



PRO CARTON
PACKAGING FOR
A BETTER WORLD

Cartons - A World of Opportunities

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A brief introduction on...

Pro Carton, the European Association of Carton and Cartonboard manufacturers, is a **non-profit organisation** representing over 40 cartonboard mills in 13 different European countries and North America, supplying more than 90% of Europe's demand, as well as the carton converting industry across Europe.

Pro Carton promotes the functionalities and benefits of **cartons and cartonboard** as a **renewable, recyclable** and **competitive packaging material** to brand owners, retailers, designers, the media and EU policymakers.

Pro Carton members fully support **sustainable forest management** as an important pillar to mitigate climate change, preserve biodiversity and forest growth.

Pro Carton highlights innovative applications of cartons and cartonboard by students, designers and brands through its **annual awards programmes**, attracting young designers to the industry.

www.procarton.com

We are celebrating success of cartonboard

**THE
WINNER**

The European Cartonboard Awards

Our industry is all about **sustainability, circularity, innovation** and the **future**. Cartons and cartonboard are part of our daily lives and are the most economically and ecologically balanced packaging medium.

There are so many stories to tell, and we need your help with that!



- **Enter the awards, compete against the best**
- **Cast your vote for the public awards**
- **Follow announcements on social media in May and June**

**WE
NEED
YOU**

The European Carton Excellence Award (ECEA)

The **European Carton Excellence Award** (ECEA) is the most **prestigious** and **respected** award in cartonboard packaging across Europe since 1997.

Hosted by Pro Carton and the European Carton Makers Association (ECMA), the Award challenges and celebrates the most **innovative cartonboard packaging designs** from some of the world's most renowned brands. Categories include:

- Carton of the Year Award
- General Packaging – Virgin Fibre
- General Packaging – Recycled Fibre
- Food & Drink Packaging – Virgin Fibre
- Food & Drink Packaging – Recycled Fibre
- Sustainability and/or Innovation Award

Entries must be received by **May 2024**.



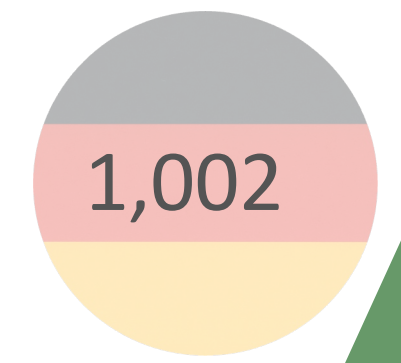
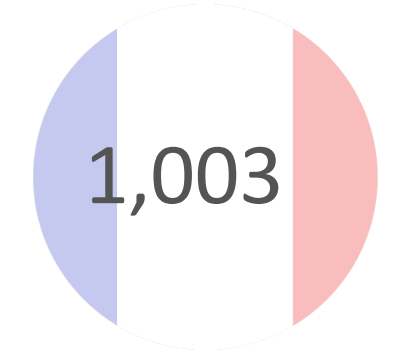
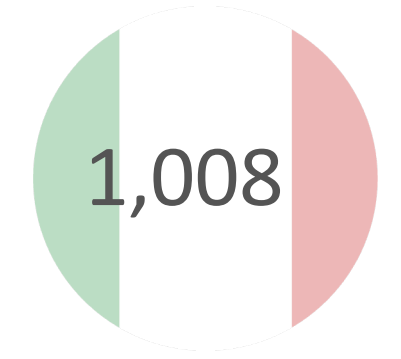
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Consumer Perceptions

A pan-European study

+5000 CONSUMERS POLLED
FIVE COUNTRIES
EXCLUSIVE INSIGHTS
PACKAGING PERCEPTIONS
ENVIRONMENTAL ATTITUDES
KEY TRENDS AND CHALLENGES
CONDUCTED IN NOVEMBER 2022





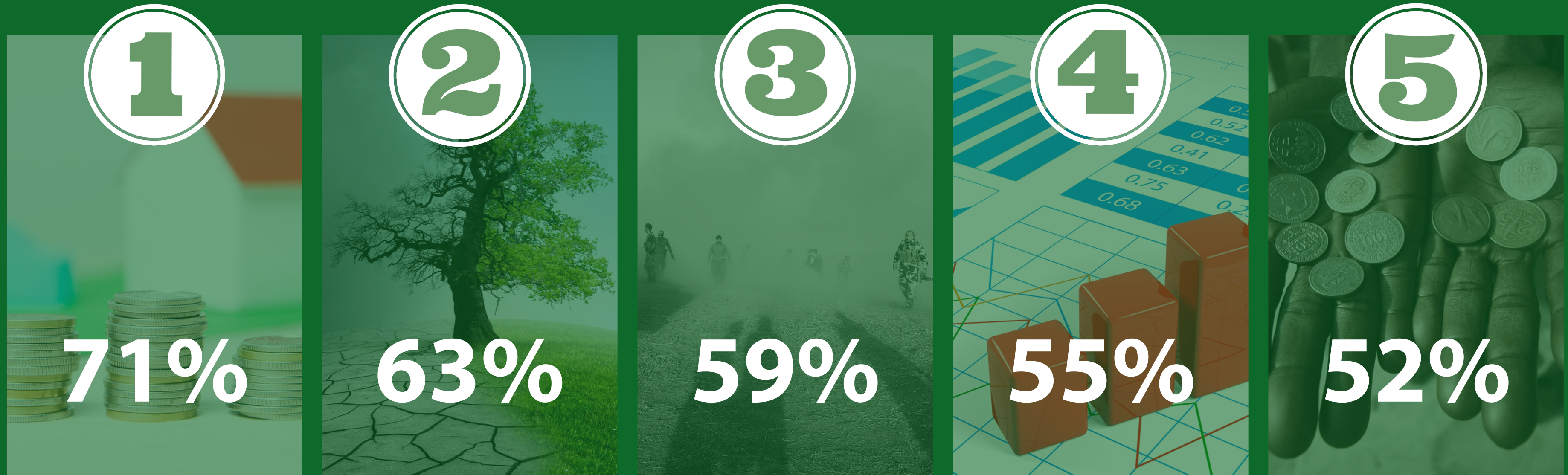
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Consumer Concerns:
What is keeping consumers awake
at night?



What are the biggest issues facing us today?

Pandemic is no longer in Top 5 – 2022 is the year of inflation, extreme climate and warfare



COST OF LIVING

CLIMATE CHANGE

WARFARE

THE ECONOMY

POVERTY

Multiple answers possible

Concerns on plastics remain high on the alert list

Pandemic and refugees moved down the ranking



41%



39%



35%



33%



29%

PLASTICS IN THE OCEAN

PANDEMICS

IMPACT OF PLASTIC
PACKAGING

DEFORESTATION

REFUGEES

Multiple answers possible

On Packaging - Who is in charge for our environment?

Strong believe in market forces

92%

An overwhelming majority of respondents believe packaging producers and brand owners should do more to help the environment.



59%

A LOT MORE



33%

A BIT MORE

8%

Meanwhile, less than 10% believe it is the responsibility of local Government's to enact change.





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Required Actions:
Consumers have a clear idea



Consumers make important choices

What have you done more of in the past 12 months...



**RECYCLE MORE OF
HOUSEHOLD WASTE**



**USE LESS
WATER**



**REDUCE PRODUCTS
PACKED IN
PLASTICS**



**PURCHASE
LOWER COST
ALTERNATIVES**



**BUY PRODUCTS IN
ENVIRONMENTALLY
FRIENDLY
PACKAGING**

Multiple answers possible

Handelsketten profilieren sich auf Kosten der Markeninhaber

Attica
KNUSPRIGE
Mischung
MIT RIND

Stiftung Warentest
SEHR GUT (1,3)

mindestens
71%
günstiger als
Whiskas

Aktion
1.99

Netto
Marken-Discount

Montag, 08.05.23 – Samstag, 13.05.23

mindestens
42%
günstiger als
Twix

Trigger
Schokoriegel
Biscuit & Caramel

Dauertiefpreis
1.59

Netto
Marken-Discount

Dienstag, 02.05.23 – Samstag, 06.05.23

- Preisführerschaft
- „Handel(n)“ im Kundeninteresse
- Schutz vor Inflation
- Moderne „Robin Hood“ Eigenschaften
- 16 Mrd Euro Umsatz
- Tochter der Edeka Zentrale

Redaktion 30.05.2023

dm erhöht durch Preissenkungen Druck auf Industrie

300 Balea-Produkte durchschnittlich 12% billiger.



- DM Österreich
- 1 Mrd Euro Umsatz
- DM Deutschland 10 Mrd Euro Umsatz

Tchibo Mehrwegtasche ist zurück



- Vermeidung von Verpackung
- Profilierung vor Verbraucher
- Es wird weitere Versuche in diese Richtung geben



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Packaging Perceptions: What consumers want you to know



In the past 12 months, have you chosen a brand specifically
for the packaging used?

Yes, 47%!

Packaging plays an important role for creating brand loyalty

Packaging impacts purchasing decisions

Reasons for switching brands/products

PACKAGING WAS NON-RECYCLABLE 50%

PRODUCT OR BRAND HAD UNNECESSARY PACKAGING 45%

PRODUCT OR BRAND USES PLASTICS 43%

REFILL/REUSABILITY OPTIONS AVAILABLE WITH DIFFERENT BRANDS 41%

BRAND DOES NOT HAVE AN ENVIRONMENTALLY FRIENDLY ETHOS 31%

Multiple answers possible



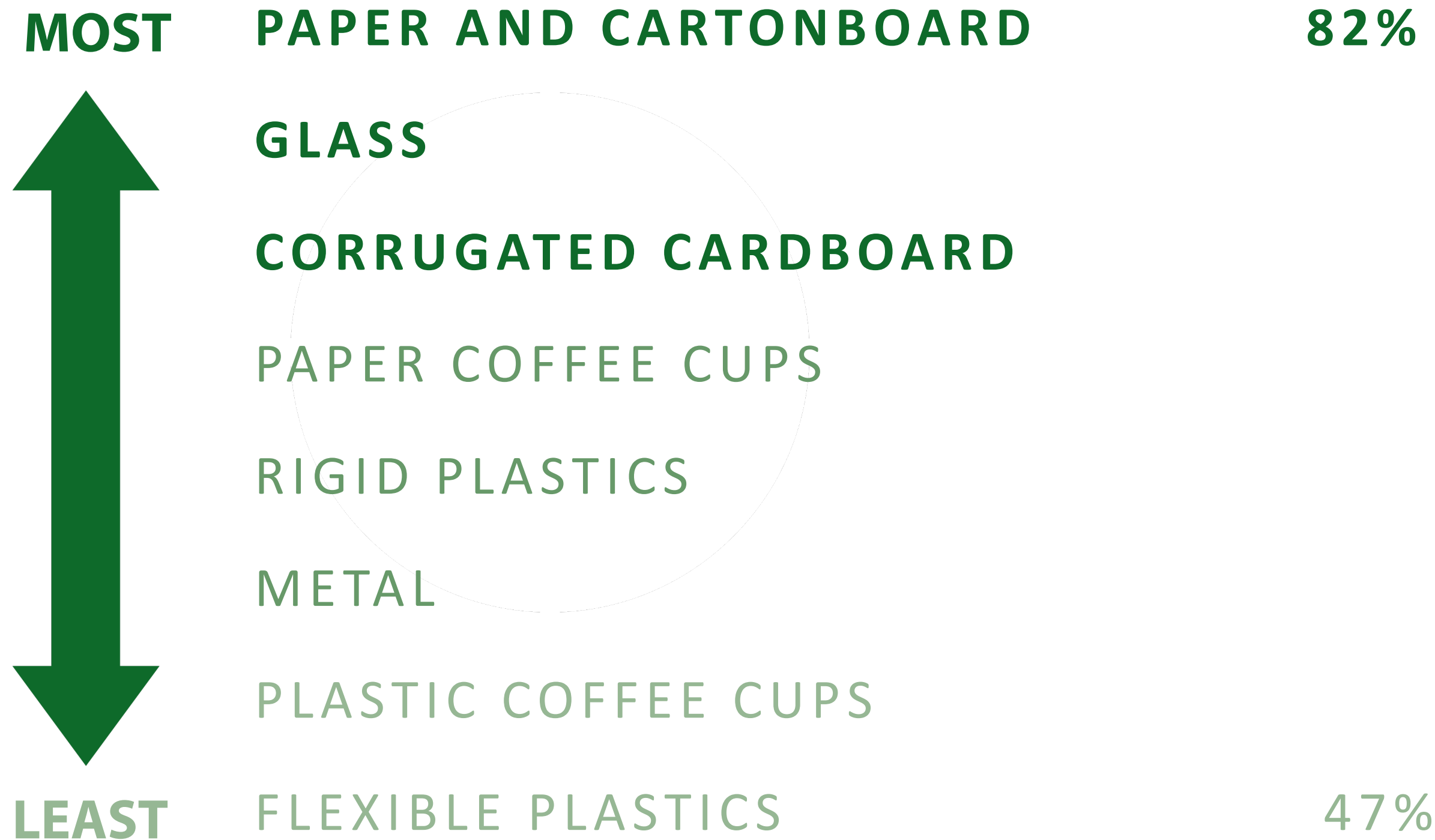
Recycling and sourcing are most important

Packaging features ranked by importance

EASY TO RECYCLE	85%
MADE FROM RENEWABLE MATERIALS	81%
PROTECT THE PRODUCT	81%
PROVIDE NUTRITIONAL INFORMATION	78%
PACKAGING IS RESEALABLE	76%
EASY TO OPEN	68%
PROVIDE BRAND INFORMATION	65%

Consumers trust cartonboard collection/recycling

How confident are you that the following materials are recyclable?



If the same product was packaged in two different forms of packaging - one in plastic and one in cartonboard, which one would you choose?

Carton
Packaging

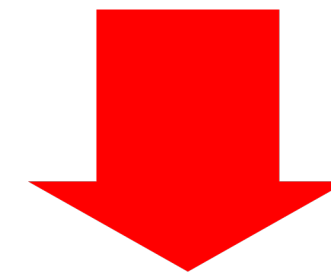
86%



Up from 81% in 2019

Plastic
Packaging

14%



Down from 19% in 2019

Money Talks

Are consumers willing to pay more?

72%
would pay more





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SUBSTITUTION POTENTIAL

An independent study

MATERIAL ECONOMICS

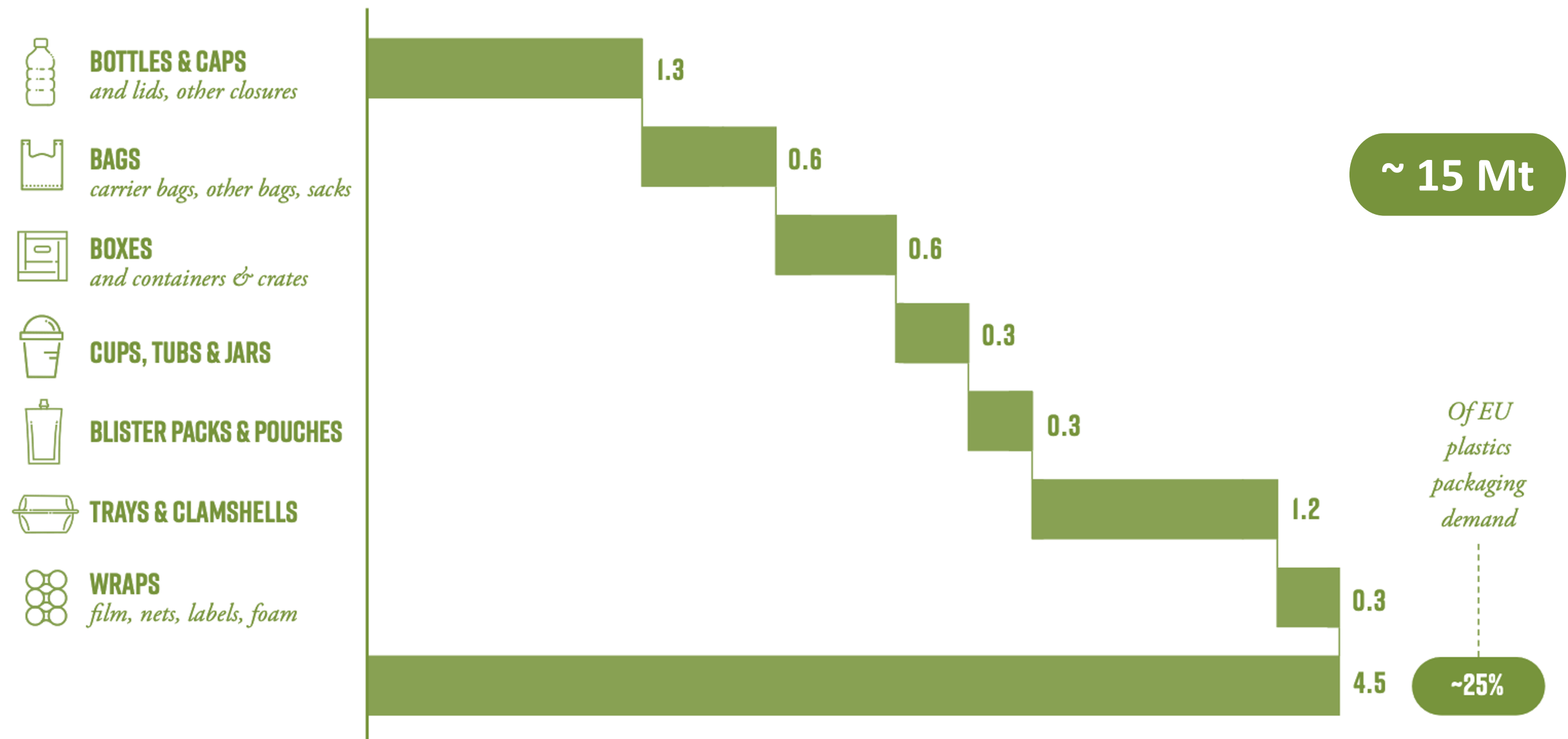
SUSTAINABLE PACKAGING

THE ROLE OF MATERIALS SUBSTITUTION

Substitution potential bottles, trays/clamshells, boxes, bags without compromise on functionality and consumer convenience

EUROPEAN PLASTIC PACKAGING SUBSTITUTION POTENTIAL

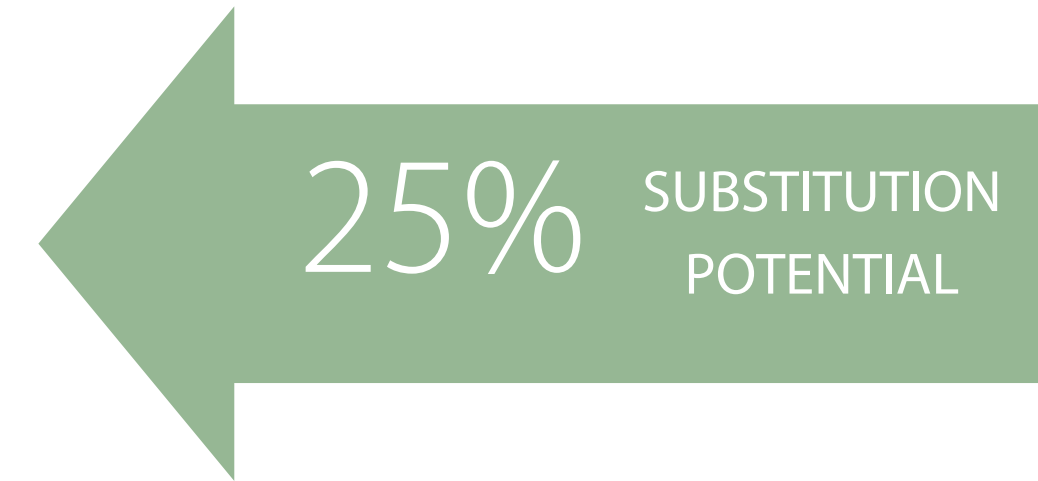
Mt PLASTICS PACKAGING, NET POTENTIAL



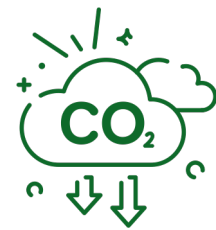
SOURCES: MATERIAL ECONOMICS ANALYSIS BASED ON DATA FROM TRANSPARENCY MARKET RESEARCH, SMITHERS PIRA, PLASTICSEUROPE (2018B), INSTITUT FUR ENERGIE UND UMWELTFORSCHUNG HEIDELBERG, HANNAY AND NAMPAY GROUP RESEARCH & DEVELOPMENT, LCA CONSULTING, POLYMER PROPERTIES DATABASE, SELKE AND CULTER, STORA ENSO, VTT TECHNICAL RESEARCH CENTRE OF FINLAND, EUROMONITOR (2013A, 2013B, 2013C), SEE ENDNOTES.¹¹

The potential of fibre packaging to replace plastics

A report by Material Economics found that one quarter of plastics use in packaging could be replaced without compromise on functionality and consumer convenience



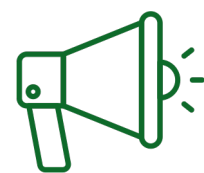
Why make the switch?



Decarbonisation of packaging: Lifecycle emissions can be reduced by up to 65% using fibre-based packaging.



Consumers expect retailers/brands to reduce plastic packaging, and demonstrate they have a plan in place to implement change.



As new material types and production technologies emerge, fibre-based substitutes without plastic barriers are increasingly achievable.

Recent Example: Decarbonisation of laundry category

Examples mentioned here will save close to 13,000 tonnes of plastic p.a.



Laundry brands, **Ariel** and **Lenor** now use the patent-pending **ECOCLIC®** box, kick-starting the next generation of detergent packaging.

Designed to be child safe and easier to use, the new packaging will save about **6,500 tonnes** of plastic in Europe.



For the first time ever, **Unilever's DIG (Dirt is Good) brands** including Persil, Skip and OMO will be sold in a plastic-free, fully recyclable cartonboard box.

The switch is thought to save around **6,000 tonnes** of plastic per year, the equivalent in weight to 500 double-decker buses.



Private Labels are following: UK supermarket **Tesco** introducing recyclable carton packs for its own label detergents.

It predicts the move will remove **252 tonnes** of plastic from its portfolio annually, and over four million pieces of plastic across four SKUs.



P&G Fabric & Home Care announced a trial of its new liquid fabric conditioner Lenor in paper bottles, in partnership with paper bottle company Paboco.

The bottle is composed of paper fibres from FSC-certified sources and will offer insight into the functionality of a non-plastic bottle for liquid laundry products.



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Reuse vs. Recycle A Consumer Study

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Consumer perceptions

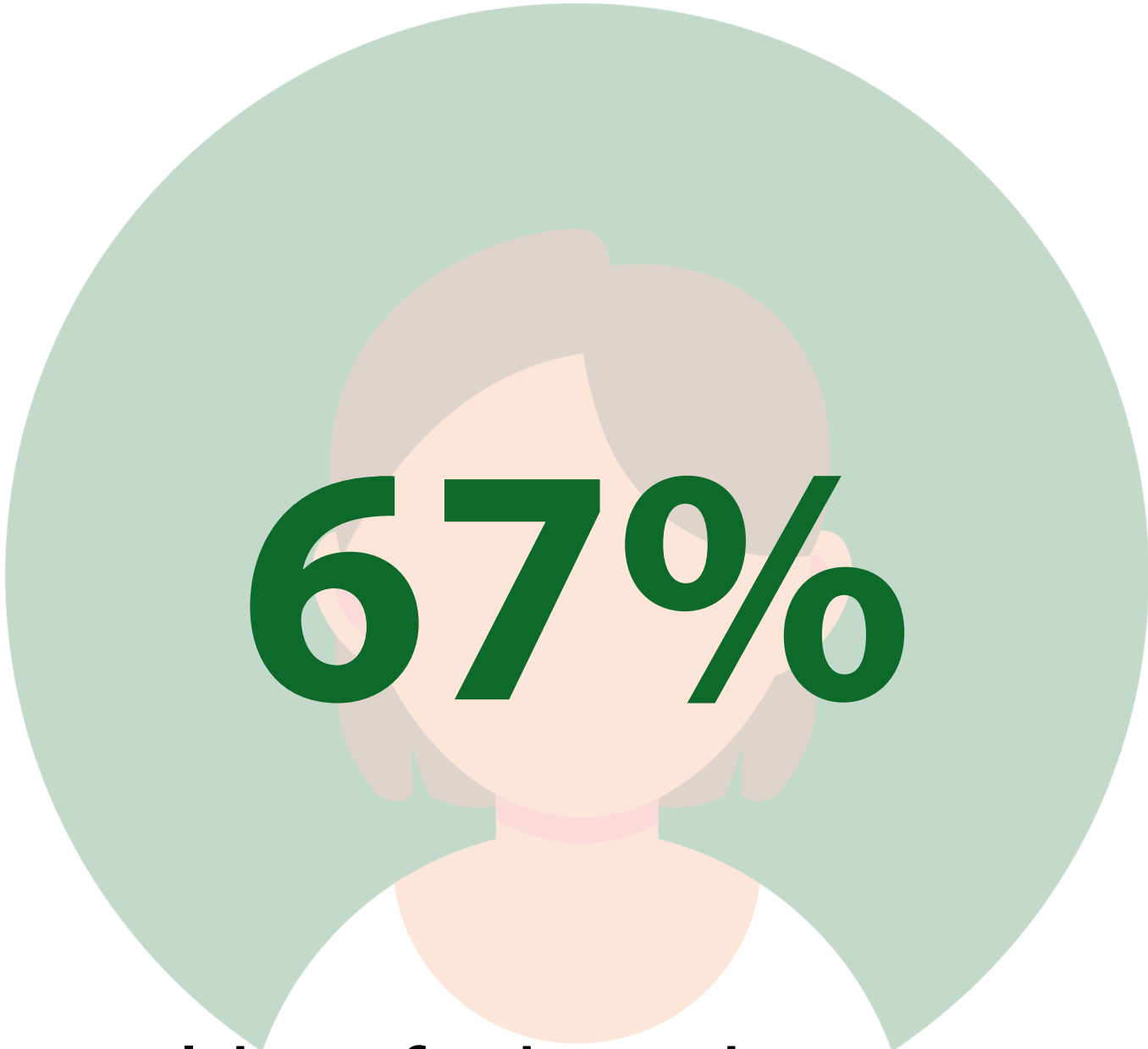
German consumers have their say



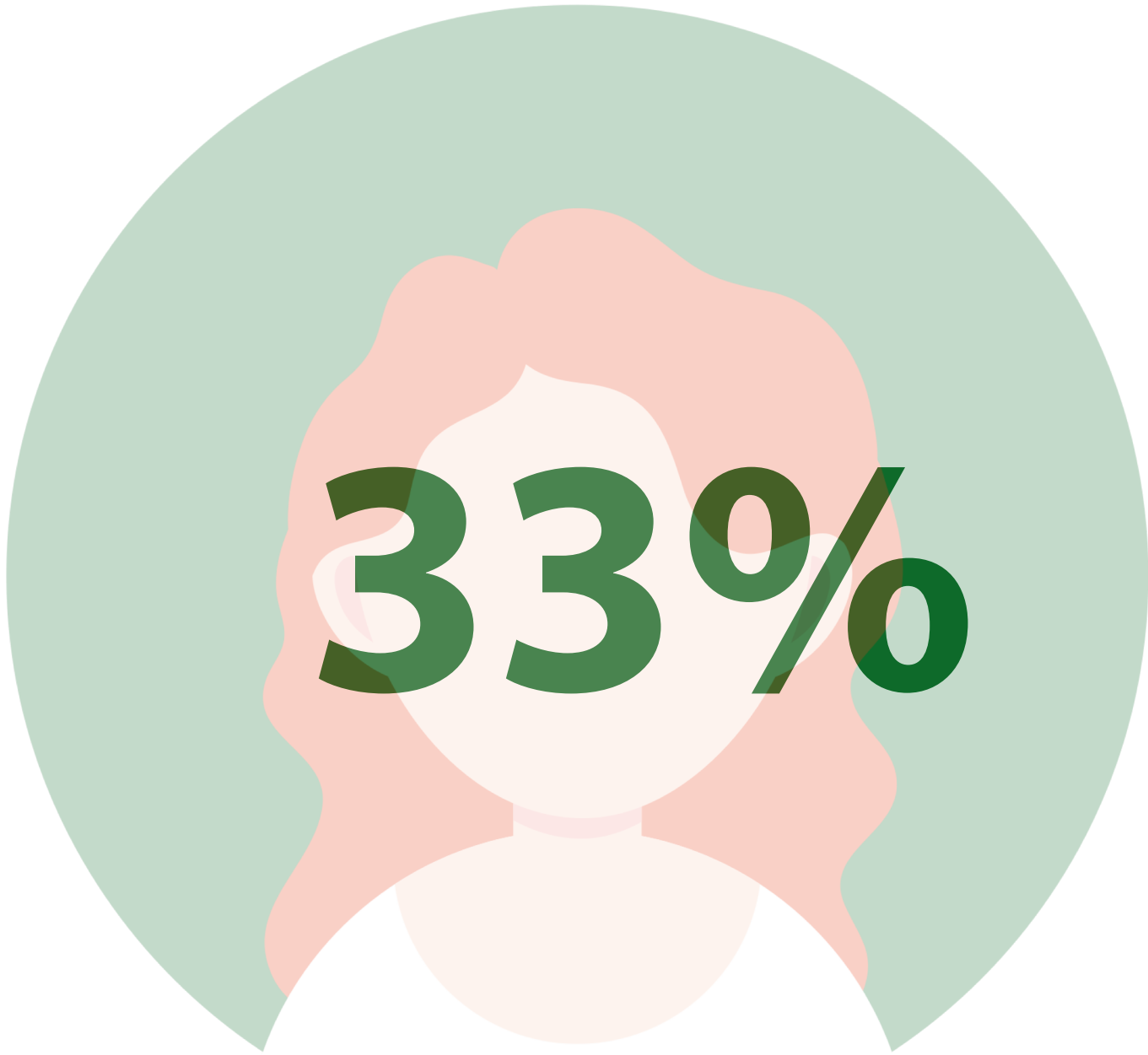
+1000 CONSUMERS POLLED
REUSE VS RECYCLE
EXCLUSIVE INSIGHTS
ENVIRONMENTAL ATTITUDES
KEY TRENDS AND CHALLENGES
CONDUCTED IN MAY 2023

Consumers prefer recyclable carton over reusable plastic packaging

What do consumers want



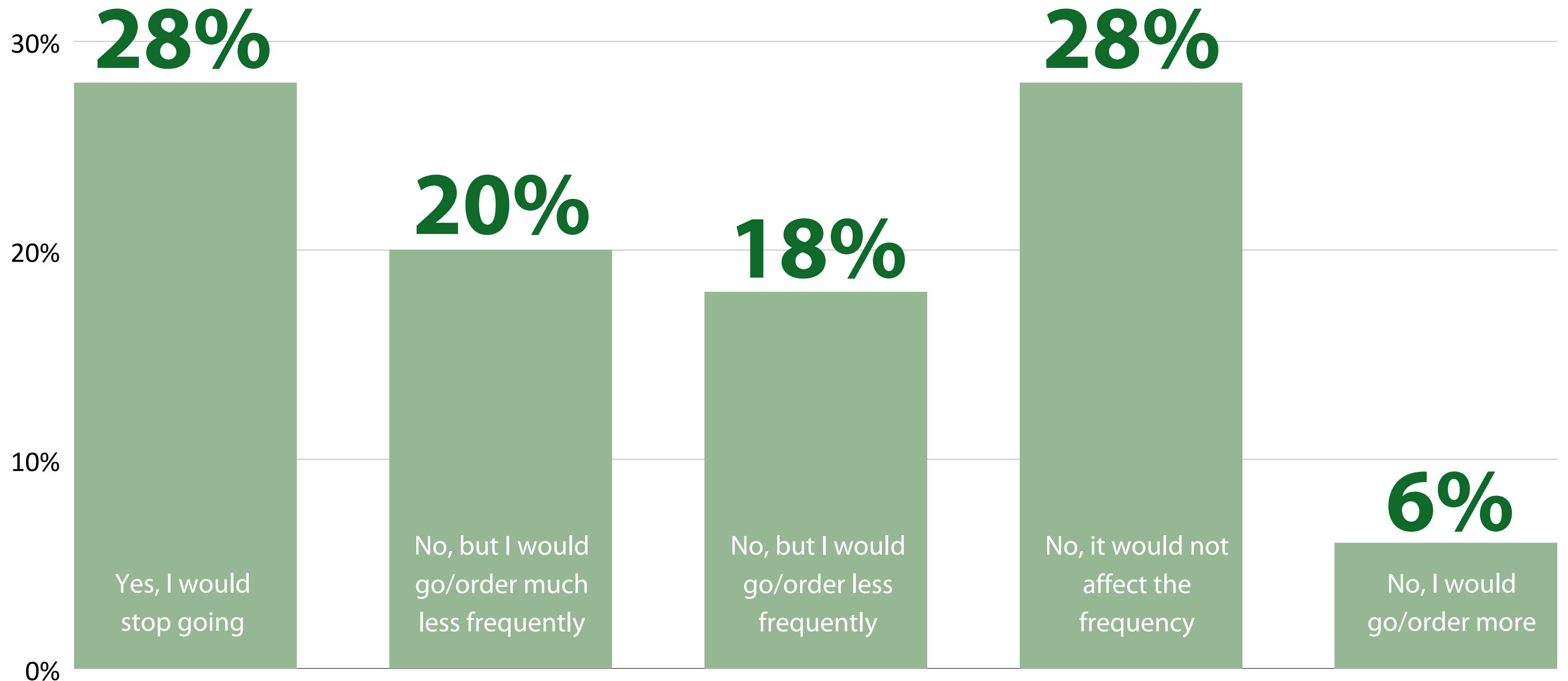
"I would prefer brands to invest in biodegradable, carton containers that can be recycled."



"I would prefer brands to invest in reusable plastic packaging."

Low acceptance level of mandatory deposit scheme

66% of consumers report lower consumption/order frequency



Would the introduction of a deposit scheme (€2) for reusable plastic packaging affect the frequency with which you shop/dine/order?

Preferences for packaging

In a fast-food setting, which of the following would you prefer to do with the packaging once you have finished your meal?



61%

"I would prefer to dispose of the packaging for recycling."



39%

"I would prefer to store, rinse and return reusable plastic packaging to a collection point."

Consumers raise concerns on hygiene

How likely are consumers to change?

On a scale of 1-10, how confident are you that reusable plastic packaging proposed for fast-food restaurants would be adequately cleaned, guaranteeing food hygiene?





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The potential impact of reusable packaging

Study undertaken by McKinsey & Company, in
partnership with Pro Carton, ECMA, FEFCO, Capi
and EPPA.

Published 5th April 2023

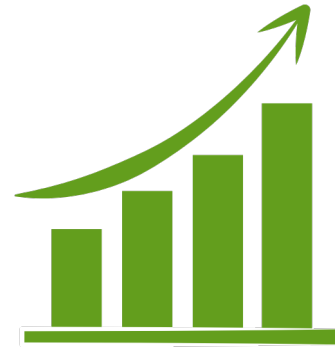


Studies in Germany and Belgium: The findings

The report yielded a number of clear conclusions:



Reusable solutions would yield **higher CO2 emissions**



Reusable solutions **imply higher costs**



Transport is the main driver for both CO2 emissions and cost



Reusable options are **fossil-based**

Takeaway food service in Belgium

A Case Study

Compared to single-use alternatives, introducing reusable packaging in Belgian takeaway foodservice by 2030 will lead to:

+140-160%
Additional CO2 emissions

Increase of 5 to 5.5kt of CO2 emissions on account of the higher share of fossil components in materials, transport and energy use.

+80-130%
Significant cost increases

Reuse alternatives will be more expensive compared to single-use alternatives due to increased transportation and cleaning costs


Societal impact

Shifting to reuse will raise the issue of maintaining a high level of food safety



E-commerce deliveries in Germany

A Case Study


Compared to single-use alternatives, introducing reusable packaging in the non-food e-commerce sectors in Germany will lead to:

+10-40%
Additional CO2 emissions

The handling of reusable items per rotation and transport alone are estimated to exceed emissions of single-use products.

+50-200%
Significant cost increases

More than 50% for mailer bags and nearly 200% for boxes. Making every tenth parcel reusable adds around €30 million in costs for the total market in Germany.


Cost of Transport

For packages that achieve 20 rotations, transport will likely account for more than 75 percent of costs and more than 65 percent of CO2 emissions.





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The Carbon Footprint of Carton Packaging 2023

A study carried out by RISE (Research Institutes
of Sweden) Bioeconomy for Pro Carton



The Carbon Footprint of Carton Packaging 2023

Headline Results

The European cartonboard and folding carton industry has succeeded in reducing its carbon footprint by 24% since 2018.

The newly measured European industry average carbon footprint per tonnes of printed cartons is now at:



249 kgCO₂e cradle-to-grave



148 kgCO₂e cradle-to-gate



24%

Reduction in Carbon Footprint
since 2018

The findings demonstrate that carton packaging not only meets the demands of a bio-based and circular economy but has a key role to play in the transition to a low carbon economy.

Cartons are “future ready”. Today.

- Increased number of applications by innovations
- Renewable raw materials
- Ease of recycling
- Trusted collection and recycling system
- Well balanced mix of virgin and recycled fibres
- Leading in circularity

Every recycled carton will be used as raw materials for new packaging.
We are pushing for fibre-based materials to be collected separately from other materials.
We are targeting a recycling rate of 90% by 2030.





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**Cartonboard is future ready.
Today.**



SCAN ME

