



[How, what and why of recycling](#)

[What can you recycle](#)

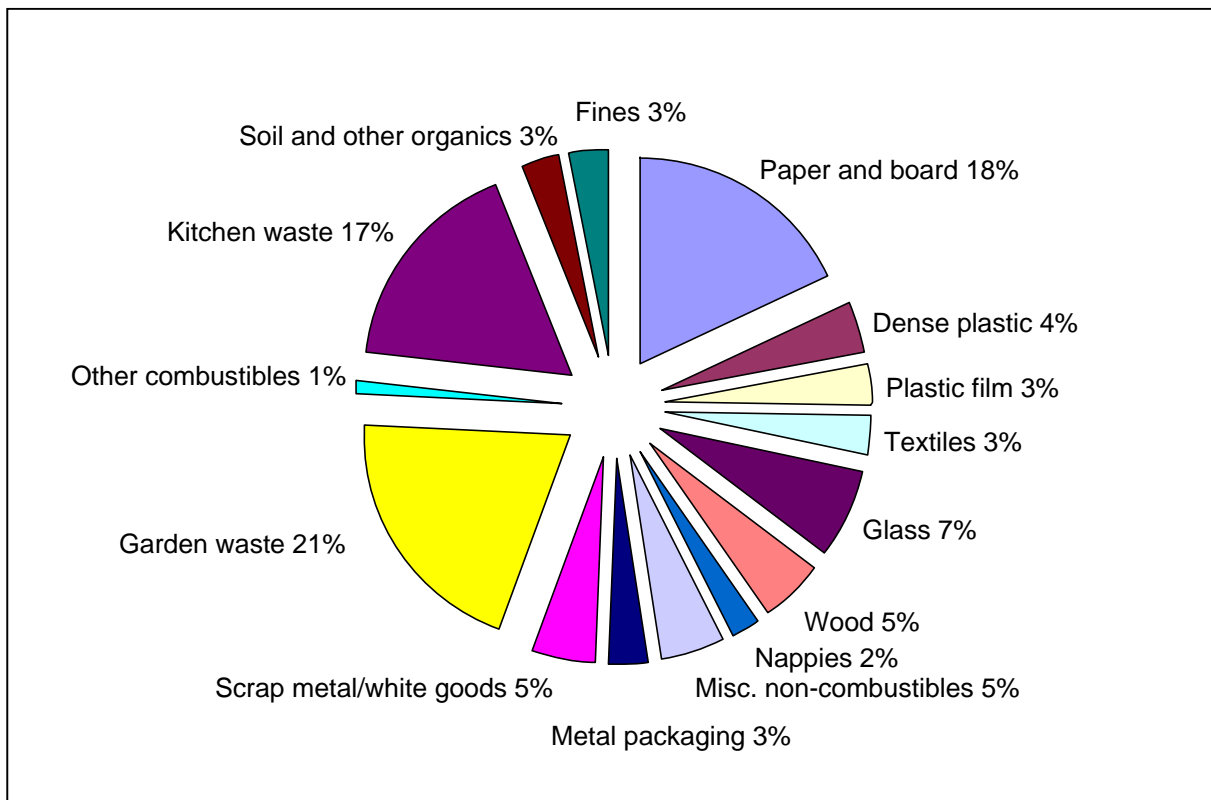
[Sources of Further Information](#)

Recycling for Householders

It is estimated that 29.7 million tonnes of municipal waste was generated in England in 2004/05¹. A total of 25.7 million tonnes of this waste was collected from households. That's over one tonne of waste per household per year!²

Although household rubbish is a relatively small percentage of the total amount of waste produced, it is a highly significant proportion because it contains large quantities of organic waste which can cause pollution problems, as well as materials such as glass and plastic which do not easily break down.

What's in your bin?



Source: Analysis of household waste composition and factors driving waste increases - Dr. J. Parfitt, WRAP, December 2002

What can we do?

The first thing to do is try to reduce the amount of waste we produce. After that we should try to reuse our wastes as much as possible. After reducing and reusing waste, we can think about recycling. Over half of the contents of our dustbins could potentially be recycled or composted. Despite the potential to recover around 60% of our waste, we are only recycling or composting 23% of municipal waste (that's waste collected by the councils). A total of 67% of municipal waste is landfilled and 9% is incinerated or burnt to produce energy.³

¹ DEFRA Municipal Waste Management Survey - <http://www.defra.gov.uk/news/2006/060324a.htm>

² Based on National statistics figures <http://www.nationalstatistics.gov.uk/STATBASE/Expodata/Spreadsheets/D7678.xls>

³ DEFRA Municipal Waste Management Survey - <http://www.defra.gov.uk/news/2006/060324a.htm>

What is recycling?

Recycling is the processing of used products to provide the raw material to make new ones. When you take materials to a bring bank or put them out for the local authority to collect, they have not at that point been recycled – although they have been *collected* for recycling. They are yet to be processed, ready for recycling, and then made into a new product, at which point they have been recycled. The recycling process isn't really fully completed until we buy the products that have been made from the recycled materials.

Why recycle?

Recycling reduces the demand for raw materials. By recovering materials from old products we are removing or reducing the need to extract yet more raw materials from the earth. This is important because the vast majority of resources that we use in manufacturing products and providing services cannot be replaced. The use of these resources cannot go on indefinitely – we would run out.

Recycling means that we also avoid many of the additional environmental impacts associated with extracting the new resources, manufacturing and distributing the goods. Activities such as mining, quarrying and logging can be environmentally destructive, damaging the natural environment and local wildlife habitats. The processing and transportation activities also add to the environmental impact. Recycling often uses less energy and causes less pollution than using raw materials. For example, the manufacture of bags from recycled rather than virgin polythene reduces energy consumption by two-thirds, produces one-third of the sulphur dioxide and one-half of the nitrous oxide, uses only one-eighth of the water and reduces carbon dioxide generation.

Recycling reduces the amount of waste going to landfill or incineration. Dealing with our rubbish in this way is not an ideal solution. Landfilling and incineration can harm the environment if not properly managed. Many landfill sites are nearly full and we are rapidly running out of suitable land, close to where the rubbish is produced, for new sites. Most importantly, when we bury or burn our rubbish we are losing valuable natural resources.

Recycling is a positive step which we can take to help the environment. It encourages us to think about the waste we create and take responsibility for what happens to it. Ultimately this is the greatest advantage of recycling as raising awareness is the first step towards changing the way we deal with any problem. As more people recycle, more recycling plants will be built and the impacts of transporting waste materials will decrease.

How to start recycling - bring sites and kerbside collections

Your local council is responsible for providing sites for recycling household rubbish. Most local councils provide recycling banks at "bring sites" for recycling newspapers and magazines, aluminium cans, glass and textiles. Some also provide for a wider range of material. These sites may simply be a collection of recycling banks at a suitable location (where car parking is provided) or may be a dedicated "civic amenity site" or "household waste and recycling centre" (often referred to as "the tip").

Some households may not be within easy walking distance of a recycling bank and you may need to use a car, with the associated energy and pollution implications. Try not to make a special car journey to recycle your waste, or better still, walk to the recycling banks! To find your nearest recycling point check the Recycle Now web site (see further contacts).

Local authorities may also provide kerbside collection schemes and some provide home composting bins for householders to compost their organic waste. A total of 79% of households now have some kind of kerbside collection scheme¹. Householders are provided with special containers or bags in addition to the normal black bag or wheeled bin provided for general rubbish. Clean, dry, separated materials for recycling such as paper, aluminium and plastic are placed in the containers which are then collected – either on the same day or a different day to the normal refuse collection. Kerbside schemes make it easy and convenient for householders to recycle, and reduce the need for separate journeys to the recycling centre. Successful schemes in many local authority areas have demonstrated that kerbside collection is an effective method of increasing recycling rates and diverting waste from disposal.

You can contact your local authority recycling officer to find out what is happening in your area - look in your local telephone directory, or find your LA contact details [here](#) by entering your postcode.

What happens to the collected material?

After you put your waste materials in the recycling bank or container they are usually taken to a central depot where the materials are sorted, bulked up and baled for onward transportation. Usually, even if materials are separated fully by the householder, there is still some further sorting to be undertaken as there is likely to be a small amount of contamination with other materials. The depot is often a Materials Reclamation Facility (MRF).

MRFs accept recyclables which have been separated from normal refuse (but they may arrive as a mixture of recyclables, for example, glass and cans). The simplest sorting techniques at MRFs are manual, employing people to pick out materials from a raised belt. However, mechanical sorting systems have developed considerably over recent years, and the newer MRFs can automatically separate plastics and aluminium.

The collected materials are baked, which are then sent to reprocessors such as paper mills, glassmakers or plastic reprocessing plants where the material is processed for use in other applications, or processed directly into a new product. Some materials such as aluminium and glass can be recycled indefinitely, as the process does not affect their structure. Other materials, such as paper, require a mixture of waste and raw material to manufacture a new product. With material such as plastic, the waste is converted into a granulate, or pellet, which is then used in the manufacture of a recycled or part-recycled plastic product.

What can we recycle?

Remember to contact your local authority to find out what is happening in your area. You can find details in the Yellow Pages, or at this website: <http://www.recyclenow.com> under where to recycle.

Glass

Bottle banks are found in many supermarket car parks and local council areas and usually have separate compartments for clear, green and brown glass. Blue glass can be put into the green bank and clear glass with coloured coatings can be put into the clear bank as the coating will burn off. The labels on bottles and jars will be removed during the recycling process, however remove as many plastic or metal rings and tops as possible. Only recycle bottles and jars - never light bulbs, window or sheet glass or Pyrex type dishes as these are made from a different type of glass. Please see our [glass](#) sheet for further details

Paper

Most local authorities supply recycling banks for newspapers and magazines, as this is the most abundant type of paper in household waste. Make sure that you don't put other types of paper in such as cardboard or junk mail, as this will contaminate the load and the reprocessors will not accept it. Some local authorities may have separate banks for these. Packaging such as milk and juice cartons cannot be recycled as paper as they have a plastic lining which would contaminate the process. Please see our [paper](#) sheet for further details

Aluminium and steel cans

Many local authorities have mixed can banks accepting both aluminium and steel cans, although some have aluminium-only banks as uncontaminated aluminium has a higher value. Aluminium can be recognised by the fact that it does not stick to a magnet, has a very shiny silver base and is very light in weight. Steel cans are also called "tins" as they contain a very thin layer of tin. Try to crush drinks cans before recycling, either with a can crusher or by squashing them underfoot. Aerosol cans made from steel or aluminium can be recycled in Save-a-can banks (check the front of the banks for guidance), but they must be empty and should not be crushed. Please see our [metals](#) sheet for further details.

Textiles

Charities such as The Salvation Army, Oxfam and Scope run textile banks for unwanted clothing, which is then sold in charity shops, given to the homeless or sent abroad. Even damaged or un-wearable clothing can be converted into items such as wiping cloths, shredded for use as filling for items such as furniture or car insulation or rewoven into new yarn or fabric. If you deposit shoes, tie them together as they tend to go astray! Please see our [textiles](#) sheet for further details.

Plastic

Plastic is a difficult material to recycle as there are many different types of plastic (often indicated by a number, or letters such as PET or PVC). The variation in plastic types means that different reprocessing techniques are required. The different types of plastic therefore need to be collected separately or sorted after collection, as reprocessors will specify which type of plastic they will accept. Plastic in household waste is often food packaging and therefore too contaminated to be recycled effectively.

Plastic is a light, bulky part of household waste and therefore it is difficult for councils to store and transport sufficient quantities of plastic to make recycling economically viable. Many councils have found it to be too expensive and do not have any facilities for recycling plastic, while others recycle only plastic bottles which are worth more money. If your council does not recycle plastic, you could try putting pressure on them to start, but meanwhile try to reduce and reuse as much plastic as possible. If your council does recycle plastic make sure that you are recycling the right type of plastic and always remove the tops of plastic containers so that they can be crushed. Please see our [plastics](#) sheet for further details

Organic waste

Organic household waste is food and garden waste. Organic waste is a problem if sent to landfill, because it is impossible to separate out from other waste once mingled, and will rot producing methane, a greenhouse gas responsible for global warming. The best way to dispose of organic waste is to compost it either through a centralised

composting scheme run by your council or at home. Find out if your council has facilities for taking garden waste for composting or you may be able to separate kitchen waste for a kerbside collection scheme if one exists in your area. Alternatively, build or invest in a home composter for the garden or try a worm bin for indoor use! Check to see if your council supplies reduced-cost recycling bins. Please see our [compost](#) sheet for further details.

Electrical and electronic equipment

At the present time there are very few facilities for recycling household electrical or electronic waste although this is set to change as the EU Directive on Waste Electrical and Electronic Equipment (WEEE) is transposed into UK law. By the end of 2006 there should be established collections for WEEE with a collection target of 4 kg per year per household. British Telecom (BT) telephones can be returned to BT and there are a number of schemes for recycling mobile phones. Goods such as working refrigerators and washing machines can be donated to schemes to be passed on to low income households. Check with your council to see if they have facilities for household appliances, electronic equipment and CFC extraction for old refrigerators. You can arrange for the council to remove bulky household items for disposal. Please see our [electronics](#) sheet for further details.

Batteries

There are currently very few collection schemes for ordinary household batteries in the UK, although the number is slowly increasing. Batteries are varied and complex, come in different shapes and types and are consequently very difficult to sort and recycle. The toxic materials have now been removed from ordinary batteries and they are safe to dispose of with your normal household waste if you do not have access to battery recycling scheme. Rechargeable nickel cadmium batteries do still contain hazardous metals and should be returned to the manufacturer where possible. A few local authorities provide facilities for recycling these, as well as lead acid car batteries, which may also be returned to garages. If you use rechargeable batteries look out for the new versions containing no mercury or cadmium. Please see our [batteries](#) sheet for further details.

Furniture

The Furniture Reuse Network is a network of furniture recycling projects across the UK, consisting of local projects which take unwanted household furniture and items, and pass it onto community groups, low-income families and other groups in need. To find your nearest group visit their website: <http://www.frn.org.uk/>. If you have unusable furniture or white goods, contact your council to arrange disposal, its normally called a bulky waste pick up.

Hazardous waste

Household hazardous waste such as paint, solvents and garden chemicals fall under the jurisdiction of your local council. Contact your local council to check whether there are facilities at any civic amenity sites where this type of waste can be deposited. If you have any tins containing a reasonable amount of paint it may be worth checking to see if there is a local Community Re>paint scheme: <http://www.communityrepaint.org.uk>.

Mixed packaging

Packaging, such as Tetra paks and crisp packets, are often made up of a mixture of materials including paper, plastic and metal, and this makes recycling difficult. There is a lack of facilities and technology for recycling mixed packaging - the materials are difficult to separate out without contamination.

Packaging is a very visible form of waste, making up around one-third of the average household dustbin. It is often necessary to protect the product, prolong its lifespan and provide essential information. However, over-packaging does occur, especially for marketing purposes. Basic foods such as bread and rice are rarely over packaged, while convenience foods often have two or three layers of packaging. Try to avoid buying over packaged goods where possible and when choosing a product pick the packaging material that is easiest for you to recycle locally.

Note that there is a difference between materials which it is technically possible to recycle and materials for which your local authority provides a recycling facility. Plastic is a good example. For a number of reasons many local authorities do not provide plastics recycling facilities, even though the technology for plastics recycling is available.

Other materials and objects

There are of course many other materials and items in the house that need to be disposed of. Above is a list of the most commonly collected materials by local authorities and community groups. For a full list of other recycling options, please visit our [A-Z](#) section on <http://www.wasteonline.org.uk>.

The recycling symbol



Products and packaging often have some kind of recycling symbol on them. The most common is the mobius loop, which can mean that a product is either recyclable or has some recycled content.

Unless the product states the percentage of recycled content, the symbol usually means that the product can be recycled. This does not mean that it will be recycled or that such facilities exist. Many products can be recycled in theory, but the technology or money may not be available to provide collection schemes for householders.

Where a material can be recycled, it needs to be clean and uncontaminated - so always try to put the correct materials in the correct recycling bank or container. A small amount of contamination can make the entire load unsuitable for recycling. Remove the tops from jars and cans before placing them in containers. Try to make sure that you wash bottles and cans in leftover washing up water (running the hot water specially is a waste of water and energy!).

Make sure that you follow any guidance prepared by your local authority explaining more specifically what can and can't be accepted for recycling in your area.

For details on other symbols, please see our [packaging](#) sheet.

The cost of recycling

The level of recycling in the UK appears low compared to other European countries such as Germany and Sweden (it is, however, important in any comparison to ensure that we are comparing like with like which is not always the case with European countries). There are fewer reprocessing plants, higher storage and transportation costs and fewer markets for recycled products.

As recycling increases it will become cheaper and easier to take part. For this to happen there needs to be an increase in the consumption of recycled products to stimulate a demand for recycled materials. This process is called "closing the loop". In order to encourage market development for recycled material applications, DEFRA, the DTI, and the devolved administrations of Wales, Scotland and Northern Ireland have funded an organisation called WRAP (Waste and Resources Action Programme) whose key priority is to assist with the development of new markets and new applications for recycled materials and products, as well as the national awareness campaign Recycle Now.

In addition, changes to environmental legislation, will lead to an increase in reprocessing and recycling plants in the UK. This will make it easier and cheaper for local authorities, and consequently individuals, to recycle.

Recycled product quality

Many products made from recycled materials can be made to equivalent standards as products made from raw materials and this is vital if they are to compete with these products in the market place. Similarly, the recycle (recovered material used as a substitute for raw material) used to make the product needs to compete with virgin material on the basis of quality, consistency, availability and performance, as well as price.

New technology is constantly improving the quality of recycled material, and design and process improvements have resulted in very high grades of recycled products being produced. For instance, recycled paper is now available at similar standards to high quality virgin paper and will function equivalently in printers and photocopiers.

Attitudes to recycled products

Even if the cost of recycling is favourable and the quality of recycled products/materials is high, we need to change our attitude to using or buying recycled materials. For some people, there is a perception that recycled products are in some way inferior – or their "green" connotations are not welcomed. For this reason, many products do not refer to their recycled content as part of their product information/marketing strategy. Many goods produced with a recycled content will end up in the shops as ordinary household products, such as bin bags, stationery, furniture, or filling for duvets and pillows.

Recycled Product Guide

Look out for products with a recycled content so that you can help to "close the loop". The Recycled Products Guide (RPG) is the first ever listing of products made from recycled materials and contains over 3000 products. Free access to the RPG is available on the website at <http://www.recycledproducts.org.uk>

Make your voice heard!

Remember that you have the power to change things both as a consumer and as a voter, so speak up! If your council does not recycle plastic bottles or provide home compost bins, contact them and ask why. If packaging has the recyclable symbol on it, but you cannot find a facility to recycle it, write to the manufacturer to ask if one exists. Put pressure on shops and supermarkets to stock recycled products. Remember that you can make a difference!

Further contacts

Centre for Alternative Technology
Machynlleth, Powys, SY20 9AZ
Tel: 01654 705 950,
Fax: 01654 702 782

Community Recycling Network
Trelawny House, Surrey Street, Bristol, BS2 8PS
Tel: 0117 942 0142
E-mail: info@crn.org.uk

E-mail: info@cat.org.uk

Website: <http://www.cat.org.uk>

Information, publications and green products.

Department for Environment, Food and Rural Affairs (DEFRA)

Information Resource Centre, Lower Ground Floor
Ergon House, c/o Nobel House, 17 Smith Square
London, SW1P 3JR

Tel: 08459 335577

Fax: 020 7238 3329

Email: helpline@defra.gsi.gov.uk

Website: <http://www.defra.gov.uk>

Friends of the Earth

26-28 Underwood Street, London, N1 7JQ

Tel: 020 7490 1555 or Freephone: 0808 800 1111

Fax: 020 7490 0881

Website: <http://www.foe.co.uk>

Send an SAE for a publications catalogue.

Recycle Now

<http://www.recyclenow.com/>

A web site that has information on recycling for householders, schools and businesses including a locator for your nearest collection bank.

Website: <http://www.crn.org.uk>

Contact for publications and details about your nearest community project.

EnCams (Environmental Campaigns)

Elizabeth House, The Pier, Wigan, WN3 4EX

Tel: 01942 612639

Fax: 01942 824778

E-mail: information@encams.org

Website: <http://www.encams.org>

Produce publications such as Slim your Bin and focus on preventing litter and reducing rubbish.

Global Action Plan

8 Fulwood Place, London, WC1V 6HG

Tel: 020 7405 5633

Fax: 020 7831 6244

E-mail: all@globalactionplan.org.uk

Website: <http://www.globalactionplan.org.uk>

Produce individual environmental action plans.

Women's Environmental Network

PO Box 30626, London, E1 1TZ

Tel: 020 7481 9004

Fax: 020 7481 9144

E-mail: waste@wen.org.uk

Website: <http://www.wen.org.uk>

Information and factsheets available on waste prevention and reuse.

Sheet updated: April - 06

<http://www.wasteonline.org.uk>

<http://www.wastewatch.org.uk>

Due to changes in funding, we are no longer able to offer a public information service. Should you have further questions on waste and recycling, please contact one of these groups:

Householders and students should call the [Recycle Now](#) helpline on 0845 331 31 31 for further waste based information, and where to find your local recycling facilities.

Small to medium businesses should visit the [Envirowise](#) website, or call 0800 585 794, for further information on waste issues. Larger businesses should visit www.businesslink.gov.uk.

For industry based questions, please use the WRAP technical helpline on 0808 100 2040 for advice on markets and recycling company development, or visit www.letsrecycle.com for listings of recyclers and reprocessors.

If you find a mistake on this page, or have a technical question regarding the wasteonline website, please email info@wastewatch.org.uk.

Thank you, and apologies for any inconvenience.