ROADMAP 2025
CREATING A CIRCULAR ECONOMY FOR 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However, we need to call time on the outdated linear approach of ‘make, take and dispose’ to achieve targets set out by The UK Plastics Pact.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 represents a quarter of all UK consumer plastic packaging, but only 4% 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 WRAP’s Plastic Packaging Flow 2025 report, where it is estimates 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**
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, capitalising on the 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

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**Table 1: Source - WRAP**

<table>
<thead>
<tr>
<th>Consumer plastic packaging by format &amp; polymer (grocery &amp; non-grocery combined)</th>
<th>HDPE</th>
<th>LDPE</th>
<th>PE</th>
<th>PET</th>
<th>PP</th>
<th>PS</th>
<th>PVC</th>
<th>OTHER</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film</td>
<td>89kt</td>
<td>119kt</td>
<td>21kt</td>
<td>28kt</td>
<td>110kt</td>
<td>2kt</td>
<td>9kt</td>
<td>17kt</td>
<td>395kt (26%)</td>
</tr>
<tr>
<td>Carrier bags</td>
<td>18kt</td>
<td>9kt</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>26kt</td>
</tr>
<tr>
<td>Bottles</td>
<td>268kt</td>
<td>0kt</td>
<td>1kt</td>
<td>347kt</td>
<td>17kt</td>
<td>0kt</td>
<td>0kt</td>
<td>0kt</td>
<td>634kt (41%)</td>
</tr>
<tr>
<td>Pots, tubs and trays (PTTs)</td>
<td>9kt</td>
<td>1kt</td>
<td>4kt</td>
<td>155kt</td>
<td>85kt</td>
<td>32kt</td>
<td>13kt</td>
<td>2kt</td>
<td>301kt (20%)</td>
</tr>
<tr>
<td>Other</td>
<td>55kt</td>
<td>23kt</td>
<td>1kt</td>
<td>40kt</td>
<td>76kt</td>
<td>3kt</td>
<td>2kt</td>
<td>0kt</td>
<td>202kt (13%)</td>
</tr>
<tr>
<td>Grand total</td>
<td>421kt</td>
<td>143kt</td>
<td>28kt</td>
<td>570kt</td>
<td>288kt</td>
<td>38kt</td>
<td>24kt</td>
<td>20kt</td>
<td>1532kt</td>
</tr>
</tbody>
</table>

Table one highlights the composition (in 2017) of UK plastic packaging that is placed on the market. It shows where film (flexible plastic packaging) sits in the overall composition.
# VALUE CHAIN ACTION

<table>
<thead>
<tr>
<th>Design</th>
<th>Collections &amp; communications</th>
<th>Sorting, processing &amp; end markets</th>
</tr>
</thead>
</table>

**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.

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

**OBJECTIVE** - All plastic packaging collected for recycling.

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

**OUTCOME** - 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.

**OBJECTIVE** - 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.

**OUTCOME** - Significant increase in UK flexible plastic packaging recycling capacity.

Clarity on the role of non-mechanical recycling and how it operates alongside existing mechanical recycling infrastructure.

Stable end markets developed and incorporation of recycled content in food grade flexible plastic packaging in practice.
By the end of 2023, all Pact members to have aligned their flexible plastic packaging portfolios to industry agreed guidelines.

**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.

**SPRING 2020**
'Mono-material (polyolefins) design guidelines’ published (phase 1 of CEFLEX ‘Design for a Circular Economy’ (D4ACE)

**BY END 2020**
UK Plastics Pact members to review flexible plastic packaging and move to mono-materials as far as possible (in alignment with CEFLEX phase 1 guidelines)

**SUMMER 2021**
UK Plastics Pact members to review portfolios in accordance with CEFLEX mechanical recycling guidelines as far as possible.

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

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 front of store (FOS) collection points for flexible plastic packaging from supermarkets as an interim solution.

SPRING 2020
Consumer research to identify the most effective messaging to encourage citizens to recycle flexible plastic packaging at FOS supermarkets.

DECEMBER 2020
Undertake a review of existing kerbside collections to identify current and good practices.

SPRING 2021
Extensive promotion of FOS network through Recycle Now campaign, in collaboration with partners including local authorities.

BY OCTOBER 2022
Collect 10% of placed on the market tonnage (POM) at front of store collection points.

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

BY END OF 2020
Best practice guidance for supermarkets to implement and promote front of store collection points, each collecting, as a minimum, all polyethylene (PE) films.

BY END 2021
Best practice guidance on kerbside collections and communications developed and findings being implemented.

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

OUTCOME
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.

2019 ONWARDS
Work initiated to evaluate the commercial, technical and environmental viability of non-mechanical recycling of flexible plastic packaging.

BY SUMMER 2020
Feedback from material recycling facilities (MRFs) on their current sorting capabilities and the materials recycled for onward processing.

DECEMBER 2020
The non-mechanical collaborative action group under The UK Plastics Pact will gather evidence to support the classification of this process as ‘recycling’.

SPRING 2021
Investment review conducted to better understand the necessary infrastructure needs for UK MRFs and reprocessing requirements.

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.

OUTCOMES
Significant increase in UK flexible plastic packaging recycling capacity.
Clarity on the role of non-mechanical recycling and how it operates alongside existing mechanical recycling infrastructure.
Stable end markets developed and incorporation of recycled content in food grade flexible plastic packaging in practice.

OCTOBER 2020
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.
Flexible plastic packaging is lightweight and often protects against food waste, however, with such a low recycling rate of 4% 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 for carrier bags at supermarkets which will be further developed and promoted until kerbside collection is rolled out.

- Citizens want to be able to recycle and many have demonstrated their willingness 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. Work to address this is underway.
- More end markets outside food packaging will be required.
- Collaboration is key, the whole value chain needs to take action.
WRAP's vision is a world in which resources are used sustainably.

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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To get in touch with WRAP about The UK Plastics Pact you can contact us in a variety of ways:

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Thank you

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.