



UK Landfill Targets 2010 – 2020

By 2010 to reduce biodegradable municipal waste landfilled to 75% of that produced in 1995

By 2013 to reduce biodegradable municipal waste landfilled to 50% of that produced in 1995

By 2020 to reduce biodegradable municipal waste landfilled to 35% of that produced in 1995

In July 2003, a Private Members Bill, aimed at obligating councils to provide doorstep recycling facilities for every home, was cleared through the House of Commons. This was enacted through the Household Waste Recycling Act, which required all English waste collection authorities to collect at least two types of recyclable waste together or individually separated from the rest of the household waste by 31st December 2010.

The ensuing publicity elicited a negative response from a small number of scientists, some of whom had been sponsored by landfill operators to undertake research into sustainable waste management. They advocated incineration with heat recovery as a better environmental option than recycling.

The building of incinerators in the UK is unpopular with the general public, which is now largely supportive of recycling. Environmental groups also oppose the use of incineration, typically on the grounds of potential health hazards, and the loss of recyclable material that could provide a more sustainable future.

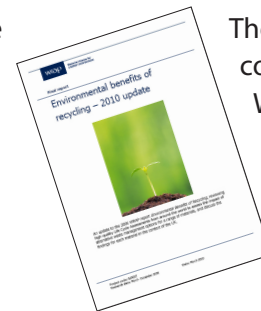
In 2006, the Waste and Resource Action Programme (WRAP) produced a report, entitled *Environmental Benefits of Recycling*, which provided a comprehensive review of international life cycle analysis (LCA).



This demonstrated the huge benefits of recycling over both incineration and landfill, concluding that the UK's current



recycling of those materials studied (including paper and board) saves between 10 - 15 million tonnes of CO₂ equivalents each year compared to the current mix of landfill and incineration with energy recovery.



These findings were confirmed by a further WRAP report into more recent LCA studies, *Environmental Benefits of Recycling 2010 Update*, which once again confirmed that the best overall

environmental option for good quality recovered paper and board is recycling.

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

Recovered paper represents almost 90% of the raw material used in the UK to manufacture paper and board. In order to compete with overseas paper companies, when only 12% of the UK's land base is forested, the industry has had to perfect the use of recovered paper sourced from the 'urban forest'.

Excess recovered paper collected in the UK is exported because of increased global demand. At first, this may appear

UPDATED: MAY 2010

harmful to the environment in terms of transportation, but in reality goods being imported by the UK are transported by ships requiring ballast for their return journeys.

Most of the waste generated in the UK still ends up in landfill - giant holes in the ground usually situated in the countryside, and generally unseen. It is commonly acknowledged that this practice is unsustainable. Under the EU Landfill Directive, the UK is required to reduce the volume of biodegradable municipal waste it sends to landfill. Targets have been set for 2010 with further reductions in 2013 and 2020. This means that other ways need to be found to deal with the diverted material.

Government estimates that over 50% of the waste from households currently sent to landfill could be recycled or composted. From the paper industry's perspective, it is crucial that used paper products recovered from the household waste stream are kept separate from non-recyclable materials, thus avoiding contamination.



Recovered paper can be recycled a number of times into new products, but once the fibres have lost their papermaking abilities they can then be incinerated for heat recovery, allowing two 'bites' at the environmental cherry.

Similarly, those paper products unsuitable for recycling, for example hospital wipes, old wallpaper etc, can also be incinerated for heat recovery.

Once built, incinerators have to be fed. If segregated recovered paper facilities are not widely available, there is genuine concern that local authorities may abandon recycling projects and opt for incineration, thereby destroying fibres that could have been used a number of times. Government has recommended that local authorities do not lock themselves into long-term incineration contracts which do not take account of recycling plans, and that they seek contracts that only allow the incineration of residual waste after it has been segregated.

The Government's *Waste Strategy* (May 2000) was based on the concept of obtaining optimum use from raw materials. This was reiterated by the Strategy Unit's

Report entitled '*Waste Not, Want Not*' (November 2002) which, after a long and in-depth study, stated that the most effective way to deal with waste was to improve recycling rates. As well as proposing an incineration tax, it also recommended that Government should consider a ban on incinerating and landfilling recyclable products.



However, much to the disappointment of the paper industry and environmental groups, in the 2004 pre-budget report Government concluded that it was not convinced that there was a strong case for the introduction of a tax on incinerated waste.

In May 2007, Government released its *Waste Strategy for England*. Within the document there is acceptance that significant increases in recycling levels and energy from waste are required to meet landfill reduction targets going forward. However, the document clearly highlights the need for material recycling ahead of incineration. This is in line with CPI and PaperChain's thinking where maximum carbon benefits are achieved over landfill.

When choosing the best environmental option individual elements of the waste management cycle should not be viewed or compared in isolation. A full LCA should be used, where possible, to determine the impacts on a number of areas.



Cementing the environmental options for waste management is the revised EU Waste Framework Directive (WFD) which is being transposed into UK legislation through 2010. This document includes a fixed waste hierarchy which must be followed, putting recycling above incineration,

even where the incineration is of high energy efficiency. This should go some way to ensure that paper recycling remains the waste management option of choice for all waste producers and should provide a good source of ongoing raw material for the global paper making industry.

However, government must be vigilant to ensure that incineration is not inadvertently given a competitive advantage over recycling. For instance, it would be inappropriate for the burning of recovered paper to

attract subsidies on the grounds that it was regarded as a renewable energy source. Such a move would run counter to the findings of the WRAP LCA reports and the waste hierarchy within the WFD.

Recycling and incineration with heat recovery can co-exist. A prime example is Denmark, which has a much better recycling record than the UK but also incinerates, with heat recovery, much more waste than the UK.

The paper industry's view is that incineration with heat recovery should be used in preference to landfill, but only after recycling requirements have been met.

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

Local Authority Recycling Advisory Committee (LARAC)

PO Box 28
Knighton, Powys LD8 2WA
Tel: 01544 267860
Fax: 01544 267860
Website: www.larac.org.uk

DEFRA

Eastbury House
30 - 34 Albert Embankment
London SE1 7TL
Tel: 020 7238 6951
Fax: 020 7238 2188
Website: www.defra.gov.uk