

# CREATING A CIRCULAR ECONOMY FOR FLEXIBLE PLASTIC PACKAGING

**Version 2 - May 2021** 



### **WHY WE MUST ACT NOW...**

### TAKING ACTION ON FLEXIBLE PLASTIC PACKAGING



Flexible plastic packaging is generally a resource efficient material; it's lightweight and can play an important role in protecting food from becoming waste.

However, we need to call time on the outdated linear approach of 'make, take and dispose' to achieve targets set out by The UK Plastics Pact. We must value this material, using it only when necessary and ensuring it is captured within a circular economy.

Flexible plastic packaging represents more than a fifth of all UK consumer plastic packaging, but only 6% is currently recycled. Urgent action is required to address the complex challenges that underpin this: poor design, collection infrastructure, inconsistent communications, sorting challenges, reprocessing technology, capacity and unstable end markets.

Therefore, galvanising the entire plastics value chain around a common roadmap for flexible plastic packaging is one of the top priorities of the Pact.

### Scope of this roadmap

A report published by The UK Plastics Pact on eliminating problem plastics highlighted several flexible plastic packaging items that can be deemed problematic and unnecessary. A key challenge being that the majority of household flexible plastic packaging is not recycled which can lead to it polluting our environment.

Part of the solution could be through the use of compostable plastic, in particular where it can facilitate the recycling of food waste; however, the infrastructure to enable this is not in place.

Potential opportunities for compostables are outlined in The UK Plastics Pact guidance on opportunities for compostable plastic packaging.

The problem is less severe when we look at non-consumer plastic packaging as evidenced in the <u>Packflow report</u>, where it is estimated that a very high proportion of non-consumer flexible plastic packaging is recycled.

For this reason, the roadmap focusses on addressing the recycling of flexible plastic packaging from consumer (household) sources.

### Taking action on flexible plastic packaging will contribute significantly to UK Plastics Pact targets:

- 100% of plastic packaging to be reusable, recyclable or compostable by 2025; and
- 70% of plastics packaging effectively recycled or composted by 2025.

"Galvanising the entire plastics value chain around a common roadmap for flexible plastic packaging is one of the top priorities of The UK Plastics Pact."

Marcus Gover, CEO, WRAP

### **WHY WE MUST ACT NOW...**

### TAKING ACTION ON FLEXIBLE PLASTIC PACKAGING CONTINUED...



Creating a circular economy for flexible plastic packaging will require innovation and investment. We must focus efforts in:

- Designing packaging that can be recycled and sorted.
- In the short term, increasing the number of front of store collection points provided by many supermarkets.
- In the long term, implementing collection at kerbside in all local authority areas.
- Investing in sorting and reprocessing capacity and capabilities.
- Ensuring recycled flexible plastic packaging has strong and stable end markets.

A strategy, that aligns with the European programme Circular Economy for Flexible Packaging (CEFLEX), has been developed that spans these areas and this roadmap sets out the high-level actions to be taken in order to meet the challenges.

We are at the start of the journey to developing a recycling system for flexible plastic packaging and many challenges lie ahead, but work is underway to address this urgent issue.

This is a live document and will be updated periodically

Table one highlights the composition (in 2019) of UK plastic packaging that is placed on the market. It shows where film (flexible plastic packaging) sits in the overall composition.

Table 1: Source - WRAP

Consumer plastic packaging by format & polymer, 2019										
	HDPE	LDPE	PE	PET	PP	PS	PVC	OTHER	Grand total	
Bottle	274kt	Okt	2kt	348kt	17kt	Okt	Okt	1kt	643kt	44%
Film	16kt	103kt	17kt	43kt	80kt	4kt	3kt	46kt	311kt	22%
Other	43kt	21kt	3kt	44kt	77kt	2kt	1kt	2kt	194kt	13%
Pots, tubs and trays (PTTs)	5kt	Okt	3kt	164kt	92kt	28kt	3kt	4kt	300kt	21%
Grand total	338kt	125kt	24kt	599kt	267kt	35kt	7kt	53kt	1447kt	
	23%	9%	2%	41%	18%	2.4%	0.5%	4%		

### FLEXIBLE PLASTIC PACKAGING ROADMAP

### PROGRESS AND **ACTIVITY**



Since the initial publication of The UK Plastics Pact's roadmap to creating a circular economy for flexible plastic packaging, the world has faced unprecedented challenges. Businesses have had to learn to operate in a new way and consumers have been forced to think about how we use flexible plastic packaging to minimise our contact.

Despite this, The UK Plastics Pact has made significant steps within the roadmap. Progress against the targets is detailed in our 2019/20 Annual Report.

### Design



WRAP fed into the CEFLEX Design for a Circular Economy (D4ACE) guidelines.

The global pandemic has led to restrictions which have halted much of the phase 2 testing for the D4ACE guidance. WRAP are working closely with CEFLEX to ensure that this is completed as swiftly as possible.



Members have started to review their flexible plastic packaging portfolio and identify where they can move to mono-material polyolefins and started the process of doing so. A number of case studies are outlined in our 2019/20 annual report.

### **Collections & communication**



WRAP conducted consumer insights work to identify the most effective messaging for supermarket collections of flexible plastic packaging. This has been shared with members and has been included in our retailer guidance - 'recycling your customers' plastic bags and wrapping'.



Retailers launched and expanded 'all flexible plastic packaging' collection trials with future plans to roll out nationwide.

Grocery retailers have provided data on front of store collection point locations to be fed into the Recycle Now Recycling Locator.



This activity is ongoing and needs to be done regularly as soon as any changes have been made.



Front of store recycling guidance for retailers has been produced, targeting an 'all flexible plastic packaging' collection.

### Sorting, processing & end markets



The Non-mechanical recycling sprint group produced a report for Defra on the opportunities and challenges for the technologies to have a significant impact on UK recycling infrastructure. The report was also shared with members.



confirmation from government that the processes do count as recycling. Similar to mechanical processes, certification is done on a case-by-case

The non-mechanical group has received



Members continue to specify recycled content in their packaging, helping to stimulate collections and end markets for flexible plastic packaging.



The End Market group has produced a report identifying key opportunities for flexible plastic packaging end markets as well as case studies from members.

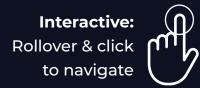


Waste management companies and Recyclers are continuing to identify investment opportunities with a number of public announcements made over the past 12 months.



Cross supply chain partnerships within The UK Plastics Pact have demonstrated new innovative end

### VALUE CHAIN ACTION







### PLEXIBLE PLASTIC PACKAGING ROADMAP DESIGN



### **OBJECTIVE**

For all flexible plastic packaging to be designed for mechanical recycling where functionality can be achieved, otherwise for packaging to be compatible with non-mechanical recycling.

### **SUMMER 2021**

UK Plastic Pact Members to have carried out a review of their flexible packaging and identified where changes can be made towards mono-material polyolefin (in alignment with CEFLEX guidlines).

### **BY END OF 2021**

Complete design guidelines for mechanical recycling published (CEFLEX phase 2 of D4ACE)

### **OUTCOME**

By the end of 2023, all Pact members to have aligned their flexible plastic packaging portfolios to industry agreed guidelines.



Support and input to Design for a Circular Economy (D4ACE) phase 2 testing.

### **SUMMER 2022**

UK Plastics Pact members to review portfolios in accordance with CEFLEX mechanical recycling guidelines as far as possible.

Please note: Design guidelines will also be necessary for non-mechanical recycling. WRAP will collaborate with CEFLEX on the development of these, with the timing to be confirmed.

### FLEXIBLE PLASTIC PACKAGING ROADMAP

## COLLECTIONS & COMMUNICATIONS

### **OBJECTIVES**

All plastic packaging collected for recycling. Establish and publicise consistent front of store (FOS) collection points for all flexible packaging from supermarkets as an interim solution.



### **BY SPRING 2021**

Best practice guidance for supermarkets to implement and promote front of store collection points, each collecting 'all films'.

### **AUTUMN 2021**

Initiate kerbside film and flexible trials

### **SPRING 2022**

Extensive promotion of FOS network through Recycle Now campaign, in collaboration with partners including local authorities.

### **BY END 2022**

Collect 10% of placed on the market tonnage (POM) at front of store collection points.



### ONGOING

Supermarkets to provide WRAP with data on the location of FOS collection points for input into the Recycle Now recycling locator.

### **ONGOING**

Collaboration between OPRL and The UK Plastics Pact to align design guidance and on pack labelling.



Brands and retailers are able to to adopt OPRL labelling for PE and PP flexible plastic packaging instructing citizens to recycle at supermarket collection points

### **AUTUMN 2022**

Best practice guidance on kerbside collections and communications developed and findings being implemented.



All householders to have access to, and widespread use of flexible plastic packaging recycling facilities.\*

\* the extent to which this is kerbside collection or retailer collection points is dependent on the outcome of ongoing government consultation.

### FLEXIBLE PLASTIC PACKAGING ROADMAP

### SORTING, PROCESSING & END MARKETS

### **OBJECTIVES**

To have an established recycling system for all flexible plastic packaging, including stable end markets in place across both food grade and non-food grade flexible plastic packaging.

# THE UK PLASTICS PACT

### **SUMMER 2021**

Review to better understand the infrastructure needs and barriers to investment

### **ONGOING**

Feedback from material recycling facilities (MRFs) on their current sorting capabilities and the materials recycled for onward processing.

### **SPRING 2022**

Identify legislative barriers for non-mechanically recycled polymers and their use in products and packaging, setting up sprint group to find solutions working with government.



### **SUMMER 2021**

Through a collaborative action group, identify key opportunities for end markets and develop an action plan to take them forward.

Continue to work with the CEFLEX end market working group.

### ONGOING

UK Plastics Pact members specifying the use of recycled flexible plastic packaging in products wherever possible.

### ONGOING

Evaluation of existing sorting technology and sharing knowledge on best in class sorting technology.

### **AUTUMN 2021**

Establish collaborative end market trials in both mechanical and non-mechanical recycling focusing on high end uses where possible.

### **OUTCOMES**

Significant increase in UK flexible plastic packaging recycling capacity.

Clarity on the role of non-mechanical recycling and how it operates along-

existing mechanical recycling infrastructure.

Stable end markets developed and incorporation of recycled content in food grade flexible plastic packaging in practice.

### **CONCLUSION....**

### **KEY TAKEAWAYS**



Flexible plastic packaging is lightweight and often protects against food waste, however, with such a low recycling rate of 6% there needs to be a radical change across the value chain to achieve at scale recycling of flexible plastic packaging.

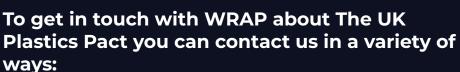
"We need to call time on the outdated linear approach of 'make, take and dispose'. The system for flexible plastic packaging is broken. We all have a responsibility to act on this urgent issue."

### The key takeaways for the supply chain are:

- As far as possible, flexible plastic packaging needs to be designed to be recycled using existing infrastructure.
- Collecting flexible plastic packaging in the longer term needs to happen directly from households in order to capture the maximum amount of material. The timing of this is dependent on the outcome of ongoing government consultation.
- There is an existing network of collection points at supermarkets with a plan for the number of collection points to increase, with all adopting a consistent approach to accepting all types of bags and wrapping.

- Citizens want to be able to recycle with 26% willing to use supermarket collection points.
- Work will be undertaken to understand and implement the best methods to collect (from kerbside) and sort flexible plastic packaging.
- Significant investment in flexible plastic packaging recycling infrastructure is needed.
- Non-mechanical recycling will be required to enable recycled plastic to be used in food contact flexible plastic packaging.
- More end markets outside food packaging will be required.
- Collaboration is key, the whole value chain needs to take action.





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Our mission is to accelerate the move to a sustainable resource-efficient economy through re-inventing how we design, produce and sell products; re-thinking how we use and consume products; and re-defining what is possible through re-use and recycling.

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The UK Plastics Pact is led by WRAP with the support of the Ellen MacArthur Foundation. The UK Plastics Pact was co-created by the Ellen MacArthur Foundation and WRAP to accelerate the transition to a circular economy for plastics in the UK and is one of the Ellen MacArthur Foundation's national and regional implementation initiatives around the world. The opinions expressed, and materials made available, by WRAP or the Ellen MacArthur Foundation or The UK Plastics Pact signatories do not necessarily reflect the views of the other parties who are not responsible for the same.