



cromwell



FOOD WASTE DISPOSAL - WHICH BAG IS BEST?



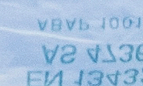


Not all biodegradable plastics are compostable. But all compostable plastics are biodegradable.

We supply a range of compostable caddy liners in all standard sizes that can support food waste management strategies. Manufactured from Ecopond® biodegradable plastic, using starch and lactide-based derivatives of plant sources, these products are fully compliant with the European composting standard, which requires more than 90% of the plastic mass to convert into biomass, CO₂ and water, with no harmful residue.

All our compostable sacks and liners fully decompose within the normal 6-10 week composting cycle in industrial composting facilities and are accredited to meet the stringent composting standard EN13432.

Compostable liners are the preferred and recommended choice for the capture and containment of food waste. As household food waste collections become mandatory, compostable liners present the ideal solution to line household food caddies and collect this waste.



FOOD WASTE PROBLEM



**10-14
Million**



tonnes of food waste is estimated to be produced by the UK each year, 7.1 million tonnes of this thrown away by households.



36 Million



tonnes of greenhouse gas (GHG) emissions is estimated to be contributed from household waste each year.

The UK produces an estimated 10 - 14 million tonnes of food waste each year, according to the European Commission, as stated by a study carried out by BIFFA in 2019. The results of this study showed that the UK was the highest contributor to food waste in Europe.

When this waste was analysed, they found that 70% of the discarded food was intended to be consumed by people (30% being the 'inedible parts' e.g. peelings, egg shells). This had a value of over £19 billion a year and would be associated with 36 million tonnes of greenhouse gas (GHG) emissions (as stated by WRAP).

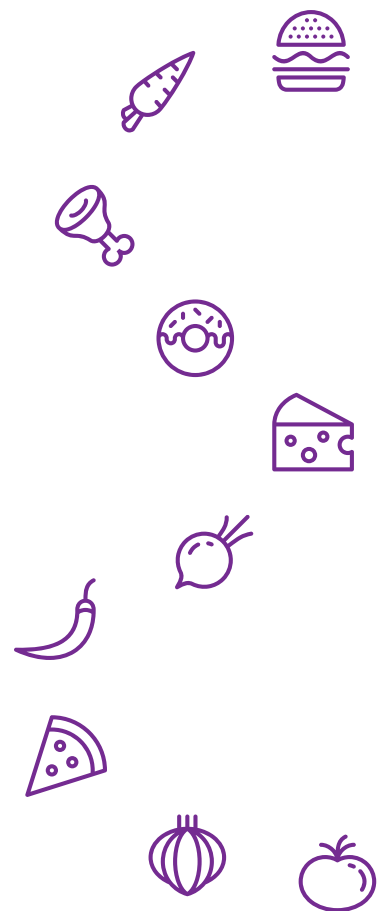
Food waste is produced in many areas, including hospitality, retails and manufacturing but it is households that contribute to the majority of this waste, with 7.1 million tonnes thrown away each year, equivalent to 156kg per person.



£19 Billion



estimated value of household waste in the UK.



FOOD WASTE TREATMENT

Food waste is an inevitable factor, however, it is how this waste is handled which determines the impacts it has on our planet. Good waste management and recycling methods are helping to support a cleaner, greener planet and more circular economy – preventing unnecessary items being sent to landfill where they struggle to decay. Almost all food waste is recyclable.



When food waste is recycled, it has the ability to breakdown and over time produce compost. Household composting recycles food waste in an environment where lots of oxygen is available. Fungi and bacteria break down the proteins, fats and carbohydrates in the waste into compost and CO2. Some local authorities collect food waste and transport it to a special processing plant. There it is treated in an enclosed vessel, which breaks down the food. This produces green energy using a process called 'Anaerobic Digestion'. This generates renewable energy and a nutrient-rich fertiliser, which can be used to grow more food.

Why should you avoid Oxo-degradable bags?

Oxo-degradable (sometimes referred to as oxo-biodegradable) is often mis-sold as biodegradable. Oxo-degradable bags are made using traditional plastic films which carry a degradable additive. These additives are designed to break down in the presence of oxygen and cause the plastic surrounding them to fragment into imperceptibly small pieces, giving the illusion that they have biodegraded. They are however contributing to the micro-plastics problem and can undermine plastics recycling efforts if they end up contaminating legitimate waste streams. The controversial nature of oxo-degradable products has resulted in bans in several countries.



Why should food waste be collected in compostable bags?

As food waste becomes a more recognised issue, many local authorities have begun offering kerbside food waste collections. Providing households with a food caddy to capture and contain their food waste, but which bag is best to line these new bins? Recent studies show compostable liners come out on top as the best product to capture food waste and recycling. Overall the evidence found compostable bags have an effective balance of reasonable costs, minimisation of plastic contaminants in the biodegradable waste stream, high participation rates and reduced instances of non compostable contamination in the food waste collected and processed.

Paper Bags: Often seen as a greener option due to paper's high recyclability, was highly disliked by users. They found using paper bags to line their caddies very messy and unreliable, the bags often ripped when the wet nature of the food weakened the bag's material.

Plastic (Polyethylene) Bags: Although the resource efficient and therefore cheaper option, there were aspects of plastic liners that caused a lot of issues. Primarily this was problems with contamination. Plastic bags had far higher contamination levels, particularly with similar plastic materials. It was thought that users were more likely to include plastic waste to match the bag material in their food waste bins.

'Naked Caddy' - No Liner: At first, not including a liner would seem the most cost-effective option, but in reality, it is not. The cost is not the only downside, the quality of the waste also see the worst results. And just like paper bags, users did not like the messy and smelly aspect of the no liner option. Participation rates decrease and overall field reduced.

Compostable Liner: The product that out shone all the others in every aspect was the compostable bag. A cost-effective option, which saw a great result in both the quality of waste & minimal instances of contamination and reduced GHG emissions. The compostable liner came out on top as the best product to capture food waste and recycling - increasing participation rates and recycling contribution.

As a result, we advocate the use of compostable liners over PE liners for food waste collection, where treatment is either composting or Anaerobic Digestion.

The Value of the Compostable Re-order Ribbon

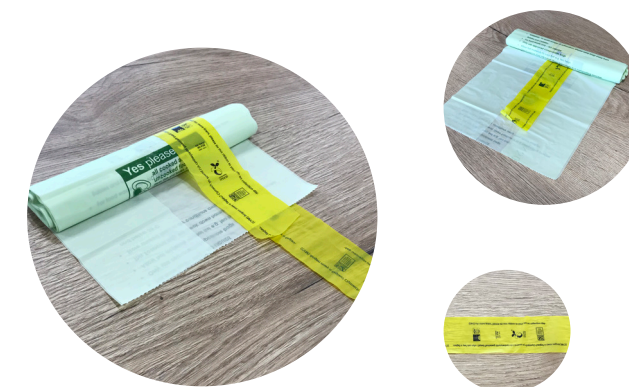
We have improved our Compostable product range with the introduction of a re-order ribbon within the bag rolls.

With mandatory food waste collections, this new yellow ribbon is designed to make the re-order of liners for household collections an efficient process for local authorities.

Benefits:

- Brightly coloured re-order ribbon to improve visibility & order remembrance likelihood.
- Extended shelf-life with individual roll wrap.
- All liners are more likely to be used, due to the access of the ribbon which will minimise wastage.
- These combined should maximize the waste collected and participation rate.

The cost of the compostable outer and ribboned strip against the standard liner is ~2% more. However, the above, additional benefits to the inclusion of the ribbon, coupled with the ease of the re-order process offsets the additional costs and the wrap more than pays for itself.



GOVERNMENT LEGISLATION

As of December 2021, less than half of UK local authorities offer household food waste collections. For those who do not have such services, residents will more often than not place their food waste into the general waste bin, which is sent to landfill. Approx. 115 councils offer a kerbside food waste collection service, this type of waste is collected in food caddies or composters, which are typically kept in the kitchen of the household. As well as household collections, many local authorities offered the same services to businesses, in similar formats.

After successful trials of food waste collections, and more local authorities, and residents alike wishing to benefit from such collections, Governments are now implementing mandatory kerbside food waste collections, across the UK. This new collection is being brought in through a wider effort to make all household and business recycling collections consistent across the UK. The proposals were for all local authorities to collect the same core set of dry recyclable materials from households and have separate weekly food waste collections from households, including flats.











The UK government is set to implement regular and separate collections of food waste from every home and business, which, it says, will boost recycling levels across the whole country.



IMPORTANCE

OF FOOD PACKAGING

Plastic offers a vast number of benefits, in particular hygiene and health advantages, but the use of plastic in food packaging makes a profound impact on reducing food waste by extending shelf lives:

 Watermelon +10 Days	 Steak +10 Days
 Broccoli +5 Days	 Grapes +7 Days
 Pepper +10 Days	 Cucumbers +14 Days
 Oranges +10 Days	 Carrots +14 Days

Food packaging is not only an advantageous addition but also a necessary requirement for some items. Despite what some may assume, plastic packaging does have a very significant purpose, and it plays a very important role in many different ways.

Eco & Economical Impacts

Small amounts of packaging make big economical impacts. By extending the longevity of an item with packaging, in turn, it will reduce the food waste levels and the methane levels that such waste produces in landfills. Of course, a reduction in food waste will also help keep resources used to produce the food at a more economical level. Transport costs and emissions will also be lowered due to the greater convenience in distribution that packaging provides us with. Along with many other environmental benefits, packaging has been proven to be a very beneficial addition when it comes to food.

Informative



Unlike the non-packaged alternatives, food that has packaging allows for important information to be shown and shared. This includes allergy information, ingredients, cooking directions, calorie and nutritional information – which needs to be legally provided.

Reduces Food Waste Levels & Preserves



A very small amount of plastic can make a huge difference in terms of a food's life span. Food's life span can be increased by 28 days, helping keep food fresher for longer.

Hygiene



COVID-19 highlighted the importance of hygiene in society. Loose food that is unpackaged has a far higher risk of contamination or risk of the spread of unhygienic particles.



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