

A collage of various plastic bottles and containers, including a Coca-Cola bottle, a Clenccarm bottle, a lemon cleaning liquid bottle, and a large white jug. The bottles are arranged in a way that they appear to be floating or scattered across the page.

Guide to recycling plastic

www.m4c-sustainability.co.uk

Facts and figures

The UK uses over 5 million tonnes of plastic each year of which an estimated 19% is currently being recovered or recycled. This figure is expected to increase significantly to over 25% of the all plastics consumed in the UK by 2010. Packaging represents the largest single sector of plastics use in the UK. The sector accounts for 35% of UK plastics consumption and plastic is the material of choice in nearly half of all packaged goods. There are about 50 different groups of plastics, with hundreds of different varieties. All types of plastic are recyclable, however not all are recycled in the UK.

The benefits of recycling waste plastics are:

- Less plastic waste going to landfill
- Less oil used for plastic production
- Less energy consumed

684,000 tonnes
of CO₂ emissions
were saved by
recycling the UK's
plastics in 2006 the
equivalent of taking
more than 216,000
cars off the road.












Source: www.bpf.co.uk

Recycling

All plastics needs to be sorted into the different types before they can be recycled. To make sorting easier the American Society of Plastics Industry has devised a standard marking code to help identify and sort the main types of plastics, and thus help to identify what can and can't go into the recycling bank. The chart on the right shows the standard marking codes, what they are commonly used for and whether they can be recycled. In the UK at the moment

- 1 recycled plastic bottle can save enough energy to power a 60-watt light bulb for 3 hours
- Most families throw away about 40kg of plastic per year, which could otherwise be recycled
- The use of plastic in Western Europe is growing about 4% each year
- Plastic can take up to 500 years to decompose

Source: recycling-guide.co.uk

Symbol	Polymer type	Examples	Recyclable?
	PET Polyethylene Terephthalate	Fizzy drinks Mineral water bottles Squashes Cooking oils	Recycle points located throughout the UK 
	HDPE High Density Polyethylene	Milk bottles Juice bottles Washing up liquid Bath & shower bottles	Recycle points located throughout the UK 
	PVC Polyvinyl Chloride	Usually in bottles form however, not very common	Some recycling points 
	LDPE Low Density Polyethylene	Many types of packaging are made from these materials e.g. plastic formed around meats and vegetables	Due to the mixture of compounds these types are hard to recycle and are not generally recycled in the UK 
	PP Polypropylene		
	PS Polystyrene		
	OTHER All other resins and multi materials		

only types 1 and 2, and sometimes 3, are recycled on a large scale.

Households account for the biggest plastic consumption but only half of UK local authorities offer some form of household plastic collection service, however there are over 4,000 plastic bottle banks in the UK where plastic can be deposited for recycling.

Why can't I recycle yoghurt pots?!

Unfortunately yoghurt pots are made from polystyrene. Milk bottles are made from HDPE - generally. Basically, yoghurt pots get stamped out - this process requires the plastic polymer to cool down quickly so that it can be filled - which lends itself to polystyrene. Milk bottles are blown and so require different polymer properties. Why yoghurt pots can't be made in the same way as milk bottles eludes us!

The plastic recycling process

The diagram opposite shows the typical stages of plastic recycling (in the UK) :

Degradable plastics

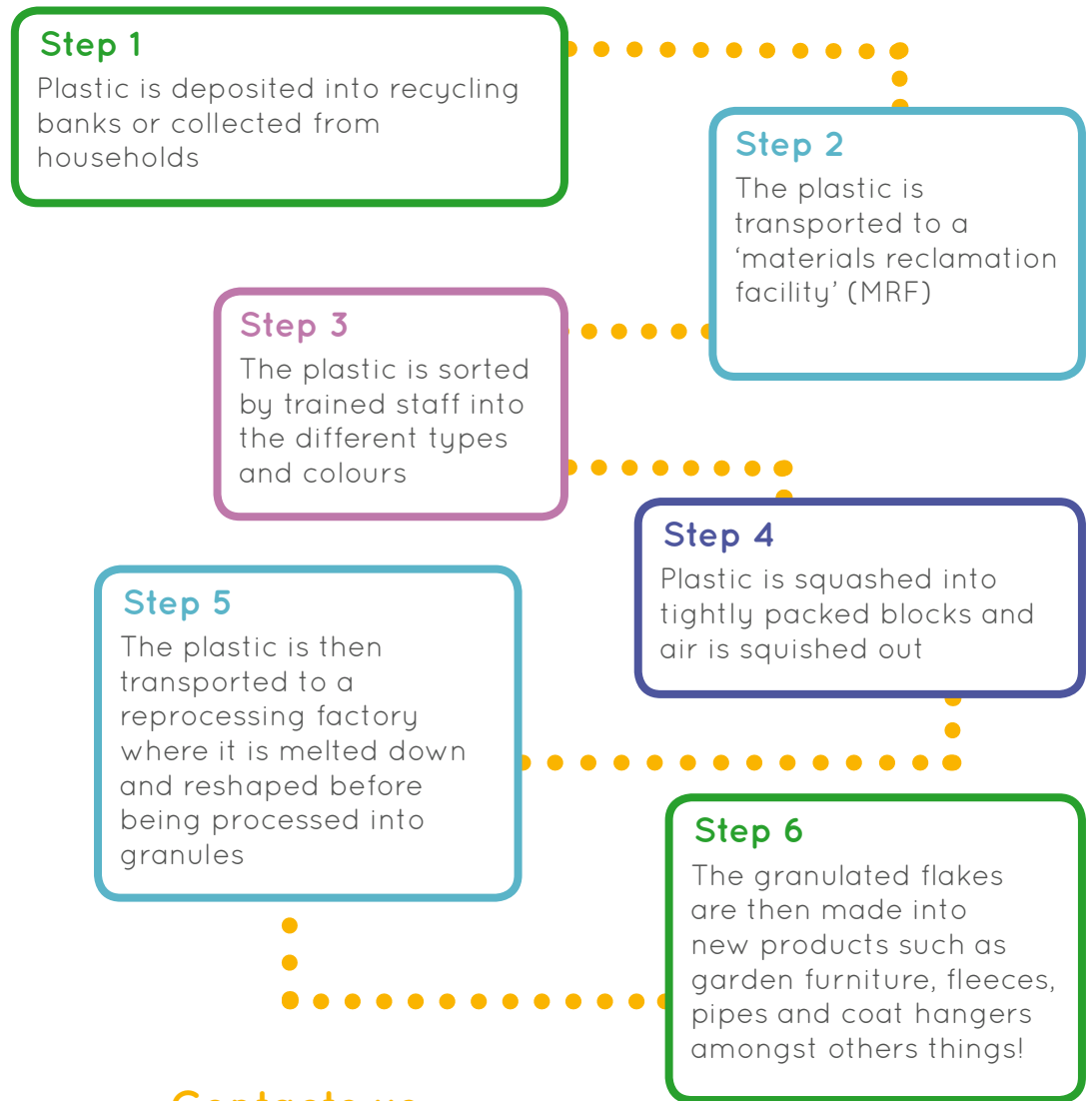
There are two types of degradable plastic: bio-degradable plastics, which contain a small percentage of non oil-based material, such as corn starch; and photodegradable plastics, which will break down when exposed to sunlight. Carriers for packs of beer cans are now being manufactured in a plastic which photo-degrades in six weeks. There are a number of concerns over the use of degradable plastics; they will only degrade if disposed of in appropriate conditions, they may cause an increase in emissions of the greenhouse gas methane as they biodegrade anaerobically, the mixture of degradable and non-degradable plastics may complicate plastics sorting systems.

Bio-plastics

Bio-plastics include polymers made from plants sugars and plastics grown inside genetically modified plants or micro-organisms, rather than being fossil fuel based. Health and safety concerns have arisen over potentially hazardous chemical additives to plastics and consumer pressure has contributed to manufacturers switching to plant-based plastics in such cases, e.g. Mattel, the world's largest toy manufacturer, announced that PVC would be replaced with plant-based plastics in new products from 2001 onwards.

Useful links and sources:

- ['A Month without Plastic'](#) – BBC article on living without plastic
- There are now over 100 plastics recyclers in the UK. The BPF (British Plastics Federation) has a [Directory of UK Companies](#) that recycle plastic
- Use the 'recycle-more' [bank locator](#) to find the nearest recycling facilities. Simply enter a postcode, placename or London street name and select the type of material that you want to recycle
- Information on applicable legislation can be found on the BPF website: www.bpf.co.uk
- Information on design for recycling can be found on the Envirowise website: envirowise.gov.uk
- [Recycle Now](#) answers lots of commonly asked questions about what can be recycled



Contacts us

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To find out more about what we do take a look at our website or give us a call

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