# 4 Efficient Use of Resources

## Introduction

The waste generated from our homes has a significant impact on the environment. A large proportion of domestic waste ends up in landfill, but this can be reduced by carefully looking at the amount of materials we order when carrying out improvement works, the amount of packaging that products come in, and reusing and recycling those materials where possible.

Many of the materials used to build and maintain our homes have environmentally harmful production methods. When carrying out DIY or bigger projects, such as insulating a loft or building an extension, we should consider using materials that are independently certified as being less harmful to the environment, and ourselves, including natural products for insulation, flooring and paints.

## Reducing Household Waste

Landfilling and recycling waste use energy, money and land space, as does making new products to replace those we have discarded. Reducing the amount of waste we produce in the first place is best for both the environment and our wallets. Something we can all do to reduce the amount of waste we produce is to be waste aware when we are shopping:

- **Upgrade responsibly.** Some of the world's most rare and precious materials are used in mobile technology, e.g. mobile phones and tablets. New versions of these products are released regularly, making older versions obsolete, but they still contain those valuable materials. If you upgrade, make sure your old gadget is reused by giving it to a friend, or to a charity that can sell it for recycling. For example, most large charities operate a mobile phone recycling envelope scheme.

  *For more information, read 'Short Circuit: The Lifecycle of our Gadgets and the True Cost to Earth' at www.gaiafoundation.org*

- **Avoiding over-packaging.** Over 40% of the waste in our bins is packaging. Packaging costs money which increases the price of goods. We can choose to reduce the packaging that we purchase and then throw away by buying loose, rather than pre-packaged, fruit and vegetables

- **Buy in bulk.** Family-sized products such as toilet/kitchen rolls, washing powder and pet food can be cheaper and use less packaging per item than individually wrapped products

- **Buy recycled.** Opting for products containing recycled material (such as toilet/kitchen roll, bin bags, stationery) or products packaged in material which has been recycled, will encourage retailers to stock more of these products

- **Avoid disposable products.** – e.g. batteries, cameras, barbecues, razors and nappies. Instead use rechargeable batteries, cameras with HD cards and reusable nappies. They will last longer, use fewer materials and cost you less in the long run. Consider them as assets to keep, not throw away

- **Buy refillable goods.** Washing, cleaning and

beauty products are cheaper and can use less packaging when sold as refills

- **Donate to charity shops.** Items that you no longer use can be a vital resource to people on lower incomes and local charities, such as Cambridge ReUse and Emmaus.

  *For more information, visit www.cambridgereuse.org.uk and www.emmauscambridge.org*

Each household in Cambridge produces an average of approximately 1 tonne of waste per year. Around 43% of this is recycled or composted, but the remainder has to be disposed of in landfill. You can contribute to reducing the amount of waste sent to landfill by reusing and recycling as much as possible.




Image: Cambridge ReUse

## Kerbside Recycling Collections

Most properties in Cambridge have their own blue and green wheelie bins for recycling at home. Flats may have shared recycling bins.

**In the blue bins you can recycle:**

- Paper – envelopes, phone books, catalogues, junk mail, office paper, wrapping paper, receipts, newspapers and magazines
- Cardboard – flattened boxes, card packaging, cereal boxes, greetings cards, toilet roll tubes and egg boxes
- Drink cartons, e.g. Tetra Pak
- Glass bottles and jars, rinsed and with lids removed



- Food tins, drink cans and foil (rinsed)
- Plastic bottles, pots, tubs and trays.

**In the green bins you can recycle:**

- All food waste – tea bags, fruit and veg peelings, cooked food, meat, fish, bones and dairy
- Garden waste – grass, hedge clippings, weeds and cut flowers
- Untreated wood and sawdust, including hamster/rabbit bedding
- Shredded paper.

*For more information on kerbside recycling services and bin collections, visit www.cambridge.gov.uk/bins-and-recycling e-mail wasteandstreets@cambridge.gov.uk, or telephone 01223 458282.*

## Public Recycling Points

There are 23 public recycling points around the city, many of which have banks for textiles, books, tapes, discs, and small electrical appliances, which are not collected from the kerbside. You can find your closest recycling point at *www.cambridge.gov.uk/recycling*. There are also a number of litter recycling bins for mixed recyclables throughout the city centre.

## Recycling Centres

There are two Recycling Centres for residents to use near Cambridge - Butt Lane, off the A10 near Milton and Gravel Pit Hill, off the A505 near Thriplow.

*Their opening times are available to view via www.cambridge.gov.uk /find-recycling-centre-or-rubbish-tip*

Entrance gates shut ***10 minutes before*** closing time on all sites. Sites are closed on Christmas Day, Boxing Day and New Year's Day.

The centres are open to residents only (no businesses) and accept a wide range of materials for reuse and recycling, including:

- all electrical and electronic equipment, e.g. mobile phones, printer cartridges
- batteries (car and household)
- building rubble (domestic only), scrap metal and wood (untreated)
- cans, cardboard, drink cartons, glass, paper, plastic bottles
- cooking oil , engine oil and paint
- clothes, shoes and books
- energy-efficient light bulbs, fluorescent tubes,
- green garden waste.

There are also containers for general waste, including bulky items.




## Bulky Waste and White Goods Collections

Cambridge City Council can collect many large items including domestic fridges and freezers (not from businesses), large quantities of flattened cardboard (either one-off or regular collections), bulky garden waste (bundled or in boxes or bags) and furniture.

The charge for collecting bulky waste ranges from £22 for one item to £44 for up to 10 items. You can pay by card over the telephone on 01223 458282, or by card, cash or cheque in person at the Mill Road depot.

These prices do not apply to hazardous waste and may vary for garden waste depending on the types of waste included.

*For more information on what is considered hazardous waste and how to dispose of it, visit www.cambridge.gov.uk/hazardous-waste*

## Real Nappies



Image: GoReal

Eight million disposable nappies are thrown away every day in the UK, ending up in landfill sites where they may take hundreds of years to decompose. Using reusable cloth nappies can reduce your household waste by up to half and save you money as well. Modern washable nappies are easy to use, do not require pins or folding, and will work out cheaper than disposables.

*For more information on choosing the right washable nappies for you, visit www.goreal.org.uk or call 0800 3288175.*

# Greener DIY and Decorating

## Paints and Finishes

- Use paints that are water or vegetable oil-based as they have reduced health and environmental impacts compared with oil-based paints and varnishes, which give off volatile organic compounds (VOC). These VOCs are chemical compounds, e.g. formaldehyde, that can have long term health risks.
- Do not pour paint down the drain or throw it in the waste bin. Take it to one of the six dedicated paint banks located at recycling Centres in Cambridgeshire operated by Cambridgeshire Community RePaint.

  Cambridgeshire Community RePaint collects, sorts and tests all the reusable paint preparing it for reuse by Community groups and families with any unsuitable paint being disposed of responsibly.

  *For more information about paint donation points or buying paint at our partner outlets please visit www.ccorrn.org.uk/community-repaint*

CAMBRIDGESHIRE COMMUNITY REUSE & RECYCLING NETWORK

## Wood

- Avoid tropical hardwoods (including plywood) unless clearly labelled as being from a well-managed source. Make sure that all wood is from an independently certified source such as the Forest Stewardship Council (FSC). Softwood in the UK is likely to be treated with preservatives. However, European non-treated softwoods, such as pine and birch plywood are available.

  *For more information, visit www.fsc.org.uk*

- Unfinished (not painted or varnished) wood can be treated using natural oil and wax. This allows the wood to breathe, helping to stabilise relative humidity in the home: not too dry (can affect eyes) and not too damp (can lead to mould and condensation).
- Cambridge Wood Works CIC sells affordable reclaimed timber that's ideal for DIY home and garden projects. They also make Cambridge Hotlogs, very hot and clean-burning timber briquettes - ideal in wood stoves and chimeneas.

  *For more information, visit www.cambridgewoodworks.org.uk*



Image: Cambridge Wood Works

## Insulation

- Conventional insulation materials e.g. mineral and rock wool, polystyrene and rigid urethane foams, have numerous ecological impacts from their manufacture to disposal.
- Greener alternatives include sheep wool and cellulose, both great for DIY enthusiasts as they are easier to handle (non-irritant) than mineral/rock wool. Cork board, recycled newspaper and flax may be more suitable in buildings that use more traditional forms of construction.

### Flooring

- Most woollen and synthetic carpets are dyed with synthetic dyes, made from a range of chemicals. Consider using linoleum, cork, or other natural alternatives, or select a 100% naturally dyed carpet.
- Hardwood floors should be certified by the Forestry Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC).

  *For more information, visit www.pefc.co.uk*
- Use underlay boards manufactured from compressed wood fibres.
- When replacing an existing carpet, ask your supplier to recycle the old one.

## Greener Upgrades, Extensions and New Builds

### Building Materials

- Make use of reclaimed and recycled materials e.g. bricks, slates and even fixtures and fittings e.g. internal doors. Be sure reclaimed products are sound and fit for purpose – don't throw good money after bad.
- Source materials from within 50 km if possible to reduce the amount of CO2 associated with transportation.
- Use materials with a low environmental impact. The Building Research Establishment (BRE) has a 'Green Guide to Specification', listing typical wall, roof, floor and other materials against a simple environmental performance rating scale.

  *For more information, visit www.bre.co.uk/greenguide*
- Consider using materials with low embodied energy (the energy associated with the extraction, production, transportation and assembly of a material or product). Timber has low embodied energy, steel and cement have high embodied energy.

### Windows

- Timber windows and doors are considered to have less environmental impact than other options. WWF-UK has researched the costs and benefits of wooden and u-PVC windows.

  *Enter 'Window of Opportunity' in the search facility of their website www.wwf.org.uk to see the full report.*

### Reduce Construction Waste

About 13% of construction materials delivered to sites are never used. Construction and demolition waste account for around 50% of waste in the UK, with only 10% of materials being recycled and 1% reclaimed.

- Reduce waste from home improvements or building works going to landfill by looking carefully at the quantity of materials ordered and the options for reusing or recycling them later on.
- Reduce construction waste by asking suppliers to take back any unused materials.
- Recycling Centres off the A10 near Milton and off the A505 near Thriplow accept rubble, metal, plasterboard and untreated wood for recycling.
- Consider advertising other items through a 'swap shop' website such as Freecycle *(www.freecycle.org)* or Gumtree *(www.gumtree.com/cambridge).*
- If you are employing an architect, ask them to 'design out' construction waste.

## Further Information

**Recycling in Cambridgeshire and Peterborough (RECAP)**

RECAP is the Cambridgeshire waste partnership, working on campaigns to promote waste minimisation, reuse and recycling locally.

*www.recap.co.uk*

**Waste & Resources Action Programme:**

The Government's waste minimisation, recycling and market development programme

*Tel: 0808 1002040*
*www.wrap.org.uk*

**Recycled Products Guide**

A guide to products available in the UK that contain recycled materials. The database provides a very comprehensive listing of recycled products

*Tel: 0808 1002040*
*www.recycledproducts.org.uk*

**Recycle Now**

Provides information on recycling at home and in the garden, including information on buying recycled goods

*Tel: 0845 3313131*
*www.recyclenow.com*

**Construction Resources Ltd.**

Ecological builders' merchant and building centre stocks alternative paints and finishes and provides independent advice

*Tel: 020 7450 2211*
*www.constructionresources.com*

**The Green Building Store**

The Green Building Store specialises in environmentally sensitive building products (01484 854 898). The Green Building Handbook Volumes 1 and 2 provide a guide to building products and their impacts on the environment.

*www.greenbuildingstore.co.uk*