themselves of incentives such as projects promoted by the Investment

Law Application Commission (COMAP) or benefits offered by free trade zones. Cellulose pulp plants in Uruguay operate within free trade zones, granting them exemptions from IRAE, IPAT, VAT, IMESI and other taxes Nonetheless, they are required to pay employer social security contributions for their Uruguayan employees (who must constitute at least 75% of the staff) and a fee based on the space's lease agreement. Exemptions granted to the free trade zones (ZZFF) averaged US$ 279 million between 2014 and 2019; however, for every dollar exempted, these zones generated a sixfold return in economic activity[42].

1.1. [42] According to CERES (2024) – Forestry production in Uruguay: a leading and sustainable sector

URUGUAY AT A GLANCE

Official name	Oriental Republic of Uruguay
Geographical location	South America, located between Argentina and Brazil
Capital	Montevideo
Surface Area	176,215 km2 and 95% of the territory is productive land suitable for agriculture and livestock farming.
Population (2023)	3.44 million
GDP per capita (2023)	US$ 22,421
Currency	Uruguayan Peso ($)
Literacy rate	0.98
Life expectancy at birth	77.9 years of age
Form of government	Democratic republic with presidential system
Political division	19 departments
Time Zone	GMT - 03:00
Official language	Spanish

KEY ECONOMIC INDICATORS

Indicadores	2020	2021	2022	2023	2024*	2025*
GDP (Annual Variation %)	-7.38%	5.56%	4.71%	0.37%	3.4%	3.2%
GDP (Million US$)	53,615	60,728	70,236	77,131	81,151	77,500
Population (Million people)	3.44	3.44	3.44	3.44	3.44	3.44
GDP per capita (US$)	15,593	17,648	20,395	22,422	23,590	22,529
Unemployment Rate - Annual Average (% EAP)	10.4%	9.3%	7.9%	8.3%	8.2%	8.1%
Exchange Rate (Pesos per US$, Annual Average)	42.1	43.6	41.1	38.8	40.2	45.8
Exchange Rate (Average Annual Variation)	19.2%	3.6%	-5.6%	-5.6%	3.6%	13.7%
Consumer Prices (Accumulated annual variation %)	9.4%	8.0%	8.3%	5.1%	5.5%	5.2%
Exports of goods and services (US$ millions)**	14,028	19,973	23,611	26,474	29,512	27,856
Imports of goods and services (US$ Millions)**	11,598	15,448	19,406	19,306	18,668	18,575
Trade surplus / Deficit (Millions of US$)	2,430	4,526	4,205	7,169	10,843	9,281
Trade surplus / Deficit (% of GDP)	4.5%	7.5%	6.0%	9.3%	13.4%	12.0%
Overall Fiscal Result (% of GDP)	-5.8%	-4.1%	-3.4%	-3.6%	-	-
Gross Capital Formation (% of GDP)	16.4%	18.3%	18.9%	17.3%	-	-
Gross Public Sector Debt (% of GDP)	74.5%	69.8%	68.1%	69.1%	-	-
Foreign Direct Investment (Millions of US$) ***	831	2,977	3,285	2,262	-	-
Foreign Direct Investment (% of GDP)	1.5%	4.9%	4.7%	2.9%	-	-

*Data projected in red.
Sources: BCU, INE, MEF and estimated data (*). Fiscal result data includes the effect of Law No. 19,590 (fifty-year-olds). In 2017 the Central Bank of Uruguay adopted the methodology of the 6th balance of payments manual. The methodology includes purchases and sales of goods and re-exports and is available since 2012. Data are net flows so they may show negative values (**).

Uruguay XXI
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