

# The Future of Milk Packaging

Ashwin Moorthy & Nigel Tong  
November 2021



**Sainsbury's**  
Helping everyone eat better

# Plan for Better



Better for you



Better for the planet



Better for everyone



Healthy & sustainable diets



Reduce carbon emissions



Reduce food waste



Reduce use of plastic packaging



Increase recycling



Minimise use of water



Sustainable sourcing and biodiversity



Championing human rights



Skills and opportunities for all

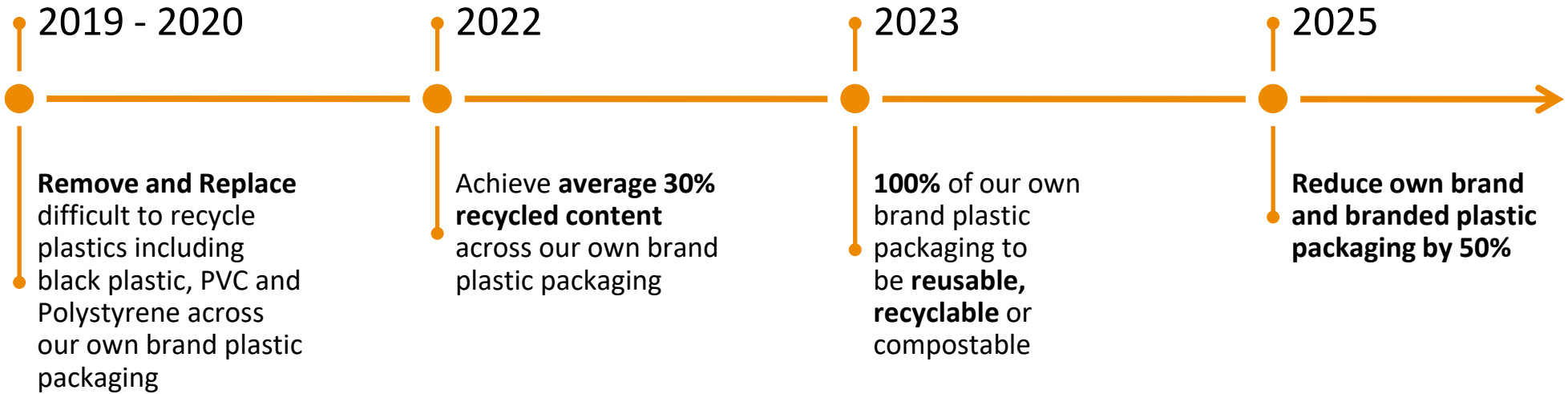


An inclusive place to work and shop



Community & partnerships

# Our Packaging Targets

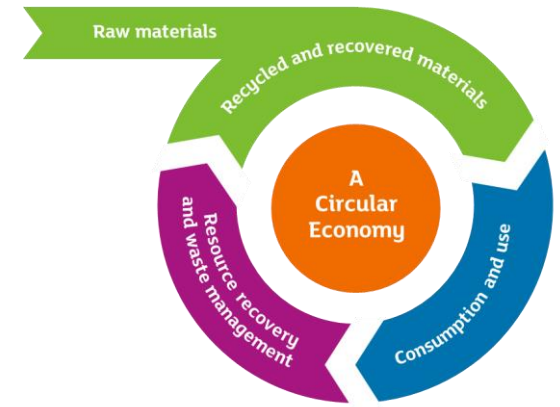


## Key Drivers

Sustainable Development Goals

Legislation

Voluntary Commitments



# Own brand approach to 50% plastic reduction

**Remove**

completely where we can

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Cream pot lids

**Reduce**

weight of packaging

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Milk bottle, cap, seal & BSM tubs lightweighting

**Replace**

with an alternative material where feasible

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Board trays for desserts

**Recycle**

by making it easy for customers after use

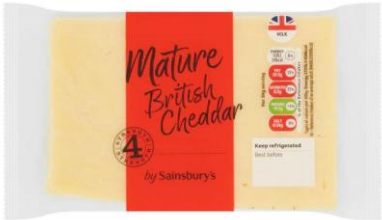
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Replacing complex laminates with mono materials for cheese and removing PS

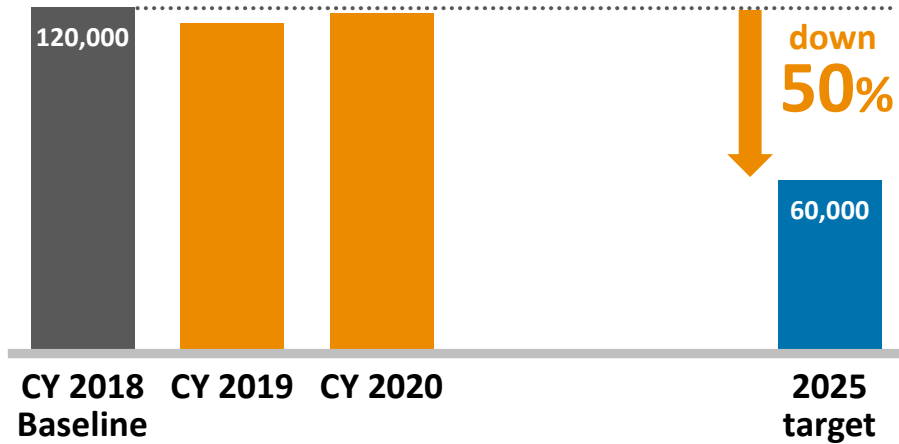
**Reuse**

options for customers

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# Plastic reduction & Packaging carbon emissions

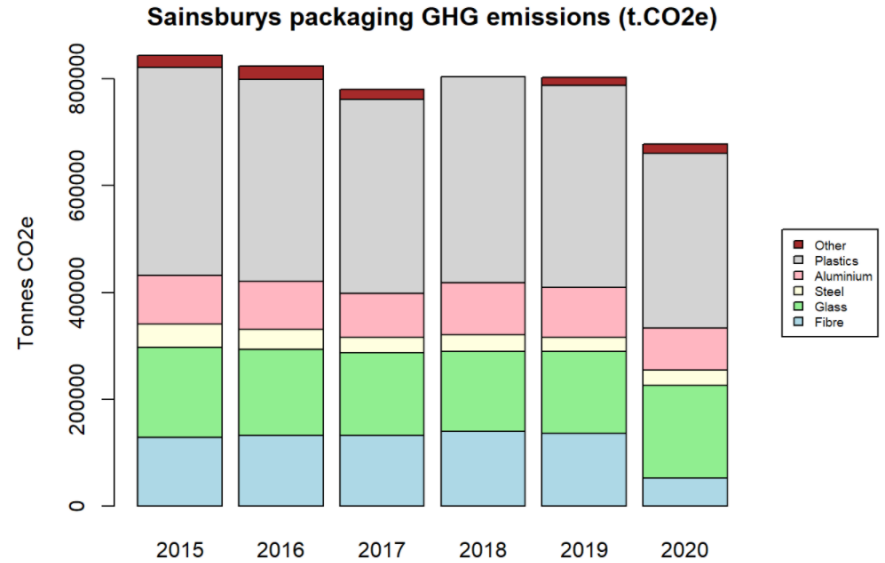


**4.6% reduction in 2019**

**1.7% reduction in 2020**

due to increased sales of pre-packed items during the pandemic

**7% relative reduction compared to 2018 baseline**



**Since 2015, GHG emissions from our food packaging (all materials) placed on the market has decreased by 20%**

Courtauld 2030 member report, Sainsbury's, 2020

# Milk is number 1



**4 pint** is the Top Own Brand SKU by plastic tonnage

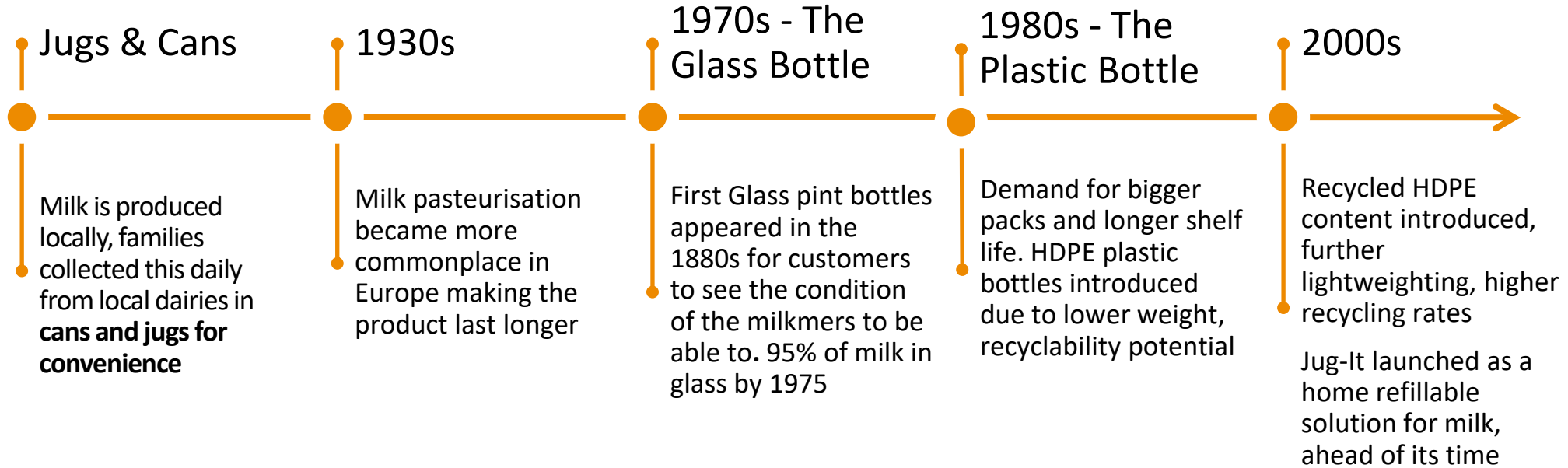
Milk suppliers are **#1 contributors** in terms of plastic tonnage

Milk bottles account for **13% of total** own brand plastic tonnage

A splash of white milk is captured mid-air, falling from the top of the frame. The splash is dynamic, with several smaller droplets trailing behind the main mass. Below the splash, the neck and shoulder of a glass bottle filled with milk are visible. The bottle has a white cap. The background is a solid, deep red color.

Im**po**ssible

# Journey of milk packaging









# Global milk packaging formats

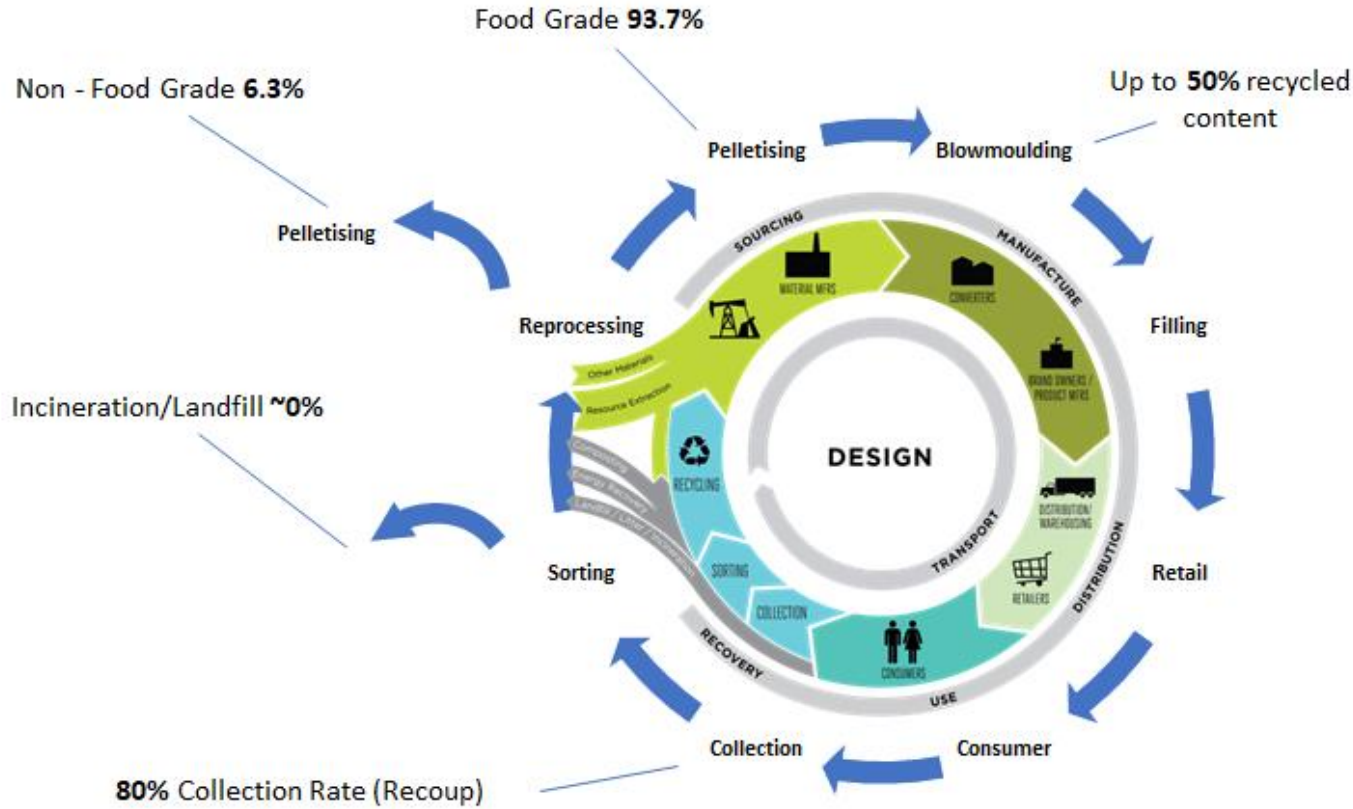
Fresh Milk markets are dominated by HDPE, followed by bags and PET

UHT markets are dominated by Cartons

Occasionally in UHT dominated markets, fresh milk is packaged in different formats to differentiate the product offerin

| Country              | Preferred Formats   |   |  |   |
|----------------------|---|---|--|---|
|                      |  HDPE |  Milk Bags |  Carton |  PET |
| USA                  | X   |   | X  |   |
| China                | X   |   | X  |   |
| Russia               |   | X   | X  | X   |
| India                |   | X   |  |   |
| France (mainly UHT)  |   |   | X  | X   |
| Japan                |   |   |  |   |
| Germany (mainly UHT) |   |   | X  |   |
| Brazil (UHT milk)    |   |   | X  |   |
| UK                   | X   |   |  |   |
| Indonesia            |   |   |  |   |
| Mexico               |   |   |  |   |
| Saudi Arabia         | X   |   |  | X   |
| Italy                |   |   |  |   |
| South Korea          |   |   |  |   |
| Spain (mainly UHT)   | X   |   | X  | X   |
| Canada               | X   | X   | X  |   |
| Turkey               |   |   |  |   |
| Australia            | X   |   | X  |   |
| South Africa         | X   |   |  |   |
| New Zealand          | X   |   |  |   |
| Israel               |   | X   | X  |   |
| Pakistan             |   |   | X  |   |
| Argentina            |   | X   |  |   |

# HDPE Milk Bottle (4 pint)



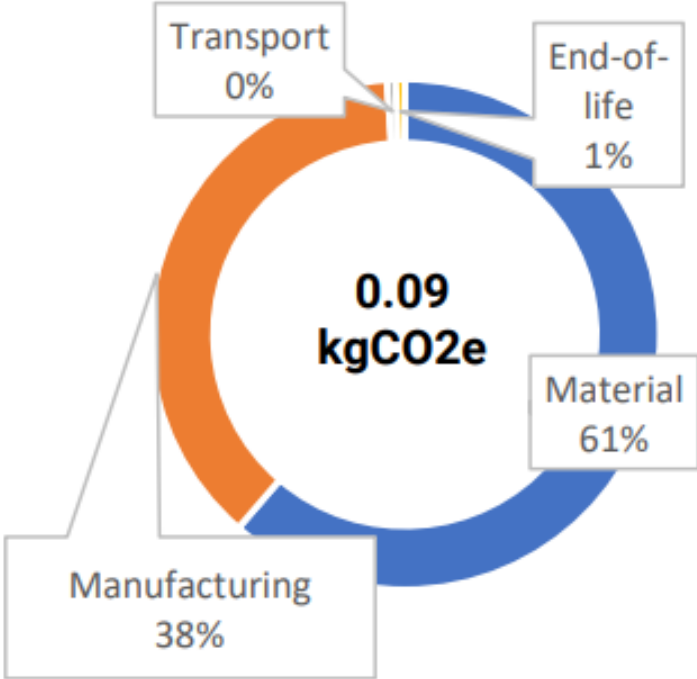
## Components:

- 1g Sleeve/Label
- 34g Bottle
- 1.3g Cap

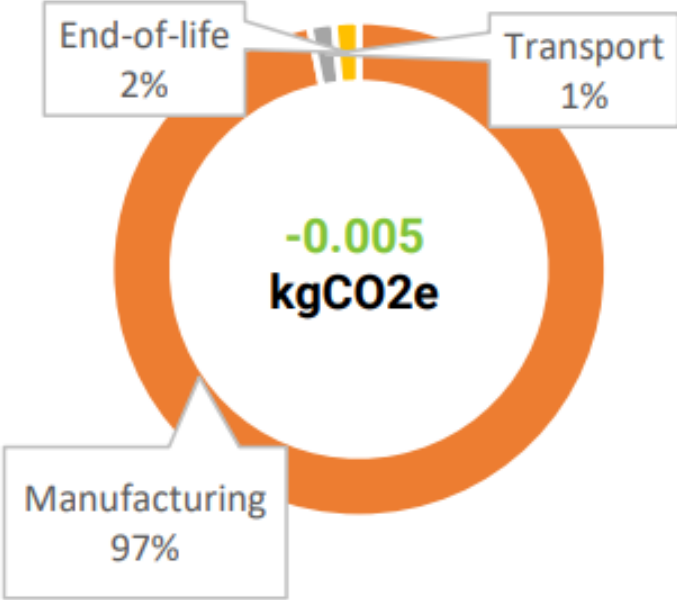


# Improving 4 pint carbon footprint

## Plastic



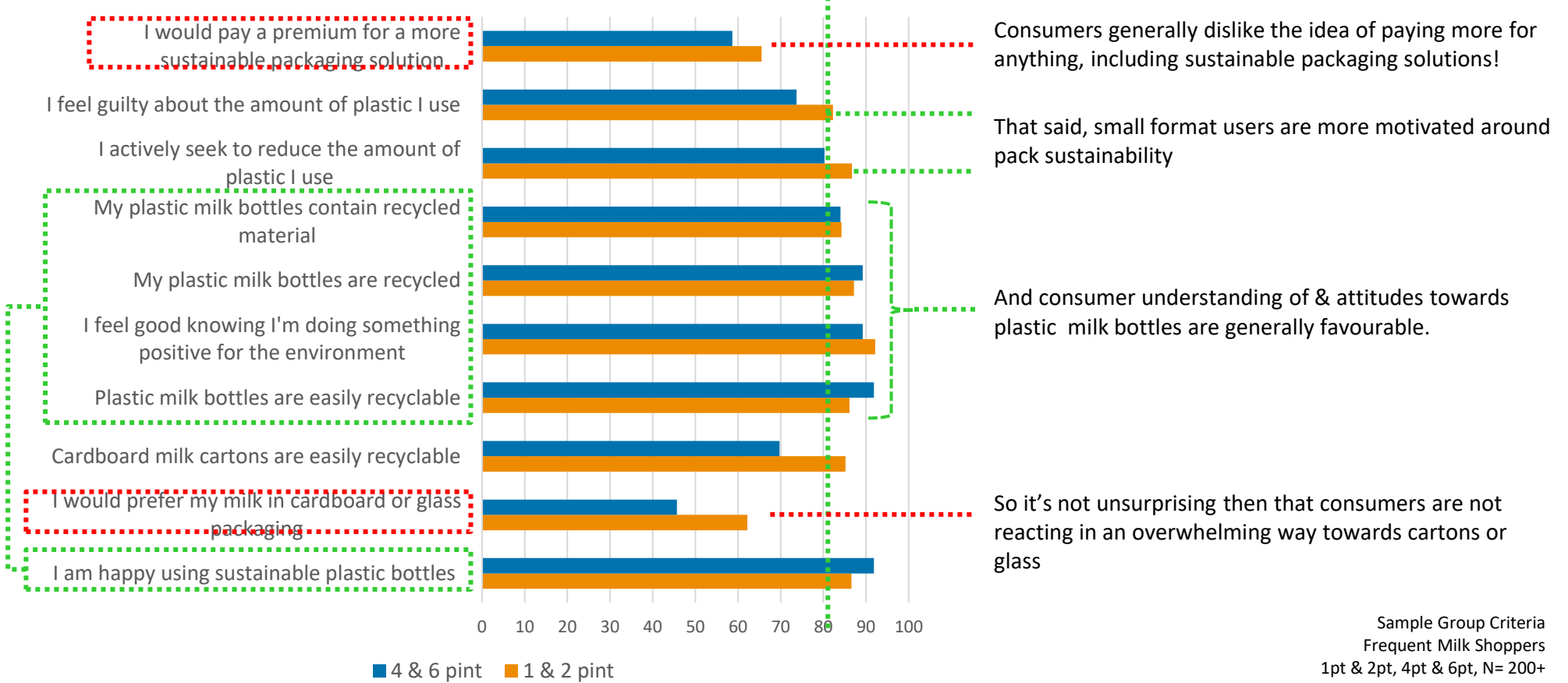
## Bioplastic\*



■ Material   ■ Manufacturing   ■ Transport   ■ End-of-life

# Understanding Customer Attitudes

Action Standard = 80% agree



Sample Group Criteria  
 Frequent Milk Shoppers  
 1pt & 2pt, 4pt & 6pt, N= 200+  
 Source: VYPR

# Bottle vs. Carton



## Renewable content

Currently made from fossil fuel plastic and could be made from biobased renewable materials in the future

Collected by 100% of LAs



## Recycled content

Currently Up to 40% recycled HDPE and 50%+ in the future

85-100% of package made from renewable materials



Collected by 100% of LAs from ?



Recycled fibres used for other applications

# Milk man return

## The return of the milkman

As traditional doorstep deliveries of milk rise, Katharine Wootton hears from one modern-day milkman about what's behind the revival and how the job has changed

## 'I couldn't cope with the demand'... popular milkman says he hasn't been this busy in 30 years as customers race to sign up

'When it starts to go back to normality, we hope we can keep as many as we can'

## Graham's expands DTC delivery amid coronavirus convenience demand

By Henry Sandercock | 20 April 2020

BUSINESS

## The Milkman Is Back: Covid Lockdowns Rekindle Demand for Dairy Delivery

## The milkman is making a comeback as coronavirus keeps people from shopping

"We had to put some customers on hold just because of the big influx that we had."

## The Modern Milkman to launch doorstep deliveries in Nottinghamshire

It's all plastic-free

## Coronavirus: The rise of the milkmen and women

By Sue Paz & Stephen Stafford  
BBC News

## Coronavirus: Business booming for milk doorstep delivery

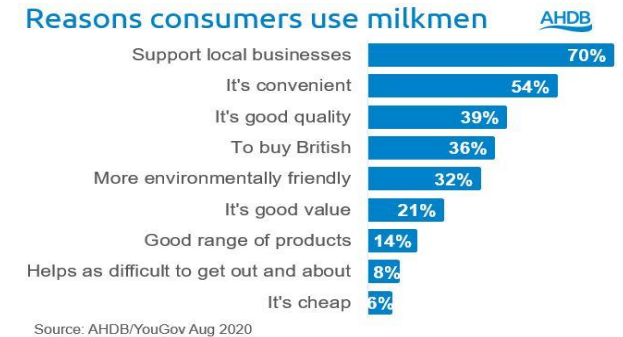
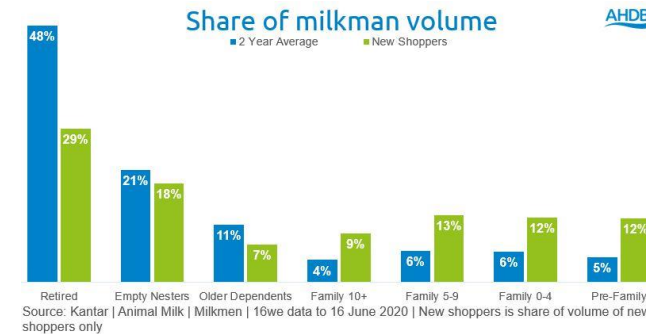
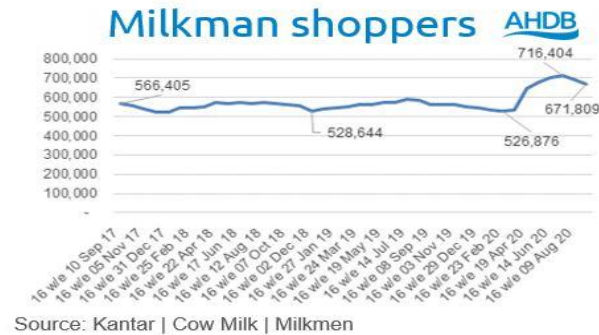
30 September 2020 | by FarmingUK Team | Dairy, News, Produce

News

8th May

## Farming company re-launches milk deliveries after 28 years due to 'high demand' during Covid-19

\* Milk & more sees +400% growth through the COVID period with 25% of their milk sold being organic against 4% retail average \*



# Alternatives moving forward

## Return of the milkman

Consumer sentiment to do the right thing in reducing plastic waste

Weight, Carbon impact, Scalability?



## Refill stations

Appearing more and more in independent shops to encourage reuse

Convenience, Scalability ?



## Cartons

Seen as better than a plastic bottle – is recyclable and has less plastic  
Widely Recycled, Scalability ?



## Pouches

Lighter in weight compared to others  
Recyclability, Scalability ?



# Reuse Models





# Cheese example - 5 Key success factors

## Culture



- Establish a continuous improvement culture
  - An aligned passion for sustainability and 'doing the right thing'
  - A business that cares, motivated to address the sustainability challenge
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## Objectives



- Clear, well defined and unambiguous
  - Aligned across the entire supply chain
  - Measurable
- 

## Resource



- Establish the right level of resource, structure and expertise within the business to deliver
  - Ensure all disciplines are covered and involved (Commercial, supply chain, technical, purchasing, operations.....)
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## Collaboration & Communication



- Make communication a priority, establishing the correct frequency and channels of communication
- Ensure communication covers the entire supply chain (retailer-1<sup>st</sup> tier supplier-2<sup>nd</sup>/3<sup>rd</sup> tier suppliers)
- Keep things positive, don't hide negative news and share best practice
- Using retailer customer interface and links to recycling

# 5 Key success factors

## Data



- Ensure you have the means to establish and access the data you need (appropriate software)
- Be clear on the baseline, where you are now and where you need to be
- Develop a road map to achieve the objectives (Data dashboard)
- Use the data to establish a priority sequence and resource each project appropriately
- “Leave no stone un-turned” – explore and critique every aspect of packaging and carbon
- Share progress regularly



## Achievements

- ✓ A well resourced team that cares, focused on delivering of objectives.
- ✓ A network of communication channels has been established
- ✓ A clear understanding of data and a roadmap of delivery
- ✓ 11% of plastic removed with a further 25% planned in the next few months
- ✓ Plans established for 50% of range to be recyclable
- ✓ 3 tonnes of carbon identified/removed in tier 1

# Summary

There is no one silver bullet

Commodity product with current packaging format established at scale for the last approx. 40 years

Unintended consequences with alternatives such as higher carbon, food waste

Customer engagement with alternative delivery/packaging formats

Packaging solution needs to be part of a circular economy approach

Collaboration across all stakeholders in the value chain required to enable a successful outcome