





FRESHER, CLEARER, EASIER, SAFER...
AND NOW GREENER

The 100% recyclable bread bag has arrived



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THE BACKGROUND

In our conversations with bakeries across the world - not to mention our own research into sustainable packaging - we're seeing several themes and contributory factors emerge in the drive for recyclable solutions.

Global action

It is estimated that packaging accounts for more than a quarter of plastic worldwide, increasing the shelf life of many products and making food shopping more convenient for billions (United Nations Environment Programme). However, as the world wakes up to the impact of plastic packaging on the environment, leading brands are making changes at the highest level that are being felt throughout the supply chain.

The Ellen MacArthur Foundation is bringing together global stakeholders under the New Plastics Economy to create a circular economy for plastics, starting with packaging. The foundation's June 2019 report shows that 400 organisations have committed to work towards work towards 100% reusable, recyclable or compostable packaging by 2025.

Those organisations include six of the top 10 global fast moving consumer goods companies (Nestlé, Pepsico, Unilever, The Coca-Cola Company, L'Oréal, and Mars); seven of the top 10 global plastic packaging producers (Amcor, Sealed Air Corporation, ALPLA Group, Aptargroup Inc., Berry Global, RPC Group and Bemis); five of the top 15 global retailers (Walmart Inc., Schwarz Group, Carrefour, Target, and Ahold Delhaize) and two of the world's largest environmental services companies (Veolia and SUEZ) .



Supermarket-driven demand

In January this year, Iceland launched its five-year plan to remove plastic from all own brand products within five years. Asda followed suit in February with a pledge to cut plastic in its own brand packaging by 10% within 12 months, and in May Tesco announced that it will ban all packaging that is hard to recycle from 2019 as it aims to move towards a 'closed loop' system.

The WRAP-led "UK Plastics Pact" launched in May with the aim of creating a circular economy for plastics. The pact "brings together businesses from across the entire plastics value chain with UK governments and NGOs to tackle the scourge of plastic waste", and it launched with a commitment from every major supermarket in Britain to eradicate unnecessary single-use plastics by 2025.

Consumer pressure

Consumer action is also putting pressure on supermarkets. What began as a small one-off protest in the UK, has evolved into 'plastic attack' protests on supermarkets around the world, which now stand at around 100 and have been held across Europe as well as in Hong Kong, South Korea, Canada, Peru and the United States. Consumer petitions and Greenpeace's public 'naming and shaming' of the worst offenders when it comes to offering sustainable packaging are all playing a part in driving supermarkets towards more sustainable packaging options.

The 'Attenborough effect'

Research showed that, following the broadcast of the Sir David Attenborough-helmed TV series Blue Planet II in 2017, there was a surge of interest in recycling. And Attenborough's impassioned plea to viewers in the final series episode certainly seemed to have a resounding impact on viewers. Research findings from online search behavioural specialist Hitwise showed that searches of 'plastic recycling' rose by 55% following the appeal in the final Blue Planet II episode.

"We are at a unique stage in our history. Never before have we had such an awareness of what we are doing to the planet, and never before have we had the power to do something about that. Surely we all have a responsibility to care for our blue planet. The future of humanity and indeed all life on earth now depends on us." Sir David Attenborough

Landfill limitations

The UK is rapidly running out of landfill space. Although there are differences of opinion over exactly when this will happen, five to ten years is the consensus. It's a similar picture in the US, with a 2018 report by the Solid Waste Environmental Excellence Protocol (SWEEP) report showing that the 2,000 active landfills in the US that hold the bulk of non-recyclable waste are reaching their capacity. China has put a stop to imports of certain types of post-consumer waste, including plastics, and as a consequence of Brexit it is unlikely that the UK will be able to continue exporting non-recyclable waste to Europe in the same quantities.

New landfill space isn't being created because it isn't seen as a long term waste management solution, and the Mind the Gap 2017-2030 UK residual waste infrastructure capacity requirements report published in late 2017 highlights 'a serious deficit between the amount of waste needing treatment and the Energy-from-Waste (EFW) capacity available to deal with it.'



THE ALTERNATIVES

Paper bags and seals

Many people believe that paper bags offer a more sustainable option than plastic because they are manufactured from a renewable resource, they are biodegradable and also recyclable. However, the truth isn't quite as black and white.

Paper bags are more widely recycled than plastic bags but, taking the entire product life cycle into account, paper bag manufacture is more resource intensive than plastic; it is harder to reuse paper bags because they're not as durable as plastic; and paper bags have a greater mass than plastic bags, which means they add more volume to the waste stream. Uncoated papers absorb moisture which reduces the product life and potentially increases food waste. Coated papers cannot be recycled.

And, whereas polypropylene and polyethylene are compatible in the recycling process, paper and polyethylene are not. This renders paper 'window' bags inherently non-recyclable. It also means that combining a paper seal with a polyethylene bag prevents the entire pack being recycled: for it to be recyclable the seal must be pure polyolefin.

Compostable options

The efficacy of biodegradable and compostable packaging as a viable and long term alternative to the traditional plastic bag is the focus of widespread debate among scientists, environmentalists and industry. The debate centres on where the core materials are disposed, the speed at which they break down and what they break down into.

Many argue that landfill does not provide the light or oxygen necessary for biodegradable plastics to degrade. Temperature and humidity can also affect the process. These plastics require industrial conditions in order to effectively degrade, and this type of waste collection isn't currently resourced in the UK.

Oxo-degradable plastic is being presented as a solution to plastic pollution, and is in widespread use in parts of the world. However, a recent BBC news report states that the EU Commission is being asked by the European Parliament to consider banning Oxo products by 2020 and highlighted the findings of an EU Commission report from January 2018, which states that the bags are "not a solution for the environment".

Plastic tags

Plastic tags are reusable, and metal detector friendly in the production process, but their size currently limits their recyclability. Commonly these are made out of polystyrene which is generally difficult to recycle. Added to this is the potential health risk they pose. Every few years a new story emerges about the dangers to health - largely among the elderly - from ingested bag clips. Over the years, medical professionals have called on the packaging industry for a product redesign and, whilst this is by no means a common problem, it is a recurring one that further supports the argument for selecting a lower risk bag sealing method.



Twist ties and twin wire clips

The metal/plastic combination that makes up the twin wire clip currently renders it non–recyclable, as the metal components are not compatible with current recycling processes. The traditional twist tie is inherently unrecyclable for the same reasons. Coupled with this are the same health risks associated with plastic tags if chewed or ingested.

A summary of bag seal recycling options

		BAG TYPE		
		Polyethylene	Paper composite	Polypropylene
SEAL TYPE	Plastic tag	X	X	X
	Wire clip	X	X	X
	Twist tie	X	X	X
	Select Flexi seal	10	X	√ &
	Other tape seal	X	X	X



INTRODUCING THE RECYCLABLE BAG SEAL

Following extensive research and development, Select Bag Sealers is delighted to introduce the recyclable bag seal. The Select Flexi seal requires a specific combination of film, adhesive and bag to legitimately make the 100% recyclable claim, in short: as long as the Select Flexi seal remains attached to a recyclable plastic (polyethylene or polypropylene) bread bag, the entire pack is recyclable.

The film

Along with the appropriate plastic bags they seal, the Biaxially Oriented Polypropylene (BOPP) films used to manufacture our bag seals are members of the polyolefin family. As such, they share similar melting points, which - in the right quantities - makes them compatible in the recycling process.

And, as the polypropylene Flexi seal represents such a small percentage of the overall bag size, it can be recycled using conventional processes when the major component is the plastic bag. The size of the Select Flexi seal is important in another way, too, as anything below 40mm is considered too small to process.

The adhesive

Ten years ago, adhesives were non-recyclable. Now, thanks to technological advances there are adhesives that can - in the right quantities - be neutralised in the recycling process, in much the same way as the inks used on bread bags. We use these adhesives in the production of our bag seals.

The bag

When attached to a pure polyethylene or polypropylene bag – as is common practice throughout the world - our polypropylene seal is 100% recyclable, thanks to the film/adhesive combination outlined above.

The Select Bag Sealers credentials

As the UK's largest bag seal manufacturer and supplier, SBS recognises our responsibility to manufacture sustainably. All of the film and adhesive waste produced during the manufacture of the select Flexi seal is recycled, and we have a recycling partner who has worked with us to develop the capabilities to process our adhesive waste. We have recently been awarded ISO 14001 accreditation at our Yorkshire factory, where all of our machinery and adhesive tape is produced, which further cements our commitment to responsible and sustainable manufacturing.

Our CEFLEX commitment

Our film suppliers are fully committed to the CEFLEX initiative, a European consortium of companies and associations, which aims to enhance the performance of flexible packaging in the circular economy by advancing better system design solutions through collaboration between companies representing the entire value chain. The CEFLEX vision is that, by 2020, flexible packaging will be recognised for the significant value it adds to the circular economy and that, by 2025, there will be an established collection, sorting and reprocessing infrastructure/economy across Europe for flexible packaging.



FAQS

Can I make a plastic bag and seal that is 100% recyclable?

Yes. If you can legitimately claim that the bread bags you manufacture are recyclable, using the Trademarked Select Bag Sealers Flexi seal means that your pack and tag are 100% recyclable at larger stores with carrier bag recycling facilities as long as the tag remains attached to the bag.

Are all taped bag seals recyclable?

Our Flexi seals with the trademarked logo are recyclable. Seals that contain paper are not currently recyclable as they contaminate the batch. Not all films are compatible with this process.

How do I know if the bag seal I am using is recyclable?

Currently, the Trademarked Select seal is the only bag seal that is 100% recyclable when attached to the polyethylene bag. Look out for the logo on your sealing tape:

How do I let customers know that the entire pack is recyclable?

You will need to include the following recycling information on the bag:

Trademarked tie:



TIE - PLASTIC: Recyclable when attached to bag. Recycle with carrier bags at larger stores.

Contact us

To discuss the contents of this white paper in more detail or talk to us about incorporating the Select recyclable bag seal into your packaging, contact us on +44 113 277 3169 or email richard.hobson@selectbagsealers.com.





SOURCES

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Iceland aims to be plastic-free across its own-brand ranges by 2023

Asda, 'Plastic Unwrapped', 5 February 2018

Asda promises customers it will use less and recycle more in fight on plastics

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Tesco announces ambitions for a closed loop system across its UK operations

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UK businesses make world leading pact to tackle plastic pollution What is the UK Plastics Pact?

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Brits change rubbish habits due to Attenborough effect

SITA UK, September 2017

Mind the Gap: UK residual waste infrastructure capacity requirements

BBC News, Angus Crawford, 19 July 2018

Could this 'biodegradable bag' cut plastic pollution?