

JULP DIRECT

In summer 2019 UPM announced the investment decision to construct a 2.1 million tonne greenfield eucalyptus pulp mill – their second – in Uruguay. That's a mere 17 months ago but, boy, has the world changed since!



he investment announcement set things in motion on several fronts. The mill site began buzzing near the rural communities of Paso de los Toros and Centenario. Work kicked off in the port of Montevideo for a modern port terminal with direct rail access. A sizable housing project to accommodate 5,000+ workers went into high gear and is well underway. At the same a new nursery being built near the town of Sarandi del Yì will take raw material supply security to the next level.

And then, of course, there's the global pandemic that affects every decision we make.

Gonzalo Giambruno, Director, Uruguay Development Project, says that to keep a project of this magnitude on track and on schedule they must have a diverse and committed professional team.



"There's plenty happening all around Uruguay. A lot of moving parts. Over 16 active working sites are keeping us busy, but everything is proceeding according to plan."

One of the clearest indicators of the ever-intensifying construction work is the amount of people working on different sites.

"The number of workers involved in the project is growing month by month. Today we have over 2,500 working at the mill site, in housing and the port of Montevideo. As the plans progress, every month we need 400-500 more workers. By the end of the year there will be about 3,000 of us and next year we will employ directly more than 6,000," Giambruno explains.

At this stage of the project most of the workers are locals. Even though the upcoming steps will involve more specialised foreign companies and experts, Uruguayans will play a major role in building UPM's second world class mill in their country.

Giambruno – a Uruguayan himself – says that they have prepared themselves well. This means both learning from their past achievements in Fray Bentos and training for the future challenges in Paso de los Toros.

"We know what it takes to plan, build and run a modern pulp mill. At the same time we have engaged in intensive training and updating local competences in different disciplines. The training courses are channelled through Uruguay's National Employment and Training Institute INEFOP."

Visible progress

The work has been at full swing now in Uruguay for months, but up until now most of the construction has been done 'below the surface'. This has included preparing the soil and laying the foundations of the mill, housing and other buildings. The new pulp terminal in Montevideo has been dredged and backfilled to a deep-sea level.

"In recent months we have finally began to grow upwards. We have completed most of the concrete work. The civil construction work that includes, for example, roads and other infrastructure is proceeding as planned," Gonzalo Giambruno says.

continued on page 2 »



Full speed ahead...

« continued from page 1

Perhaps the most noticeable sign of progress is the mill's flue-gas stack soaring to the skies. The chimney has been growing at the rate of 20 centimetres per hour around the clock to its maximum height of 127 metres.

At the port the piers, tank and unloading areas as well as warehouses are taking shape.

Housing for the workers is an integral part of the whole project. According to Giambruno the majority of the accommodation is ready and will be finished by the beginning of 2021.

"The housing must be completed before people start coming en masse. We need to generate capacity to house over 5,000 workers near the mill site."

That's a huge temporary jump in population in the area. The communities near the mill site are relatively small, with 13,000 inhabitants in Paso de los Toros, 1,000 in Centenario and Carlos Reyles and 40,000 in Durazno.

While the housing is being completed, the next steps are to strengthen external services so that local communities will be able to host the project.

As part of the agreement between UPM and the government of Uruguay, road and rail infrastructure improvements are also proceeding.

"The road and railway from Montevideo go side by side most of the journey to Paso de los Toros. When traveling from the capital to central Uruguay, you will spot an impressive number of construction sites," Giambruno says.

Coping with COVID-19

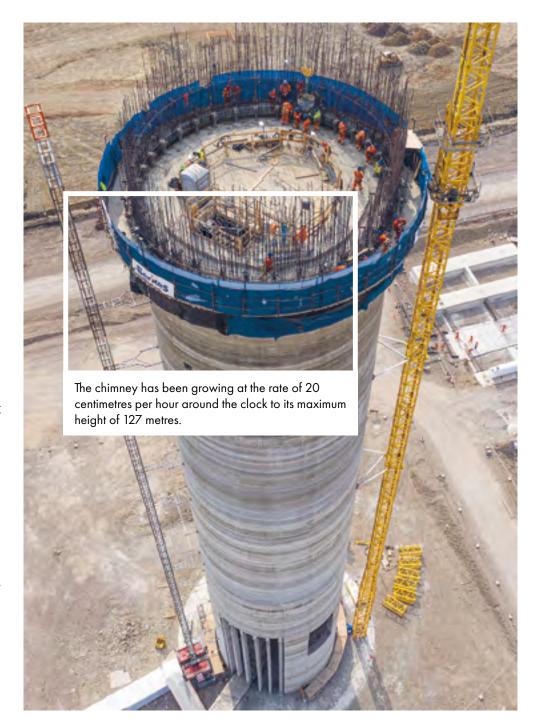
Uruguay has been one of the best performers in Latin America – even in the world – coping with the coronavirus. Compared to its neighbouring countries Uruguay has had only a fraction of active cases at any given time.

"That's a big achievement, but with a pandemic like COVID-19 everything can change very quickly. We need to remain focused and vigilant," Gonzalo Giambruno points out.

So far Uruguay hasn't imposed a mandatory lockdown of any sort. The country's successful COVID strategy has been simple yet effective. The government requested people to keep their lives as normal as possible, but at the same time to be responsible in every action they take, big and small.

"We have actually taken the same approach in our project. The work has continued uninterrupted since everybody is going out of their way with extra precautions," Giambruno says.

The first step was to change their way of thinking and working. This meant shifting from a centralised approach into a teambased and compartmentalised concept. You will always be working, living, commuting and eating within a same small group of people, no matter which construction site you are assigned to. If there's a positive coronavirus case only a limited number of people will have been in contact with that person. They can be easily isolated, tested







and followed up without infecting the whole site.

Most of the workers – especially at this stage of the project – are young and generally healthy. They may be completely symptomless and still carry the virus.

"In addition to random testing everyone gets tested when they start working on any of the construction sites. And thanks to the latest Finnish-made technology we get samples reliably analysed within 20 minutes," Giambruno reveals.

Besides successfully adapting and integrating global best COVID-19 practices, the Uruguay project has also benefited from what has been learned in UPM's Chinese operations.

"They were at the forefront of the first virus outbreak. They had first-hand knowledge how to manage the situation, so we naturally took all the things that worked well and implemented them for us."

Positive overall attitude

UPM has hosted over 150 meetings with different stakeholders and more than 20 open sessions in communities this year alone. Sharing information, aligning expectations and explaining how the project affects people's daily lives.

"Like every large undertaking, the mill project has raised questions, but we

welcome active interaction. Generally the attitude has been supportive, positive and optimistic, especially now in a time of global economy instability due to COVID-19," Gonzalo Giambruno says.

Since this is UPM's second mill project in Uruguay most of the people already know what to expect.

"It used to be difficult for locals to fathom what benefits a pulp value chain would bring to a country – or even what it is. Now people understand what kind of impact a pulp mill creates when its operations are tightly integrated within the surrounding communities. It brings prosperity and permanent employment opportunities."

Giambruno describes the new mill as a customer-focused project. Designed from the ground up to produce the right qualities and quantities of UPM Euca based on the present technical specification. The mill will also have the same high level of certification you have become accustomed to getting from the UPM Fray Bentos mill.

"Fray Bentos has been producing hardwood pulp reliably since 2007. We will have almost 15 years of experience in pulp making in Uruguay when the Paso de los Toros mill starts up. And our customers will be able to take full advantage of that experience."



ne could say that plantation-based wood production – and forestry as a whole – are in their infancy in Uruguay. Sparked by the national Forestry Act that was ratified in 1987, plantations have become the prime source of wood fibres. Recognising the potential of plantation forestry Kymmene Oy (one of the companies that form UPM today) was among the first corporations to start growing eucalyptus in Uruguay in the early 90s. Today UPM owns, leases and manages over 290,000 hectares of plantable areas in the country.

The Forestry Act sets strict rules for plantation design and structure.

This includes location, tree types and identifying suitable forestry soils for plantation development as well as safe zones around roads, native forests and waterways. Every single plantation project must be approved by the Uruguayan Forestry Office before planting and since

2005 also by the Environmental Office.

"Over the years UPM has had front row seats to witness the stellar progress of Uruguay's forestry sector. But we have also been a major contributor in this development," says **Alvaro Fitipaldo**, Director Forestry Operations, UPM Uruguay.

The grand idea behind the Act was to establish a critical mass of plantations for the needs of the wood processing industry. At the same time the legislation strove to create new jobs in Uruguay's rural areas and maximise productivity of the land.

"In addition to promoting and identifying priority zones for plantations the national Forestry Act also protects native forests. There's no competition between the two forest types," Fitipaldo explains.

Plantations are established on former grazing lands and currently cover about 1 million hectares which is only 6% of the



country's total area. Uruguay's native forests are all protected, and they typically grow on riversides and other lowlands. In fact, the area of native forests has been steadily increasing over the past decades.

Perfect conditions for plantations

Conditions for growing eucalyptus are optimal in Uruguay. Eucalyptus' fast growth rate and rotation time of 10 years make it the preferred plantation tree.

Eucalyptus is also one of the most efficient plants in the world in terms of water and nutrients needed to produce a unit of biomass.

"According to several independent studies and our own monitoring, eucalyptus plantations don't have noticeable effects on the water dynamics in Uruguay. Here the annual rainfall of 1,200 to 1,500 mm is more than enough to support wood cultivation. The country is located within a temperate climate zone so there are no rain forests in Uruguay either," Fitipaldo says.

The amounts and types of agrochemicals used in UPM's plantations are all strictly within FSC® certification limits.

"We apply agricultural chemicals only during the first year after planting and maintain distances to water streams and native forests. This further decreases risks of nutrient runoffs," Fitipaldo states.

UPM has been breeding the most suitable and adaptable eucalyptus genotypes since the 90s.

"As a result, our fast-growing and well-balanced Eucalyptus grandis and Eucalyptus dunnii species provide high quality wood for pulp production," says Fitipaldo, who is also in charge of wood logistics for the UPM Fray Bentos pulp mill – and in the future for the UPM Paso de los Toros mill.

The new mill will be located in central Uruguay in Durazno. This means that its wood supply must be there too.

"We have been developing plantations in the area for years and we are already in a good position to supply the Paso de los Toros mill."





The best in the forest and paper industry

PM has continued its impressive performance in the Dow Jones European and World Sustainability Indices (DJSI). The company was again listed as the forest and paper industry leader for 2020-2021.

What makes this year's achievement even more notable is the fact that a record number of companies participated in the 2020 Corporate Sustainability Assessment (CSA). This goes to show that responsible business is both good for the planet but also recognised as a clear competitive advantage. As organisations continue to incorporate sustainability into their strategies, S&P Global, the market intelligence company that issues the CSA results, has introduced more stringent rules. This sets the bar even higher for inclusion in the Dow Jones Sustainability Indices.

To seal their top spot, UPM became one of the world's first forest industry companies to commit to the UN's Business Ambition for 1.5°C and to science-based measures to mitigate global warming. As part of UPM's Biofore approach they also established a Green Finance Framework and integrated responsibility targets of sustainable forest management, emission reductions and innovative bioeconomy products into the company's long term financing. ∞

Joining the fight against climate change

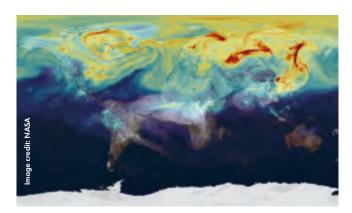
Time is running out fast on mitigating climate change. UPM has stepped up and pledged to pursue science-based measures to limit global temperature rise to 1.5°C.

ccording to the latest IPCC Special Report limiting global warming requires immediate actions. This is why UPM has committed among the first global forest industry companies to the UN Global Compact's Business Ambition for 1.5°C.

But what does it take to limit temperature increase to 1.5°C? On a global level greenhouse gas (GHG) emissions need to halve by 2030 and drop to net zero by 2050. These are hefty but reachable targets.

The Finnish Meteorological Institute has created several models that projected how different climate change scenarios would impact UPM's business environments in Finland, Uruguay and China. Even in best-case scenarios extreme weather conditions, droughts and forest fires could become more common.

In Finland, for example, mean temperature is projected to increase by about 4°C (1°C to 6°C) in winter and slightly over 2°C (1°C to 4°C) in summer. A warmer climate would



BUSINESS 1.5°C



likely result in accelerated forest growth but also increase the prevalence of pests in forests. More temperate and shorter winters could also increase the difficulty of harvesting trees using heavy forest machinery.

How will UPM reach its commitment goals?

Tangible tools in UPM's arsenal battling climate change and driving value creation include novel product innovations, sustainable forestry practices and commitment to a 65% CO₂ emission reduction.

The company has a long track record in innovating climate-positive products and turning them into growing businesses. One great example of this is UPM BioVerno that is used for replacing fossil raw materials in traffic fuels and chemicals. The renewable bio feedstock is made from crude tall oil which is a residue of the pulp making process.

Responsible, climate-positive forestry has always been one of the cornerstones of UPM's success and business continuity - but also its climate work. UPM ensures its own forests grow more than they are harvested. And in the future the company will also report annually on the carbon sink levels of its forests. The annual average carbon sink of UPM's forests in Finland has been 1.3 million tonnes of CO_a equivalent over the last five years.

Decreasing the use of fossil fuels is a key part of the Business Ambition for 1.5°C pledge. UPM has reviewed its opportunities for reducing GHG emissions using existing technologies and analysed the financial impact of each carbon action.

Based on this assessment UPM committed to reduce its CO_o emissions from fuels and purchased electricity by 65% from 2015 levels by 2030. In addition the company aims to reduce the emission levels of its supply chain by 30%.



We make fibres for the future

This is UPM Pulp's promise to you. It perfectly encapsulates the company's two cornerstones: meeting the global demand for sustainable materials as well as customers' need for reliable, responsible partners.

"Fibres for the future means long term supply security. Our customers can count on UPM Pulp's ability to provide renewable raw materials - so that their own customers will be able to create sustainable products the world craves," Bernd Eikens, Executive Vice President, UPM Biorefining says.

UPM recognises the responsibility that comes with using natural resources we all share and depend on. Forests are a renewable but not unlimited resource – and vitally important to life on earth. This is why UPM is committed to climate positive forestry, making sure to always grow more trees than they use. And taking concrete actions every day to foster biodiversity.

"We believe this marks the beginning of a new era. Pulp is a material of the future and plays a key role in finding non-fossil alternatives. I would like to thank our customers for being part of the solution together with us," Eikens concludes. 😂



The year 2020 is drawing to an end – and what a year it has been. Plenty of challenges for all of us, regardless where we live or work, and still no definite end in sight. With more positive signs on the horizon lately we can however begin to hope for a brighter year ahead of us.

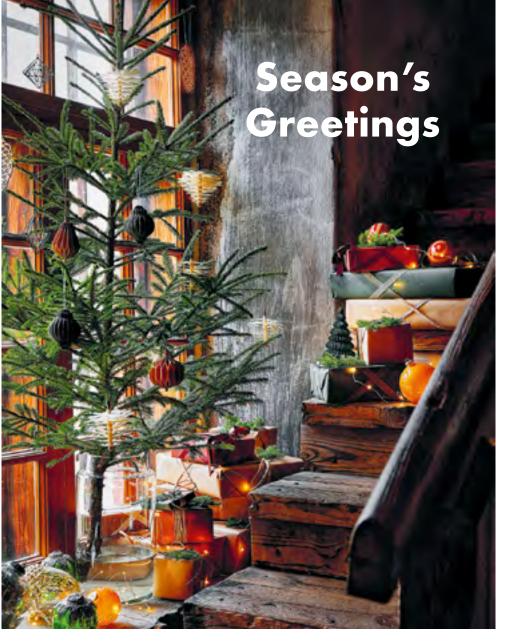
One piece of good news is that the construction of the UPM Paso de los Toros pulp mill in Uruguay proceeds according to plan and we will continue reporting on developments with this project.

Another positive piece of news for us at UPM Pulp was the nice feedback you gave us in our recent customer survey – rest assured it will encourage us to continue improving our performance going forward! We will also be developing our "Fibres for the Future" concept even further, and keeping you updated through our regular communication channels - Pulp Direct, enewsletter, LinkedIn and webinars as well as the personal meetings that we hope to be able to have again soon.

Wishing you all a Merry Christmas and a Better New Year!

Tomas Wiklund

Vice President, Sales and Marketing



Editor-in-chief: Tomas Wiklund

Editor: Sari Hörkkö

Writer: Niko Kilkki

Contact: UPM Pulp, Marketing, pulp@upm.com, upmpulp.com





