



### Background

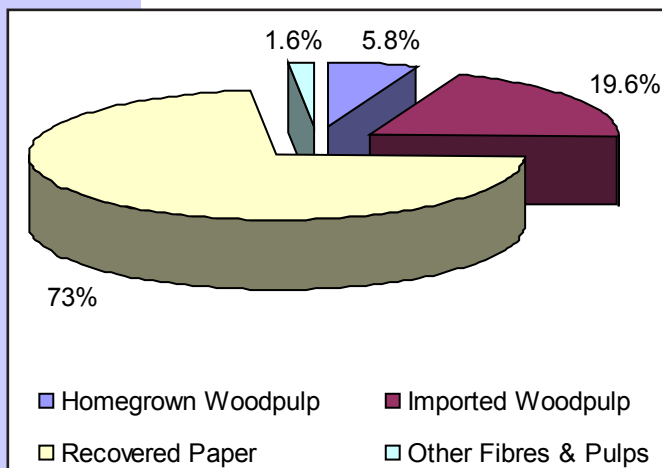
Recovered paper (used paper) is the most important raw material for the UK paper and board industry, representing 73% of the fibre used throughout this sector in 2009. The paper industry is the UK's most successful recycler.

Re-using paper is good national housekeeping and is crucial in the UK due to the lack of forests (only 12% of UK land base is forested). Instead, the papermaker uses the 'urban forest'.

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.

**FIBRE SOURCES USED IN UK MANUFACTURING IN 2009**



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.

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 multiply board, white shavings and unbleached board;

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- **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 2009 in '000 tonnes:

Type of Paper	UK Production ('000 tonnes)	Recovered Paper Usage ('000 tonnes)
Graphics	1609	1475
Packaging & Others (inc. Packaging Boards)	1701	1610
Tissue	736	468
Speciality Products	247	267
Total	4293	3820

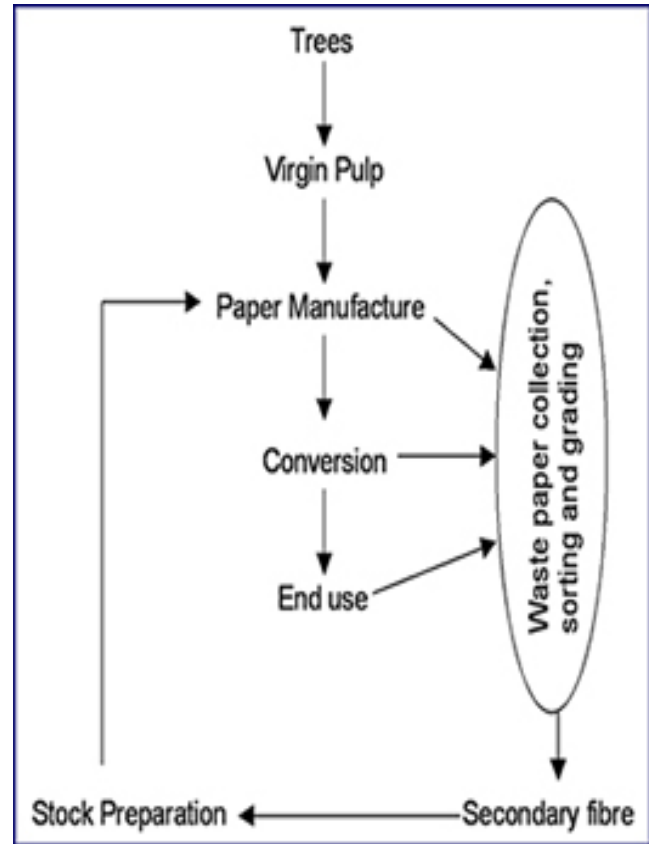
**New pulp still needed**

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.

**The Recovered Paper Cycle**



**Supply and demand**

Globally, the paper industry's use of recovered paper has risen steadily for the last 15 years. During 2009, 3.8 million tonnes of recovered paper was delivered to UK mills, while 4.4 million tonnes was exported.

Until recently, the UK had a fairly low paper collection rate relative to the amount used. However, it currently stands at 78.4% compared to an average of 72.2% (CEPI 2009) in Europe.

A complication in determining the UK's collection rate is the net trade in finished paper and board products. As the UK manufacturing infrastructure has diminished, we are relying on more and more imports from outside the UK. It is estimated that the net trade in finished paper and board products add around 1.5 million tonnes to that recoverable from the UK waste stream. This drops the collection rate to around 69%, just below the European average.

At 89%, 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 50.8%.

**Government initiatives and producer responsibility**

As landfill capacity diminishes and the amount of waste burgeons, UK Governments launched a number of initiatives through their national waste plans. 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. Revised targets published in 2004 set new 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 target set by Government.
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. This target was met, and exceeded, to achieve a 87.2% recycled content rate at the end of 2008.
3. **Direct or 'junk' mail.** Government is also targeting other sectors, such as the Direct Marketing Industry. In response, the industry has set the following targets for delivered material.
  - 30% Recovered for recycling by the end of 2005;
  - 55% Recovered for recycling by the end of 2009;
  - 70% recovered for recycling by the end of 2013.
4. **Periodical Publishers Association (PPA).** In response, the PPA has set voluntary targets for the recovery of post consumer magazines.
  - 50% by the end of 2007;
  - 60% by the end of 2010;
  - 70% 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.

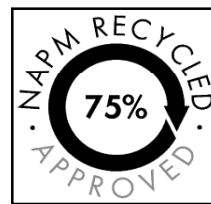
The Waste Strategy for England also sets out policies to reduce the amount of non-industrial and commercial waste landfilled. The targets set include:

- recycle or compost 40% of household waste by 2010;
- recycle or compost 45% of household waste by 2015;
- recycle or compost 50% of household waste by 2020.
- recover value from 53% of municipal waste by 2010;
- recover value from 67% of municipal waste by 2015;
- recover value from 75% of municipal waste by 2020.

Scotland, Wales and Northern Ireland have also set targets for recycling and recovery and, along with England, are looking at the use of landfill restrictions for certain waste streams as policy drivers to achieve compliance.

**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.

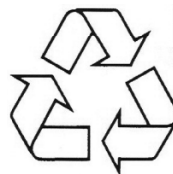


To aid the public in its choice of recycled paper, The National Association of Paper Merchants (NAPM) has produced the NAPM Recycled Paper Mark which states that paper must comprise at least 75% genuine recycled paper and board.

There are also other logos in the market such as 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, Wiltshire SN5 7BD  
Tel: 01793 889600  
Fax: 01793 878700  
Website: [www.paper.org.uk](http://www.paper.org.uk)

**PaperChain**

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

**Newsprint and Newspaper Industry  
Environmental Action Group (NNIEAG)**

1 Rivenhall Road,  
Swindon, Wiltshire SN5 7BD  
Tel: 01793 889637  
Website: [www.nnieag.org.uk](http://www.nnieag.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](http://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](http://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](http://www.napm.org.uk)

**National Waste Plans**

Links to the other national waste plans below:

<http://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Waste-1/wastestrategy>

<http://wales.gov.uk/consultations/environmentandcountryside/wastestrategy/?lang=en>

<http://www.ni-environment.gov.uk/waste-home/strategyni.htm>

<http://www.defra.gov.uk/environment/waste/strategy/strategy07/index.htm>