The UK industry is proud of its recycling heritage which started over 100 years ago and led to world-beating recycling technologies being developed such as de-inking (the removal of ink from recovered paper).

Paper recycling is not a knee-jerk response to environmental pressures. It is an integral part of the UK paper industry and it has its own sophisticated infrastructure.

Before paper can be sent to a mill for recycling, it needs to be collected and graded. It may also require to be sorted and baled. Fibre Sources Used in UK Manufacturing in 2012

Papermakers buy their raw material for recycling primarily from recovered paper merchants. These merchants can be mill-owned or may be independent firms specialising in particular grades, or operating in a specific geographical location. Many paper mills also deal directly with Local Authorities, using the waste paper collected through kerbside collection schemes.

More recently waste management companies have found it economically advantageous to sort recovered paper for recycling, and they now play an important market role.

Types of recovered paper
Apart from old newspapers and magazines collected from household schemes, recovered paper is derived from industrial and commercial sources. These sources are often the easiest, cleanest and most economical to collect from.

Today there are over 60 recognised grades of recovered paper in Europe, categorised into five main groups by the Confederation of European Paper Industries (CEPI) and the Bureau of International Recycling (BIR):

**Ordinary grades:** These papers tend to contain a substantial amount of short fibres. Subcategories include mixed paper and board, grey board, mixed newspapers and magazines, corrugated paper and board, and sorted graphic paper for de-inking;

**Medium grades:** This category contains unsold newspapers free from inserts, printed white shavings, sorted office paper, coloured letters, white books, coloured magazines, as well as continuous computer print-out paper;

**High grades:** Predominantly white papers made from virgin fibres. Subcategories include mixed lightly coloured printer shavings, binders, letters, white business forms, white computer print-out, printed multi-ply board, white shavings and unbleached board;
**Kraft grades:** Generally come from brown unbleached packaging materials such as paper sacks and corrugated boxes. Their long, strong fibres make them suitable for recycling into new packaging.

**Special grades:** This a hotchpotch of papers which tend to be uneconomic to sort and so are used in the middle layers of packaging papers and boards. This category includes mixed recovered paper and board, mixed packaging, wet-strength papers and labels.

**Uses of recovered paper**
The following table shows the quantity of recovered paper used per papermaking sector in 2012 in ‘000 tonnes:

<table>
<thead>
<tr>
<th>Type of Paper</th>
<th>UK Production ('000 tonnes)</th>
<th>Recovered Paper Usage ('000 tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphics</td>
<td>1616</td>
<td>1493</td>
</tr>
<tr>
<td>Packaging Papers and Boards (including Corrugated)</td>
<td>1734</td>
<td>1588</td>
</tr>
<tr>
<td>Tissue</td>
<td>786</td>
<td>473</td>
</tr>
<tr>
<td>Others</td>
<td>280</td>
<td>268</td>
</tr>
<tr>
<td>Total</td>
<td>4416</td>
<td>3822</td>
</tr>
</tbody>
</table>

**New pulp still needed**
Although recycling makes economic and environmental sense, recovered paper cannot be used in all paper grades, nor can it be used indefinitely. Three criteria must be considered:

1. **strength** - Every time a fibre is recycled it loses some of its strength and the fibre length decreases. After being re-used about six times the fibres become too short for papermaking;

2. **quality** - Some grades make little or no use of recycled fibre because they need certain qualities provided only by new pulp. However, recycled papers can have a high whiteness, smoothness, excellent runability, and be compatible with laser, inkjet and copier printing;

3. **utility** - It is not possible to recover all paper. For example, cigarette paper, papers put to permanent use in books and artistic works, and others which quite literally go down the pan! Some are non-recoverable because their end-use results in them being bonded with materials unsuitable for recycling.

**Supply and demand**
Globally, the paper industry’s use of recovered paper has risen steadily for the last 15 years. During 2012, 3.8 million tonnes of recovered paper was delivered to UK mills, while 4.5 million tonnes was exported.

Until recently, the UK had a fairly low paper recycling rate relative to the amount used. However, the recycling rate currently stands at 70% compared to an average of 70.4% (CEPI 2011 data) in Europe.

At 87%, the UK has one of the highest recovered paper utilisation rates (the amount of recovered paper used, in relation to the amount produced). In Europe the average utilisation rate is only 51%.

**Government initiatives and producer responsibility**
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.

Currently there are four main areas that impact on the paper industry and most of these apply across the UK:

1. **Packaging.** The Producer Responsibility (Packaging Waste) Regulations set targets for the recovery and recycling of packaging waste.
2. **Newspapers.** The Government and newspaper publishers agreed a voluntary target to increase the recycled content of newspapers consumed in the UK to 70% by 2006. By the end of 2011, recycled paper made up 78.9% of the raw material used to make newspapers in the UK.

3. **Direct or ‘junk’ mail.** Government is also targeting other sectors, such as the Direct Marketing Industry. In response, the industry has set a target to recover 70% of delivered material by the end of 2013.

4. **Periodical Publishers Association (PPA).** In response, the PPA has set a voluntary targets to recover 70% of post consumer magazines by the end of 2013. These Producer Responsibility Agreements are to be added to in the coming years and are set out in the national waste plans.


**Waste hierarchy**

At the heart of the revised Waste Framework Directive is the updated waste hierarchy contained in Article 4. While, in its previous form, the Directive called on the UK to “encourage” waste prevention, in the first instance, and then recovery through reuse, recycling of reclamation, the revised Directive outlines a new hierarchy which should act as a “priority order” in waste prevention, legislation and policy. This means all decisions on waste policy, infrastructure and management will be expected to take the hierarchy into account.

The amended hierarchy is:

- Prevention;
- Preparing for reuse;
- Recycling;
- Other recovery - including energy recovery;
- Disposal.

**Recycling targets**

With the waste hierarchy as its foundation, the revised Waste Framework Directive then sets out a range of provisions in relation to recycling and reuse - not least of which are a range of tough targets for increasing recycling rates for both household and construction and demolition (C&D) waste.

The targets in the Directive are:

- to recycle or prepare for reuse 50% of household waste by 2020
- to reuse, recycle or recover 70% of non-hazardous C&D waste by 2020

Alongside this, the Directive details a requirement to set up separate collection of “at least the following: paper, metal, plastic and glass”, from the household waste stream by 2015.

**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.

To aid the public in its choice of recycled paper, The National Association of Paper Merchants (NAPM) has produced the NAPM Recycled Paper Mark which states that paper must comprise at least 75% genuine recycled paper and board.

The **Mobius Loop.** This comes in two versions:

- **Recycled Content** – used only by products that are made from, or contain a percentage of, recycled fibre.
- **Recyclable** - This symbol denotes that the product can be recycled after use.

The **Recycle Mark** is a call for action to recycle whenever possible.

The **Green Dot** does NOT necessarily mean that the packaging can be recycled, but is used on packaging in many European countries to signify the producer has contributed towards the recycling of packaging.
Packaging symbols are now starting to appear on some packaging. They help to identify how different parts of packaging can be recycled.

"Widely Recycled" means 65% of people have access to recycling facilities for these items.

"Check locally" means 15% - 65% of people have access to recycling facilities for these items.

"Not recycled" means less than 15% of people have access to recycling facilities for these items.

National Waste Plans

Links to the other national waste plans below:


www.wales.gov.uk/consultations/environmentandcountryside/wastestrategy/?lang=en

www.ni-environment.gov.uk/waste-home/strategyni

www.defra.gov.uk/environment/waste

Where can I get more information?

Confederation of Paper Industries
1 Rivenhall Road
Swindon, Wiltshire SN5 7BD
Tel: 01793 889600
Fax: 01793 878700
Website: www.paper.org.uk

Waste and Resources Action Programme (WRAP)
The Old Academy
21 Horse Fair
Banbury, Oxon OX16 0AH
Tel: 01295 819900
Fax: 01295 819911
Website: www.wrap.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

National Association of Paper Merchants
PO Box 2850
Nottingham NG5 2WW
Tel: 0115 8412129
Fax: 0115 8412149
Website: www.napm.org.uk