



**In the UK, over 80% of all corrugated cardboard boxes are recycled, giving the corrugated industry the best recycling rate of all packaging materials.**

**This impressive recycling rate saves an area of board the size of Greater London from landfill every four months.**



Corrugated packaging is very flexible when it comes to selecting a waste management option, and there is no need to send it to landfill. Well over three-quarters are already recycled, but it can also be reused, composted or incinerated with energy recovery; although the latter is a lower carbon benefit than recycling.

It is important to remember that the vast majority of the timber from trees goes to construction and furniture making, and that papermakers use the forest thinnings and sawmill waste associated with these industries.

### Waste Hierarchy

The Department for Environment, Food and Rural Affairs (DEFRA) has laid out a waste hierarchy, specifying which waste management option should be given priority.

#### 1. Reduce

Manufacturers of corrugated packaging are constantly improving their techniques and technologies to create more efficient packaging products. Part of this is the development of "lightweighting" technologies, used to make boxes stronger whilst using less resources. As a result, box for box, corrugated packaging is both stronger and lighter today than it was 20 years ago.

#### 2. Reuse

Re-using a product to prolong its life is good sense. However, it is not always practical or the best environmental option based on life cycle thinking. In a

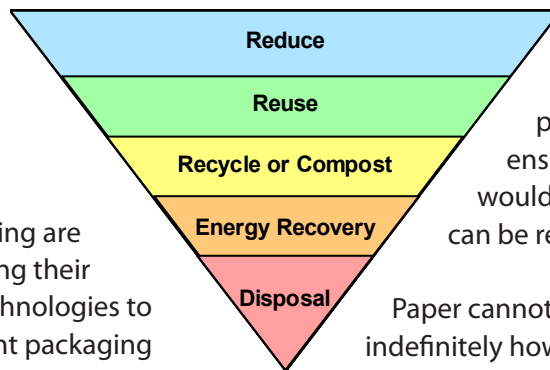
number of situations recycling is a better option than re-use. This is recognised within the European Waste Framework Directive that came into being in 2008, and will be transposed into UK legislation in 2010.

#### 3. Recycle or Compost

The Waste Strategy for England 2007 requires the re-use, recycling and composting of 50% of household waste by 2020.

#### a) Recycle

Not only is recycling beneficial to the environment and to the UK's carbon footprint, but with each box containing 76% recovered material on average, and many containing 100%, it is essential to the UK corrugated industry. Recycling is therefore the preferred waste



management option for corrugated packaging, as it ensures that fibres, which would otherwise be lost, can be reused.

Paper cannot be recycled indefinitely however, as the fibres get weaker each time they are recycled, and so the material needs to be strengthened by introducing new fibres into the mix. These come from higher quality paper products, such as magazines and office papers, where virgin fibre is required to meet the performance criteria of these products.

Recycling is easiest when it is most convenient. Many Councils now collect corrugated cardboard in their kerbside collections. Alternatively, "bring" sites

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exist in most towns at supermarkets and civic amenity sites, and many people bring their used corrugated board to supermarket recycling facilities when doing their weekly shopping. Other papers that may not be desirable in the kerbside collection may also be deposited with the corrugated cardboard.

For further information on recycling, such as the importance of quality, please see PaperChain fact sheets at:  
<http://www.paperchain-recycling.org.uk/publications.html>

### b) Compost

Where recycling facilities do not exist, corrugated cardboard can be used to provide much needed "brown" waste to your compost heap. Brown waste provides fibre and carbon, and allows air pockets to form in the layers of waste. Air enables anaerobic digestion to take place - a vital part of breaking your garden and food waste down, and turning it into nutritious compost.

Making compost at home is an easy way to create environmentally friendly, peat-free compost. It also helps cut down on other types of waste which you would normally send to landfill, such as vegetable peelings.

For more information on home composting, see the Recycle Now home composting website at:  
[http://www.recyclenow.com/home\\_composting/](http://www.recyclenow.com/home_composting/)

### 4. Incinerate with Energy Recovery

Under the EU Landfill Directive, the UK is required to reduce the volume of biodegradable municipal waste it sends to landfill. The Waste Strategy for England 2007 expects 25% of municipal waste to be used for energy recovery by 2020. This means that other ways need to be found to deal with the diverted material that is unsuitable for recycling and composting.

For this reason, incineration of non-recyclable waste with energy recovery is becoming an increasingly popular alternative to landfill.



In 2006, the Waste and Resource Action Programme (WRAP) produced a report, entitled Environmental

Benefits of Recycling, which provided a comprehensive review of international life cycle analysis (LCA). This demonstrated the huge benefits of recycling over both incineration and landfill, concluding that the UK's current recycling of those materials (including paper and board) saves between 10 - 15 million tonnes of CO<sub>2</sub> equivalents each year compared to the current mix of landfill and incineration with energy recovery.

In reality, incineration emissions are now tightly controlled through legislation, however this does not mean that the paper industry is unconcerned about any promotion of incineration above recycling.

The papermaking industry feels it is essential that all recyclable material is recovered prior to incineration, in order to make best possible use of the material. However, industry also accepts that some materials, such as used corrugated hot pizza boxes, cannot be recycled for quality reasons, and in this instance incineration is preferable to landfill.

For more information on incineration with energy recovery, please see the PaperChain fact sheet, at: <http://www.paperchain-recycling.org.uk/publications.html>

### 5. Dispose (Landfill)

The landfilling of corrugated packaging should be viewed as a last resort. Such a versatile, easily recycled product should be recovered wherever possible, in order to make the most of the resources which went into its production.

#### Government initiatives and producer responsibility for the disposal of packaging waste

As landfill capacity diminishes and the amount of waste burgeons, Government launched a number of initiatives as part of its Waste Strategy published in April 2000, and revised in May 2007.

Producers are now under increased pressure to take responsibility for goods at the end of their lives. This can either be in the form of voluntary agreements or mandatory obligations.

#### The Producer Responsibility (Packaging Waste)

Regulations set targets for the recovery and recycling of packaging waste. Revised targets published in 2004 set minimum recovery targets of 60%. Recycling rates of 55-80% were also set to be met by 2008. Material specific recycling targets for paper and board were set at 60%.

In 2008, the UK (including exports of recovered paper) recycled 79% of its paper and board packaging, well above the targets set by Government.

For more information on recycling logos, please see CPI's Environmental Labelling fact sheet, at: <http://www.paper.org.uk>.

## Recycling logos

With recycled products now being demanded by the public, a few companies are cashing in on the public's sympathies by making vague, extravagant or misleading claims. In response to this, several recycling logos were founded. When featured on products, these logos can be a way of verifying that the company's claims are genuine.



**Corrugated Recycles** – This symbol is used to highlight the excellent environmental credentials of corrugated packaging. Any packaging featuring this symbol is likely to contain a high proportion of recovered material, and be recyclable.



**NAPM** – To aid the public in its choice of recycled paper, The National Association of Paper Merchants (NAPM) has produced the NAPM Recycled Paper Mark. The NAPM logo is allowed to be used on all branded paper and board products that

contain a minimum percentage of genuine paper and board waste. There are three variations of the logo in use, indicating a recycled paper content of 50%, 75% and 100% respectively.



**RecycleNow Swoosh** - The Waste and Resources Action Programme (WRAP) have founded the RecycleNow Swoosh. This swoosh is used in place of the 'recyclable'

mobius loop, below. 75% of local authorities use the RecycleNow Swoosh, and so you may recognise it from recycling bins and collection vehicles.

**The Mobius Loop** – this comes in two versions:



**Recycled Content** – This symbol is used only by products that are made from, or contain a percentage of, recycled fibre. The percentage by weight of recycled fibre used appears in the centre of the loop.



**Recyclable** - This symbol denotes that the product can be recycled after use.

## Where can I get more information?

### Confederation of Paper Industries

1 Rivenhall Road  
Swindon, SN5 7BD  
Tel: 01793 889612  
Fax: 01793 878700  
Website: [www.paper.org.uk](http://www.paper.org.uk)

### PaperChain

1 Rivenhall Road  
Swindon, SN5 7BD  
Tel: 01793 889612  
Website: <http://www.paperchain-recycling.org.uk>

### DEFRA

Customer Contact Unit  
Eastbury House  
30 - 34 Albert Embankment  
London, SE1 7TL  
Tel: 020 7238 6951  
Fax: 020 7238 2188  
Website: [www.defra.gov.uk](http://www.defra.gov.uk)

### INCPEN - Industry Council for Packaging and the Environment

SoanePoint,  
6-8 Market Place  
Reading, RG1 2EG  
Tel: 0118 925 5991  
Fax: 0118 925 5993  
Website: [www.incpen.org](http://www.incpen.org)

### Packaging Federation

1 Warwick Row  
London, SW1E 5ER  
Tel: 020 7808 7217  
Fax: 020 7808 7218  
Website: [www.packagingfedn.co.uk](http://www.packagingfedn.co.uk)