



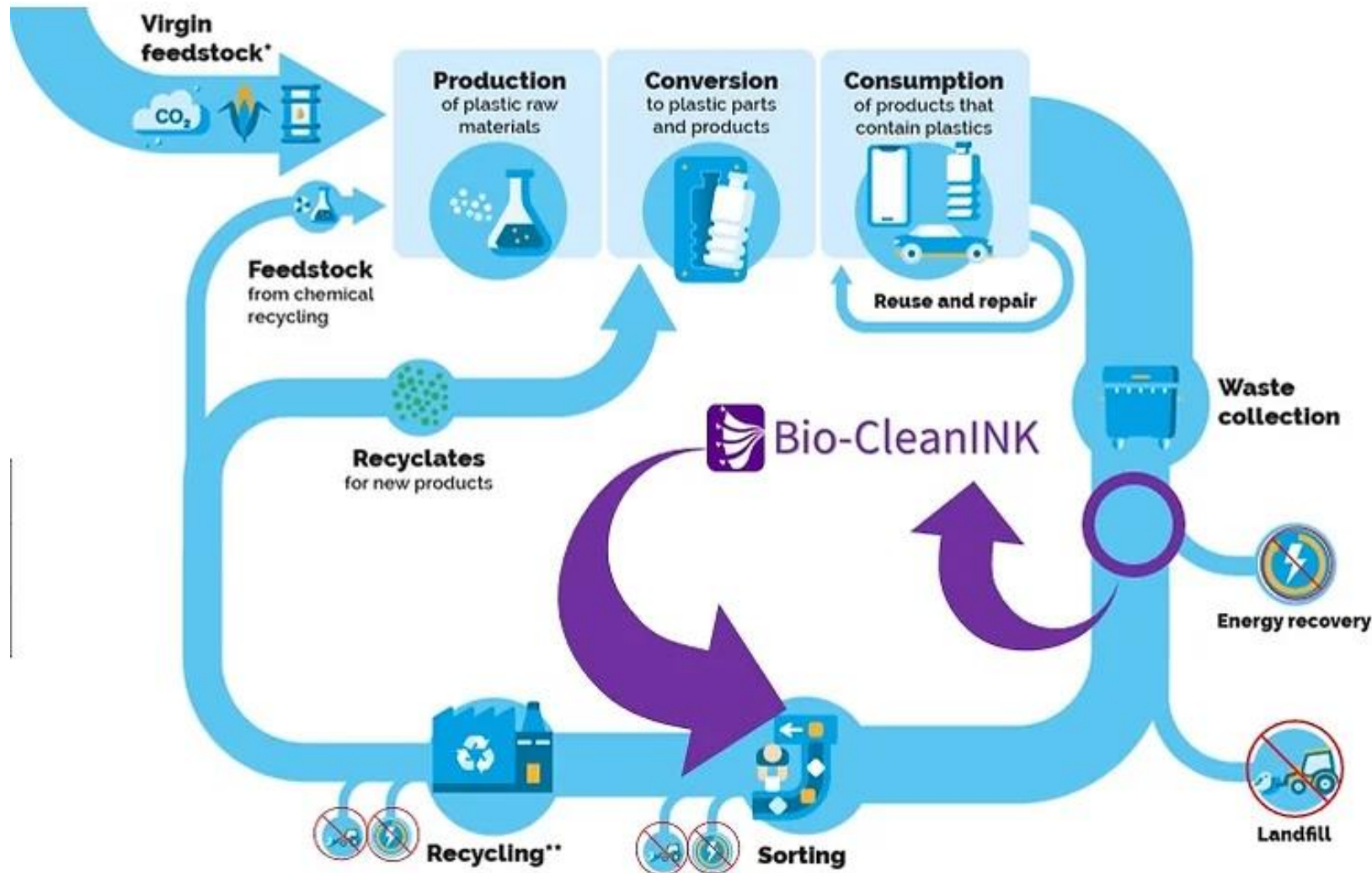
Bio Clean INK

Enabling circular plastic

**WHAT HAPPENS
WITH THE
PACKAGE OF
YOUR FAVORITE
CHOCOLATE
BAR?**

BIO-CLEANINK

How we influence the lifecycle of plastic films?



We remove:

- Inks
- Adhesives
- Primers

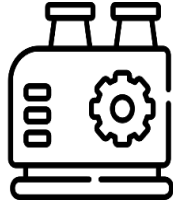

**From almost
any kind of
monolayer
and
multilayer
plastic film.**

We sell technology directly

Wasted plastic film
with ink or laminated



Bio-CleanINK

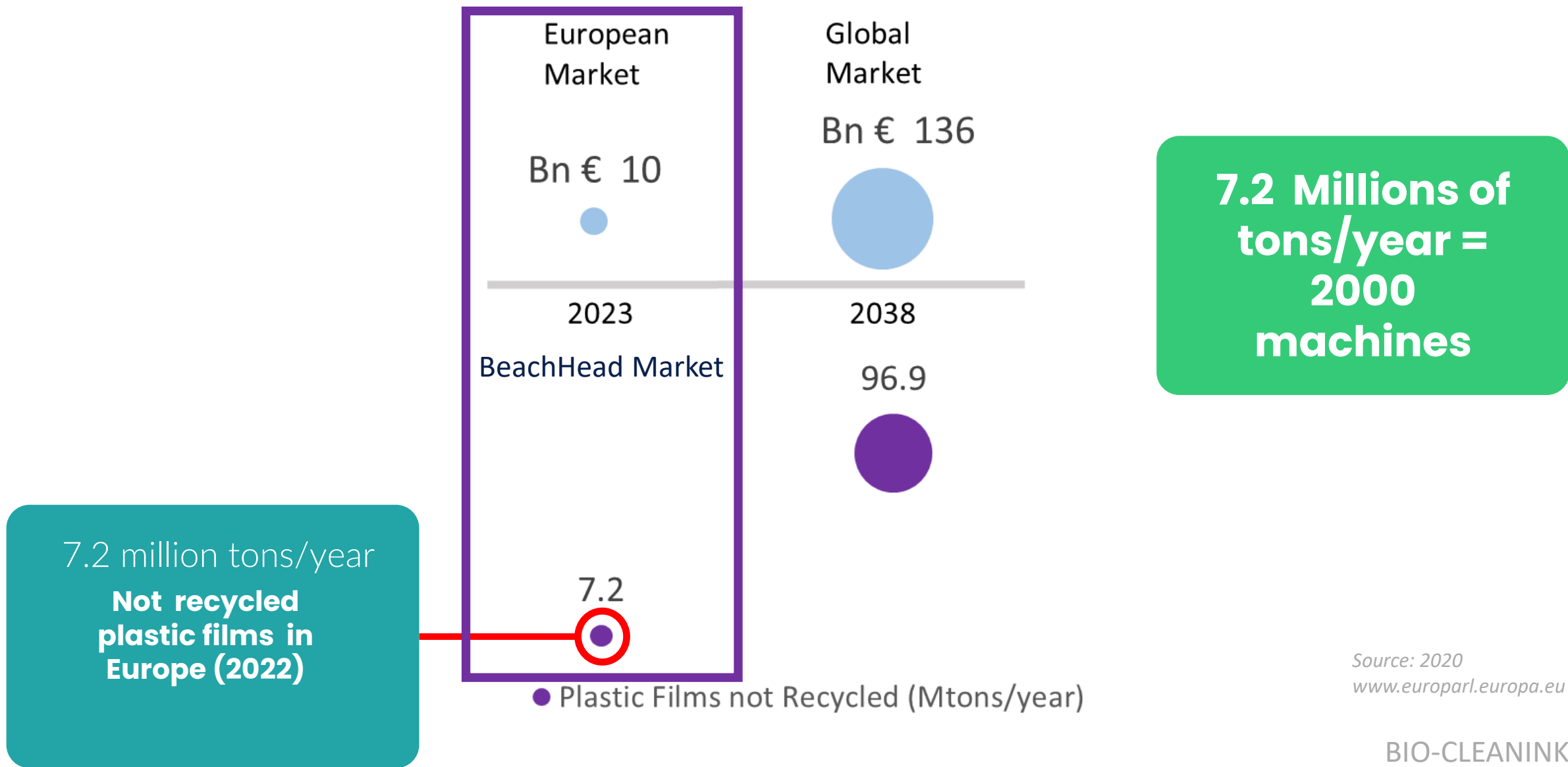
Machine	De-inking Liquid
	
€600K	€ 0.25/L

Plastic pellets



DEAL

Customers: Waste Management And Recycling Companies

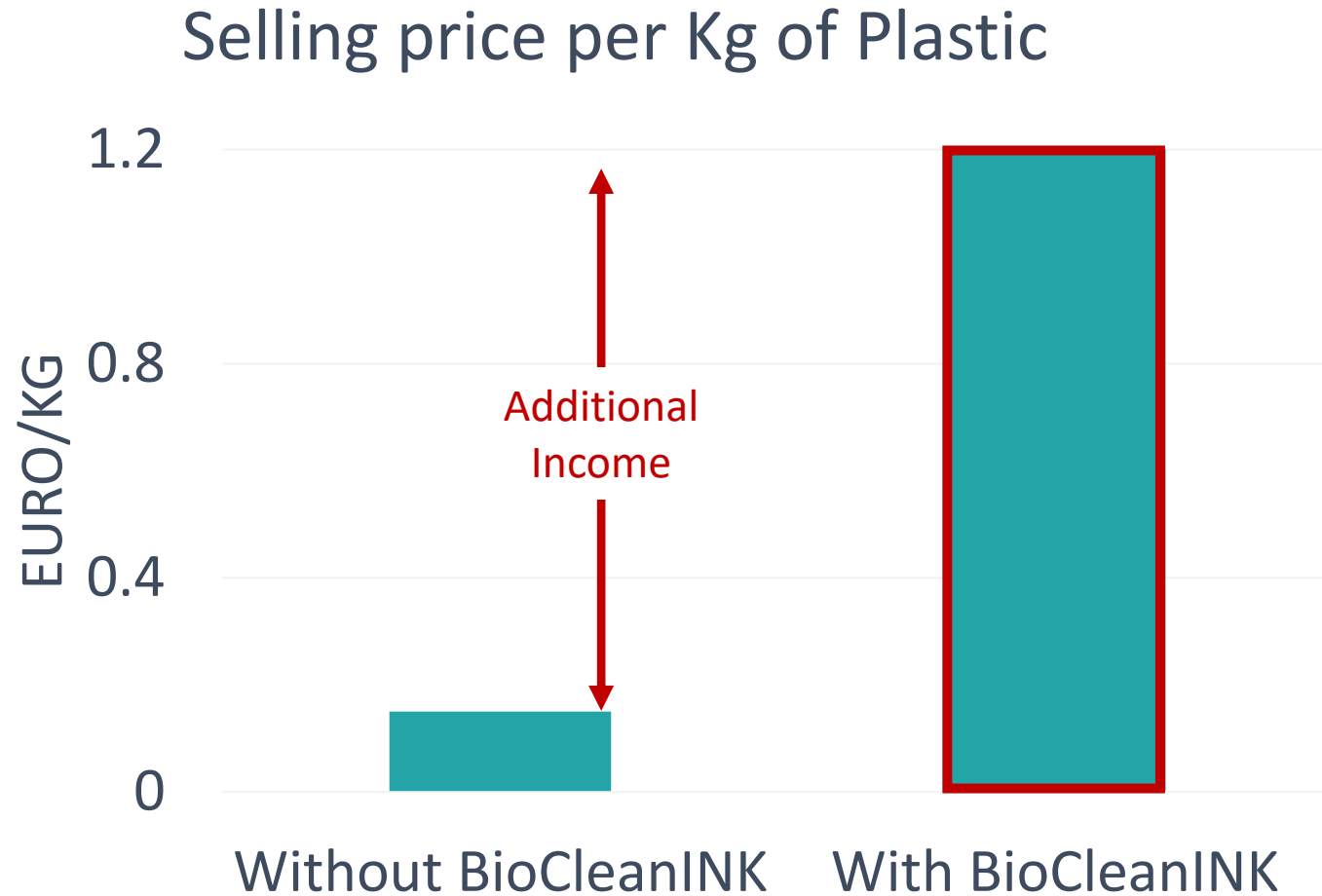


Source: 2020
www.europarl.europa.eu

Enable customers to access high-value markets with an economical add-on

Our Clients

get a higher price for the same kg of plastic

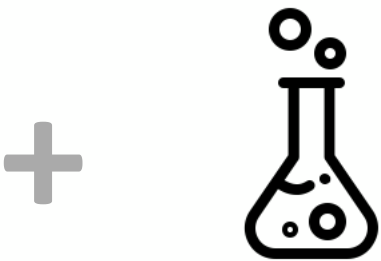


VALUE PROPOSITION

We developed an innovative method to process plastic film waste

The Product

Pilot plant 500Kg/h.



The Machine

Water base De-inking Liquid

The Process



NO toxic
subproducts

Deinking & Extracting different layers

BIO-CLEANINK



Technical facts from our pilot plant:

Water use	0.06	L/kg
Cost energy/kg	0.01	euro/kg
Electricity per kg	0.16	Kwh/Kg
Carbon footprint	0.026	CO2 kg- eq/kg
Kg plastic/kg cat	10	kg/kg cat

From Post-industrial waste or Post consume waste we can:

1

**Deinking monolayer plastic films and
shrink sleeves**

2

**Deinking and delamination of
laminated plastic films and shrink
sleeves**

3

**Deinking and delamination of
multilayer packaging**

What does our end user desires?

Interviews

- 6 Recycling machine producers
- 5 Waste management and recycling companies.

Key Learnings

- They pay to send plastic to landfill
- They pay to send plastic to Energy Recovery
- They need high output process

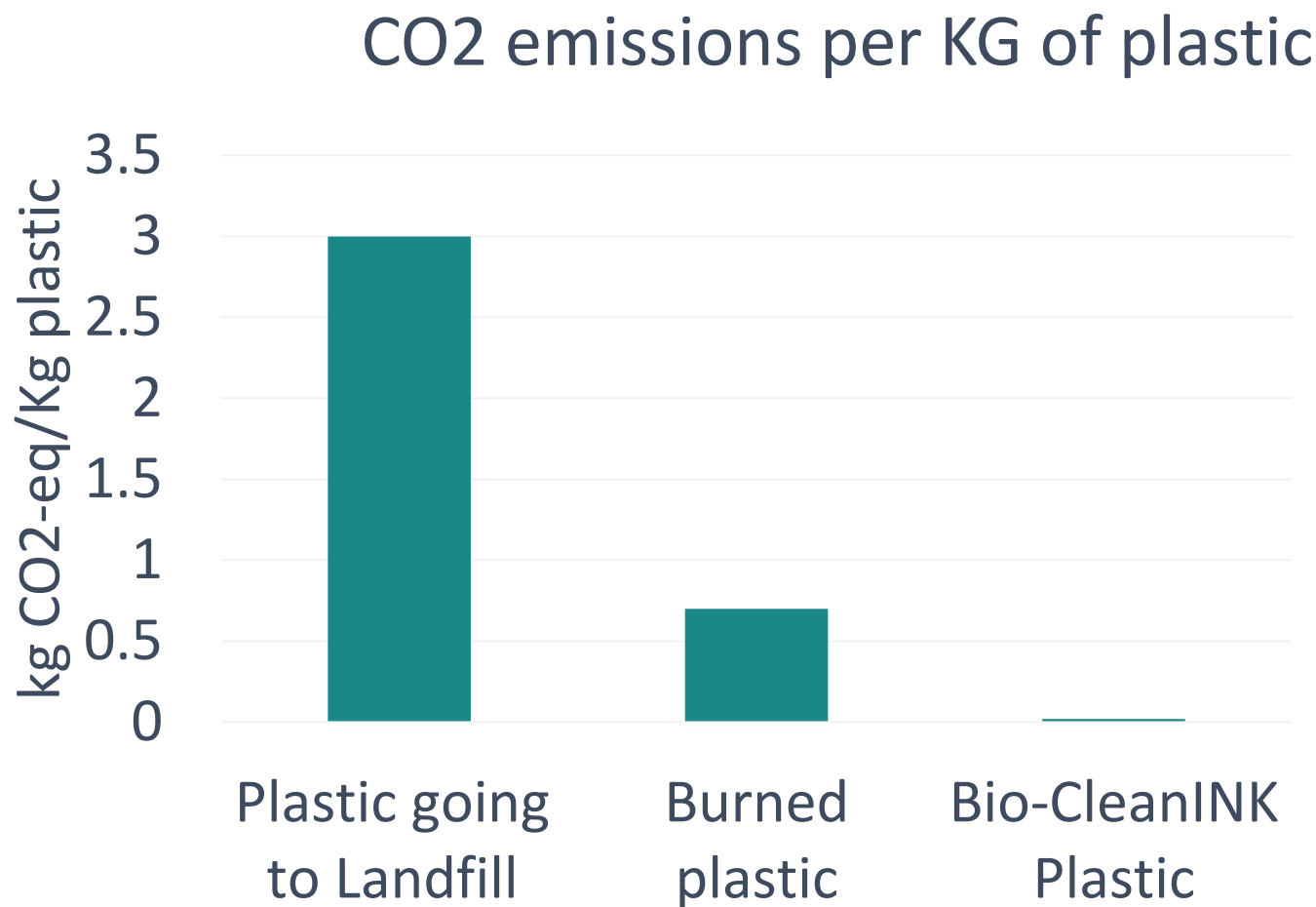
Key assumptions

- Inked plastic films pose a recycling challenge
- Deinked recycled plastic is a high value product

Climate Impact

Reducing new plastic production by enabling plastic film circularity.

Reducing 349
MT CO₂-Eq/per year





What we have next in mind:

- Validation of European Market.
- find key players in the sector.
- Installation pilot plant in Netherlands for at least 500 kg/h fulfilling the European standards.
- Establish food safety standard of the process
- Define a method to predict the processing conditions of the recycled plastic material coming from our process.

The Team



Julian Zamudio
Business Developer

Msc. Environmental Technology
Entrepreneur



Andres Calderon
CEO

Chemical Engineer
B2B Sales expert



Jorge Millan
COO

Chemical Engineer
Researcher

Our Mission

- Decrease plastic pollution and make plastic valuable by de-inking 10% of the plastic film packaging produced in the world (7.2 Mill -Ton/year)
- Generate steady revenue by 2028: 6 million euros/year.
- Go to developing countries and contribute to grow jobs in the sector by plastic sorting.