

Wifi network Griffin_Visitor

What you will see these days

MONDAY 25.11

Montevideo port terminal



Gonzalo Giambruno
Director, Industrial
Logistics

TUESDAY 26.11

Paso de los Toros pulp mill



Federico Mantiñan
Mill General Manager

WEDNESDAY 27.11

Plantations and Sarandí del Yí nursery



Álvaro Fitipaldo
Director, Forestry
Operations

UPM Fray Bentos started the modern pulp industry in Uruguay



World class pulp mill, reference in the industry



**~1.3 million ADt
per year BEKP**
with operations start-up
in 2007



8% of energy
generation in
Uruguay



**On-site production
of bleaching
chemicals**

for UPM Fray Bentos and
UPM Paso de los Toros
by Kemira facilities

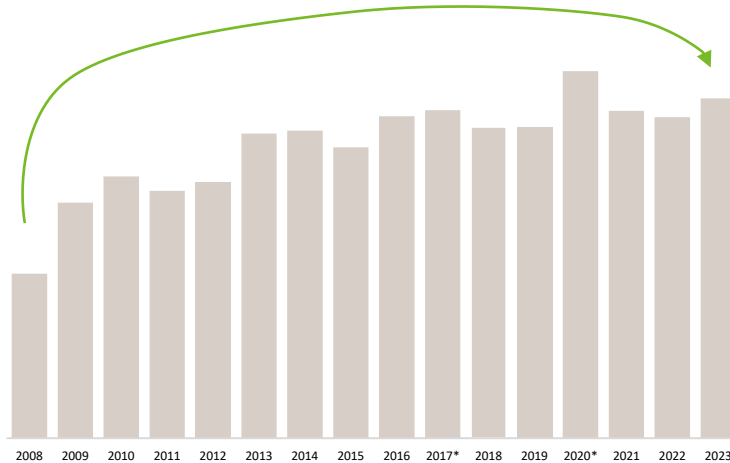


500
people working
daily at the mill



Modern mill based on operational excellence

Minor debottlenecking investments between 2010-2016



Comprehensive approach to continuous development since start-up

in all operational aspects of safety, environmental
performance and productivity



+30% production against design capacity



-35% use of water per ton of pulp



-5% wood consumption per ton of pulp

FRB environmental performance – an industry benchmark to follow in PDT



#1

water requirement
and effluent
discharge per ton

#3

Phosphorous
discharge, below
the minimum of the
BAT range

Continuous
development of
process through
focused R&D



Euca research capabilities to support long-term development



Pulping and bleaching pilot testing, wood chemistry and fibre properties

Evaluation and selection of clones in integrated work with Forestry R&D - commercial deployment based on the value chain approach

Evaluation of planned wood supply to the mills and correlation with mill performance and pulp properties

Lab pilot facilities also used for mill process development studies and circular economy projects

UPM Paso de los Toros mill takes UPM operations to a new era



UPM Paso de los Toros – new world-class pulp mill



**~2.1 million ADt
per year BEKP**
capitalizing on 15 years of
experience in Uruguay



April 2023
start-up



**High energy-
efficiency design**
producing a surplus
electricity of 1,3 TWh/a
(10% of total energy
consumed in Uruguay)



600
people working
daily at the mill

1000
people entering
daily at the mill



UPM Paso de los Toros reached full production



1

In April, the **railway from the mill** to UPM's port terminal in Montevideo was taken into use

2

The mill **reached nominal capacity** for a full month before the first maintenance shutdown

3

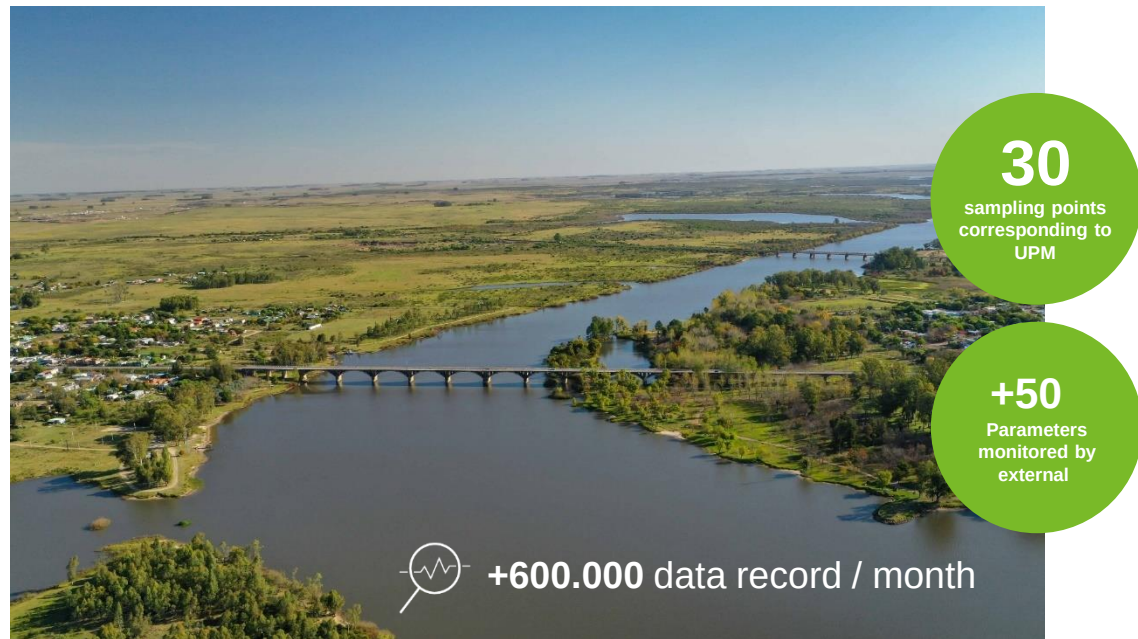
The first **general maintenance shutdown** was taken in June as scheduled

4

Now the mill has moved from ramp-up to **regular production**



Extensive monitoring of the environment in the area prior to and after mill operation



Broader and intensive monitoring than in the Uruguay river

Rigorous baseline study before the mill start-up

- Water quality and sediments of Río Negro river
- Groundwater and soil
- Air quality and noise
- Socioeconomic variables

Uruguay environmental authorities receive **online data**

Continuous monitoring of environmental performance and impact on environment

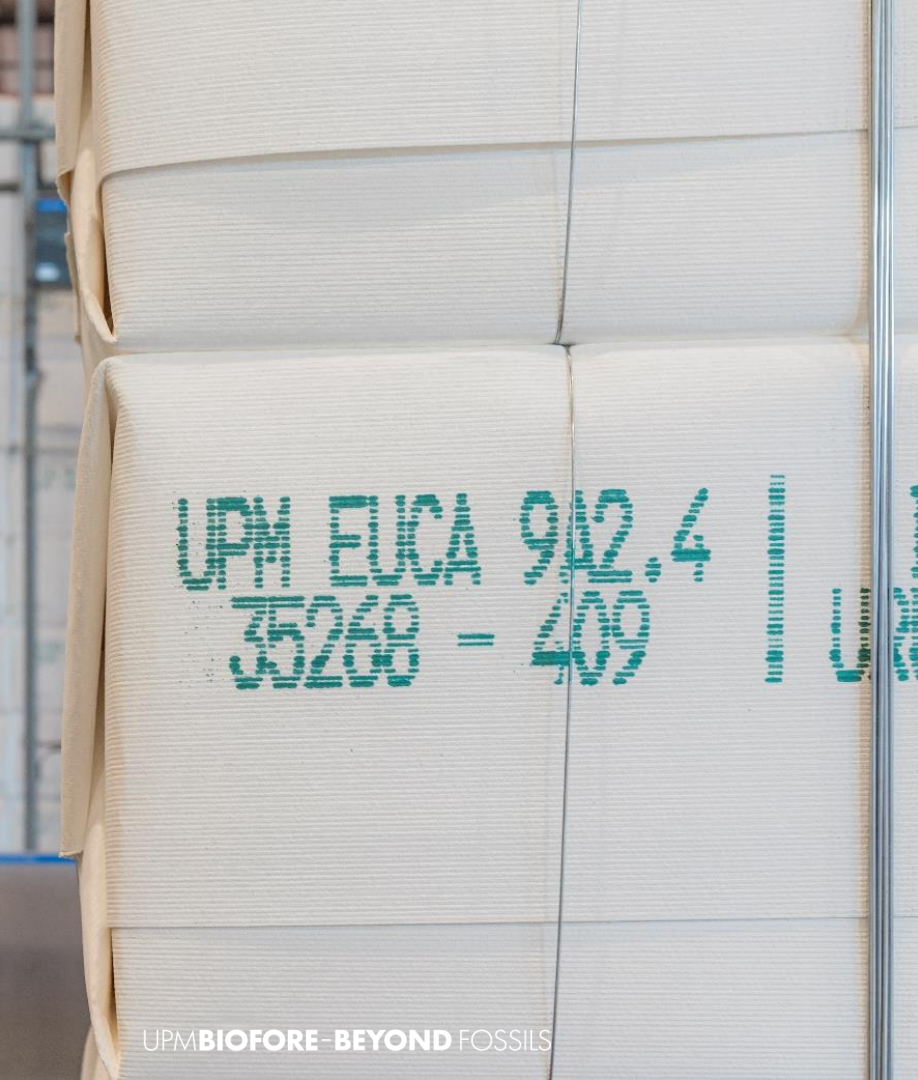


Uruguay environmental authorities receive **online data**

Broader and more intensive monitoring than in the Uruguay River

Based on **more than 15 years of monitoring experience** in Fray Bentos





UPM Euca is a well established short fibre in the market



- Equivalent paper making properties from FRB and PDT
- Excellent quality, stability and good runnability
- High tensile strength compared to standard eucalyptus grades
- Quick refinability
- Good softness for tissue

Pulp logistics- from Paso de los Toros to the world

~270 kilometres between
Paso de los Toros and Montevideo

A map of Uruguay with a black line representing the railway route from Paso de los Toros in the north to Montevideo in the south. Along this route, there are four circular icons: a factory (at Paso de los Toros), a truck, a train, and a port (at Montevideo). A dashed blue line extends from Montevideo to three small globe icons labeled "Global markets".

UPM Paso de los Toros

Montevideo

Global
markets



7+7 trains/day

1 train every 2 hours
Direct access to port
terminal



Alternative pulp
road transportation

Used across several end-uses in all main markets



- Tissue 62%
- Specialty 22%
- Board 8%
- Printing & Writing 8%

North America	10%
New Markets	10%
Europe	25%
Asia Pacific	55%

Woodhandling

Wood cleaning and chip production
4 chipping lines and biomass storage
1 large chip-pile

Effluent treatment

Primary and secondary treatment

White liquor plant

Recausticizing process with 2 lime kilns

Water treatment

Flotation units and sand filters, drinking water
and demineralized water. Cooling water service

Black liquor evaporation

7 effects to concentrate black liquor

**Truck/Train chemical
unloading & storage**

Recovery Boiler & Power Boiler

Recovery of process chemicals (Na/S), production
of steam and electricity through 2 steam turbines
Biomass and solids into electricity

Fibreline

ECF bleaching technology

Drying / Bailing

2 pulp drying machines
6 baling lines

Wagon loading hall

500m closed hall for train loading
operation with 2 cranes

State-of-the-art mill design

Safety first



Please follow the safety instructions given to you



Wear the required Personal Protective Equipment in all instructed areas



Stay with your host and follow instructions



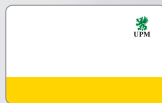
Mind the steps, hold onto the railings



Smoking, alcohol and other intoxicating substances are prohibited on the premises



Photography, videotaping and recording are prohibited without UPM permission



Keep your visitor badge visible



UPM **BIOFORE**
BEYOND FOSSILS

