

# Driving Demand for Sustainable Products and Services

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**wrap**  
Cymru



# OUR VISION

WRAP's vision is a world in which resources are used sustainably.

# OUR MISSION

Our mission is to accelerate the move to a sustainable resource-efficient economy through:

- Re-inventing how we design, produce and sell products
- Rethinking how we use and consume products
- Re-defining what is possible through re-use and recycling.



# Resource Management Vision to 2025

**Towards a Route  
Map for Plastic  
Recycling:** Creating  
Circularity for Plastics in  
Wales

June 2018

**2025  
Vision**

**70%**

Capture and recycling of all  
plastics in Wales

**2025  
Vision**

**>90%**

collection and recycling rate of  
publicly procured plastics

**2025  
Vision**

**50%**

Capacity to reprocess plastic  
waste in Wales

**2025  
Vision**

**30%**

Recycled Content for **all** plastic  
products produced in Wales



# PROJECT OBJECTIVES

To imbed best practice and drive cultural change in the Welsh public sector.

To increase the procurement of re-used goods and products containing recycled content.

Promote the development of a circular economy in Wales.

BY 2025

0%

eliminate problematic or unnecessary single-use packaging items through redesign, innovation or alternative (reuse) delivery models

BY 2025

100%

of plastic packaging to be reusable, recyclable or compostable

BY 2025

70%

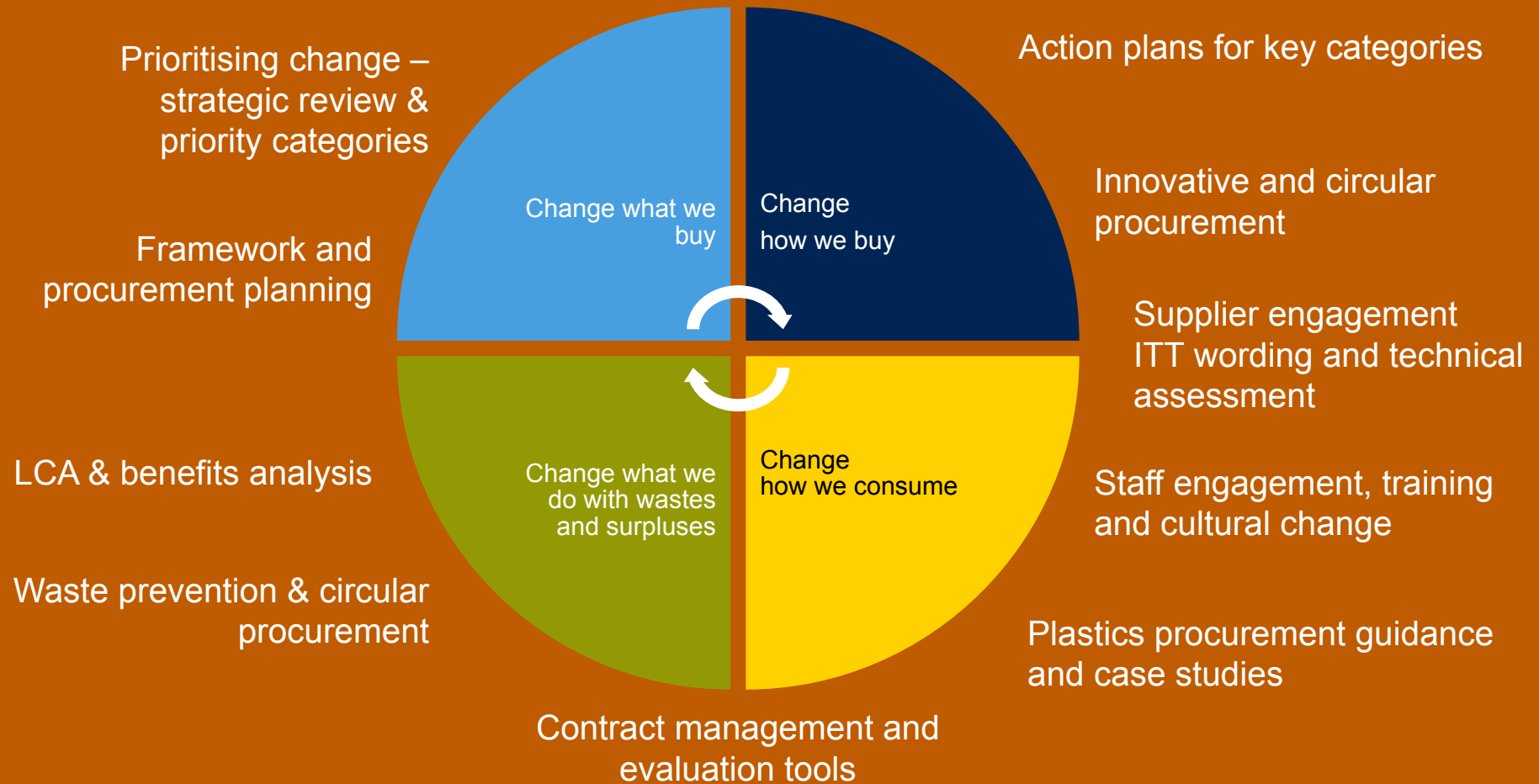
of plastic packaging effectively recycled or composted

BY 2025

30%

average recycled content across all plastic packaging

# HELP TO DRIVE CHANGE



# TOOLS & RESOURCES

- **Case Studies**
  - Public Health Wales
  - Swansea City Council
  - Pembrokeshire Milk Bottles
  - Welsh Government
  - NPS
- **Guidance**
  - Plastics procurement
- **Available at:**  
[www.wrapcymru.org.uk/public-sector](http://www.wrapcymru.org.uk/public-sector)

## Delivering Well-being goals through procurement

### Summary

In 2017 the National Procurement Service (NPS) started to refresh its national food and drink services framework, which makes the supply of food services available to more than seventy public sector organisations across Wales.

Driven by commitments set out in the Well-being of Future Generations Act and the Welsh Government Towards Zero Waste Strategy, the NPS have worked in partnership with WRAP to embed sustainability requirements in the tender specification, evaluation and contract management process.

This case study shows how the carefully considered NPS procurement strategy will improve the sustainability of food and drink services used by the public sector in Wales.



Source: Shutterstock

### Key Facts

- The Welsh public sector spends an estimated £74m per year on food and drink services.
- Each tonne of food waste typically costs a business an average of £2,800.
- Reducing the impacts of food waste is a key priority of the Towards Zero Waste Strategy and the Well-being of Future Generations Act.
- Framework performance indicators were aligned to Well-being indicators, including carbon and waste reduction.
- Framework providers will be expected to take steps towards supplying sustainable food packaging options.

## Comparing Milk Packaging Options for Primary Schools



Source: Shutterstock

## Public sector guidance on the procurement of plastics

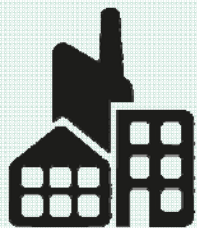
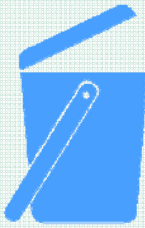
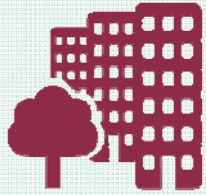
September 2019



# Pembrokeshire Milk Bottles

- Many public sector bodies have initiated plans in response to the plastics challenge
- School children and parents across Pembrokeshire campaigned for the replacement of plastic milk bottles in schools with alternatives
- It was unclear which packaging format was the most suitable alternative





# Scope of study

For plastic, glass and pergal options:

- an environmental assessment - comparing GHG emissions of the three packaging/dispensing options; and
- a financial assessment – comparing the costs of each method per serving

# Summary

- Key drivers for results is this study - proximity of the milk supply chain
- Where the supply chain significantly differs from this case study, results and conclusions are also likely to differ
- Demonstrates importance of context and differences in supply chain when moving from one packaging to another - which can become more important than the material itself

# Caerphilly CBC Single Use Plastics

- Support to Caerphilly CBC take steps to reduce the impact of single use plastics in its supply chain
- Focus on food and drink/catering consumables
- Advise the authority on packaging formats which are sustainable and cost effective

# Financial Assessment

Consumables	Solution	£ impact
Sandwich wedges	<b>Substitute</b> - for cheaper plain paper bags.	Cost saving
Sandwich bags	<b>Substitute</b> – standard (non-PLA) packs	Cost saving
Burger wraps	<b>Substitute</b> - natural wax paper without a PE coating	Cost increase - 1.5 times
Plastic cutlery	<b>Substitute</b> - use wooden (Birchwood) cutlery	Cost increase
Cling-film	<b>Avoid</b> - stop delivering water to meeting rooms. <b>Substitute</b> – jugs/bottles with permanent lids/stoppers	Cost saving – materials and labour
Plastic tumblers	<b>Avoid</b> - stop purchasing. Provide glasses and sell Keep-cups	Cost saving on materials – although some labour
Paper cups	<b>Avoid</b> - stop use of disposable paper cups or charge for them and sell 'keep cups'.	Cost saving likely
Freezer bags	<b>Substitute</b> - source reusable and stackable containers.	Cost saving in longer term
Baking parchment	<b>Substitute</b> - replace with reusable baking parchment sheets.	Cost saving in longer term
Clean foil	<b>Avoid/Substitute</b> - reusable baking containers with lids	Cost saving in the long term
Meal containers	<b>Substitute</b> - FSC Oven Board as a more sustainable alternative - with moisture / grease barrier	Cost increase
Pasta bowls/ jacket potato pots	<b>Substitute</b> - Kraft/semi-chem board, and sell reusable containers	Cost saving? medium term

# Summary

## **Decision making on alternatives to plastics:**

- Decision making around alternatives should always be guided by business case and life-cycle thinking, to avoid unintended consequences

## **The issue of cost:**

- Interventions such as the sale of reusable containers at a profit, levies on disposables, avoiding biopolymer packaging (that will not actually be composted), and avoidance in general, can help to offset more expensive plastic alternatives (e.g. paper and wood) where they are environmentally beneficial

# Top Tips

## **Guidance and communication to support behaviour change:**

- To ensure initiatives are appropriately supported, and that changes to operational procedures result in consumables and packaging being deposited correctly

## **Monitoring and evaluation:**

- Sets out a framework for monitoring the impact of any interventions to ensure that outcomes can be communicated to relevant stakeholders

## **Use buying power:**

- When catering consumable frameworks are scheduled for renewal use this opportunity to ensure sustainable alternatives can be sourced at the best available price

# Public Sector Guidance on the Procurement of Plastics in Wales





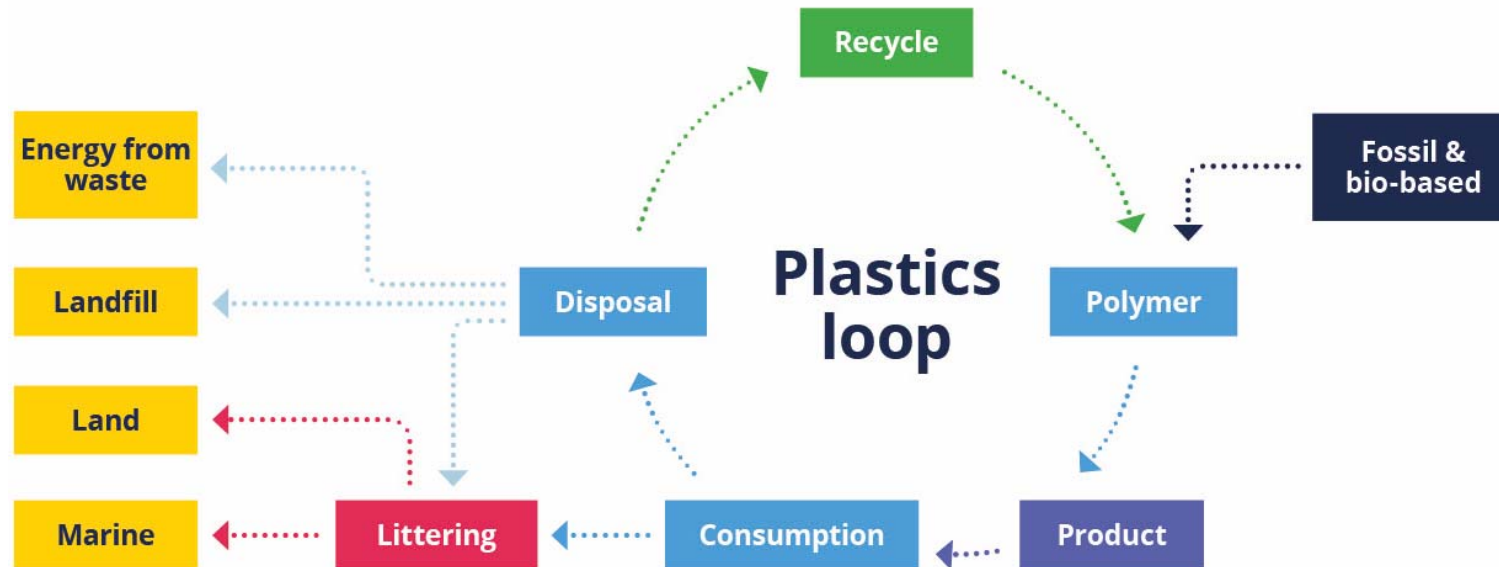
# OBJECTIVES

- Guidance is aimed at the Welsh public sector.
- Provides basic information to tackle the environmental impact of plastic.
- Focus is on single-use and packaging plastics but can be applied wider.



# DEFINING PROBLEM PLASTICS

Figure 1: Simplified plastics loop and leakage pathways



■ Leakage pathways

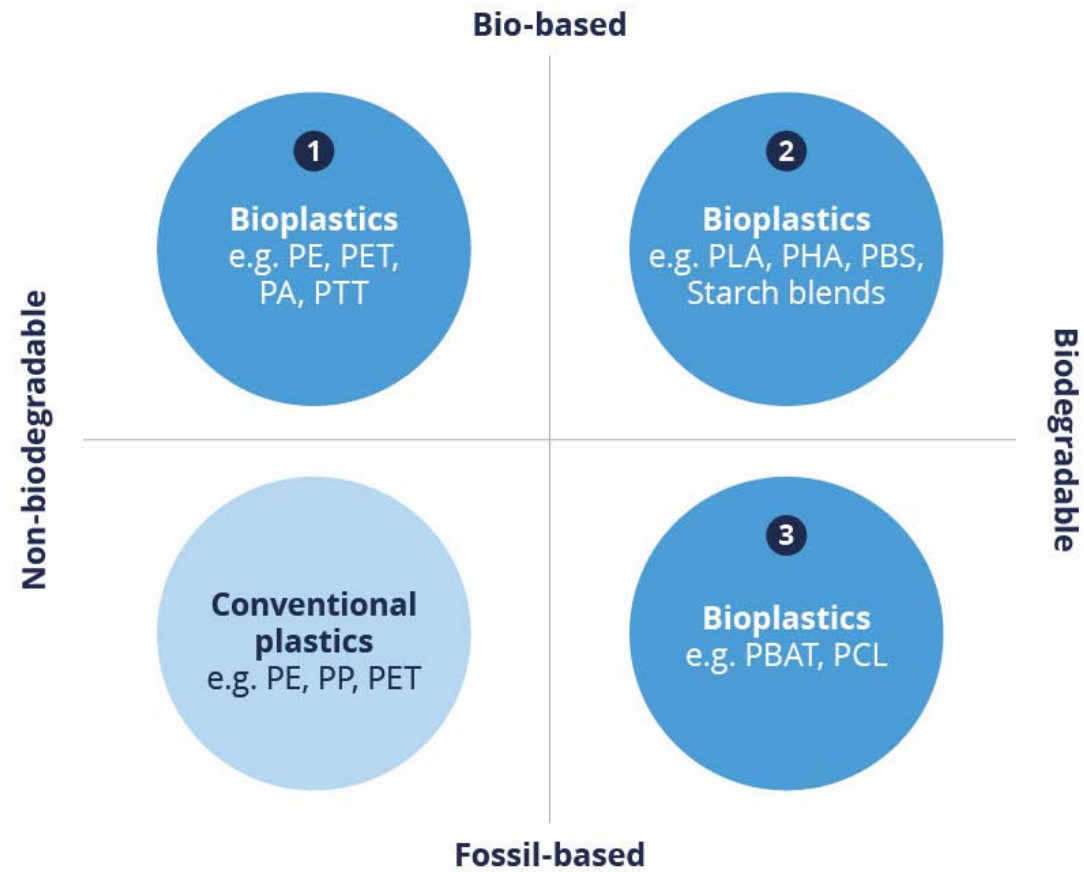
Source: WRAP, 2018



## The UK Plastics Pact has defined specific problematic plastics as:

- disposable plastic cutlery;
- all polystyrene packaging;
- cotton buds with plastic stems;
- plastic stirrers;
- plastic straws;
- oxo-degradable plastic that breaks down to create microplastics;
- PVC packaging;
- disposable plastic plates and bowls.

Figure 2: Bioplastics terminology



**Key**

- 1** Bio-based or partially bio-based non-biodegradable plastics.
- 2** Plastics that are both bio-based and biodegradable.
- 3** Plastics that are fossil-based and biodegradable.

Source: WRAP, 2018

**Table 1: Examples of alternative materials**

<b>Material</b>	<b>Products</b>	<b>Disposal route</b>
Wood	Knives, forks, spoons, stirrers	Wood recycling stream
Baggase (reclaimed sugarcane)	Takeaway boxes, plates, hot drinks containers	Industrial composting
PLA (polylactic acid) & CPLA (crystallised polylactic acid) – typically made from fermented plant starch such as corn, cassava or sugarcane	Windows on sandwich bags & boxes	Industrial composting
Paper and card (kraft), which may be lined with plastic or PLA	Food trays, microwave meals, pizza boxes, sandwich boxes	Card/paper recycling stream unless: – product is contaminated with food; – it includes a plastic or PLA liner; or – it has a wax or greaseproof finish  Industrial composting (unless plastic lined)
Naturflex (film made from wood pulp)	Confectionery bags, cereal & pasta bags	Industrial composting
Palm leaf	Plates, trays	Industrial composting

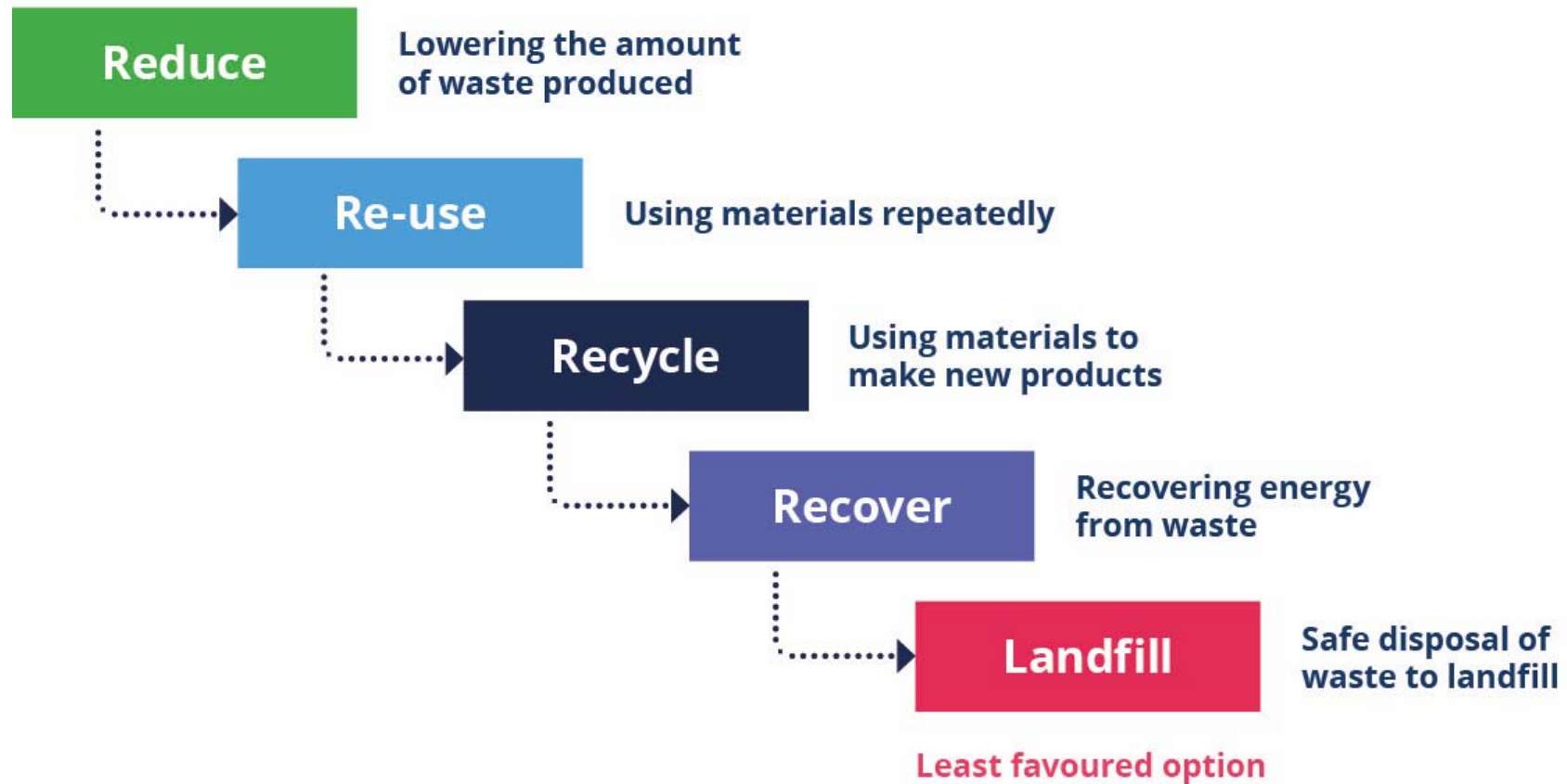
# RECYCLED CONTENT



- Vast majority of packaging is made from virgin plastic.
- 10% recycled plastic used in Wales.
- *Towards a Route map for Plastic Recycling* includes ambition to increase use of recycled content in packaging produced in Wales to 30% by 2025.
- Recommends the public sector specify minimum percentage of recycled content across targeted spend categories.

Figure 3: The Waste Hierarchy

Most favoured option



Source: EU Waste Framework Directive, 2008

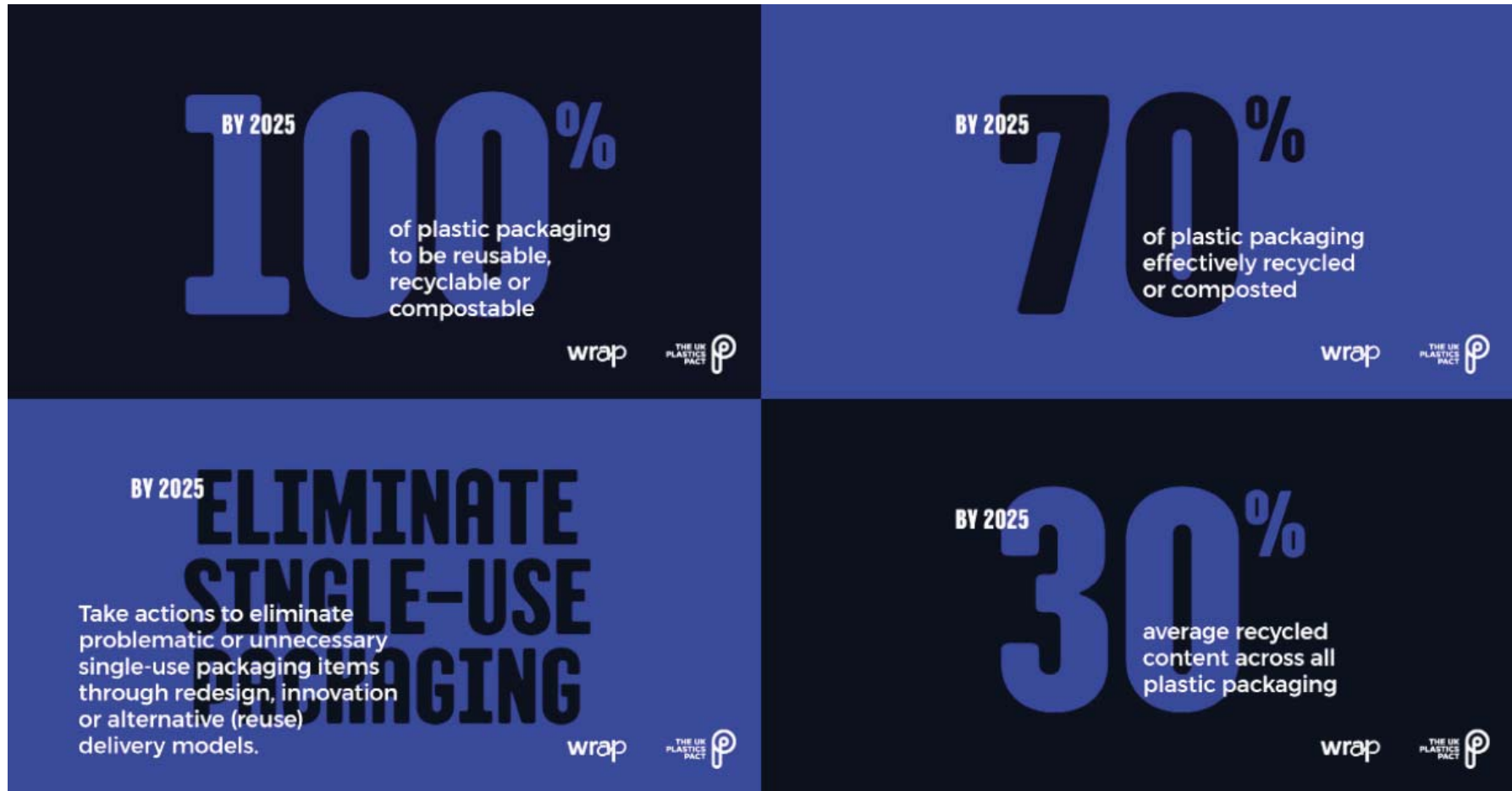
# THE DECISION-MAKING PROCESS

- Step 1 Understand what you currently purchase
- Step 2 Understand how plastic products are used and disposed of
- Step 3 Identify options to avoid, re-use or replace plastics
- Step 4 Use buying power
- Step 5 Guidance/communication to support behaviour change
- Step 6 Monitor, evaluate & communicate the impact of changes



# Step 7

Encourage suppliers to adopt the principles of the UK Plastics Pact





# Avoid



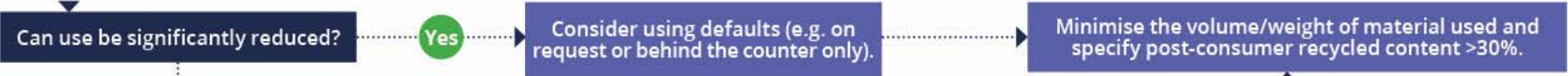
**Key**  
 ● Decision  
 ● Action

# Re-use



Needs to be single-use

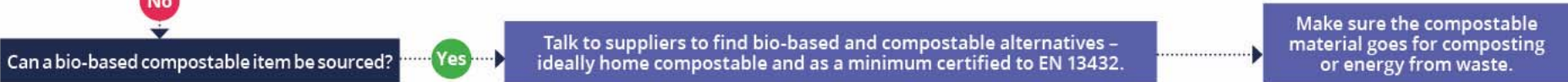
# Reduce



# Recycle



# Replace



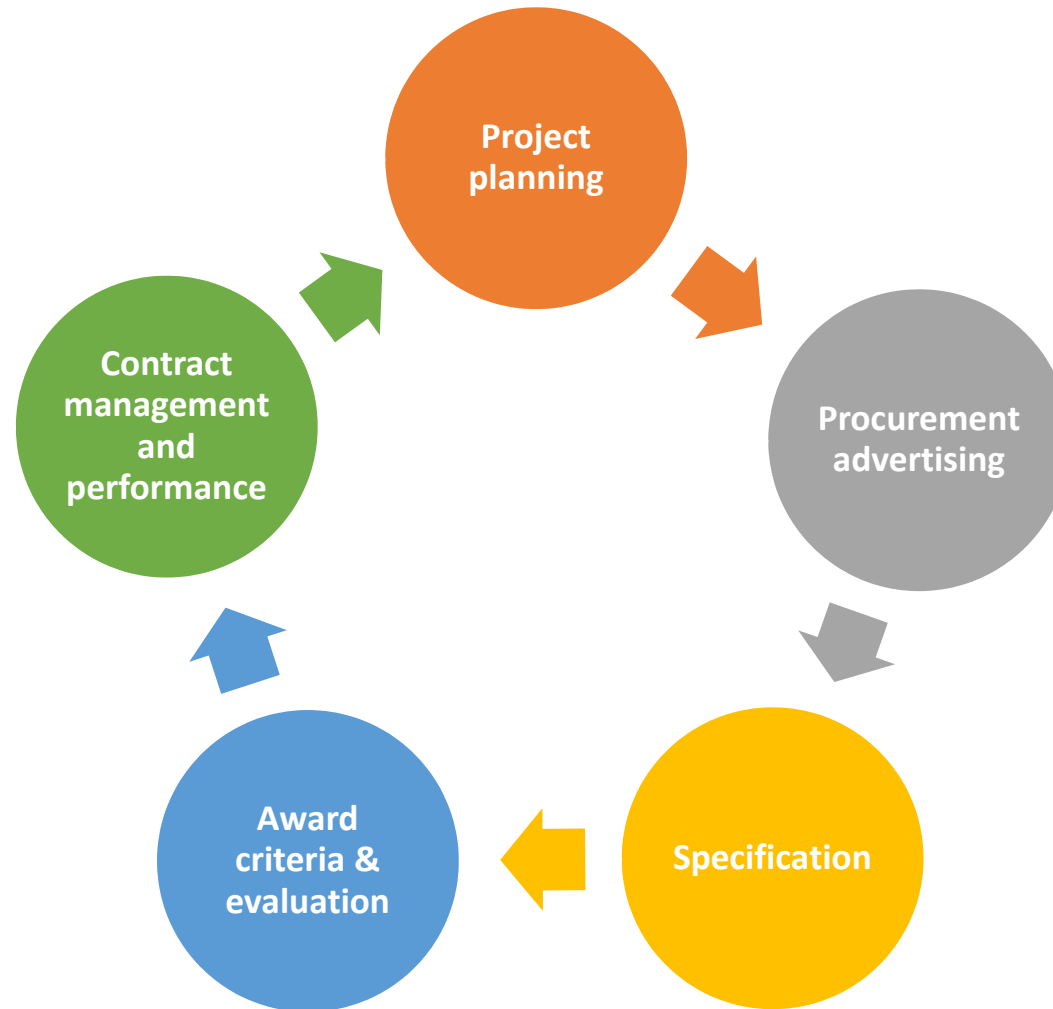
# Manage



# ALTERNATIVE CHOICES

Consumables	Current likely materials	Current likely disposal/ waste routes	Potential alternatives
Beverage bottles (e.g. water, soft drinks)	PET	Widely recycled	<p>Reduce – Consider using syrup-based drinks dispensers (filled with tap water) rather than selling bottles. Provide urns or jugs of water. Consider installing water fountains as an alternative to bottled water or encourage the use of tap water.</p> <p>Re-use – Provide re-usable cups or water bottles.</p> <p>Recycle – Ensure clearly labelled collection points or consider a deposit return scheme (DRS) facility. Ensure existing bottles are captured, caps on, for recycling.</p>
Bowls and trays (e.g. self-serve hot and cold food)	PET, PP, EPS	PET and PP collected for recycling (unless black or heavily contaminated e.g. with food)	<p>Re-use – Provide or sell durable re-usable containers and/or offer discounts to encourage their re-use.</p> <p>Recycle – Rinse containers prior to disposal. Select containers made from commonly and easily recyclable polymers. Use signage and labelling to encourage appropriate recycling behaviours.</p> <p>Replace – Consider alternatives such as FSC board (with a non-film moisture/grease barrier). Confirm waste collectors can recycle any alternative products considered.</p>
Burger wraps	PE-coated paper	General waste, landfill or EfW	<p>Reduce – Consider incentives to reduce takeaway food packaging waste.</p> <p>Re-use – Provide or sell durable re-usable containers and/or offer discounts to encourage their re-use. Burgers made in-house may be served on re-usable crockery.</p> <p>Recycle – Include in paper recycling if only a light food soiling, otherwise include in food waste collection. Appropriate signage will be needed.</p> <p>Replace – Alternatives include natural wax paper without a PE (or PLA) polymeric coating, or possibly newer grease-barrier papers.</p>

# MODEL PROCUREMENT WORDING



# WRAP RESOURCES

**A Roadmap to 2025 - The UK Plastics Pact:**

<http://www.wrap.org.uk/content/the-uk-plastics-pact-roadmap-2025>

**Citizens' attitudes & behaviours relating to food waste, packaging and plastic packaging:**

<http://www.wrap.org.uk/citizen-survey-food-waste-and-packaging>

**Eliminating problem plastics:**

<http://www.wrap.org.uk/content/eliminating-problem-plastics>

**Understanding plastic packaging and the language we use to describe it:**

<http://www.wrap.org.uk/sites/files/wrap/Understanding%20plastic%20packaging%20FINAL.pdf>

**Design guidance for recyclability of household rigid plastic packaging:**

<http://www.wrap.org.uk/sites/files/wrap/Polymer-Choice-and-Recyclability-Guidance.pdf>

**Design tips for making rigid plastic packaging more recyclable:**

<http://www.wrap.org.uk/content/design-tips-making-rigid-plastic-more-recyclable>

**Design tips for better recyclability of paper and board packaging:**

<http://www.wrap.org.uk/fibresrecyclingguidance>

**Plastics Market Situation Report 2019:**

<http://www.wrap.org.uk/plastics-market-situation-report-2019>

**The UK Plastics Pact - Member progress report:**

[http://www.wrap.org.uk/sites/files/wrap/The-UK-Plastics-Pact-Member-progress-report-May-2019\\_0.pdf](http://www.wrap.org.uk/sites/files/wrap/The-UK-Plastics-Pact-Member-progress-report-May-2019_0.pdf)

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