WHY DO WE USE PLASTIC FOR PACKAGING?

Plastic works to keep our carbon footprint low.

Plastic typically uses less land, less water, and less energy to manufacture than alternatives, and because it’s so lightweight it means much less fuel is needed to move it around.

Effect of substituting plastic packaging with alternatives

<table>
<thead>
<tr>
<th></th>
<th>Plastic Packaging</th>
<th>Alternative materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total masses</td>
<td>x 3.6</td>
<td>x 2.2</td>
</tr>
<tr>
<td>Energy consumption</td>
<td>x 2.2</td>
<td></td>
</tr>
<tr>
<td>GHG emissions</td>
<td>x 2.7</td>
<td></td>
</tr>
</tbody>
</table>

In acknowledgement of such important factors, over 40 academics from across the UK have come out in support of the environmental benefits of plastics.*

“Plastics are a vital part of the drive to ‘lightweight’ products to save energy across all industry sectors. It makes sense to exploit their range of physical properties and processability, combined with lightweighting capabilities, enabling many valuable products”

Professor Phil Coates, FREng
Director of the Polymer Interdisciplinary Research Centre, University of Bradford

*BBC (2018), PoliticsHome (2019)

HOW TO ELIMINATE PLASTIC WASTE?

2 billion people have no access to regular waste collection

Some countries around the world do not have sufficient waste collection and recycling infrastructure, resulting in plastic ending up in our environment. Urgent action is required to remedy this situation, and prevent plastic waste from polluting our rivers and oceans.

The plastics industry recently pledged $1 billion towards this effort.

INDUSTRY’S VISION

• Reform PRN System
• Improve On-the-go Collection
• Reduce
• Promote Re-use
• Deposit Return Scheme
• Standardise Collections
• Increase Recycled Content
• Promote Eco-design

Scientists have warned that switching away from plastics will be significantly worse for the environment.

Total masses for same functional units

Energy consumption in total lifecycle

GHG emissions in total lifecycle

Alternative materials would result in 2.7 times more greenhouse gas emissions over their lifetime.

Plastic typically uses less land, less water, and less energy to manufacture than alternatives, and because it’s so lightweight it means much less fuel is needed to move it around.

It’s not so easy to see, but plastic is doing an important job to keep our greenhouse gas emissions low.

Costs to human health and ecosystems would be over 5 times higher if we switched away from plastics.

Sources: bpf.co.uk/sources
WHY IS PLASTIC SO POPULAR?

Plastic has always been used to replace heavier, less flexible, less safe materials. Modern plastic is designed to be hygienic as well as light, and adheres to strict legislation ensuring it is extremely safe. We must however work together and call on governments and all stakeholders to prevent it from ever ending up as waste.

WHAT ABOUT FOOD WASTE?

"Food waste is a vastly overlooked driver of climate change"

Plastic Packaging Helps Prevent Food Waste

27% more apples are wasted when they are sold loose vs. in plastic packaging

Cucumbers extend their life when wrapped in film by up to 14 days

Advanced plastic packaging extends the life of steak by up to 10 days

Plastic has always been used to replace heavier, less flexible, less safe materials. Modern plastic is designed to be hygienic as well as light, and adheres to strict legislation ensuring it is extremely safe. We must however work together and call on governments and all stakeholders to prevent it from ever ending up as waste.

IT’S POSSIBLE TO RECYCLE ALL THE PLASTIC WE USE

The technology exists to recycle 100% of plastic. Recycling rates have been improving for over 20 years, but we still need to do much more.

What needs to happen next?

Simplify Collection
Simplify UK collection systems to remove consumer confusion

Apply Eco-Design
Design easy-to-recycle packaging

Invest in British Recycling
Build up UK infrastructure, and invest in technologies like new sorting methods and chemical recycling

Consumer Education
Educate to instil the value of recycling across UK culture

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