

# How Sustainability will help you to keep the pace in the Yogurt category

**2019 SPRING CONFERENCE**

May 9<sup>th</sup>, Shropshire



# Who is Amcor?

Global leader in Flexible and Rigid packaging



US  
\$ **9.5**  
**billion**  
annual sales

**31,000+**

**Co-workers** globally



Operations across



**43**

HQ in  
Zurich

**countries**



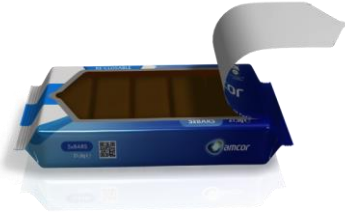
**200+**  
manufacturing  
sites worldwide

- **Mktg/Innovation** team
- Dedicated **R&D**
- **Bi-lingual Account** team
- **Field Technical Service**
- **Sustainability** team



# Who is Amcor?

## We Believe in Responsible Packaging



### Packaging preserves freshness

- Maintains brand promise as defender of product quality
- Reduces food waste from production to consumption

**FRESHER**



### Lighter packaging means lower environmental impact

- Reduction in raw materials and fuel consumption (transportation)
- Less packaging ends up in landfills

**LIGHTER**



### Making products safe and easy to use

- Protective barrier drives shelf life making products safe for consumption well after production
- Resealable and reclosable packaging offer convenience and keep consumer in control

**SAFER**



### Smart packaging innovations are enhancing brand experiences and marketing tools

- Consumer engagement
- Brand Stories
- Consumer insights
- Security features
- Track and Trace

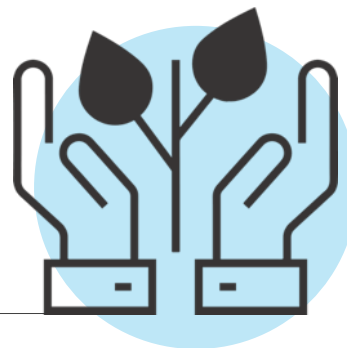
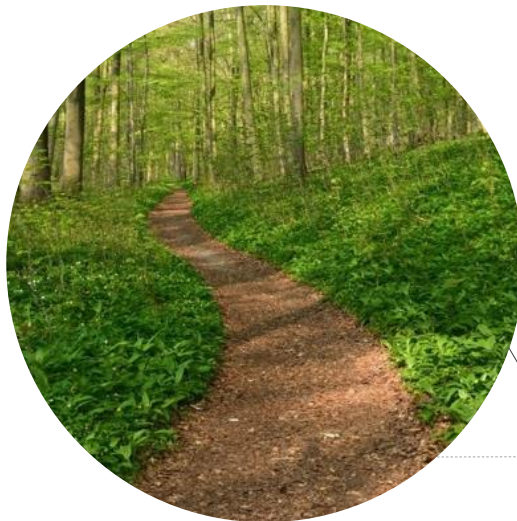
**SMARTER**

# Sustainability in a nutshell



**“The greatest threat to our planet is the belief that someone else will save it.”**

Robert Swan - Explorer and environmental activist

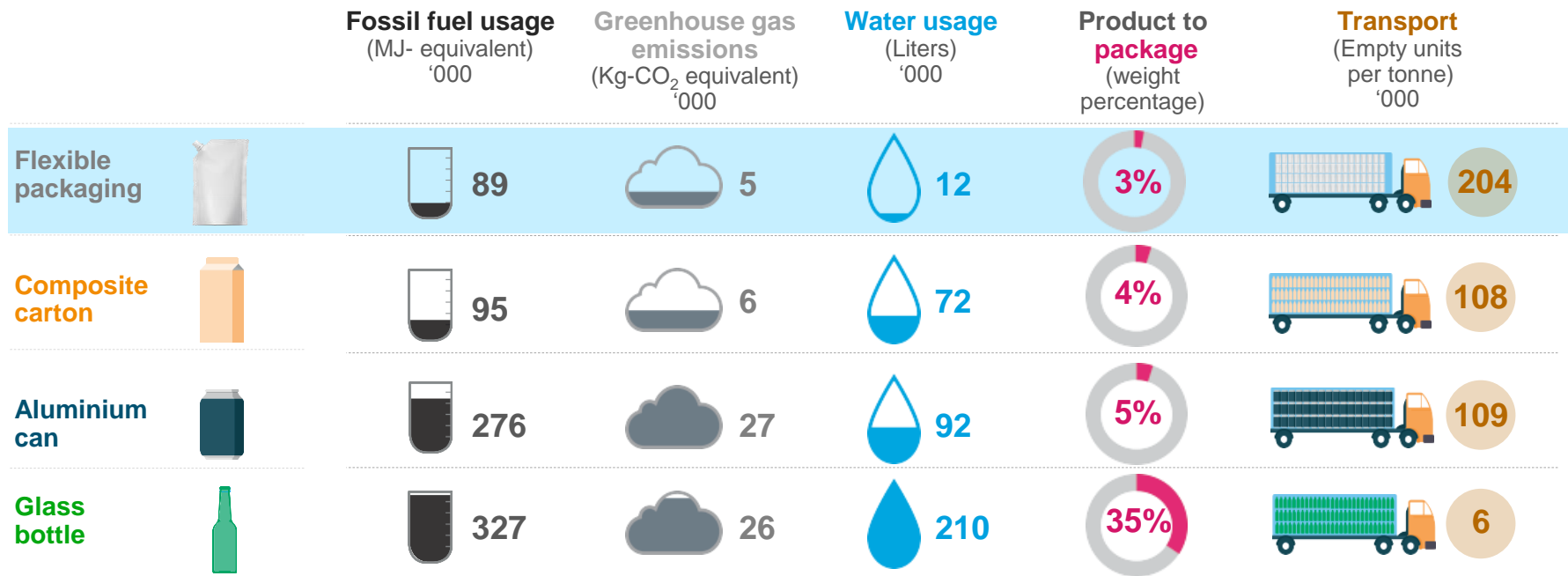


# Plastic packaging is the 'villain'



The 'villain' seems as pure as the driven snow...

## Plastic packaging typically has a lighter environmental footprint than other materials





...but still goes by a linear economy

And we need to address the “end of use”





# What's the real issue?

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Is it the packaging?



Is it the recycling  
infrastructure?



Is it collection and  
consumer behavior?



**We need all 3 for the packaging to be recycled**

# What can Amcor propose?

Deeper dive into our journey



## Develop all our packaging to be recyclable or reusable by 2025

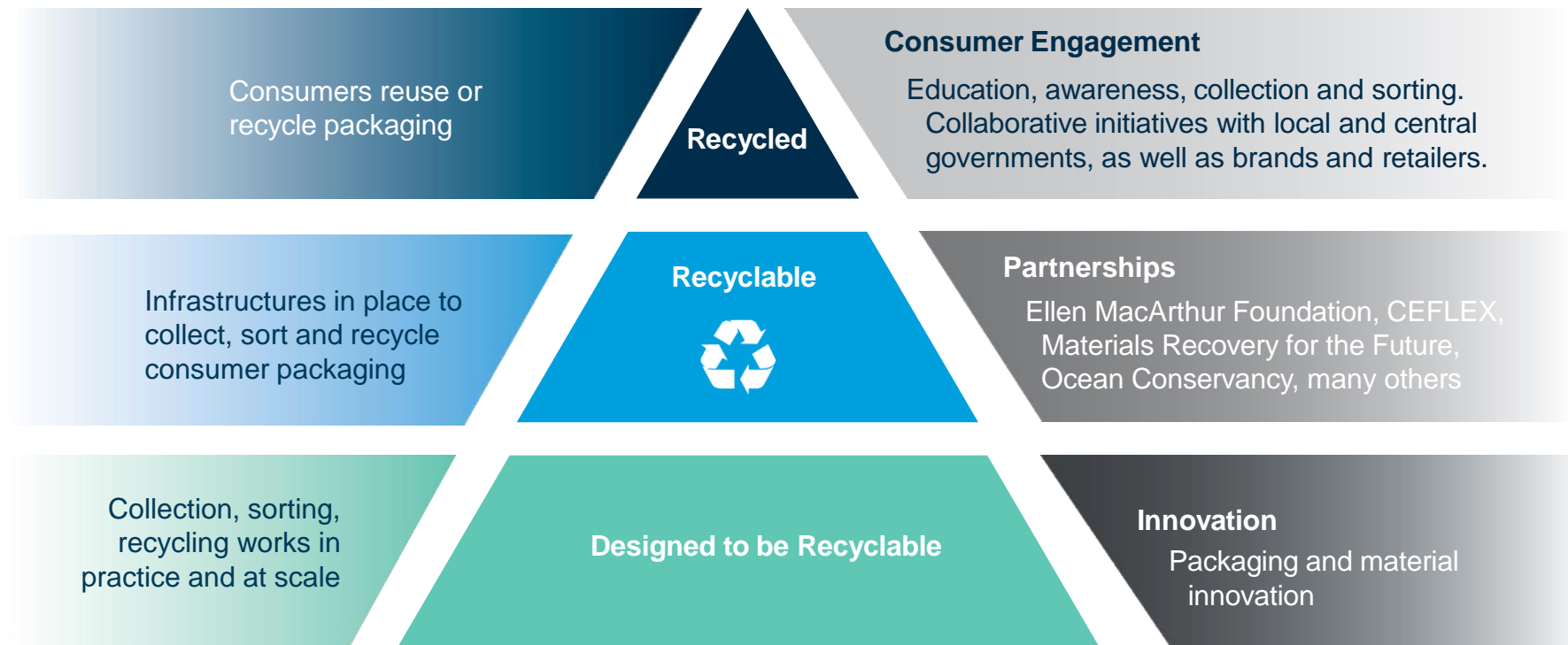
Develop all our packaging to be recyclable or reusable by 2025



Significantly increase our use of recycled materials in our packaging

Work with others to drive consistently greater worldwide recycling of packaging

# Sustainability for flexible packaging





# Our Partners: Working with influencers and industry for change

RECOUP



CEFLEX:  
Recycling  
of Flexibles



Keeping  
plastic waste  
out of the oceans



Defining a  
plastics economy  
in which plastics  
never become waste



Materials  
Recovery for the  
Future (MRFF):  
Collection and  
sorting of  
Flexibles



Increasing  
access to recycling  
infrastructure



**cyclos-HTP**  
Institut für Recyclingfähigkeit  
und Produktverantwortung



CITEO



## Our Products: Multiple options for more sustainable packaging





# Designing for recycling is the first step



**The majority of PE and PP packaging we make today is recyclable\***

## What is it?

- Designing packaging that meets recycling criteria AND has been proven to be recyclable in practice at large scale

## Why does it matter?

- Material science and informed design is the 1<sup>st</sup> step in making recycling possible
- Recycling is part of the circular economy – meaning instead of make/use/dispose it becomes make/use/remake
- It creates a supply of recycled materials that can replace virgin feedstock

## Good to know...

- EU Plastics Strategy: all packaging put on the EU market needs to be recycling-ready by 2030
- EU targets 55% recycling rate for plastic packaging by 2030
- UK Plastics Pact: 100% of plastic packaging to be reusable, recyclable or compostable by 2025

# Raw materials derived from plants

Source:  
**Sugar cane**



Result:  
**Pouch made with bio-based PE**

## What is bio-based material?

- Bio-plastics are made of renewable plant-based feedstock (like sugar cane) instead of depletable fossil fuels.
- Bio-based options for PE, OPP, PET, PLA. Paper and cellulose are bio-based too

## Why does bio-based material matter?

- Can significantly lower the pack's carbon footprint
- “Drop-in” bio-plastics, such as bio-PE, can replace conventional plastics with limited changes to the flexible packaging structure

## Good to know...

- Bio-based plastics are still plastic. Not all are compostable or recyclable.
- Bio-based materials are also available as certified responsibly sourced materials, e.g. ensuring that they don't compete with food production
- Ongoing research on using new bio-materials such PHA and PEF.



Concrete **delivers up to 30% carbon footprint reduction** vs. standard yogurt cup

## What is it?

- Packaging optimisation can be achieved by lightweighting (like Concrete), using alternative films, removing alu and metallised layers, optimizing processes and reducing waste (i.e. solvent recovery)

## Why does it matter?

- Minimizing carbon footprint helps address climate change and a product's overall lifecycle impact
- It can support customers' sustainability goals such as carbon footprint and water use reduction

## Good to know...

- Carbon footprint reduction claims are not as tangible to consumers vs. other claims (like compostable)
- Many consumers think glass or alu cans are better because they are recyclable – they don't know those materials have a heavier carbon footprint.
- Footprint improves even further with recyclable flexible packaging.

## Charta



Charta has an **outer paper layer made with FSC® (Forest Stewardship Council) certified paper** and a high barrier inner layer

### What is it?

- Independent certification that provides Amcor and our customers assurance that raw materials are responsibly sourced.
- Maintains independent standards for things like: fair labour, environmental controls, forest management, mining activities, agricultural management, etc.

### Why does it matter?

- Reduces risks in the supply chain
- Positive association for consumers to show the brand cares and is responsible.

### Good to know...

- Examples of certified materials we can supply: FSC paper, ASI aluminium, ISCC/Bonsucro bio-based PE
- 85% of our global procurement spend is with suppliers who are monitored by the Ecovadis program
- We're part of AIM-PROGRESS program for responsible sourcing

# Sustainability in Dairy

## Pragmatic approach on the Yogurt case...



# Step 1 // Design packaging to be recyclable



## Main structure/baseline

## Alternative

PAP/PET



OPP/PP



What is it?

Standard Lidding

Mono material Lidding

Recyclability

Not recyclable

Recyclable<sup>1</sup>

Carbon footprint

Lower carbon footprint



Water usage

Lower water usage



Additional Information

PET and PLA Cup also considered but very limited recycling infrastructure in main EU countries vs PP cup

Availability

Under Development



## Main structure/baseline

## Alternative

PAP/HM



OPP/HM



What is it?

Standard Banderole

Mono material Banderole

Recyclability

Not recyclable

Recyclable<sup>1</sup>

Carbon footprint

Lower carbon footprint



Water usage

Lower water usage



Additional Information

PET and PLA Cup also considered but very limited recycling infrastructure in main EU countries vs PP cup

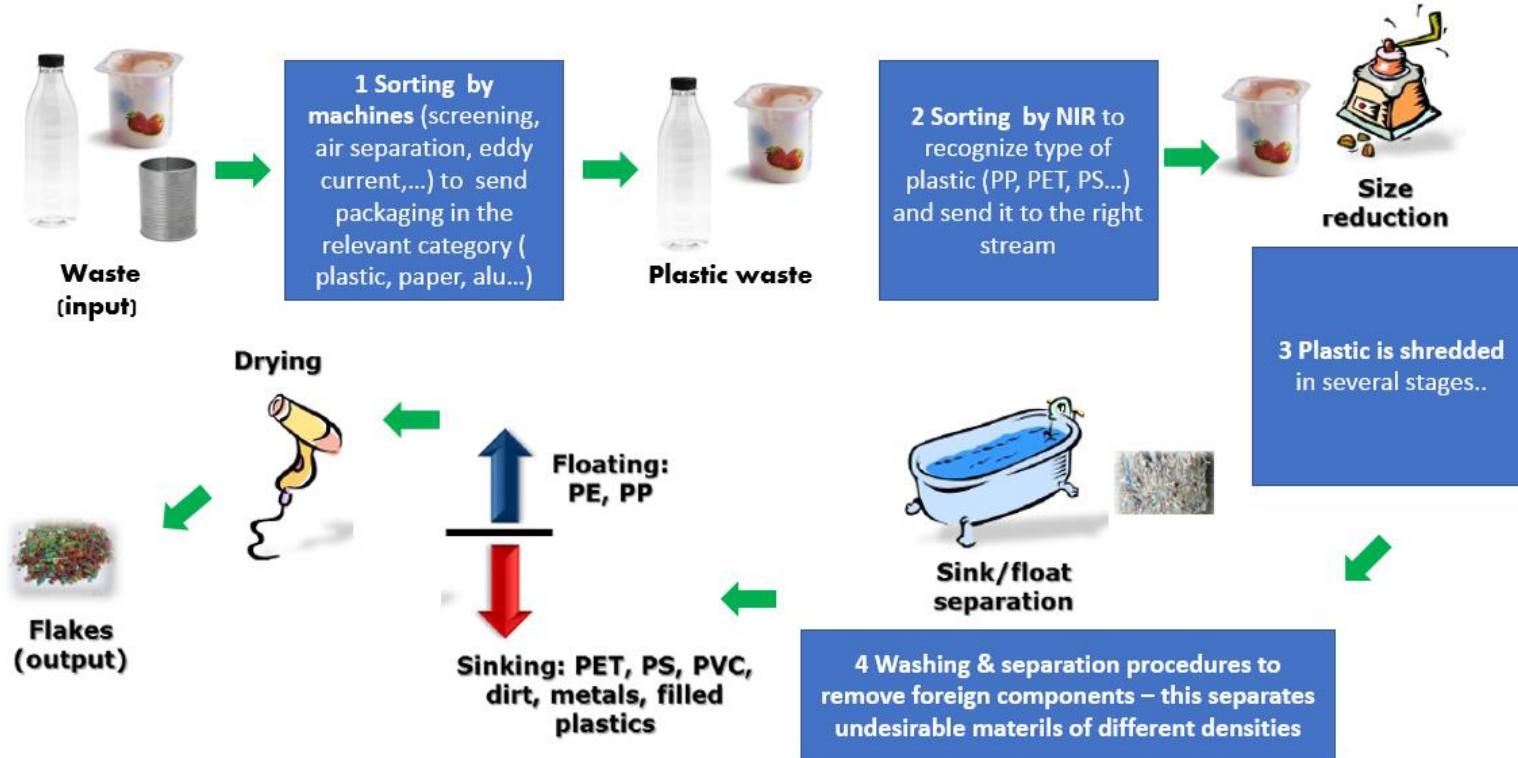
Availability

Under Development





## Step 2 // Develop Infrastructure to collect/sort/recycle



## Step 3 // Build awareness and educate consumers



PP? PET? Even PS?  
Manufacturers' choice will  
orientate step 3!

# 2021

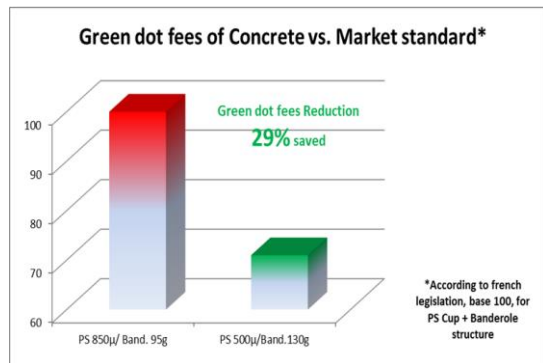
« Ok, Great! And what do you have  
available **right NOW???** »

# Yogurts & Desserts FFS // Products available today

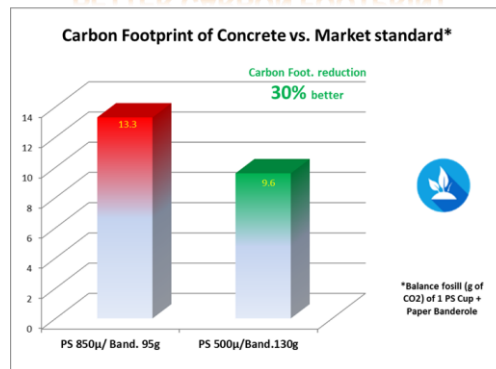


For FFS technology, 'Concrete' is a brand new concept with thicker paper banderol (up to 140g) than market standards (95g) that allows reduction of PS cup's thickness (from 850μ down to 500μ) to provide savings and sustainability credentials:

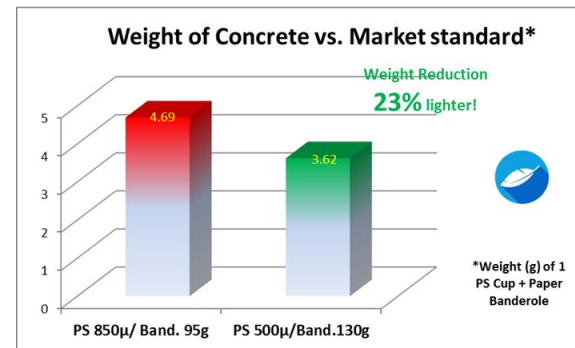
## LESS FEES TO PAY\*



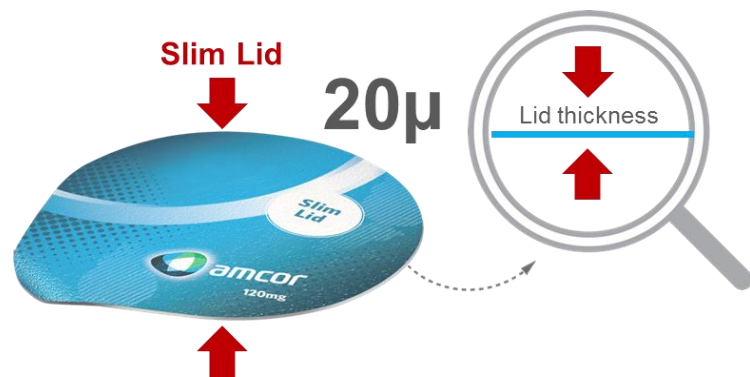
## BETTER CARBON FOOTPRINT



## LIGHTER STRUCTURE

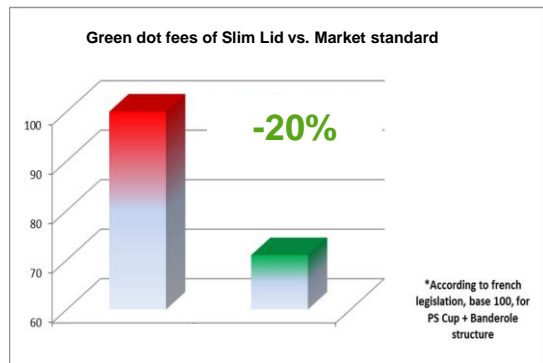


# Yogurts & Desserts FS // Products available today

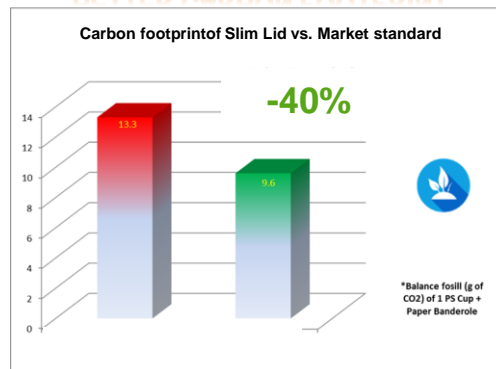


For FS technology, 'Slim Lid' is a Precut (Die Cut) Lidding downgauged from 29μ to 20μ thanks to PE extrusion (24g), that provides savings and sustainability credentials:

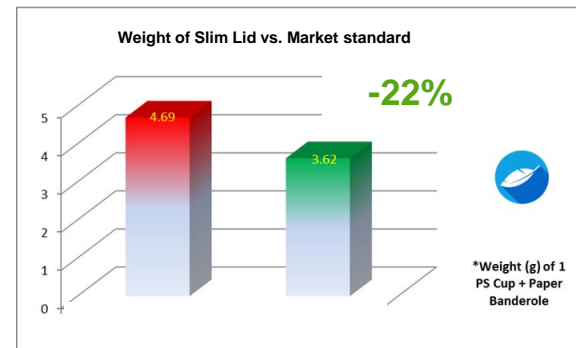
## LESS FEES TO PAY\*



## BETTER CARBON FOOTPRINT



## LIGHTER STRUCTURE





## Which packaging claim?

Build brand equity? Drive sales? Show company values?

# Two types of claims can be used to reinforce a brand's sustainability commitment

## Claims based on 3<sup>rd</sup> party certification

### Sourcing

- Biobased content
- Paper



Covering all kinds of biobased feedstocks and renewables



Reducing the environmental & social impacts of sugarcane



Forest Stewardship Council



Programme for the Endorsement of Forest Certification

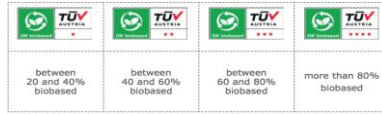
## Self-declared claims and labels

I am made from ethically sourced sugarcane!

Coming from sustainably managed forests

### Converted solutions

- Biobased content
- Carbon footprint
- Recycling-ready



ASTM D6866 Biobased carbon



DIN Certco (DE)

I am partly made from renewable sources!



Tüv Austria

Carbon Trust launched the world's first carbon footprint label in 2007



I produce 40% less carbon footprint than my predecessor



Institut cyclos-HTP<sup>2</sup>

Recyclable through the paper board stream

Recyclable through the polyolefins stream



TerraCycle



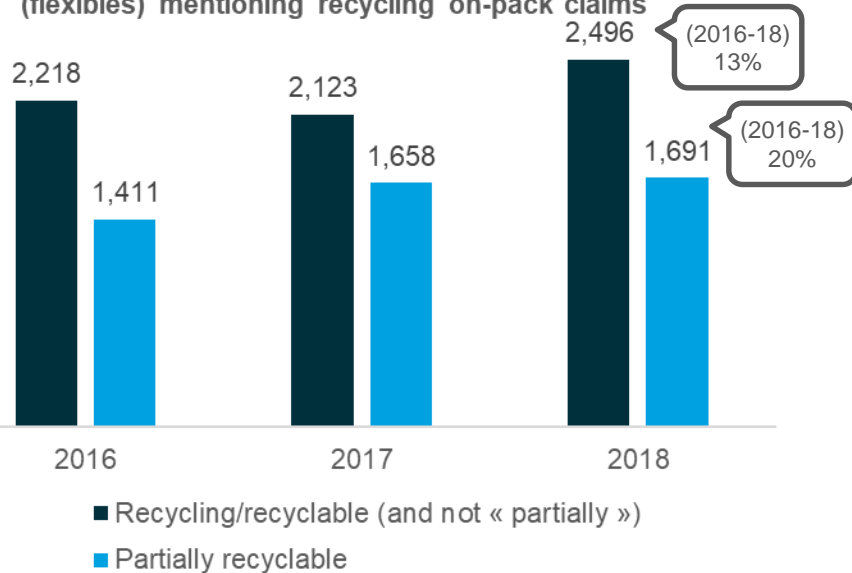
Drop-off bins at retailers (PE only)

Although self-declared claims do not require 3<sup>rd</sup> party certification, any claims must be backed by credible facts and proofs



# 'Recyclable' on-pack claims are by far the most used for flexible packaging

Number of new food products launched in Europe (flexibles) mentioning recycling on-pack claims



Kellogg's Crunchy Nut Creations



Jordans Funny Crisp



Bimbo Tigretón Minix



## Minimising the 'carbon footprint' of products is another popular on-pack claim



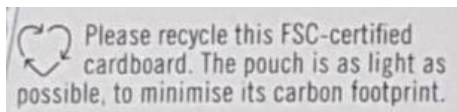
Walkers



- As Pepsico is committed to becoming a more environmentally sustainable company, it calculated the lifecycle carbon footprint of their products to determine where in the supply chain they needed to reduce emissions
- In 2007, Walkers became the 1<sup>st</sup> consumer brand to launch the Carbon Trust's Carbon Reduction Label. Between '07 and '09, Walkers reduced its carbon footprint by 7%

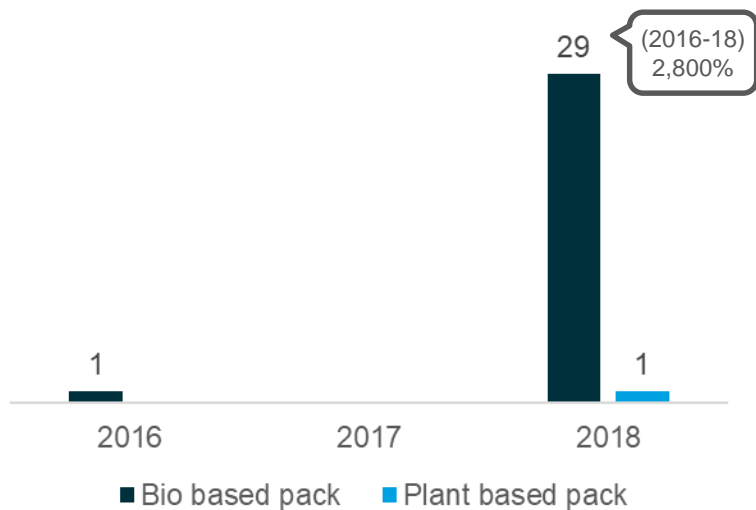


Daylesford Organic Mushroom Soup



# 'Bio-based' on-pack claims are gaining momentum across all geographies

Number of new food products launched in Europe (flexibles) mentioning bio-based pack claims



Crispa Potato Crisps



- The new bio-based pack is not made from plastic and features the EU Green Leaf, Bio, Vincotte OK Biobased 4 Stars and Compostable logos



Chaumes L'Original



- In October '18, Chaumes launched a tray made of 67% biosourced plastic



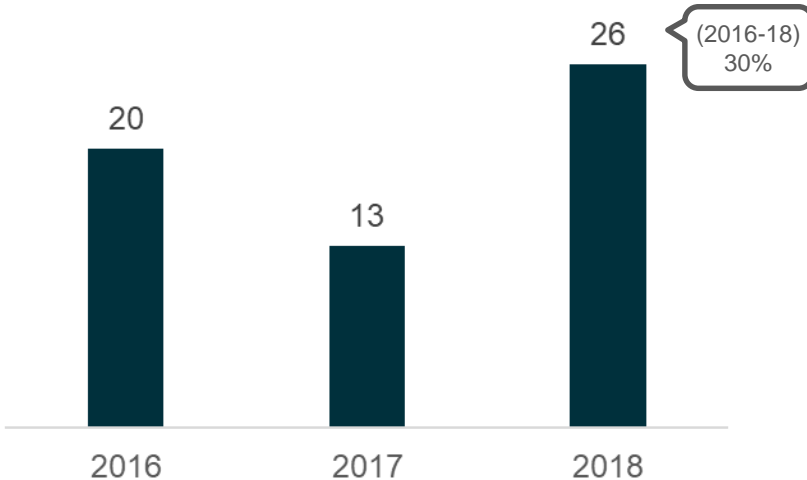
Polarbrød Fullkorn



- The new pack is predominantly made from sugar cane

## 'Responsibly sourced' on-pack claim also includes 'FSC' which is the most popular third-party certification in Europe

Number of new food products launched in Europe (flexibles) mentioning responsibly sourced claims



Kallø Tortitas Mini Arroz y Chocolate



- Deleitar claims to be the first 100% renewable milk pack
- It uses a full side of the pack to delivery the message to the consumers

# How Sustainability will help you to keep the pace in the Yogurt category

THANK YOU FOR YOUR ATTENTION



# APPENDIX





# What are the criteria\* for recycling?

## Criteria for flexible packaging in three primary streams

Recycling stream	Preferable**	Minimum criteria**	Comments
<b>Aluminium stream</b>	>80% aluminium content	>30% aluminium content	
<b>Paper stream</b>	<ul style="list-style-type: none"> <li>Outer layer is paper</li> <li>&gt;80% paper fiber content</li> </ul>	<ul style="list-style-type: none"> <li>Outer layer is paper</li> <li>&gt;50% paper fiber content</li> </ul>	
<b>Polyolefins (PE and PP) stream</b>	<ul style="list-style-type: none"> <li>&gt;90% mono PP or mono PE</li> <li>density &lt;1 g/cm<sup>3</sup></li> <li>No PET, PVC, PvdC, fibres or aluminium foil</li> <li>Other polymers &lt;5% each (e.g. EVOH, PA, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>&gt;80% polyolefins (mix of PP and PE)</li> <li>density &lt;1 g/cm<sup>3</sup></li> <li>No PET, PVC, PvdC, fibres or aluminium foil</li> <li>Other polymers &lt;10% each (e.g. EVOH, PA, etc.)</li> </ul>	<p>Based on “Project Barrier” guidelines developed with the Ellen MacArthur Foundation</p> <p>Exceptions can be granted based on certified recycling tests (e.g. Cyclos HTP)</p>







# Germany has the most advanced recycling infrastructure

Country	Polyethylene Recycling stream	Polyolefins Recycling Stream*	Paper Recycling Stream	Aluminum Recycling Stream
<b>Belgium</b> (Fost Plus)	To some extent (P+MC)	No	Yes If more than 85% fibers	To some extent (AREME project)
<b>Germany</b> (DSD)	Yes (yellow bin) Target fraction generally > A4 size	Yes (yellow bin)	Yes (yellow bin)	Yes (yellow bin)
<b>France</b> (Citeo, COTREP)	Yes Target fraction generally > A5 size with NIR sorting in development (25 % population)	No	Yes If more than 50% fibers + certification	To some extent (METAL project) Alu >= 50 %
<b>Italy</b> (Corepla)	Yes Target fraction generally > A3 size Target < A3 with NIR limited to some pilot sorting centers	No Can be done based on a signed contract with a recycler	Yes If more than 80% fibers + certification	To some extent (CIAL)
<b>UK</b> (WRAP)	To some extent Recycled with bags at larger stores (check locally kerbside)	No	No	To some extent (Alupro) (container, lid and closure) No for the rest of flexible
<b>Netherlands</b> (KIDV)	To some extent generally > A4 size	To some extent NL export large amounts of packaging waste to Germany and as a result have indirectly the same streams	No	No State of art sorting alu from the bottom ashes
<b>Spain</b> (Ecoembes)	All plastic film packaging is sorted in the same mixed plastic fraction	All plastic film packaging is sorted in the same mixed plastic fraction	Yes If more than 50% fibers	To some extent (ARPAL)
<b>Sweden</b> (FTI)	Yes	No	Yes If more than 50% fibers + other design for recycling guidelines	NA

- Germany has the most advanced recycling infrastructure, with all streams in place, at large scale
- Norway, the Netherlands and Austria export large amounts of waste to Germany and as a result have indirectly the same streams.










# Hard Cheese // alternatives to today's baseline

## Main structure/baseline Alternatives

	OPA/PE	OPP/PE 	OPE/PE bio 
What is it?	Traditional OPA film	PE film	Bio-based PE
Recyclability	Not recyclable through the mixed PO streams	Recycled in Germany and to some extent in the Netherlands, Austria and Norway	Recycled in Germany and to some extent in the Netherlands, Austria and Norway. <b>Potentially recyclable in UK PE stream.</b>
Carbon footprint		<b>Lower carbon footprint</b> 	<b>Lower carbon footprint</b> 
Water usage		<b>Lower water usage</b> 	<b>Lower water usage</b> 
Why? Pros vs. Cons			Potential cheese residue in PE bags is currently under investigation for the UK carrier bag recycling stream (concerns only UK).
Availability		<b>To be developed</b>	<b>To be developed</b>







# Processed Cheese // alternatives to today's baseline

	Main structure/baseline	Alternatives		Main structure/baseline	Alternatives
	<b>Alu/lacq.</b>	<b>ASI<sup>1</sup> Alu/lacq.</b> 		<b>Alu/PE</b>	<b>OPP/PP</b> 
What is it?	Cheesefoil 12μ	Cheesefoil 10/12μ	What is it?	Lidding 29μ	Lidding 29μ
Recyclability	recyclable in the aluminium recycling stream via pyrolysis	recyclable in the aluminium recycling stream via pyrolysis	Recyclability	recyclable in the aluminium recycling stream via pyrolysis if sealed to aluminium tray	recyclable in the polyolefins recycling stream if sealed to PP tray
	Carbon footprint	<b>Lower carbon footprint</b> 		Carbon footprint	<b>Lower carbon footprint</b> 
	Water usage			Water usage	
	Why? Pros vs. Cons	Paper based and PO based specifications are also been considered		Why? Pros vs. Cons	Potential additional improvement: Downgauged Alu to Alu 20μ are also considered
	Availability	 Ready for customer trials		Availability	<b>Under Development</b>

# Soft Cheese // alternatives to today's baseline

## Main structure/baseline

## Alternative

	OPP/PAP	PAP/Extrusion Matrix 
What is it?	Standard Wrapping, paper fiber = 50%	Wax Free Wrapping, more paper fiber (>70%)
Recyclability	<b>Under recyclability testing</b> with Cyclos HTP to evaluate paper detection by NIR, sorting fiber structure & wet strength resistance	<b>Under recyclability testing</b> with Cyclos HTP, paper is in outer layer (easily detected by NIR as paper), no wet strength issue, fiber > 70% = recyclable in Germany, France, Spain, Sweden
Carbon footprint		<b>Lower carbon footprint</b> 
Water usage		<b>Lower water usage</b> 
Why? Pros vs. Cons		Potential additional improvement: Use FSC certified paper
Availability		 Ready for customer trials



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