



UPM Fray Bentos

Environmental and societal responsibility 2025



UPM Fray Bentos Pulp Mill

The pulp mill is located on the coast of the Río Uruguay, 5 km away from the city of Fray Bentos.

Construction of this state-of-the-art pulp mill began in 2005. The initial Environmental Authorization for Operation was granted by the authorities on November 8th, 2007. Until June 2020, the environmental authority in Uruguay was the Ministry of Housing, Territorial Planning and Environment (MVOTMA) through the National Direction for the Environment (DINAMA). From June 9th, 2020 the environmental authority is the Ministry of Environment through the National Direction for Quality and Environmental Assessment (DINACEA).

Through the use of modern techniques high quality pulp is efficiently produced, with a significant share destined for the Asian, European and North American markets.

The annual capacity of the mill is 1.3 million tons of bleached eucalyptus pulp. Wood procurement is under the responsibility of UPM Forestal Oriental, which has been pioneering the development of eucalyptus plantations in Uruguay for over 35 years, since 1990. UPM has a 91% ownership of the Fray Bentos pulp mill and 100% in UPM Forestal Oriental. The UPM mill complex also accommodates the operations of four chemical plants responsible for supplying bleaching chemicals for the production process. The management of hydrogen peroxide and sodium chlorate is under the purview of Kemira, while the oxygen plant is managed by Linde. In January 2023, ownership of the chlorine dioxide plant was transferred from Kemira to UPM, and subsequently, UPM assumed responsibility for its operation.

Maintenance of pulp mill operations is outsourced to Andritz, which supplied most of the production equipment for the construction of the mill.



Production capacity	1,300,000 ADt
Personnel	235
Products	UPM Euca (bleached eucalyptus kraft pulp)
Certificates	EMAS – EU Eco-Management and Audit Scheme ISO 14001 – Environmental Management System ISO 9001 – Quality Management System ISO 50001 – Energy Management System ISO 22000 – Food Safety Management System ISO 45001 – Occupational Health & Management System PEFC Chain of Custody – Programme for the Endorsement of Forest Certification FSC® Chain of Custody – Forest Stewardship Council® All certificates can be found from UPM's Certificate Finder (available at www.upm.com/responsibility)
Environmental labels	EU Ecolabel Nordic Ecolabel UPM pulp products have the approval for use in EU Ecolabel and Nordic Ecolabel paper products.



UPM Fray Bentos Environmental and Societal Responsibility 2025 is a supplement to the Corporate Environmental and Societal Responsibility Statement of UPM's pulp and paper mills (available at www.upm.com) and provides mill-specific environmental and societal performance data and trends for the year 2025. The annual mill supplements and the UPM Corporate Environmental and Societal Responsibility Statement together form the joint EMAS Statement of UPM Corporation.

UPM is a material solutions company, renewing products and entire value chains with an extensive portfolio of renewable fibres, advanced materials, decarbonization solutions, and communication papers. Our performance in sustainability has been recognized by third parties, including EcoVadis and the Dow Jones Sustainability Indices. We operate globally and employ approximately 15,100 people worldwide, with annual sales of approximately €9.7 billion. Our shares are listed on Nasdaq Helsinki Ltd.

UPM – we renew the everyday



For more information about FSC® certification visit www.fsc.org



For more information about PEFC certification visit www.pefc.org

Review of the year 2025

Performance

UPM Fray Bentos pulp mill continued to achieve high level of capacity utilization in 2025 with steady operations, maintaining its reliability in pulp quality as well as high level of environmental performance.

One event with permit noncompliance occurred during the year. On March 10th, during the unloading of sulfuric acid at the UPM Fray Bentos port, a spill was detected on the dock due to the rupture of a discharge hose. A temporary and limited effect was observed in the river pH. During the incident and the cleanup, people were not affected.

In 2025, the UPM Fray Bentos mill received six odour related contacts from the community, two of which were submitted through DINACEA. The first two contacts were received on April 11 and 15 through DINACEA, reporting odours perceived in Fray Bentos. At those times, mill operations and effluent treatment plant parameters remained stable, and no specific source could be identified. However, a contribution from the mill could not be completely ruled out. A third contact occurred on May 1, when local media reported odours detected at various points in the city. On that day, the fiber line experienced a disturbance, although no venting of odorous compounds, and the rest of the mill operations were stable. On July 12, during the reconnection of the mill to the electrical grid, a disturbance triggered a recovery boiler trip. In this case, venting of odorous compounds was recorded (while the mill was not producing), and local media contacted the mill regarding odours. On August 6, a neighbour submitted an odour inquiry through DINACEA. At that time, the fiber line stopped in a controlled manner due to an issue in the dioxide plant. The last community contact of the year was received on October 18 during the general mill shutdown.

The UPM Fray Bentos pulp mill is designed to be self-sufficient in terms of electricity consumption, generating its own power by burning black liquor. It is even capable of supplying excess energy to the national grid. External energy purchases are only required occasionally, such as during plant startups or specific unbalanced situations caused by maintenance activities. Since February 2024, an agreement with the Ministry of Energy has allowed UPM's pulp mills in Uruguay to sell and purchase energy between each other via the national grid infrastructure. As a result, the Fray Bentos mill only draws additional energy from the grid when the Paso de los Toros mill is not producing a surplus sufficient to cover its needs. Consequently, the vast majority of electricity purchased by the Fray Bentos mill is free of fossil fuel emissions.

In 2025, air emissions were maintained at very good levels, and the management of malodorous gases was within internal targets.

The mill's emissions were within the ranges associated to Best Available Tech-niques (BAT) as established in the European Commission Implementing Decision of 26 September 2014.

Environmental monitoring

UPM Fray Bentos mill is exhaustively monitored with more than 130 control parameters covering the Uruguay river (water and biology), air, soil, fauna, groundwater, noise, among others.

Environmental monitoring activities, overseen by UPM Fray Bentos and executed by multiple external experts, continue to show, even eighteen years after its start-up, that there is no negative impact on the environment

Transparency

In 2025, UPM's mill in Uruguay welcomed 136 visitors, mainly students from educational institutions within the mill's area of influence. While the number differs from previous years due to ongoing facility enhancement works and resulting adjustments in visit coordination, the mill continued to receive groups and uphold its open-door approach, reaffirming UPM's commitment to transparency and support for local education.

UPM's Communications Team in Uruguay was recognized among the country's top communication teams in the first edition of the Merco Corporate Reputation ranking. This distinction reflects the credibility and trust built through transparent communication and active stakeholder engagement.

On August 28, the Follow-up Commission—composed of representatives from national ministries, local governments, the operating companies, and up to seven civil society mem-

bers—reconvened after seven years without being formally called by the authorities. During the session, an overview of key aspects of mill operations and regulatory follow-up was presented. Participants raised questions freely, all of which were addressed during the meeting.

The session developed in a constructive and collaborative atmosphere, reflecting a positive and harmonious relationship among the participants and a good level of community engagement regarding the mill's operation.

In 2025, 12 inspections were carried out by the Scientific Committee (integrated by Uruguayan and Argentinian members) of the Uruguay River Administrative Commission (CARU), reaching 170 in total by December 2025. Results of the monitoring carried out during these inspections are available in [CARU's website](#).

Results of the environmental monitoring plan requested by Uruguayan environmental authorities are available in UPM's webpage. Additional information on compliance with legal requirements can be found on both [UPM's corporate website](#) and the official [webpage of the Ministry of Environment](#).

Press releases regarding events that may be perceived by nearby communities are shared with the local press, follow up commission, Uruguayan environmental authorities as well as published on UPM's corporate website. In 2025, there were six releases, including the general mill shutdown for maintenance, scheduled maintenance in specific areas, and a few plant disturbances.

The revised environmental product declaration for Fray Bentos pulp has been released and is accessible to our customers.

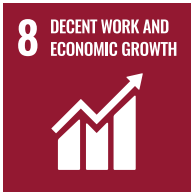


Federico Mantiñan
General Manager



The UPM Environmental Team
Silvia Bentancur, Maite Mendez, Jonathan Ragghianti

Contribution to UN Sustainable Development Goals in 2025



Taxes

Total tax impact approx.

USD **32** million

related to Fray Bentos mill and forestry operations in Uruguay in 2025, including:

- Income taxes on salaries
- Corporate income taxes and Free Trade Zone fees
- Property taxes including real estate tax
- Value Added Tax cost



Water

Percentage reduction in specific phosphorus discharge (per ton of pulp) comparing 2025 and 2016.

38%

Total Phosphorus



Biodiversity

UPM is the first private company in Uruguay to manage an area within the National System of Protected Areas.

14,907 ha

of formal conservation areas are managed by UPM, covering native forest, grasslands, wetlands, riparian zones and palm areas.

593

species of tetrapods and fish reported to date and

1,600

plant species reported to date



Supply chain

81%

of contract raw material spend covered by UPM Supplier and Third Party Code (wood not included).



Waste

9%

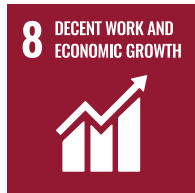
of total process non-hazardous waste generated in 2025 returns to plantations, used as soil improver and 4% for other recycled uses.

19%

of total process non-hazardous waste generated in 2025 was disposed in landfill.

71%

of total process non-hazardous waste generated in 2025 was used for energy recovery.



Community

7 Projects

promoted by UPM Foundation in 2025 in coordination with 6 partner organizations.



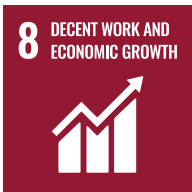
Environment

60 environmental observations

By actively doing environmental observations and taking needed actions beforehand, we efficiently prevent environmental deviations.

13 environmental rounds

carried out with subcontractors working within UPM Fray Bentos mill premises.



Employment

UPM Fray Bentos employed

235

people directly.



Renewable energy

91.5%

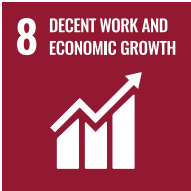
of the energy produced in UPM Fray Bentos during 2025 came from renewable sources.



Certified fiber

96%

of fibre used in pulp production was FSC® and/or PEFC certified. UPM's target is to use only certified fibre by 2030.



Safety

Total Recordable Incident Frequency (TRIF):

4.7 incidents

per million hours worked (Process areas: UPM employees & Contractors).

803

Reported Safety Walks and Inspections. Safety walks are conducted with the aim of improvement.

1,004

Safety observations Observations covering both good safety practices and potential unsafe conditions or behaviors.



Air

Reduction in TRS emissions per ton of pulp:

17%

Calculated comparing 2025 to 2024 performance.



Health

100%

Workplace health risk assessments

33%

voluntary workers participated in the influenza vaccination program

44%

voluntary workers participated in the DETOX Nutritional program

Air



Emissions to the air remained at very good levels throughout the year, with all parameters staying within the limits established in the environmental permit.

The handling of malodorous gases from the production process remained in line with the internal targets set for 2025. Preventive maintenance of the auxiliary boilers is carried out annually to ensure their availability for the safe and effective handling of odorous gases.

Fuel oil consumption in 2025 remained broadly consistent with the levels recorded in 2024. The highest consumption occurred in the period following the mill's general shutdown, when operational conditions were still stabilising.

In 2025, the UPM Fray Bentos mill received six odour complaints from residents. The first two complaints were reported on April 11 and April 15. A review of mill operations, together with data from the air quality monitoring stations at the time of the notifications, did not indicate any operational condition that could clearly explain the odour perception. However, the possibility that the mill was the source could not be completely ruled out.

On May 1, a local media outlet consulted the mill regarding odour perceived in certain areas of Fray Bentos. At that time, no venting of odorous compounds were recorded, mill operations were stable, and the TRS measurements at the nearest air quality station showed values within normal ranges. Nevertheless, a disturbance occurred in the fiber line that did not affect the rest of the mill. Although no direct link was identified, the mill could not be excluded as a potential source. On July 12, while reconnecting the mill to the electrical grid, an operational failure led to a mill shutdown. During the shutdown, odorous gases were vented because, with no production, the volume generated was not sufficient for treatment in the auxiliary boilers. Following this event, an interlock was implemented to ensure proper synchronization before grid reconnection to prevent similar situations in the future.

On August 6, a disturbance in the chlorine dioxide plant caused a controlled interruption of the fiber line production which occurred without venting. The other process areas accompanied the event with a controlled and progressive ramp down, maintaining operational stability without disturbances. TRS levels at the air quality station remained within normal ranges. Even without identifying a specific source, the possibility that the mill contributed to the odour perception could not be dismissed. The final complaint of the year was received on October 18, during the mill's general shutdown. Residents were aware of the planned shutdown, as prior communication had been issued to local authorities, media outlets, and published on the company's website, in accordance with established procedures.

Waste

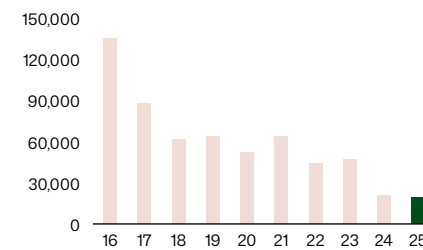


The UPM Fray Bentos landfill is located with-in the mill premises. In 2025, it received a total of 19,208 tonnes of waste on a dry basis, representing 19% of the total non-hazardous waste generated at the site. Notably, green liquor dregs accounted for 94% of the total dry waste sent to landfill.

Efforts to minimize waste disposal to landfill continued throughout 2025. As part of this initiative, the dryers originally designed for treating Biosludge were gradually adapted through local development to enable stable processing of mixed sludge "PS" (Phosphorous and Secondary sludges). This mixed sludge is created by combining biosludge with P sludge, which is generated during the primary treatment stage of the wastewater treatment process, where phosphorus is precipitated from the incoming effluents. Since the only authorized disposal method for P sludge is landfilling, incorporating it into mixed PS sludge significantly reduces the volume requiring landfill disposal. Thanks to this initiative, and to the ongoing efforts to achieve stable, continuous operation of the dryers, the amount of P sludge sent to landfill was reduced by 94% compared to 2023 and 2022 when this adaptation started.

The mixed sludge PS produced serves as an alternative fuel or soil amendment. In 2025, 8,872 tonnes (dry basis) of mixed sludge PS were produced, 83% of which was used for energy recovery in a cement plant, while the remaining 17% was applied as a soil amendment in plantations.

Solid waste to industrial landfill (wet t/y)



In 2025, the amount of dry biosludge generated decreased by 45% compared with 2024. This reduction also reflects the stabilization achieved in the drying process of the mixed PS sludge. During 2025, a total of 1,431 tonnes of biosludge were generated; of this amount, 87% was used as an external fuel in a cement plant, while the remaining portion was applied as a soil amendment in plantations.

Wood waste management also remained efficient: 97% of wood waste (mostly bark and wood fines) was used for energy recovery, with 81% burned in the Paso de los Toros biomass boiler and 16% was used for other recycling purposes, such as animal bedding or feed.

Since 2020, the Rio Negro city hall has operated a waste sorting facility through a social cooperative. In 2025, UPM Fray Bentos delivered 269 tonnes of recyclable materials (paper, cardboard, plastic, combustible waste) to this site for further commercialization.

Finally, in 2025, the generation of hazardous waste totaled 167 tonnes, making up only 0.16% of the total waste. Of this, 69% consisted of used oil and oil-water mixtures, primarily originating from maintenance activities.

Water



UPM Fray Bentos acquires raw water from the Uruguay river. Operations in 2025 required about 0.94 m³ of water per second and generated about 0.70 m³ per second of treated effluent.

On March 10, an incident occurred during the unloading of sulfuric acid at the UPM Fray Bentos port, when a hose transferring the product from the vessel to the dock pipeline and storage tanks ruptured, resulting in a spill on the dock. The operation was immediately stopped, and the plant's emergency response procedures were activated. UPM's emergency brigade responded promptly and managed the situation effectively.

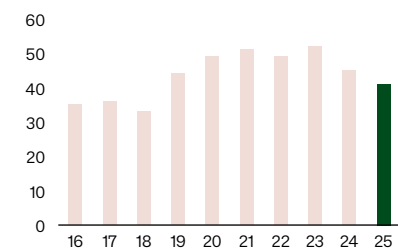
The product contained on the dock was recovered using appropriate materials. However, part of the spilled acid reached the river through the port's contentment system located beneath the dock. A temporary and localized pH decrease was observed approximately 1.5 hours after the incident at a single monitoring point close to the dock. No pH changes were observed at other nearby locations or downstream, and normal conditions were restored at all monitored points within two hours. No injuries or health impacts to personnel or third parties were reported.

Subsequent inspections identified chemical damage to the discharge hose. Independent laboratory analysis concluded that, despite the hose having been recently supplied by a specialized provider, based on available information, compatibility with high-concentration sulfuric acid (97-98%) could not be ensured. As a result, the supplier was changed, the findings were shared with other mills, and a claim with the former provider is ongoing. Additional corrective actions include a review of unloading procedures, improvements to dock drainage containment, and reinforcement of preventive

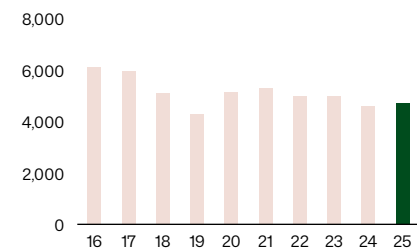
measures. The use of an additional protective hose during unloading was confirmed as an effective mitigation practice. The event also demonstrated the importance of continuous emergency training, which enabled a rapid and coordinated response.

In 2025, the phosphorus removal plant reached its tenth year of continuous operation. This system was developed on site to address a unique environmental challenge: eucalyptus grown in Uruguayan soils naturally contains elevated phosphorus levels, which dissolve during certain stages of the bleaching process and ultimately reach the wastewater treatment plant. Despite these conditions, the mill is required to meet a discharge limit that is even more stringent than the international BAT range for eucalyptus kraft pulp mills (0.03-0.30 kg P/ADt), as the Fray Bentos permit sets a maximum of 0.02 kg P/ADt. Throughout the years, the plant has consistently operated well below both regulatory and internal targets. In 2025, the annual average phosphorus load was 31.9 kg/day, remaining comfortably within the environmental permit of 60 kg/day and below the internal target of 55 kg/day. The strong performance of the

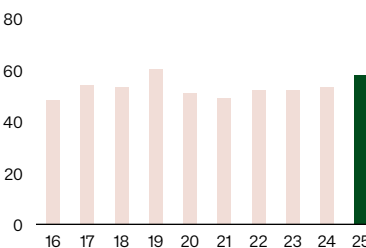
Adsorbable organic halogen compounds, AOX t/y



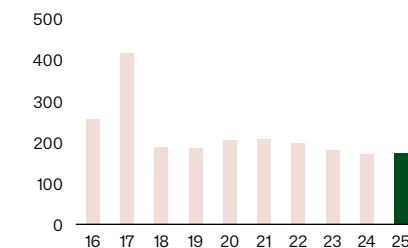
Chemical oxygen demand, COD t/y



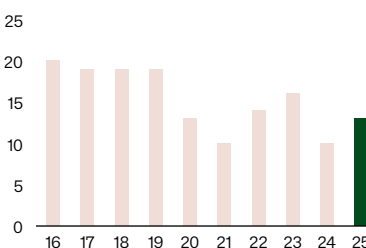
Nitrogen (inorganic), N t/y



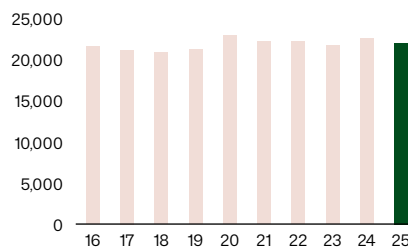
Biological oxygen demand, BOD₅ t/y



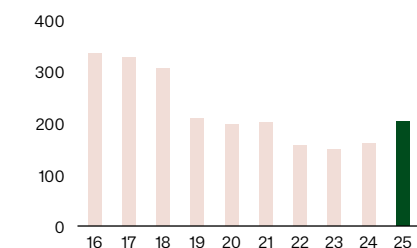
Phosphorus, P t/y



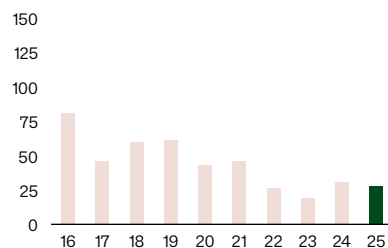
Effluent flow (process wastewater) 1,000 m³



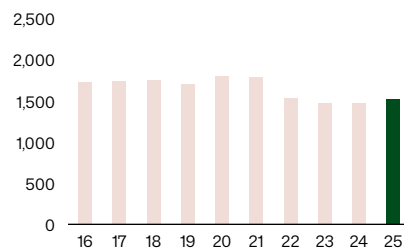
Total suspended solids, TSS t/y



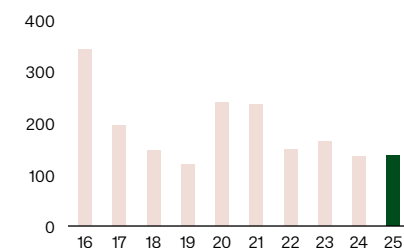
Sulphur dioxide, SO₂ t/y



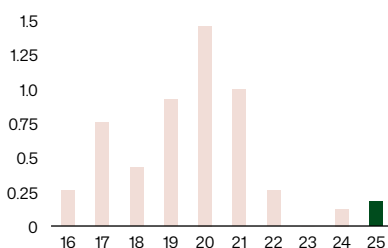
Nitrogen oxides, NOₓ t/y (measured as NO₂)



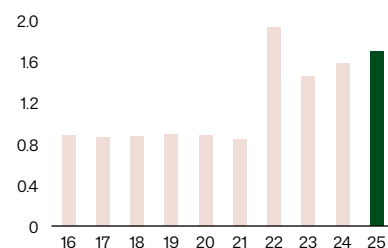
Dust t/y



Electricity supplied to the national grid (relative to 2007)



Fuel oil consumption (relative to 2007)



phosphorus removal system is the result of a decade of continuous optimization, careful operational control, and preventive maintenance since its start-up in 2015. These sustained efforts have made it possible to meet, and consistently exceed, demanding environmental expectations, even under conditions that present a higher natural phosphorus load than those typically encountered in other regions.

In 2025, the mill's specific effluent discharge achieved levels well below both the BAT reference range, 30–50 m³/ADt, and the mill's internal target of 20 m³/ADt. This level of performance has been consistently maintained for more than ten years, reflecting the effectiveness of the mill's water management practices and its ongoing commitment to minimizing water use and effluent generation.

Water quality monitoring carried out in Uruguay River in February 2025 showed no significant differences between upstream and downstream sites that could be associated with the mill's operations. All measured parameters, such as temperature, pH, dissolved oxygen, turbidity and nutrients, remained within the natural ranges historically recorded for this section of the Uruguay River, and followed the same seasonal pattern at the reference point and at the receiving areas.

This stability is consistent with the long-term results obtained since the mill's start up and continues to support the reduction in monitoring frequency approved in the 2020 Environmental Management Plan and maintained in the 2025 plan.

The biological components of the river also reflected this pattern. Phytoplankton densities and biomass varied among sampling points, as is typical of a large river influenced by hydrology and climate, but the dominant groups appeared in similar proportions at all sites and no downstream shift was detected. Zooplankton diversity and abundance likewise remained similar between locations, with the usual dominance of copepods, rotifers and small cladocerans. Sediment results showed the absence of contaminants commonly associated with industrial activity: mercury, PCBs, PAHs and extractable organic halogens were not detected, dioxins and furans appeared only at very low concentrations near detection limits, and all acute toxicity tests with *Daphnia magna* were classified as non-toxic. Benthic invertebrate communities reflected local habitat rather than distance to the mill, and species typical of the Uruguay River, bivalves, gastropods, oligochaetes and chironomids, were present at all sites in comparable densities and richness.

These results complement the long-term assessments of fish communities and fish health indicators. As in previous years, fish species richness, abundance and biomass in the receiving area remain comparable to the upstream reference zone, with no evidence of changes linked to the mill. Chemical analyses of fish bile since 2005 did not detect chlorophenolics, phytoestrogens or resin acids, and dioxins and PCBs in muscle tissue have consistently remained low and well below international reference values.

Management of critical issues and exceptional situations

At UPM Fray Bentos, environmental awareness is a fundamental part of the mill's operational culture. All employees are accountable for the environmental impacts related to their respective areas of work. The Production Manager holds overall responsibility for the mill's environmental performance, while the Environmental Manager coordinates environmental matters internally and externally with regulatory authorities and other stakeholders.

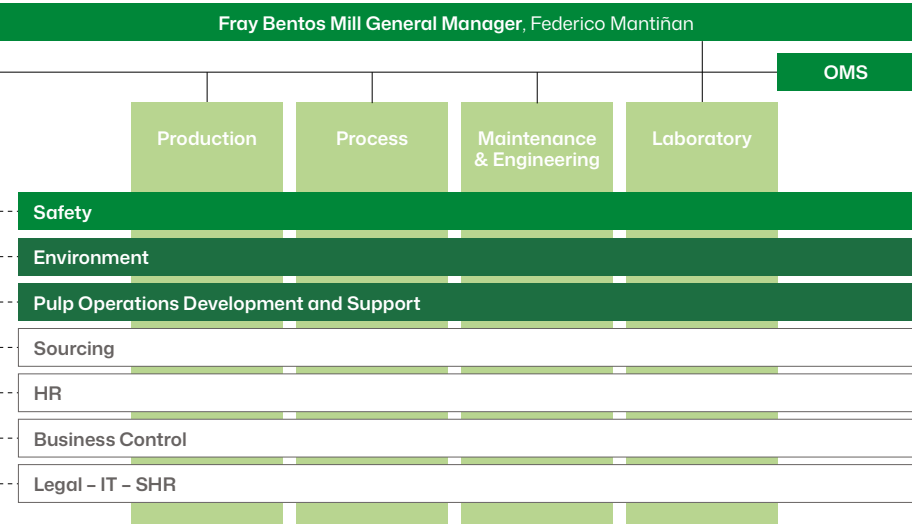
As part of the Operational Environmental Management Plan, the mill maintains a contingency plan approved by Uruguayan environmental authorities. This plan outlines procedures to be followed in the event of environmental incidents, clearly defining responsibilities and including a communication flowchart.

Health and safety activities are managed by the Safety Manager, in coordination with the Safety Supervisor and the Fire Chief.

Together, they oversee health and safety efforts within the company and in collaboration with authorities and partners. The mill operates under a comprehensive safety plan and activity program that sets goals, targets, and specific actions to enhance workplace safety.

UPM Fray Bentos has a trained fire brigade composed of 70 brigadiers, including UPM personnel and technicians from on-site partner companies ((Andritz, Kemira, Linde). The brigade is organized into five shifts aligned with mill operations and receives continuous training from qualified instructors.

Fray Bentos mill Organization



In 2025, a total of 85 training sessions were conducted. Additionally, emergency drills were planned and carried out through-out the year.

These sessions addressed a wide range of critical scenarios, including fire suppression, rescue from heights, chemical incident response involving casualties, collapsed structure rescue, confined space operations, and the installation of river pumps.

In 2025, the Brigade's Training Center was equipped with a new firesimulator system that incorporates enhanced safety features. This upgrade strengthens the training capabilities and supports the continuous improvement of emergency response skills.

Additionally, in 2025 an external advanced first-aid training program was carried out. The course focused on the initial steps to take in an emergency, familiarization with available material and logistical resources, the application of first-aid techniques in various scenarios, and the criteria for effective coordination with medical care services. The Fray Bentos City Fire Brigade and the Fire Handling

Supervisor from UPM Forestal Oriental were invited to participate in this training.

These types of training activities contribute significantly to the professionalization of the fire brigade and reinforce their capacity to respond effectively to complex emergency situations. Participation in international training sessions also encourages the exchange of best practices and strengthens a culture of continuous improvement and preparedness.



Societal responsibility

The UPM Foundation was established over 16 years ago in Fray Bentos with the aim of supporting community development. As UPM's operations expanded, the Foundation evolved its vision to become a long-term driver of community empowerment through education, capacity building, and local partnerships. Its engagement model is built on three pillars: Dialogue, Impact Management, and Contribution to Development, working closely with communities across the different regions where UPM operates.

Each year, the Foundation promotes educational projects and awards scholarships in collaboration with highly recognized institutions and specialists. Over the last three years, it has implemented 60 projects, reaching more than 14,000 people and engaging around 100 communities in UPM's areas of influence.

In 2025, the Foundation commissioned Nómade to conduct a qualitative impact study of its teacher training programs. The

study explored how educators perceive the Foundation, their motivations to participate, and how they apply the training in practice. Based on ten focus groups with around 80 teachers from different levels and regions, the results showed that the Foundation is highly valued as a reliable and accessible provider of high-quality professional development, especially in rural and inland areas. Teachers highlighted the academic quality, practical content, and the Foundation's close and supportive approach. The study also confirmed positive impacts on teaching practices, emotional well-being, and broader school communities.

During the year, the Foundation awarded 182 sponsorships to teachers in the Fray Bentos area, covering all educational subsystems. Of these, 46% were primary school teachers, 25% secondary teachers, 18% teacher training students, 3% early childhood educators, and 2% from the Teacher Education Institute. One example was the course "The Teacher as a Mental

Health Agent," attended by 79 participants, emphasizing the role of teachers in shaping students' emotional environments.

As the instructor explained: "Schools are key settings where mental health is shaped, where suffering can be prevented, and where empathy, self-regulation, and safe relationships are promoted. Seeing teachers as mental health agents means recognizing that teaching is not only about transmitting knowledge, but also about creating and regulating the emotional context in which children learn, grow, and develop."



Biodiversity

Supporting science to understand and conserve biodiversity

In 2025, Forestal Oriental launched its first competitive research fund to support studies on biodiversity within UPM's Network of Biodiversity Reserves. The fund focuses on topics such as biodiversity interactions, invasive species, climate change, and ecosystem ecology, and is open to research groups and institutions. According to the Biodiversity Coordinator, the initiative enables field-based research that is often difficult to finance, while strengthening reserve management and contributing to national scientific knowledge.

Three projects were selected: one on terrestrial invertebrate biodiversity using metabarcoding, and two led by the University of the Republic focusing on spiders, millipedes, insects and crustaceans in high conservation value areas. Their results will support species inventories and conservation planning. In addition, UPM expanded its FSC® certification to include maintaining an ecologically sufficient network of conservation areas.

Fish biodiversity and community monitoring in the Uruguay river

Two decades of continuous knowledge building

Since the mid-2000s, the Uruguay River has been monitored to understand fish community dynamics. This program introduced standardized methods for studying biodiversity and has created the most complete long-term dataset for the lower Uruguay River.

A partnership with local fishermen

Artisanal fishermen from nearby communities contribute daily catch data, providing valuable insights into seasonal patterns, species presence and ecological changes. Their involvement strengthens both the scientific value and social relevance of the program.

Scientific surveys of the fish community

Annual surveys at fixed upstream and downstream sites show that fish communities remain diverse and stable. Key migratory species such as dorado and sábalo, along with resident species like catfish, are consistently recorded, indicating a healthy ecosystem.

What nearly 20 years of species records tell us

Monitoring has documented more than 25–30 species over time, including migratory, commercial and benthic species. Species richness and composition have remained stable, reflecting balanced ecological conditions.

What the fishery data adds

Fishermen's data aligns with scientific findings, showing natural variability but no loss of diversity or ecosystem imbalance.

Main conclusion: No detectable influence of the mill on fish biodiversity

After nearly two decades, both scientific and fishery data confirm that the UPM Fray Bentos mill has not caused measurable impacts on fish biodiversity. Observed variations are linked to natural environmental factors rather than mill operations.

A lasting contribution to Uruguay's understanding of its river ecosystems

The program has provided Uruguay with its first long-term, science-based understanding of fish communities in the river. Its continuity, methods and collaboration with local communities make it a valuable contribution to environmental knowledge and sustainable river management.



Environmental parameters

The figures related to production as well as raw material and energy consumption are published as aggregated figures on group level in the UPM Corporate Environmental and Societal Responsibility Statement.

		2023	2024	2025
Production capacity	Pulp	1,300,000 t	1,300,000 t	1,300,000 t
Raw materials and additives	Wood Pulping and bleaching chemicals	See UPM Corporate Environmental and Societal Responsibility Statement for more information		
Energy ¹⁾	Biogenic fuels	92%	92%	92%
	Fossil fuels	8%	8%	8%
	Energy sold			See UPM Corporate Environmental and Societal Responsibility Statement
Emission to air	Carbon dioxide, CO ₂ (on-site fossil emissions, scope 1)	155,526 t	153,236 t	154,187 t
	Carbon dioxide, CO ₂ (fossil emissions from purchased energy, scope 2) ³⁾	27,240 t	20 t	19 t
	Nitrogen oxides, NO _x	1,471 t	1,470 t	1,518 t
	Sulphur dioxide, SO ₂	19 t	31 t	28 t
	Particulates Total	164 t	135 t	138 t
	Reduced sulphur, TRS	10 t	8 t	7 t
Water intake	Process and cooling water	30,915,965 m³	30,004,283 m³	29,692,810 m³
Discharges to water	Process wastewater	21,677,934 m³	22,526,178 m³	21,923,163 m³
	Process wastewater quality indicators			
	- Biochemical oxygen demand, BOD ₅ ⁴⁾	181 t	169 t	172 t
	- Chemical oxygen demand, COD	4,961 t	4,563 t	4,680 t
	- Suspended solids, TSS	148 t	159 t	202 t
	- Nitrogen, N (total)	53 t	53 t	58 t
	- Phosphorus, P (total)	17 t	10 t	13 t
	- Adsorbable organic halogen compounds, AOX	52 t	45 t	41 t
Waste ²⁾	Non-hazardous waste			
	Waste to recycling, energy recovery and/or composting			
	- Sludges	12,203 t	17,167 t	16,029 t
	- Bark and wood waste	66,003 t	70,723 t	65,060 t
	- Green liquor dregs	19,9 t	43 t	0 t
	- Metals	266 t	271 t	259 t
	- Others	505 t	2,476 t	522 t
	Waste to landfill and incineration w/o energy recovery			
	- Green liquor dregs	19,793 t	18,489 t	18,017 t
	- Sludges	3,705 t	1,515 t	895 t
	- Others	348 t	379 t	297 t
	Hazardous waste	103 t	246 t	167 t
Total use of land		553 ha	553 ha	553 ha
	Total sealed area	53 ha	53 ha	53 ha
	Total nature-oriented area on site	500 ha	500 ha	500 ha
	Total nature-oriented area off-site ⁵⁾	1,550 ha	1,550 ha	1,550 ha

¹⁾ See UPM Corporate Environmental and Societal Responsibility Statement for more information.
²⁾ Dry weight
³⁾ In 2023 UPM purchased more energy than usual as a consequence of the turbine failure.
⁴⁾ Fray Bentos permission refers to BOD₅. BOD₅ can be estimated (195 t for 2025).
⁵⁾ Corresponds to Mafalda protected area, included in the National System of Protected Areas as a requirement for the mill's environmental authorization. This area is managed by UPM Forestal Oriental.

Environmental objectives

- Among the objectives set for 2025, the following can be highlighted:
- Continue transparent and effective proactive communication of environmental issues to all stakeholders.
 - Contribute to UPM's corporate commitment to environmental responsibility.
 - Promote environmental awareness within the mill, its main suppliers and partners, and all subcontractors working in mill area.
 - Comply with the key environmental indicators defined for 2025 (see below).
 - Renew the environmental authorization for operation (AAO)

Performance against targets in 2025

	Target	Achievement*	
COD discharge to the river (annual average)	≤ 5 kg/ADt	Achieved	Stable operation
Effluent discharge to the river (annual average)	≤ 20 m³/ADt	Achieved	Stable operation
Total phosphorus discharge to the river (annual average) Phosphorus sludge disposal at landfill	≤ 55 Kg/d ≤ 250 t /month (annual average)	Achieved	Optimization of phosphorous removal and stable operation
Availability of strong odorous gases handling (annual average)	≥ 99.9%	Achieved	Stable operation
Availability of mild odorous gases handling (annual average)	≥ 99.5%	Achieved	Stable operation
Amount of permit exceedances	None	Not achieved	One exceedance (see Water)

* see page 6 for more details

Targets for 2026

	Target	Focus actions
COD discharge to the river (annual average)	≤ 5 kg/ADt	Stable operations without significant disturbances
Effluent discharge to the river (annual average)	≤ 20 m³/ADt	Stable operations without significant disturbances
Total phosphorus discharge to the river (annual average)	≤ 55 Kg/d	Continue optimizing cleaning process, keeping good performance in phosphorous precipitation system
Phosphorus sludge disposal at landfill	≤ 250 t /month (annual average)	
Availability of strong odorous gases handling (annual average)	≥ 99.9%	Stable operation without significant disturbances
Availability of mild odorous gases handling (annual average)	≥ 99.5%	Stable operation without significant disturbances
Amount of permit exceedances	None	Stable operations



Validation statement

As an accredited environmental verifier (FI-V-0001), Kiwa Sertifointi Oy has examined the environmental management system and UPM Fray Bentos Environmental and Societal Responsibility 2025 statement as well as the information concerning UPM Fray Bentos in the UPM Corporate Environmental and Societal Responsibility Statement 2025.

On the basis of this examination, the environmental verifier has herewith confirmed on 2026-04-13 that the environmental management system, the UPM Fray Bentos Environmental and Societal Responsibility 2025 statement and the information concerning UPM Fray Bentos in the UPM Corporate Environmental and Societal Responsibility Statement 2025 are in compliance with the requirements of the EMAS Regulation (EC) No 1221/2009.

UPM Fray Bentos

Ruta Vladimir Roslik Km. 307
65,000 Fray Bentos
Tel. +598 456 20100

For further information,
please contact:
Silvia Bentancur
Environmental Manager
Tel. +598 98 028 219
silvia.bentancur@upm.com

Marcelo Cardozo
Communications Manager
Tel. +598 99 108 316
marcelo.cardozo@upm.com