Sustainable
Packaging.
Has the COVID-19
pandemic changed
everything?

Our latest research on the impact of the COVID-19 pandemic on sustainable packaging – and how to adapt your packaging design and messaging







The world is always changing. But never as much as right now.

The COVID-19 pandemic has had a significant impact on individuals and businesses across the globe.

As a leader in sustainable packaging solutions, DS Smith supplies some of Europe's biggest retailers and brands. We have watched over time as sustainability has become a stronger competitive advantage and a sales opportunity on the market for our customers. It is also absolutely the right thing to do for our world.

Before the COVID-19 pandemic, we were hosting more than 30 sustainability and plastic replacement workshops across Europe every week, enabling customers to use sustainable packaging to reduce cost, increase sales and manage risk. More recently, as the impacts of the pandemic spread across the countries where we operate, we focused on sharing our packaging expertise to find innovative solutions

to support our customers during this difficult time. From helping to meet significant supply and demand challenges, to adapting to seismic shifts in retail and e-commerce behaviour.

Amongst all this change, we asked ourselves have consumer attitudes towards sustainable packaging changed? Has packaging hygiene become a bigger concern or impacted the purchasing power that was previously driving sustainable packaging trends?

To find answers we have partnered with the world leading consumer research company Ipsos MORI. We interviewed an online sample of 9,000 adults, across 12 European countries, between the 24th September and the 19th October 2020.¹

9000 nn PEOPLE TTT SAMPLED 18-65 nn GROUP **EUROPEAN MARKETS**

¹ Methodology. Ipsos MORI interviewed an online sample of 8,500 adults aged 18-65 in the UK, France, Germany, Italy, Spain, Poland, Belgium, Denmark, Finland, the Netherlands and Sweden and 500 adults aged 18-55 in Portugal between the 24th September and the 19th October 2020. Data has been weighted to the known offline population proportions for age, gender, region and working status within each country.





Sustainable packaging still matters...

Existing research shows sustainability issues continue to be considered as serious as the COVID-19 pandemic, and now our own research suggests a similar trend.

Despite changing shopping habits, consumers continue to prioritise sustainable packaging - and it continues to be an opportunity for competitive advantage and to drive sales.

We have also found the pandemic has not diminished nor impacted the willingness of consumers to take positive action on sustainable packaging. In fact, it has marginally increased. However, this has to be balanced against the potential future impacts of recession across Europe.

Although our data already suggests sustainability will continue to influence consumer behaviours, it is possible that over the next 12 months we may see cost become the most significant driver in purchase decisions. It is crucial that we remove these barriers to consumers making sustainable packaging choices.

We also asked directly about more specific sustainability considerations when 'purchasing products in general'.

Our research shows the most important packaging-related themes overall are products being 'in the minimum amount of packaging', 'packaged in recyclable materials' and 'produced in a way that has low impact on the environment'.

710/0
globally agree long term climate change is as serious as the COVID-19 pandemic



32%

globally consider 'dealing with the waste we generate' is a top 3 environmental issue



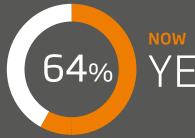
85%

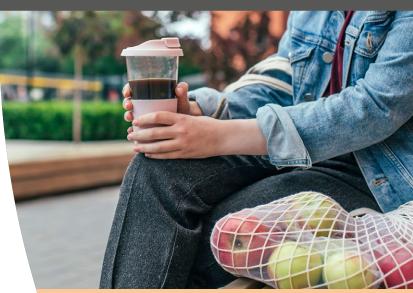
want to buy products which use 'as little packaging as possible'

"I'd be willing to change where I shop if it meant I would use less packaging."*



PRE-COVID-1
PANDEMIC
YES







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Continue to use sustainable packaging innovation projects to gain a competitive advantage and drive sales

Source: Q23 How much do you agree or disagree with the following statements... Q1 Which of the following, if any, are important to you when purchasing products in general? Base: All UK, DE, PL, IT, FR, ES (1000), BE, NL, SE, DK, FI, PT (500). Source: Ipsos Earth Day data, February 21 to March 6, 2020. Q In your view, what are the three most important environmental issues facing [COUNTRY] today? That is, the top environmental issues you feel should receive the greatest attention from your local leaders. Base: 20,590 online adults aged 16-74 in 29 markets.



...But the amount of packaging is influencing purchases more

We asked in more detail which sustainability-related packaging criteria were important when purchasing products.

43% of adults in our survey say 'the minimum amount **of packaging**' is important (with higher than average scores seen across the UK, Germany and Belgium). This is followed by 41% stating 'packaged in recyclable materials' is important.

Our research indicates concern about the amount of packaging used will not be going away, with a third of our respondents expecting the amount of packaging will still be important after the COVID-19 pandemic.

At DS Smith, we believe this may become an even bigger issue over the coming year as we all continue to do more of our shopping online. 64% of Europeans say they shopped more online during the COVID-19 pandemic² with 89% saying they intended to shop as much online or even more after European lockdowns.

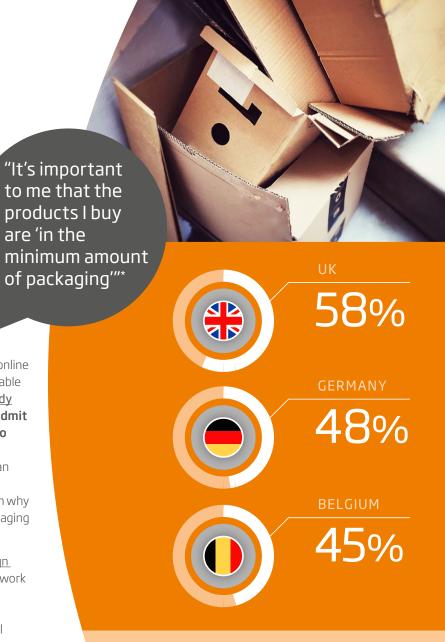
This increase is supported by data from Local Authorities in the UK showing household recycling has risen 50% since the COVID-19 pandemic lockdowns began and across Europe household recycling levels are set to reach new heights.

The cost of confusion

43% of consumers feel guilty about ordering items online which then arrive with either too much or unsustainable packaging. This comes on the back of a previous study from DS Smith which uncovered **European adults admit** to throwing 41% of their recyclable material into **general waste**. In fact, 74% - almost 3 in 4 people said they were not clear which types of packaging can and cannot be recycled. A total of 51% of Europeans cited unclear information on packaging as the reason why they were unsure whether to recycle a piece of packaging or not³.

are 'in the

DS Smith's recently launched <u>DS Smith Circular Design</u> Principles give our designers and customers a framework to help achieve this. They ensure all our packaging designs optimise materials and structure to ensure they use no more material than necessary whilst still protecting the product in the supply chain; whether retail, industrial or e-commerce.





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Focus on projects which improve and communicate recyclability; and optimise packaging designs to use no more material than necessary

 $^{^2}$ "Why European shopping may never be the same post Covid- $10^{\prime\prime}$ 3 "DS Smith launches Circular Design Principles to drive sustainability in packaging/Cost of Confusion" 'Source: Q1 Which of the following, if any, are important to you when purchasing products in general? It is important to me that the products I buy are... Q5 And how much do you agree or disagree with the following statements? Q18 How much do you agree or disagree with the following statements? Base: All UK, DE, PL, IT, FR, ES (1000), BE, NL, SE, DK, FI, PT (500).



Some consumers are more willing to act than others

In surveys like ours, what people say is important is not always reflected in their actual behaviours. We call this the say-do-gap.

We observed this discrepancy when comparing what people say to be important when buying products, and what they say they have made a conscious decision to buy in the past month.

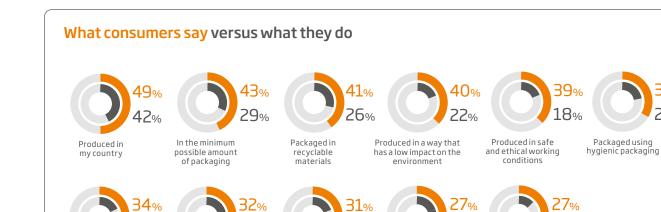
Digging into the data, across most topics, we see around a 20 percentage point gap, but it is smallest for 'products not packaged in plastic' and locally sourced products, as we discuss in the following pages.

We must make it easier to act

However, the say-do-gap is not a reason for companies to slow progress. It simply shows the need to offer people

the chance to act more easily. So there is an opportunity for brands and retailers to use packaging to minimise the say-do-gap through good material and design choices, better recyclability and labelling.

As we move into a potentially more difficult financial period, it is important now more than ever to minimise these barriers to act for consumers and make sustainable packaging an easy, straightforward choice. For example, a start would be to make all packaging 100% reusable or recyclable in household waste recycling, which DS Smith has committed to by 2023 as part of our Now & Next Sustainability Strategy.



Packaged using

recycled materials



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Use good packaging design and messaging to make sustainable packaging choices easier for consumers Q1. It is important to me that the products I buy are...*

Produced in my

local area / region

sustainable

• Q2. Conscious decision to try to buy in the past month

Packaged using

sustainably sourced

materials

Source: Q1 Which of the following, if any, are important to you when purchasing products in general? Please select all that apply. It is important to me that the products I buy are... Q2 And which of the following, if any, have you made a conscious decision to do in the past month? Please select all that apply. In the past month, I have made a conscious decision to try to buy products that are... Base: All UK, DE, PL, IT, FR, ES (1000), BE, NL, SE, DK, FI, PT (500)

Not packaged

in plastic



Attitudes towards plastic are evolving

Our research found the importance of household products 'not packaged in plastic' is less important than other packaging-related sustainability criteria, and here, the say-do-gap is relatively small.

There has been public backlash against plastic packaging, but our research is starting to show some interesting new trends. We see data that suggests people have gained a more mature or nuanced understanding of the issues relating to packaging and sustainability, and that a simple removal of plastic may not be appropriate or necessary in all cases. This may also represent the voice of a smaller group of deep green, eco-consumers and is indicative of the size of the zero waste movement we see gaining traction on social media.

What does this mean for the sustainability strategies of brands and retailers?

We believe strategies should focus on removing all unnecessary plastic, as opposed to simply removing all plastic. There also needs to be a strong focus on both recyclability and total cost of ownership.

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1in4
appear to be actively
anti-plastic

For example, DS Smith's <u>ECO Bowl</u> innovation is a Modified Atmosphere pack primarily designed for use in the meat, fish and substitutes category. The first generation uses 85% less plastic, with a fully recyclable corrugated outer. It is a solution that still uses plastic where necessary for hygiene reasons and the next step on the innovation journey is to look into alternative, non-plastic films.

In our research, UK consumers were the most concerned about plastic. There is however variation in importance of 'not packaged in plastic' across markets which suggests that the public understanding is not consistent in this area. We see this variation particularly in the Nordic countries which may be due to better waste management of plastic, and their strong incineration infrastructure.



90%

of the people who say it is important products are not packaged in plastic, have made a conscious decision to try to stop buying products in plastic UK

39%

(7% higher than next highest country)

LOWEST



"It is important that the products I buy are 'not packaged in plastic""*



12%



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Focus on eliminating unnecessary plastic, but do not forget other packaging sustainability improvements



'Source: Q4 And which of the following will continue to be important in the next 12 months? Please select all that apply In the future, it will continue to be important to me that the products I buy are... Base: All UK, DE, PL, IT, FR, ES (1000), BE, NL, SE, DK, FI, PT (500). Q1 Which of the following, if any, have you made a conscious decision to do in the past month? Base: All UK, DE, PL, IT, FR, ES (1000), BE, NL, SE, DK, FI, PT (500)



Local produce and hygienic packaging are more important than ever

"It is important that the products I buy are 'produced in my country""*





Loving local

Since the COVID-19 pandemic it has become more important to 40% of all adults that the products that they buy are 'produced in my country' - the greatest increase in importance over all other packaging considerations. 48% of all people surveyed feel that 'produced in my country' will continue to be more important in the future. The importance of 'local' is particularly high in Italy, France, Spain, Germany, Finland, Sweden and Denmark.

Saying really does mean doing

The say-do-gap for this topic was the smallest of all packaging-related criteria, meaning people may change their purchasing behaviours as a result. This is no big surprise as lockdowns have driven people to both work, live and shop closer to home, combined with the longer-term trend of glocalisation we have seen arise.

While this is unlikely to be wholly driven by sustainability considerations (i.e. carbon emissions associated with shipping food), it is an area where 'local' credentials should enhance positioning with consumers. This is already quite common in the fresh fruit and vegetables category, where we find for example, messaging on-pack such as 'Made in Britain' and in the meat and fish category with transparency campaigns around sourcing and supply chain mapping. Similarly in Beer & Cider, with the growth of craft, and in Confectionery, local sourcing and/or ethical provenance has become particularly important; driving interest in products from a trusted country.

This behaviour is also significant for the supply chains of brands and retailers. The attraction of locally sourced products to consumers, combined with more commercial and logistical supply and demand challenges due to the COVID-19 pandemic, may result in more local supply chains and significant changes to their packaging performance needs.









*Source: Q1 Which of the following, if any, are important to you when purchasing products in general? Please select all that apply. It is important to me that the products I buy are... Q3 Which of the following, if any, have become more important to you since the disruption caused by COVID-19? Please select all that apply. Since the disruption caused by COVID-19, it has become more important to me that the products I buy are... Base: All UK, DE, PL, IT, FR, ES (1000), BE, NL, SE, DK, FI, PT (500)





Hygiene first

The importance of products 'packaged in hygienic packaging' has also increased and almost half (45%) say they now prioritise hygiene over sustainability. Our research suggests packaging hygiene will continue to be a priority, even after the COVID-19 pandemic recedes.

Manufacturers and retailers will therefore need to balance sustainability and hygiene in current and future product development and promotion.

Although it is difficult to understand precisely what consumers want in relation to hygiene, DS Smith believes there is significant opportunity for material related innovations and packaging design to strengthen hygiene credentials. Perception is reality when it comes to hygiene and packaging can act as an education piece.

In a time when public messaging is driving behaviour and consumers are adapting to greater quantities of scientific messages, this is a huge opportunity.



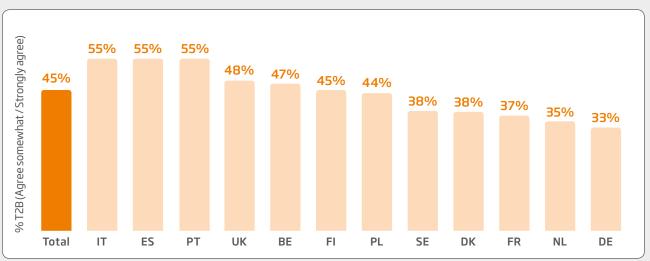
important in future



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Use packaging to communicate to consumers more about hygienic credentials and investigate material innovations

"Since the COVID-19 pandemic, I prioritise hygiene over sustainability when it comes to packaging" (% agree)*



Source: Q1 Which of the following, if any, are important to you when purchasing products in general? Please select all that apply. It is important to me that the products I buy are... Q4 And which of the following will continue to be important in the next 12 months? Please select all that apply. In the future, it will continue to be important to me that the products I buy are... Q5 And how much do you agree or disagree with the following statements? Base: All UK, DE, PL, IT, FR, ES (1000), BE, NL, SE, DK, FI, PT (500).



'Unsustainable packaging' poses significant commercial risks

A commercial risk for e-commerce

Between one third and two thirds of people in every market say they have purchased online more frequently during the COVID-19 pandemic. 48% have experienced what they call 'unsustainable packaging'. Unlike in retail, consumers have no choice about the packaging they receive when they buy online.

We have previously mentioned packaging 'guilt' (which has been experienced by 43% of European consumers) which drives them to take real action against unsustainable packaging. On the flip side, this can create significant opportunities for companies that do more to offer more sustainable packaging.

Hitting the 'Sweet Spot'

When creating new e-commerce packs, our designers look to balance six critical focal points: Product Protection, Brand Alignment, Customer Experience, Inclusive Design, Innovation Efficiency and Sustainability.

The importance of each focal point will be led by our customers or end user needs and will take into account brand strategy as well as practical criteria. For example, where a brand is focused on sustainability, then a solution can be developed to perform using minimal fibre.

On the other hand, a product could be heavy and requires further protection. Here the customer unboxing experience may not also be as critical.

Striking the right balance between what is important when developing new packaging innovations, allows companies to hit the 'Sweet Spot' for their brand and customers.





1in3

consumers have reduced or stopped buying completely from offending sites or companies



61%

of online shoppers have felt overwhelmed by the amount of packaging items



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Develop e-commerce packaging which hits the 'Sweet Spot' and take extra focus on avoiding overpackaging

Source: Q13 Since the disruption caused by COVID-19, how much more or less, if at all, do you buy products online? I buy products online... Q16 Have you bought products online which have been delivered in e-commerce packaging that you consider to be packaged unsustainably (e.g. not easy to recycle, too much plastic, box too big for the product, overpackaged, unnecessary filler material etc.)? Q17 When you have received items from e-commerce websites that you consider to be packaged unsustainably, which of the following, if any, have you ever done? Q18 How much do you agree or disagree with the following statements? Base: All UK, DE, PL, IT, FR, ES (1000), BE, NL, SE, DK, FI, PT (500)



'Unsustainable packaging' poses significant commercial risks

For brands and retail

Over time, brands and retailers who do not act sustainably risk losing reputation and customers. Since the COVID-19 pandemic, 64% of people say they are prepared to shop elsewhere if this means less packaging.

High profile anti-packaging campaigns by the public (and often boosted by personalities) can damage brands through direct action and negative PR. Retailers have a choice: to resist it or embrace customer demands and use sustainable packaging solutions as a competitive advantage, generating positive stories that cut through with consumers.

The location and clarity of packaging information (materials, recyclability etc) is also important, with 38% looking for such information in-store, and 53% saying they would look for this information on the products themselves. Our research indicates there are two main locations where consumers look for information. On-shelf is where the competitive advantage messages which drive sales needs to be, and on the primary packaging is where consumers are looking for informational messages at point of disposal (recyclability etc).











would look for packaging information on the product itself UK 63% Sweden 59% Portugal 61%





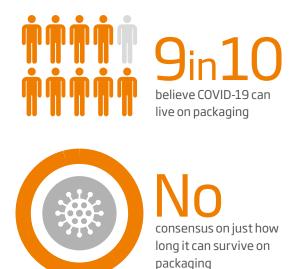
Consumers believe COVID-19 can live on all packaging materials

Consumer perception of the risk of the virus tends to outweigh actual risk.

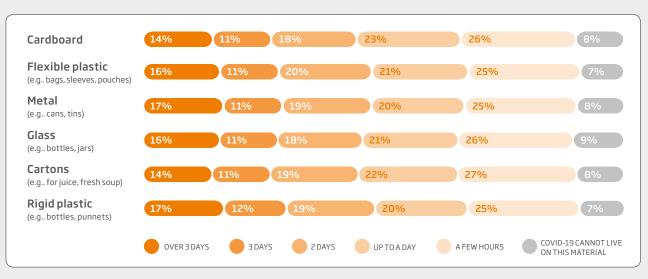
The Food Standards Agency insist that it is unlikely that coronavirus can be transmitted by exposure to food packaging. Despite this, sales of loose items fell over the four weeks to 4 April 2020 vs. the same period in 2019, while pre-packed foods increased¹.

When asked directly about how long the virus can live on specific materials, over nine in ten believe that COVID-19 can live on packaging materials, but there is no consensus on how long it can survive.

We see from the rest of our research, that this perception is driving some surprising and significant changes in how consumers interact with packaging which could drive new needs for packaging design.



Perception of how long COVID-19 can live on packaging materials



Source: Q24 How long, if at all, do you think that COVID-19 can live on the following types of packaging materials? Base: All UK, DE, PL, IT, FR, ES (1000), BE, NL, SE, DK, FI, PT (500)



Weighing up the future for loose fruit and vegetables

UK government and World Health Organisation guidelines recommend not touching loose foods unless you intend to buy them. Whilst they also state there is no need to sanitise or disinfect the outer packaging of food, the washing of hands thoroughly after touching packaged products is recommended.

At DS Smith we have been observing numerous brands and retailers switching back to plastic packaged products to meet renewed consumer demand. Our research suggests that there is an increase in cautious hygienic behaviours with regard to groceries and household packaged products specifically on hand washing and disinfecting loose items, which is particularly significant in Spain and Portugal.

However we are also seeing a significant proportion of consumers avoiding purchasing loose items. These behaviours are most pronounced in Finland and the UK.

Next generation solutions are needed now

There is clearly significant demand to develop solutions to balance sustainability with hygiene in the fruit and vegetable category.

DS Smith has innovative mid-term solutions to meet some of these challenges, including <u>corrugated boxes</u>, <u>punnets</u>, <u>trays</u> – and our latest innovation <u>ECO Bowl</u> which all reduce plastic significantly but still protect the product from damage, food waste or hygiene-related concerns.







52%

claim to wash their hands after touching packaged groceries and household products, increasing to Spain 71% Portugal 74%



wash or disinfect all loose items (e.q. fruit and vegetables)





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Packaging solutions that reduce plastic significantly but still protect the product from damage, food waste or hygiene-related concerns



New in-store behaviours: Less browsing, less time in-store

In keeping with other research, we have found more cautious in-store behaviours since the onset of the COVID-19 pandemic.

68% agree that since the COVID-19 pandemic, they now 'try to spend as little time in-store as possible', with half claiming they are more stressed in-store and/ or actively try to complete shopping trips as quickly as possible. However, there are still significant variations by market, with Portugal displaying the most caution, closely followed by the UK and Italy.

For packaging design and messaging, our other findings (around list-writing and touching products in store) have significant implications and we expect this behaviour to continue over the next six months.

This may impact on <u>Shelf Ready Packaging (SRP)</u> design, for example to help accessibility at the back of shelf.

Or may focus more on navigation and using colour, different typefaces or other techniques to signpost variants more clearly in-store which will reduce the time it takes for consumers to find a product.

It is also more important than ever for brands to stand out on-shelf to 'intercept' the shopper journey, as display and promotional packaging in-store may be less likely to be noticed. This is a key opportunity for high impact promotional POS.



56%

worry how many people have touched the products they touch in-store



23%

have chosen items from the back of the shelf which people are less likely to have touched UK 33%

Portugal 33% Finland 33%



2in5

have written a shopping list to avoid browsing (increasing to over half in Italy and Portugal)



78% worry how many people have touched the products they touch in-store



68% worry how many people have touched the products they touch in-store



worry how many people have touched the products they touch in-store



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High impact promotional POS and SRP to 'intercept' the shopper journey



New e-commerce behaviours: Shopping more, worrying more

Our research shows new at-home behaviours. Almost half the people we surveyed say they are buying online more compared to before the COVID-19 pandemic; rising to two-thirds in the UK. As online shopping is on the up, so are the cautious behaviours related to the handling of e-commerce packaging.

All cautious behaviours relating to handling e-commerce packaging, as shown in the figures on the right, are significantly more common in Portugal, Spain and Italy, and least common in Germany and the Netherlands, where roughly half do not admit to any new/different behaviours since the COVID-19 pandemic.

This is clearly an opportunity for innovation in both materials and packaging design; whether it be special

coatings or treatments or clearly marked packaging for where to hold/touch packs.

We must also focus on speeding up the flow of packaging through the home. It must be low contact and as fast and easy as possible to break down, recycle and dispose of. This means a focus on recyclable designs and recyclability messaging on pack.







pack



16% wash or disinfect all items packaged in cardboard





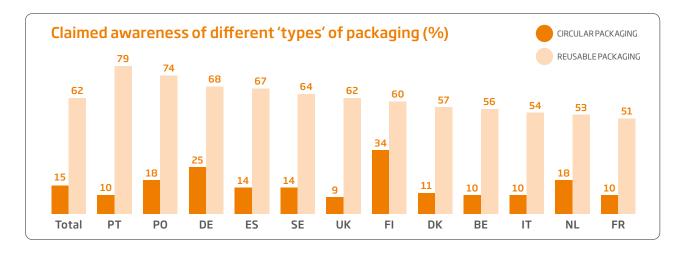
We need to work together to increase awareness of the circular economy

The circular economy has always been at the heart of DS Smith's <u>business model</u>. Our commitment has been strengthened by our partnership with the <u>Ellen MacArthur Foundation</u>, our <u>Now and Next Sustainability</u> Strategy and our Circular Design Principles.

However, our research has found low awareness of the term 'circular packaging' in most markets, while 'reusable packaging' is much more familiar.

Our research used a world-leading pack testing platform to assess the consumer appeal of some of the most common sustainable packaging claims on boxes. We found that the simplest messages – perhaps those most immediately relatable to the actual packaging were the most appealing (i.e. recyclable, reusable, made from sustainable forests, zero plastic etc.)

Brands and retailers must become more circular to drive awareness. Consumers need to understand more what circular packaging can be, in practice. We will continue to grow awareness of the circular economy of packaging – but we have a long way to go, for which we need a combined approach across the whole industry.



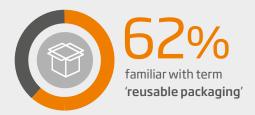


only 15% aware of the term 'circular packaging' (but there is considerable variation across markets)



25%
German consumers aware of 'circular economy' term







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Use simple, clear, understandable messaging and claims about sustainability on your packaging



Get in touch

At DS Smith we are committed to driving innnovation and sustainability in partnership with our customers. Especially in these very changeable times.

Let's create a sustainable, hygienic future packaging system, together!

<u>Get in touch</u> today to dig deeper into our research data and understand more about what these trends could mean for your packaging design and messaging.

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