



The UK paper and board industry currently recycles around 3.8 million tonnes of recovered paper (used paper) annually.

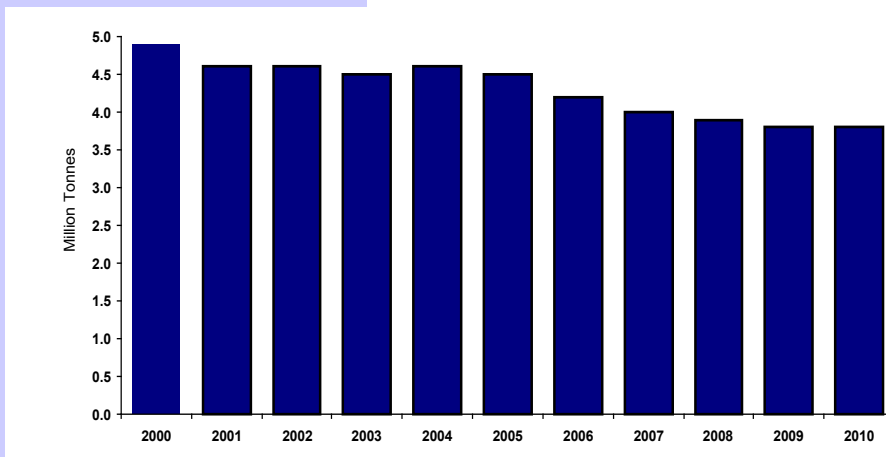
When exports are taken into consideration, the UK recovered for recycling 8 million tonnes of used paper in 2010.

Although the collection of domestic waste has a much higher public profile, much of the recovered paper used by the paper industry comes from commercial, industrial and retail outlets. The

newsprint sector depends mostly on household paper collections, but packaging, graphics and tissue papermaking operations rely on businesses for most of their recovered paper requirements.

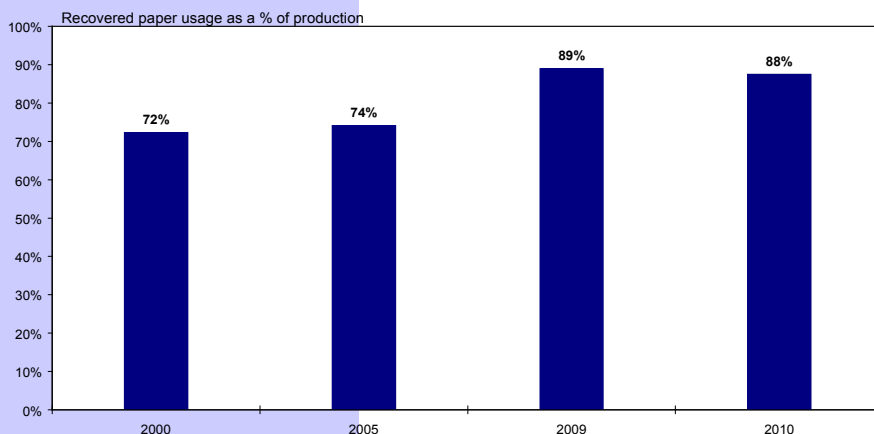
Around 48 million tonnes of industrial and commercial waste was produced in England in 2009, and of this, 23% was sent to landfill (DEFRA 2009). This included paper and board that could have been recycled into new products. Commercial and domestic waste streams provide a valuable source of fibre for UK paper and board manufacturers. A systematic and robust policy approach is required to optimise the yield from both of these sources.

Graph 1: Recovered Paper Usage 2000 - 2010



Graph 2: Utilisation of Recovered Paper by Papermakers 2000-2010

Utilisation of Recovered Paper by Papermakers 1990 - 2010



Graphic Papers

Office graphic papers, such as copier paper, letter head, compliment slips and computer printouts, have a number of potential further uses because these grades are generally made from virgin fibre. This particular resource is largely untapped because the paper needs to be segregated, which means that someone has to take responsibility to ensure this is done. Special recycling bins (and shredders) for internal office use are readily available from a variety of outlets, including recovered paper merchants and office supply stores, making the task less onerous.

Many small businesses do not generate enough recovered paper

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Table 1: Types of Recovered Paper

Paper Grade	Source	Uses
<i>Graphic Papers</i>	Commerce	Graphic Papers Tissue Products Packaging
<i>Newspapers & Magazines (“News & Pams”)</i>	Paper Banks Kerbside Collections Households Distributors Publishers	Newspapers Packaging cartons Hospital disposables Egg Trays
<i>Packaging</i>	Industrial Outlets Retailers Distributors Households	Packaging cartons Corrugated cases Plasterboard Coreboard
<i>Mixed Papers</i>	Industrial Outlets Households	Packaging cartons Corrugated cases

to make collection for recycling economically viable. However, collection can become feasible if a number of businesses in the same vicinity agree to segregate their waste, possibly by placing it in a common storage facility, and making it available for collection on the same day. The introduction of pre-treatment requirements for all waste destined for landfill, and increases in landfill tax costs, may make the recovery of used office paper the economic choice of the future.

“News and Pams”

2.4 million tonnes of newspapers and magazines currently get recovered each year. Of this, 1.4 million tonnes is recycled in the UK. Newsprint manufacturers obtain their used newspapers and magazines from local authority household collections, paper banks, and kerbside collections. Newsprint is a high volume, low margin commodity, and manufacturers need to be able to obtain large and steady volumes of clean recovered material to maintain their competitiveness. Three major newsprint mills using only recovered fibre, now operate very successfully in the UK. They produce high quality newsprint, and there is scope and hope that capacity will expand.

Packaging Grades

Paper and board packaging tends to get recycled into new packaging. Of the 3.5 million tonnes recovered in 2010, 1.3 million tonnes were recycled in the UK. Most paper packaging waste emanates from industrial and commercial users.

Mixed Papers

Mixed papers are always at the lower end of the demand scale. Their use is limited, although some niche mills are dependent upon them. Mixed papers tend to be used in the production of packaging papers, though the extent of their use is dictated by the availability

of stronger grades of packaging waste. It is therefore extremely important that the generators of mixed papers and potential collectors ensure that they have contracted outlets before commencing collection of these grades.

Collection of paper and board from industrial and commercial units is important

Producers of recycled graphic papers, tissue and packaging products rely on recovered paper and board from industrial and commercial sources because these outlets generate material that is:

- uniform and available in consistent quantities;
- segregated;
- clean; and
- cost effective in terms of transport utilisation.

How is commercial and industrial recovered paper collected?

Recovered paper merchants handle most of the paper and board that is recycled in the UK. They can be independent operators who supply sorted material to papermills, or integrated companies that are owned by a paper manufacturing organisation. Some will act as a middleman between local authorities and papermills. The UK has a sophisticated private recovered paper collection infrastructure, which can provide a variety of services from compacting and baling facilities, and the handling of confidential material, to the provision of tailored collection bins.

There are more than 120 specialist recovered paper collection and reprocessing depots situated in the UK. There are also a number of waste management companies offering additional facilities such as transfer stations.

Local Authorities

A number of local authorities currently collect industrial and commercial recovered paper and board, and recent Government policy incentives are likely to further encourage municipal recycling collections from businesses. Some have direct contracts with paper mills to supply segregated recovered paper. Others have arrangements with recovered paper merchants or waste management companies. Recovered paper and board that has been collected in the general waste stream, but not contracted to be recycled, will either be incinerated or sent to landfill.

How can the recycling of industrial, commercial and retail recovered paper and board be improved?

Local authorities could introduce collection schemes from the appropriate outlets, but a number of factors need to be considered:

- before any collection system is set up, a contract with a paper mill or recovered paper merchant should be established;
- the most cost-effective solution needs to be determined by using a holistic approach. Local private sector collection facilities should be identified and explored. For example, recovered paper merchants will sometimes have baling and compacting facilities that could be used to process paper and board collected by a local authority contractor, from High Street shops, restaurants etc;
- contracts should be long term, but flexible, to reflect market conditions, as prices for recovered paper and board are determined by global market conditions.

Price of recovered paper is affected by the demand for paper and board products, and economic and commercial events in other countries. For example, a new machine coming on stream in the Far East can suck in recovered paper normally used in European markets. It is also an extremely competitive market and margins are low. It is imperative, if UK paper manufacturers are to compete with overseas papermakers, that the cost of recovered paper is competitive.

What paper and board can you recycle?

- corrugated boxes and other paper and board packaging;
- office papers;
- direct mail material;
- printers offcuts;

- converters offcuts;
- newspapers and magazines.

Most paper and board can be recycled into new products. All recyclable materials should be segregated, with paper sorted as much as possible into the paper and board grades shown in Table 1. It should be clean. 'Contraries' such as inks and staples are removed during the de-inking process, but non-paper materials and those listed in Table 2 are unacceptable and can cause damage during the papermaking process.

Table 2: Non-recyclable 'contraries'

- Elastic Bands**
- Glass, metal and wood**
- Laminated paper**
- Magazine cover-mounts**
- Nylon string**
- Paper cups**
- Polythene and other plastics**
- Food wrappers**
- Sticky notes**
- Thermal fax paper**
- Wax paper**



Recycling bins should be clearly labelled to show which materials are and are not acceptable.

Schemes are more successful where staff are motivated to participate by clear instructions and conveniently placed, clean and tidy recycling bins.

Why recycle?

Business waste has to be disposed of somehow and it is no longer acceptable to send it to landfill untreated. Landfill is also becoming an increasingly expensive option and Landfill Tax will continue to rise.

Businesses and local authorities are therefore looking for the most economic way to deal with recovered paper and board.

Some businesses recycle their waste to improve business practices and to lessen their environmental impact. Recycling helps the environment by minimising the use of virgin fibres and reducing the amount of material going to landfill. It is recognised by Government as the best practicable environmental option for dealing with used paper and board products.

Why should businesses recycle their paper?

Main drivers include:

1. Landfill Pre-treatment Requirements

Treating waste reduces the impact it has on the environment and encourages recovery and recycling. All waste must be treated before you send it to landfill. Treatment is defined as a physical, thermal, chemical or biological process which changes the characteristics of the waste.

Waste characteristics may be changed by:

- reducing the volume of the waste;
- reducing the hazardous nature of the waste;
- making handling or recovery easier.

2. Landfill Tax Escalator

The Landfill Tax was introduced in 1996. Initially, it was planned that landfill tax would increase by £3 per tonne per year, to a medium/long term rate of £35 per tonne. However, in his 2010 budget, the Chancellor pledged to increase the landfill tax by £8 per year to 2014. In 2011, Landfill Tax stands at £56 per tonne.

3. Producer Responsibility (Packaging Waste Regulations)

Businesses with a turnover above £5m are obligated to recycle packaging waste. Obligated companies have 2 options: comply with the Regulations on an individual basis; or join a collective compliance scheme.

Whichever option is chosen, obligated companies are required to register with the Environment Agency (EA) in England, the Scottish Environment Protection Agency in Scotland (SEPA) or the Environmental and Heritage Service (EHSNI) in Northern Ireland. These Agencies are responsible for enforcing the Regulations and all have published guidance on how businesses have to demonstrate compliance.

Collective compliance schemes are responsible for discharging their Members' obligations. Failure to comply is a criminal offence and can result in a substantial fine.

There are now a number of compliance schemes in operation and details can be obtained from the Environment Agency or the Department of Environment, Food and Rural Affairs (DEFRA).

4. Landfill Directive

The Directive aims to reduce the negative impact of landfilling in environmental and health terms. The Directive sets targets to gradually reduce the amount of biodegradable waste going to landfill.

5. Government's Waste Strategy

The UK met its 2010 landfill directive target and the Waste Strategy was further updated in 2011 for England. The strategy now sets out policies to reduce the amount of industrial and commercial waste landfilled by a further 35% by 2015(?), compared to 1995(DEFRA).

6. Paper and Board Imports

The UK imports around 68% of the paper and board it consumes, and recovers 76% for recycling. If we can encourage better segregation at source, efficient collection and sorting to provide a cost-effective fibre from our 'urban forest', we may enable additional investment in papermaking in the UK. This would create jobs, improve the UK's balance of payments and bring environmental benefit.

How can you arrange for your recovered paper and board to be recycled?

- Arrangements must be made with an appropriate Recovered Paper Merchant before any paper and board is collected;
- if waste is currently handled by a waste management company, check what recovery for recycling processes they operate – if there are none seek independent advice, possibly an audit of the amount of paper and board likely to be generated;
- be prepared to segregate your waste stream;
- take a long-term view.

Local recovered paper merchants and/or the local authority recycling officer should be contacted for details of the services they provide. These can include the provision of containers for short-term storage, wheeled waste bins, compacting equipment for companies generating substantial quantities and the handling of confidential papers. Advice will also be available on how to best organise space to facilitate collection and avoid fire risks.

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

PaperChain

1 Rivenhall Road,
Swindon, Wiltshire SN5 7BD
Tel: 01793 889612
Fax: 01793 878700
Website: 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

**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

**NetRegs - environmental guidance for
business**

Tel: 8708 506 506
Website: www.netregs.gov.uk