



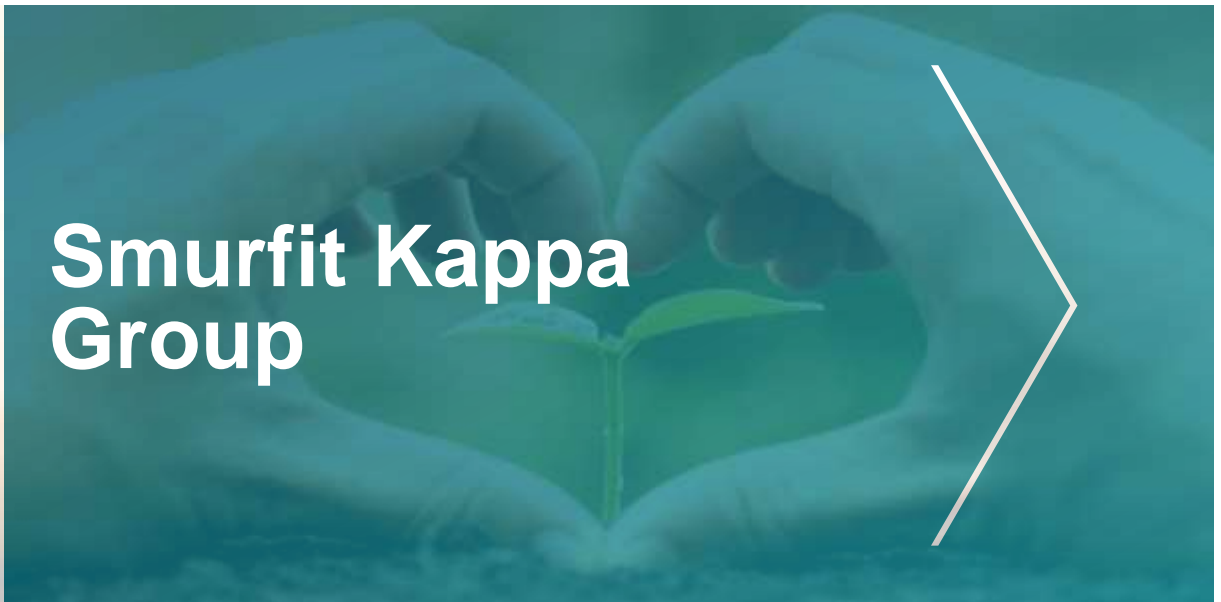
Better Planet Packaging

The Smurfit Kappa Innovation Journey to Open the Future of Sustainable Packaging

4th SCREEN INTERNATIONAL WORKSHOP
Pedro Mendarozketa – General Manager Smurfit Kappa Navarra

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PAPER | PACKAGING | SOLUTIONS

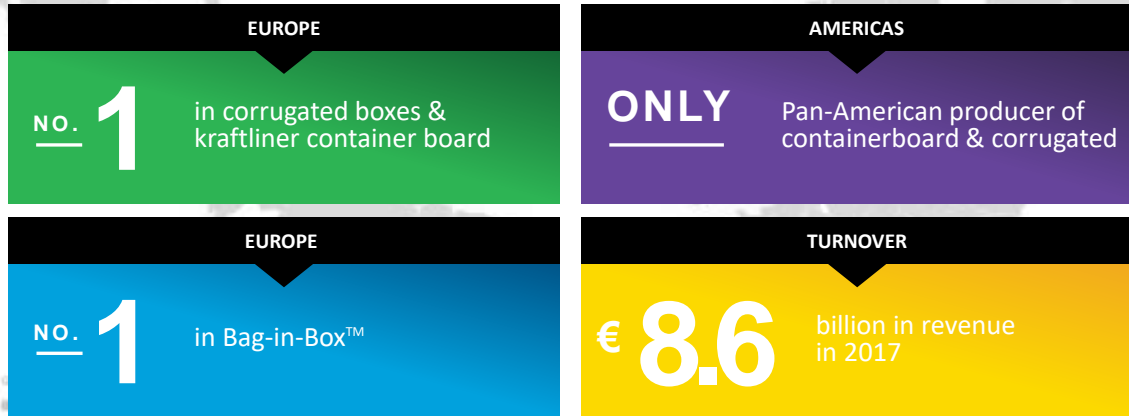


Smurfit Kappa Group

2 PAPER | PACKAGING | SOLUTIONS



At a glance



Geographic reach





Sustainability



Innovation and expertise

- ▶ Collective expertise of 700 designers around the world
- ▶ 7200 design solutions available
- ▶ World's largest packaging Experience Centre in Schiphol, The Netherlands
- ▶ Supported by a global network of 23 Experience Centres



7 PAPER | PACKAGING | SOLUTIONS

 Smurfit Kappa



8 PAPER | PACKAGING | SOLUTIONS

 Smurfit Kappa

Smurfit Kappa Sangüesa

82,500

tons

Turnover+ 100 million EUR Employees+250





With our annual production we can go around the world 50 times...





1

Biomass Boiler



1

Recovery Boiler



3

Paper Machines



+300

Customers

WATER QUALITY

72%

In reduction of the Chemical Oxygen Demand(DQO)

VIRGIN FIBRE

100%

Chain of custody standards

ELECTRICITY

+40%

Self-Generation



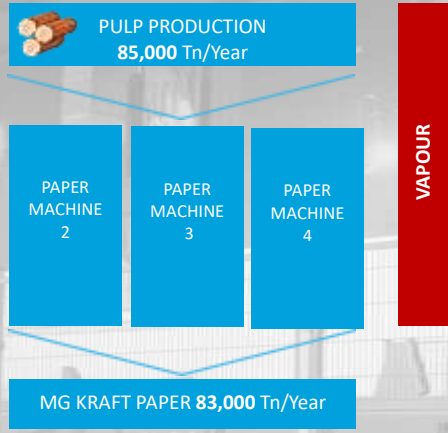
80% export

30% Market Share
(Europe)

1 product | MG KRAFT PAPER

Circular and Sustainable Production

Sangüesa | Integrated Mill for MG paper production



FOSSIL FUELS

165,000
CO²
TONS / YEAR

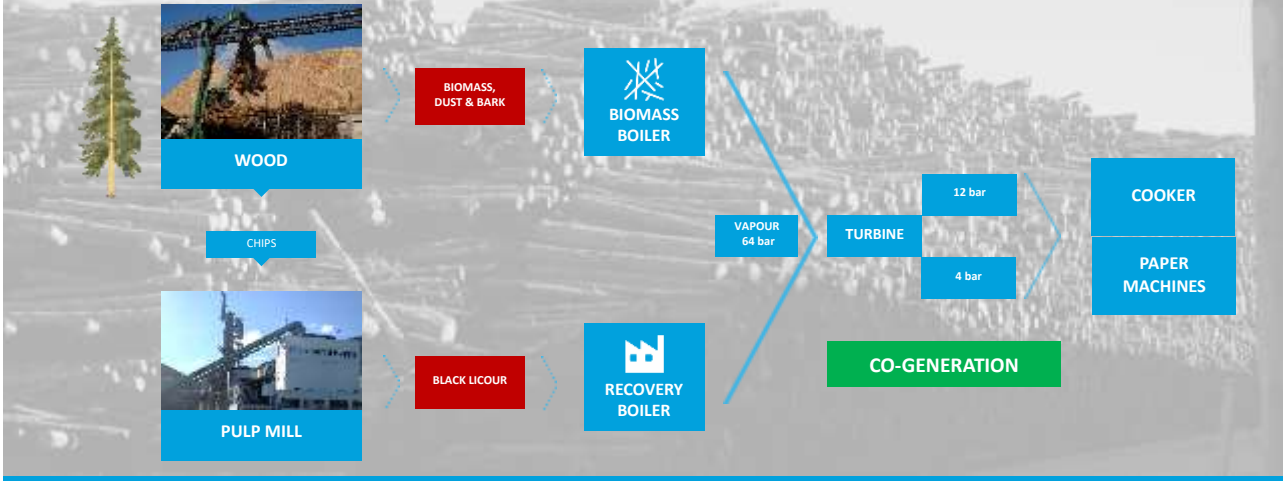
↓ VS ↓

12,000
CO²
TONS / YEAR

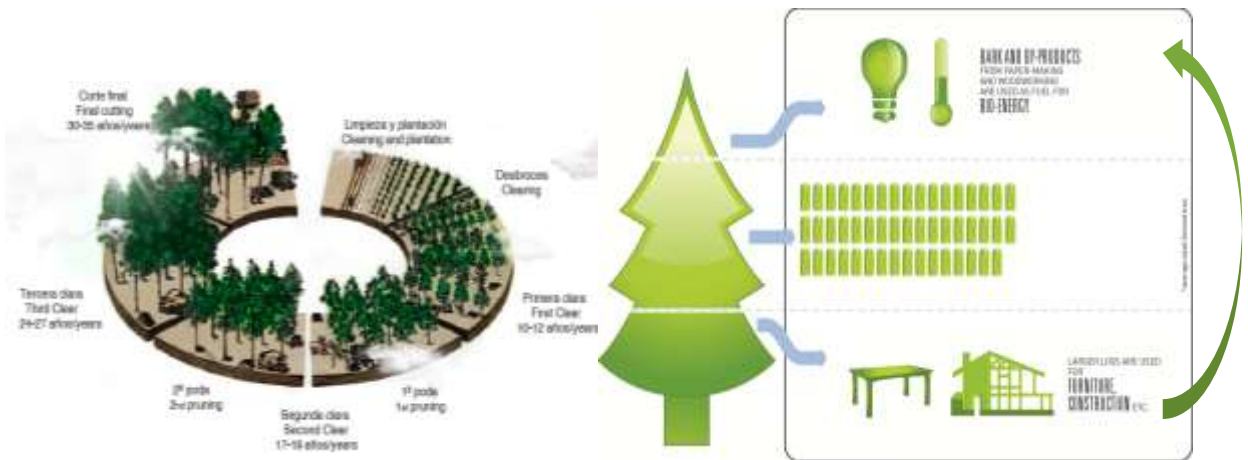
SMURFIT KAPPA SANGÜESA

How do we achieve it?

Integrated Mill | Highlighting the Circular Economy



Circular economy in Forestry Management





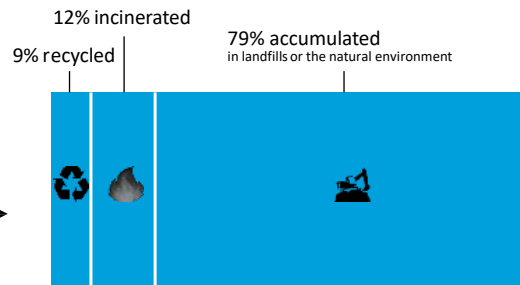
**Giving solutions
Solving the problem**

Some facts about plastic pollution

An estimated 8.3bn tonnes of virgin plastic has been produced to date



Approximately 5.8bn tonnes of plastic waste has been generated



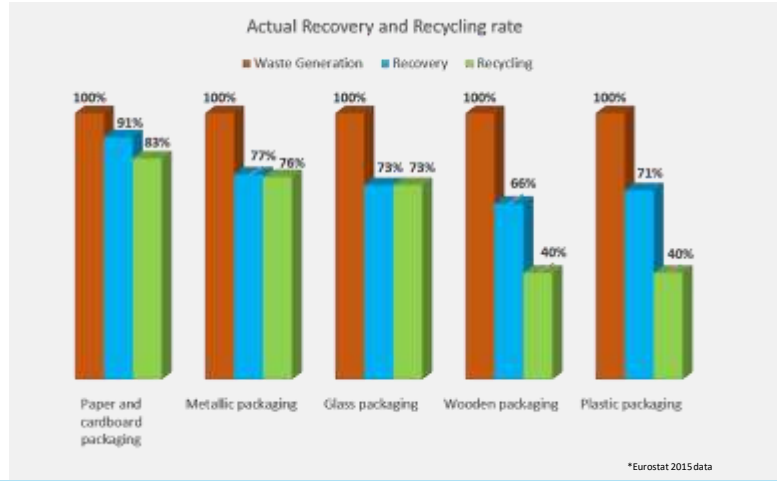
Source: Roland Geyer et al. Sci Adv 2017;3:e1700782

"This is a planetary crisis... we are ruining the ecosystem of the ocean,"

UN oceans chief, Lisa Svensson

The challenge is recovery

- ▶ 29% of the produced plastic packaging is not collected by any waste management system
- ▶ More recycling will probably not solve plastic pollution
 - Many plastic products have no economic value in today's recycling system (contamination, down cycling, etc.)
 - Can increase recycling keep pace with the increase in the use of plastic?



Fight against plastic packaging

The big problem

1 Packaging is a **major contributor** to the problem



Source: Plastics – the Facts 2016 – An analysis of European plastics production demand and waste data

The world is changing

Everybody is talking about the plastic problem

- 1 Packaging is a major contributor to the problem
- 2 Focus has shifted to some typical **single-use plastic products**



Current situation and outlook call for immediate action!

“ National Geographic has launched **PLANET OF PLASTIC?** a multi-year initiative to raise awareness of the global plastic crisis and encourage its community to take a pledge to reduce consumption of single-use plastic. Learn more at natgeo.com/planetofplastic. ”

Source: National Geographic

Reduce, Reuse, Replace, Recycle

How Major Brands are Committing to Sustainable Packaging



- ▶ 100% of packaging will come from renewable, recycled or certified sources by 2025.



- ▶ Recover and recycle bottles and cans equivalent to 75% of those that Coca-Cola introduces into developed markets.



- ▶ Eliminate 65,000 metric tons of packaging.



- ▶ Reducing packaging by 20% per consumer use.
- ▶ Ensuring 90% of packaging is recyclable.



- ▶ 100% of packaging is recyclable or reusable by 2025.
- ▶ Reduce the amount of packaging we use by 140,000 tons by 2020.



- ▶ Ensure all plastic packaging is designed to be reusable, recyclable or compostable by 2025.
- ▶ Reduce the weight of the packaging it uses this decade by one third by 2020.

<https://www.simplifymypackaging.com/home/2018/6/5/reduce-reuse-recycle-how-major-brands-are-committing-to-packaging-sustainability>

Smurfit Kappa

What can we do?

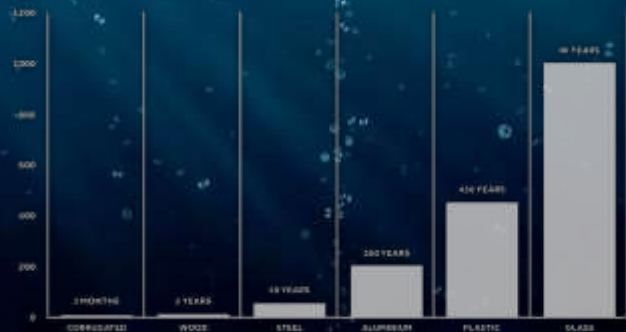
Better Planet Packaging

The world has opened up to the opportunity of paper based packaging

Being biodegradable is a material property Biodegrading in the ocean is sustainable

Paper-based packaging is in many applications the sustainable packaging of choice

Sustainable packaging should be no harm to our planet in any end of life scenario



Estimated decomposition rates of common marine debris items

*NOAA (National Oceanic and Atmospheric Administration US/ Woods Hole Sea Grant US)
*<http://www.walpole.com/blog/eco-friendly-packaging-and-compostable>

Future success depends on what you're made of

Short term opportunities to replace plastic by a material that is adaptable, could biodegrade within a period of months and cause no harm to our planet



SHRINK WRAP



PUNETTS



EPS FOAM



PLASTIC PALLETS



This year...

5.0 TRILLION

Plastic bags are consumed.
That means 160,000 per second.
Less than 1% are recycled

23

Source: <http://www.worldwatch.org/system/files/Plastic%20Bags.pdf>

Future success depends on what you're made of

Paper-based packaging is in many applications the sustainable packaging of choice

Biodegradable

Paper always biodegrades quickly, be it in controlled or uncontrolled end of life scenarios.

Renewable

Paper is 100% renewable in a sustainable way (environmentally, economically and socially).

Recyclable

High paper recycling rates give a low chance of used packaging becoming litter.



24

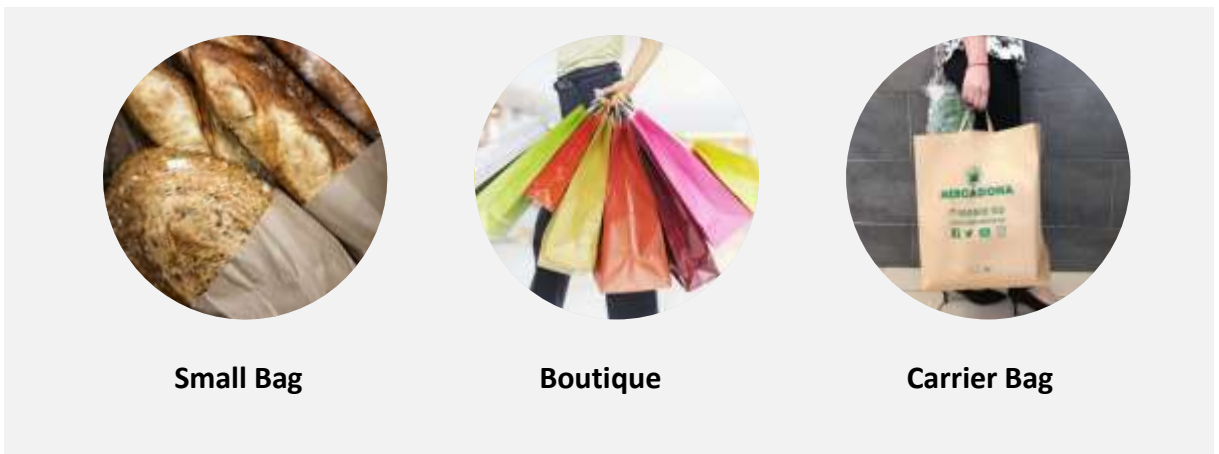
We have the solution: the paper bag...

What do consumers think?



Paper Bag

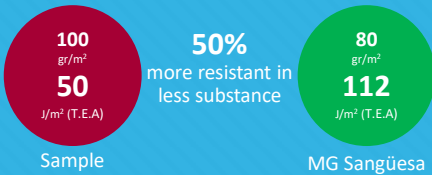
Leading the change in the world and in Navarra



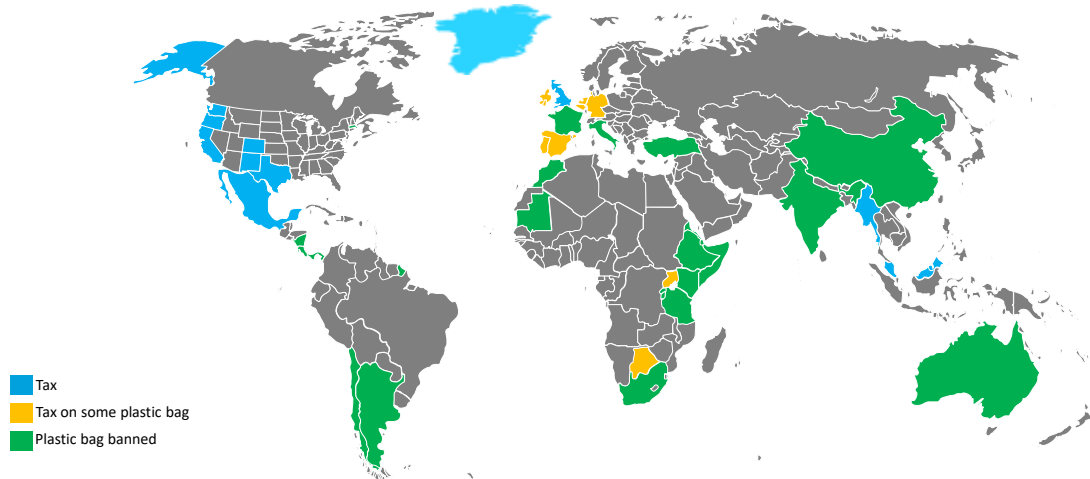
Paper Bag

Not all the papers give the right solution

- ▶ Long fibre.
- ▶ 100 % virgin.
- ▶ Good formation.
- ▶ Substance optimization.
- ▶ High tensile strength properties.



Acting against plastic bag pollution



JULY 2018

Paper Bag Day in Europe

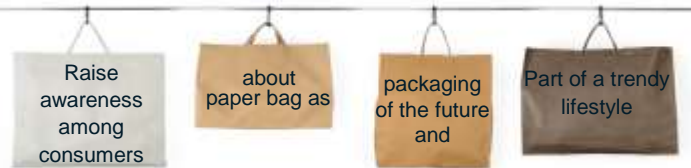
Navarra is leading that day in South Europe

October 18,
2018



Why to celebrate the European Paper Bag Day?

- ▶ Paper bags are the packaging of the future. They are strong and reliable shopping companions for all occasions. They carry almost anything – from food, fashion, luxury and decorative items to pharmaceuticals and electronics – and can hold up to 12 kg. Furthermore, they are also pleasant to handle and touch.
- ▶ But paper bags do a lot more. Paper bags are reusable, recyclable, biodegradable and made from renewable resources – they are environmentally-friendly. In a world facing changing requirements due to globalization, climate change and scarcity of raw materials, consumers engage in living a healthy and sustainable lifestyle. By using paper bags, they do. By reusing and recycling them, they do even more so. Taking responsibility for the environment can be that simple – and it is one of the megatrends in our society.
- ▶ By celebrating the European Paper Bag Day, we want to convince more people to be trendy and use paper bags. We invite them to combine the happiness from a great shopping experience with a good conscience for the environment.



The paper based solution that ends up smelling of roses

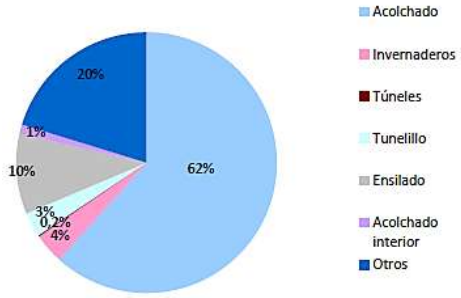


16 ENERO 2018
Carretera Tafalla-Olite

Agriculture

Waste generation in Navarra

TIPOS DE PLASTICOS GENERACIÓN SEGÚN SU USO



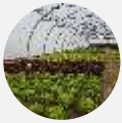
EVOLUCIÓN DE LA GENERACIÓN Y GESTIÓN DE RPVA



► ¿Waste management or avoid it?

Mulching project

Real problem to solve



Mulching project

CURRENT SOLUTION



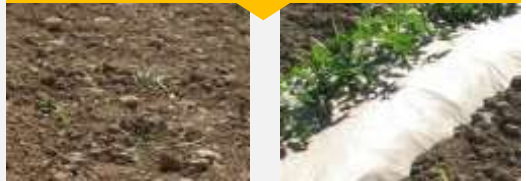
WASTE & WEEDS PERFORATION PROBLEMS



OUR PROPOSAL



PROBLEMS SOLVED



Mulching project

Testing our paper-based solution



Key Drivers vs Plastic solution

- > Special paper based solution made from virgin fibres.
- > Better weed control.
- > Storable without losing properties.
- > Sustainable and Eco-Friendly.
- > Biodegradable as Compost.



Mulching project

Highlighting Circular Economy



- ▶ It's not necessary to remove the paper.
- ▶ The farmer could plough the land with the paper.
- ▶ The paper will act as compost for the land, improving its quality.



Banana project

Replacing the plastic...



- > Price reduction vs PE solution.
- > Transport costs optimization.
- > Waste fee reduction.
- > Environmentally friendly.





**Non-biodegradable
packaging's days
are numbered**



Smurfit Kappa believes the best way to open the future of sustainable packaging is **to create it**

