

Target recycling

Aiming for 50 per cent and beyond



**Friends of
the Earth**



Foreword

We are consuming and wasting our Earth's resources, as if an inexhaustible supply of materials and energy existed for us to draw on. There is no doubt that we currently produce too much waste in the UK. This situation is unsustainable and we need to take urgent action through policy changes to address it. Significantly increasing the amount of waste we recycle is an important piece in the jigsaw.

We need policy changes and financial commitment from Government to address the current situation. Positive steps have been taken at a local level and recycling rates of over 50 per cent have been achieved at a national level in other countries. This report provides the evidence to show that we can do it here too.

Friends of the Earth's Executive Director, Tony Juniper

About this report

The UK has for many years languished at the bottom of the European recycling league table, relying heavily on landfill for the disposal of waste. However, since statutory recycling targets were set in 2000, many local authorities have made great improvements to their recycling services. Some have even achieved household waste recycling rates of over 40 per cent. Friends of the Earth believes that in light of this success, the Government and National Assemblies should review the long term targets and aim for much higher levels of recycling to build on this momentum.

In this report we set out the reasons for setting higher targets and the policy measures that need to be implemented to help us achieve a dramatic change in the way we deal with our waste. This report is designed to enable decision-makers put forward these arguments, particularly during the review of the English national strategy, *Waste Strategy 2000*.¹

Friends of the Earth has a proven track record working on waste issues, having campaigned for increased recycling for over 30 years. We drafted and actively supported the *Household Waste Recycling Act*², which became law in 2003. This requires that every household is provided with a doorstep recycling collection for at least two materials by 2010. Friends of the Earth is the largest environmental campaigning organisation currently working on waste issues in the UK.

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1 Introduction

We need to take action now to dramatically change the way we deal with our waste. For too long the UK has dealt with discarded products by burying them in the ground rather than treating them as resources.

Addressing waste management and our consumption of raw materials will help as part of a raft of measures to tackle climate change and other issues associated with resource extraction and processing, such as pollution and loss of wildlife and habitats.

The UK also has legal obligations to transform its waste management. The *EU Landfill Directive*³ came into force in 1999 and as a result, national waste strategies have been developed for England, Wales and Northern Ireland. Statutory targets for recycling have been instrumental in improving local authority performance over the past few years: now we need more ambitious targets to change significantly our attitude to resource use.

Setting targets

Some European countries are already recycling over half of their waste, and we could be doing the same. We believe that the Government should set the following targets for recycling municipal waste:

1) 50 per cent by 2010

2) 75 per cent by 2015

It's not just Friends of the Earth that is calling for higher targets. The Government's Strategy Unit has called for a target of 45 per cent by 2015,⁴ and the Environment, Food and Rural Affairs Committee (EFRA) has recommended targets of 50 per cent by 2010 and 60 per cent by 2015.⁵

Domestic recycling

For householders, recycling is one of the easiest things to do to make a difference to the environment – indeed, it may be the first action someone takes to reduce their environmental impact. The Environment Agency found that nine out of 10 people would recycle more if services were available to them.⁶ Most people know the benefits of recycling, but to be motivated to change their behaviour they need to see commitment from all levels of Government.

Incineration

To divert waste from landfill some local authorities have proposed incineration as a solution to their waste problems. There is growing public opposition to incineration and other forms of thermal treatment, and in the past few years many applications for incinerators have been refused as a result of lengthy campaigns. Some of the energy used to make products can be recovered through thermal treatment, but much more can be saved through recycling materials. We need to reduce our consumption of energy to address climate change; increased recycling could play a part in this.

Legislative support

Setting targets alone won't enable us to reach high rates of recycling. We need a comprehensive approach with a range of legislative measures that offer economic incentives for reducing, reusing and recycling. Friends of the Earth believes the UK could reach recycling rates of 50 per cent with policy measures that have been supported by a number of voluntary organisations, businesses and public bodies.

In particular, the landfill tax needs to be increased and extended to cover other forms of disposal. Local authorities should also be permitted to implement incentive schemes for residents in the form of financial rewards for those who recycle more. Charging people for the disposal of the waste they create has vastly increased recycling in other countries.

Furthermore, we need to tackle the amount of waste we produce. As well as setting a national waste prevention target, the Government should place further responsibilities on producers. Statutory targets for industry generally achieve better results than voluntary measures, so these will be needed to make a dramatic change. In other countries, landfill bans for certain materials have also helped to divert waste from disposal and increase recycling and composting.

The Government has already taken some positive steps, for example, by setting mandatory recycling targets and providing increased funding and support for local authority schemes. Now we have the opportunity to become one of the highest performers in Europe. We need to build on what has already been achieved, and implement further measures to reduce the impact of our consumption.



National recycling rates higher than the current targets are both desirable and possible.”

Department for Environment, Food and Rural Affairs (2000)⁷



Nick Strugnell/Friends of the Earth

Child's play: Nine out of ten people would recycle more if services were available

2 The current situation

Managing waste

The UK produces over 25 million tonnes of household waste every year.⁸ Most of this material ends up in landfill, with a further proportion being incinerated, and a relatively small fraction being recycled. The current strategies for dealing with waste in England⁹, Northern Ireland¹⁰ and Wales¹¹ include various waste hierarchies, which rank the options for waste management in terms of their environmental impact. These hierarchies favour reduction of waste, followed by reuse, and then recycling and composting, followed by energy recovery, and disposal as a last resort. Despite the fact that around 80 per cent of household waste could be recycled or composted, we are largely failing to implement this model in practice. Figure 1 compares municipal waste management in the UK with other EU countries.

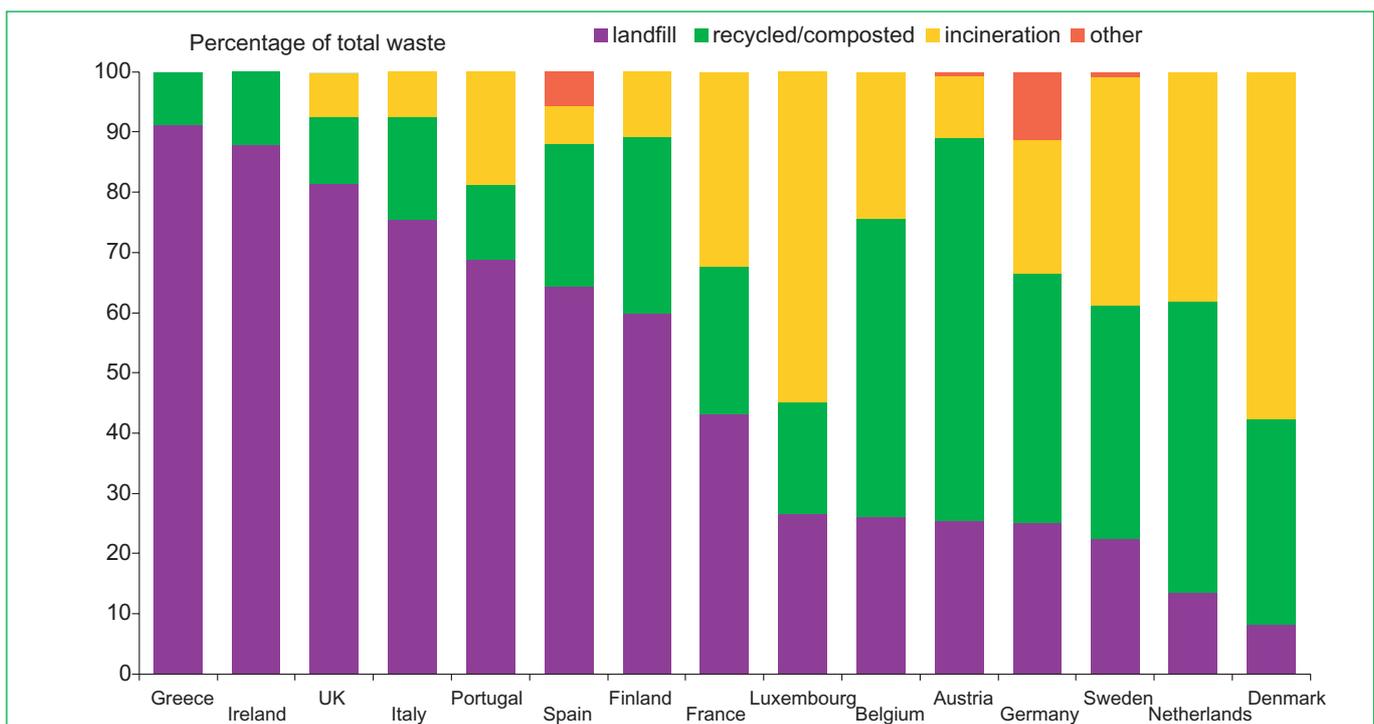
The UK already has a legal obligation to address landfill of waste. Targets were set in the strategy for

England, *Waste Strategy 2000*, to comply with the *EU Landfill Directive*, that require the amount of biodegradable waste sent to landfill to be reduced to 75 per cent of the 1995 level by 2010, 50 per cent by 2013, and 35 per cent by 2020. Failure to meet these targets could result in fines of up to £180 million a year for the Government.¹²

In addition, the *EU Packaging Directive*¹³, which is to be transposed into UK law by Autumn 2005, sets a target to recycle at least 55 per cent of packaging by 2008, along with targets for specific materials

Landfill poses significant environmental problems. Landfilled waste accounts for one quarter of the UK's total emissions of methane – a powerful climate change gas. It also causes local environmental problems, including litter, noise, odours and pests. According to the Environment Agency, landfill capacity is now becoming an issue for concern, particularly in the North West¹⁴ and South East¹⁵ and regions of England.

Figure 1
Comparison of waste management across the EU



Source: Department for Environment, Food and Rural Affairs (2004). *Municipal Waste Management in the European Union*.



Our landfill legacy: The majority of our waste is sent to landfill, despite the fact that UK national waste strategies recognise disposal as the worst option for the environment.

Some argue that the solution to our waste disposal problem lies in incineration and other forms of thermal treatment. However, the energy recovered through incineration falls short of the energy savings associated with recycling.¹⁶ Table 1 shows the energy saved by recycling rather than incinerating various materials. Burning organic material produces substantial quantities

of carbon dioxide, which contribute to climate change. Other emissions commonly include toxins such as dioxins, heavy metals, dust particles and acid gases. There is also growing public opposition to facilities that produce energy from waste, and gaining planning permission for plants is becoming increasingly difficult in the face of major local campaigns.

Table 1
Energy saved by recycling rather than burning materials

Material	Energy saved
Paper	3 times
Plastic	5 times
Textiles	6 times

Source: Friends of the Earth (2003). *Up in smoke*



Twenty recycled aluminium cans can be made with the power it takes to manufacture one from virgin materials"

Alcan (2004) ¹⁷

Consuming virgin materials

Because we fail to reprocess the 80 per cent of household waste that could be recycled, we continue to damage the environment unnecessarily by consuming an increasing quantity of raw materials. By extracting resources such as aluminium ore (bauxite), iron ore (haematite) and crude oil, we cause major damage to precious eco-systems and local communities around the world.

The processes to refine raw materials are often highly energy intensive, too. For instance, plastic production uses 8 per cent of the world's oil – 4 per cent as raw material and 4 per cent as energy for the process¹⁸. The statistics for aluminium are even more arresting: to produce 1 tonne of the metal takes 4 tonnes of chemicals and 8 tonnes of bauxite.¹⁹

Friends of the Earth has been fighting a major project for aluminium production in Chile.²⁰ The plan, put forward by Canadian giant Noranda, is to build an aluminium plant, three hydroelectric dams and a new port in one of the most pristine areas remaining on the face of the earth. If it goes ahead it will generate over one million tonnes of waste a year.



Icelandic giant: This aluminium smelter is the biggest in Europe. By extracting resources we cause major damage to precious eco-systems and local communities around the world.

3 Signs of improvement

Rapid progress made by local authorities

The Government and National Assemblies have developed waste strategies that include statutory minimum targets for recycling and composting. Some local authorities have made considerable improvements since the targets were introduced in 2000. Figure 2 shows councils in England that have increased their recycling rates by more than 10 percent in just two years²¹, in light of challenging targets and extra funding and support from the Government.

More ambitious targets were set for those local authorities with higher levels of performance in 1998/99, and many councils have responded well to the challenge. A number have increased their recycling rates by over 10 per cent in the past few years to reach levels of recycling in excess of 20 per cent.²² Figure 3 shows several of the local authorities that have made such rapid improvements.

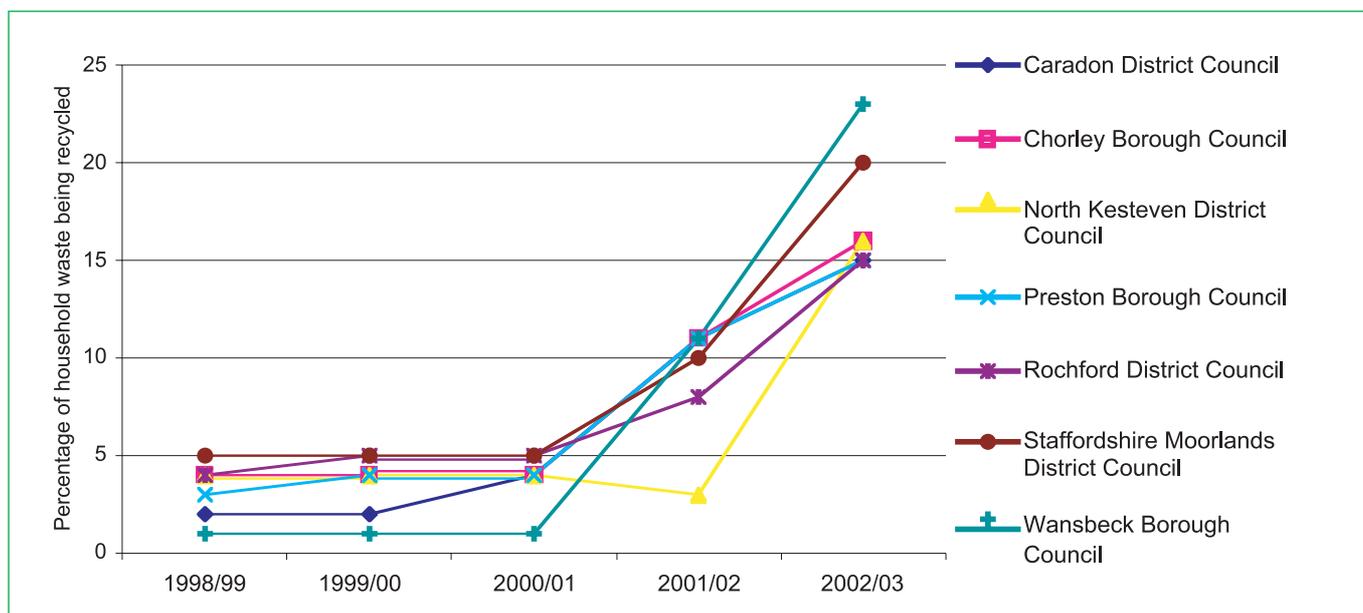
Lichfield and Daventry councils have achieved outstanding performance, recycling over 40 per cent of household waste in 2002/03.²³ In just four years, the recycling rates in both districts rose by over 30 per cent.



Nick Strugnell/Friends of the Earth

Crate expectations: Over 46 per cent of household waste in Lichfield is now recycled and composted.

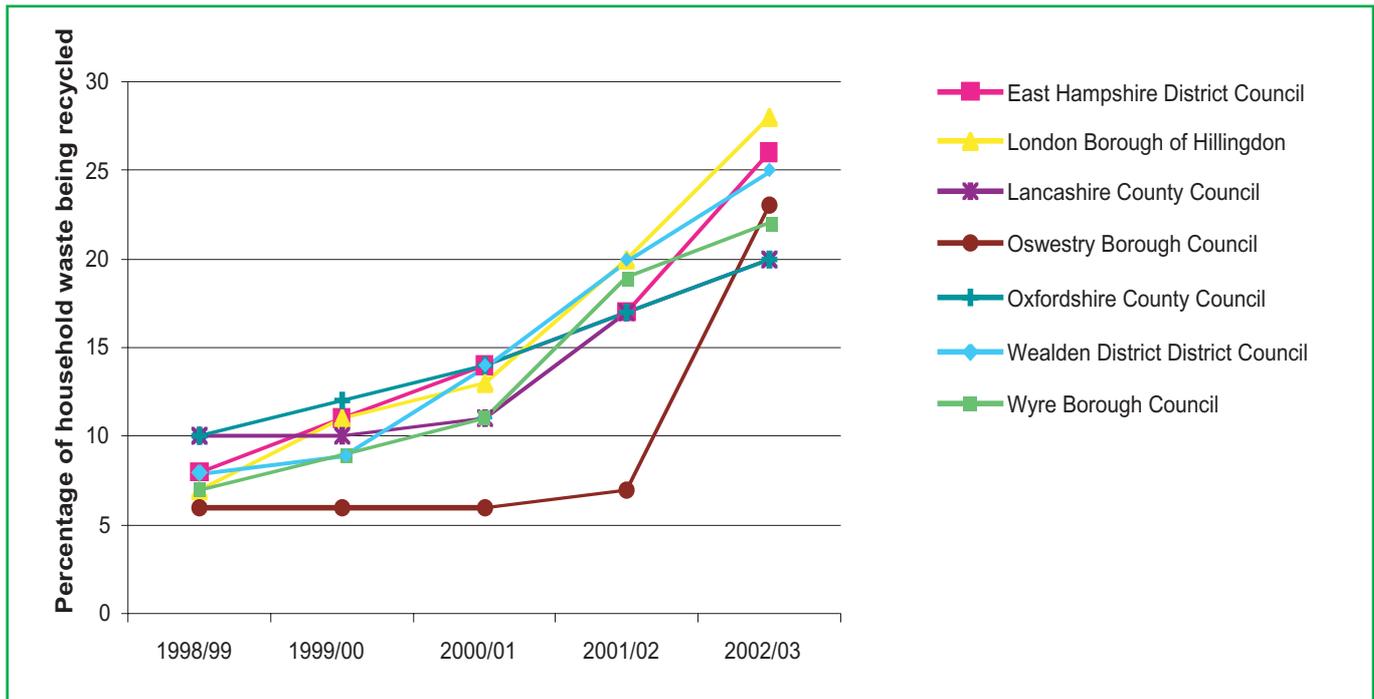
Figure 2
Local authorities that have increased their recycling performance from 5 per cent or less to at least 15 per cent in 4 years



Source: Department for Environment, Food and Rural Affairs (2004). *Municipal Waste Management Survey 2002/03*.

Figure 3

Local authorities that have increased their recycling performance from 10 per cent or less to at least 20 per cent in 4 years



Source: Department for Environment, Food and Rural Affairs (2004). *Municipal Waste Management Survey 2002/03*.

Recycling success outside the UK

Figures from other countries show that rapid improvements in recycling are possible at a regional and national level too:*

- **The Netherlands** increased municipal waste recycling from 16 to 42 per cent between 1990 and 1995.
- **In Flanders, Belgium**, the recycling rate rose from 21 to 62 per cent in the nine years up to 1999, with most of the increase (from 30 to 62 per cent) taking place between 1994 and 1999.

- **In Sweden** municipal waste recycling rates increased from 19 to 39 per cent between 1994 and 2000.
- **In California** recycling leapt from 24 per cent in 1993 to 42 per cent in 2000.²⁴

This range of evidence suggests that there does not need to be a plateau in improvement in national recycling rates in the UK in the foreseeable future.

*It is important to take care when comparing the UK's recycling performance with that of other countries, as there are variations in definitions of waste sectors and treatments. For example, secondary recycling associated with incineration is sometimes included in municipal waste recycling figures for other European

countries, but it is not recognised by best value performance indicators for UK local authorities.

However, there is comparable data for Austria, where they recycle over 60 per cent of municipal waste, and for Belgium and the Netherlands where around 50 per

cent is recycled.²⁵ This performance still makes the UK targets – particularly the long-term targets for England and Northern Ireland – appear unambitious.

4

The case for higher recycling targets

Statutory targets do work

Before the Government set the current statutory targets, an aspirational target had been set in 1990 in *This common inheritance: Britain's environmental strategy*²⁶ to increase household waste recycling from 6 per cent to 25 per cent in 2000. This target was re-iterated in 1995, in *Making waste work*.²⁷ However, the target was missed by a large margin, with recycling of household waste only reaching 11.2 per cent in 2000/01.²⁸

Setting statutory targets for local authorities has made a huge impact on recycling performance over the last few years. The proportion of household waste recycled in England has increased from 11.2 per cent in 2000/01²⁹ to around 17 per cent in 2003/04³⁰, representing an increase of over 50 per cent in just three years.

Many organisations besides Friends of the Earth are now calling on the Government to set higher recycling targets. Many experts believe that the current longer-term targets will fail to build on the significant efforts that have been made so far to meet the 2005 targets. If these longer-term targets are not significantly increased, the drive for recycling could lose momentum.

The House of Commons Environment, Food and Rural Affairs (EFRA) Committee has been particularly critical of the targets for England for 2010 and 2015, describing them as “depressingly unambitious”. It has recommended that the Government sets new targets of 50 per cent by 2010 and 60 per cent by 2015.³¹ And in its review of *Waste Strategy 2000*, the Strategy Unit recommended recycling levels significantly in excess of



Sarah Denney/Friends of the Earth

Boxing clever: Doorstep collection schemes enable everybody to recycle

present targets, and provided substantial evidence to show that higher rates are achievable. Figure 4 shows the current targets and those recommended by the Strategy Unit³² and the EFRA Committee.

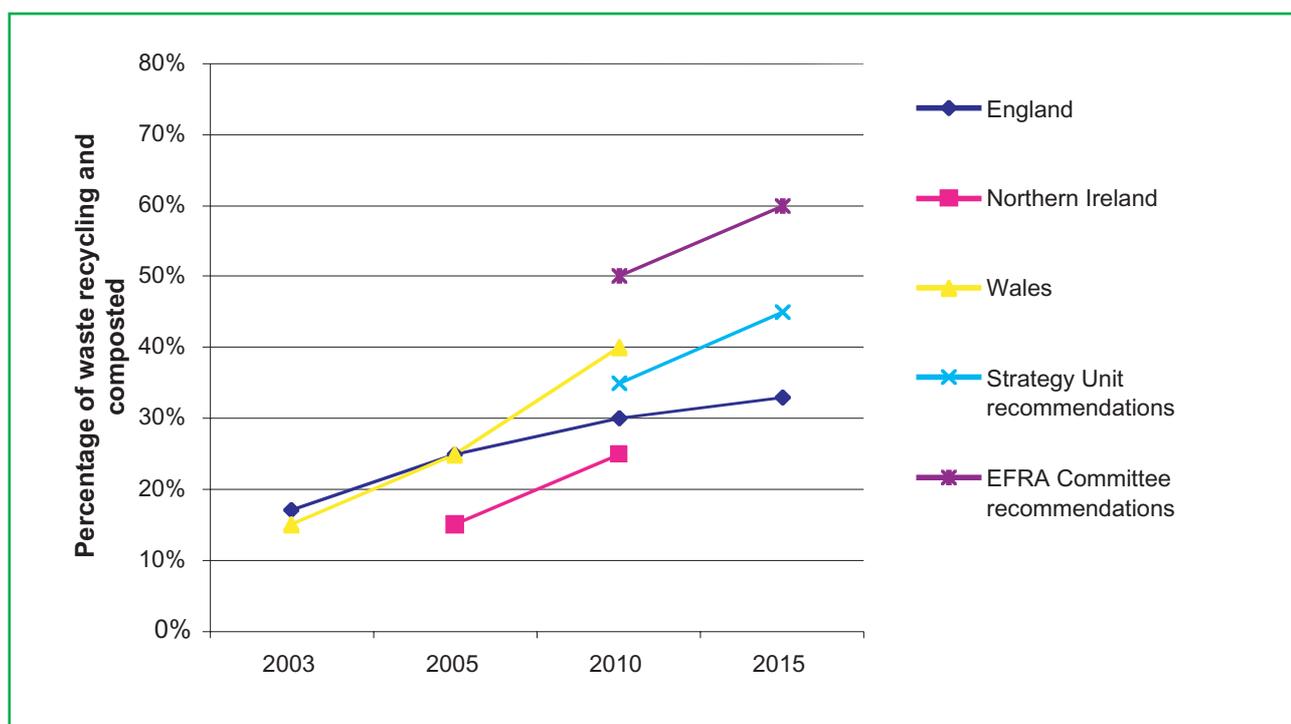
Friends of the Earth recommends setting new national recycling targets of 50 per cent by 2010 and 75 per cent by 2015. These targets are challenging, but they are based on evidence that suggests they are possible. In the next section, we set out how.



While our statutory interim target for 2005/06 is 36 per cent, we are viewing that as a bare minimum, and realistically hope to achieve 50 per cent recycling by 2008.”

Bath and North East Somerset Council (2003)³³

Figure 4:
Recycling targets: Current national recycling targets and recommendations for the future



Sources:

1 Department for the Environment, Transport and the Regions (2000). *Waste Strategy 2000*;

2 Department of the Environment, (2000) *Waste Management Strategy for Northern Ireland*;

3 Welsh Assembly Government, (2002) *Wise about Waste: The National Waste Strategy for Wales*;

4 Strategy Unit (2002). *Waste not, Want not – A strategy for tackling the waste problem*;

5 Environment, Transport and Regional Affairs Committee (2002). *Delivering sustainable waste management Government reply to the fifth report of session 2000-01 from the Environment, Transport and Regional Affairs Committee fourth special report of session 2001-02*



Lichfield is on target to recycle and compost at least 50 per cent. Our target was 42 per cent, but we're exceeding that. Awareness raising and promotion has been the key to successful participation, and should always be an integral part of the whole process."

Ysanne Williams, Service Development Manager, Lichfield District Council (2003)

5 50 per cent and beyond

Extending UK best practice

Research has shown that by extending current good practice we could achieve a recycling rate of 27-36 per cent in England.* This level could be reached without making major policy changes and takes account of current variation in levels of performance.³⁴

To achieve a national recycling rate of 27-36 per cent we will need:

- weekly multi-material kerbside recycling collections throughout the country or fortnightly alternating with residual waste
- good practice facilities for recycling and composting at all civic amenity sites
- separation of garden waste, where it is collected, for composting rather than it being accepted with refuse for disposal.



Nick Strugnell/Friends of the Earth

*Different types of authorities tend to deliver different levels of performance. A recent report for the Resource Recovery Forum³⁶ found that the highest rates of recycling are usually in relatively prosperous areas with low population density. In major urban areas and deprived areas, rates tend to be much lower. The reasons for these variations

include differences in housing type, social mobility, and household consumption of materials.

It's important to take local factors into account when setting local authority targets. However, there are always some exceptions. A collection scheme in one of

the most deprived areas in Liverpool recently recorded a participation rate of 73 per cent³⁷ and looks set to reach high rates of recycling. Examples such as this must be used to spread good practice, and more supportive policies will ensure improvements are made in low-performance areas.

6 New policy solutions

Changes to waste policy

If we are to raise our recycling performance, we need to see a major change in waste policy. Friends of the Earth would like the Government to introduce a combination of policies to support the achievement of increased recycling, which have been successful in other countries:

- speed up the increase in landfill tax, so that it reaches £35 per tonne more quickly
- extend the landfill tax to cover other forms of disposal
- remove the economic incentives for incineration
- allow councils to introduce variable charging schemes
- ban the disposal of recyclable and compostable materials by 2010
- implement a national waste prevention target
- extend measures to make manufacturers responsible for minimising waste, reusing materials and recycling.

Accelerating the increase in landfill tax

The Government has recognised that if the landfill tax is to become an effective economic disincentive, it needs to be much higher. The Government has set the target level at £35 per tonne, but with a current increase of £3 per year, that level will not be reached until 2011. Friends of the Earth recommends an annual increase of £5, which would reach the target by 2008. The higher landfill tax revenues could fund the increased provision of comprehensive doorstep collection services required to achieve higher rates of recycling and composting.

Removing economic incentives for incineration

It is vital that an increase in landfill tax does not encourage local authorities to simply divert waste from landfill to another form of disposal. The Government needs to assess the existing tax breaks and support measures for waste management options, and to examine the case for removing the subsidies received by thermal technologies.

Current subsidies for thermal waste technologies (such as incineration, gasification and pyrolysis) are delaying a more sustainable system being developed. These subsidies pull in the opposite direction to waste policy, and they make little sense in terms of averting climate change.

As well as removing the incentives, the Government must also commit to introducing a graduated waste disposal tax that encompasses incineration, to reflect the position of disposal in the waste hierarchy.

In Denmark there has been a tax on landfill and incineration since 1987. Every year the tax has been increased, and it now stands at roughly £50 for landfill and £44 for incineration.³⁸

Creating householder incentives

When high disposal taxes are in place, it makes sense to pass on the economic incentives for reducing and recycling to householders. Many of the highest performing cities and regions in Europe and North America have introduced some form of variable charging or “pay-as-you-throw” system for non-recycled waste.³⁹

Once local authorities have comprehensive doorstep recycling and composting collections in place they can make them far more effective by implementing incentive schemes to encourage householders to separate their waste. Incentive schemes come in different forms including:

- discounts on existing charges, such as council tax
- cash incentives and reward schemes
- various forms of direct and variable charging.⁴⁰

A variety of householder incentive schemes operate in Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Netherlands and Sweden.⁴¹ Their impact can be significant, with levels of recycling typically increasing by up to 30-40 per cent.⁴²

There are a number of systems that UK local authorities could adopt if new legislation were to give them this power. One charging mechanism could involve removing the waste management charge in the council tax and charging householders separately for the waste they throw away. The less waste someone produced, the less they would pay for disposal services, rather than paying a fixed charge.

Friends of the Earth believes that systems must be designed to avoid a disproportionate impact on low-income families. However, this issue could be addressed through a rebate system similar to the one in operation for the council tax. Initially, there may be an increase in fly-tipping, but research shows this has not been a major problem in other countries. Putting in place high fines for fly-tipping helps to avoid the risk.

In the United States the amount of waste sent to landfill after introducing variable charging decreased by an average of 40 per cent.⁴³

Banning disposal of recyclable and compostable materials

To bolster the impact of economic incentives that divert waste towards recycling, Friends of the Earth recommends that the Government introduces a disposal ban on some materials by 2010. Priority materials would include biodegradable materials, such as food, green waste, paper and cardboard. These materials need to be diverted from landfill to comply with the *EU Landfill Directive*, but there is a risk of them simply being diverted to other unsustainable forms of waste management, such as thermal treatment, which would fail to recover sufficient value from the materials.

A ban on disposal of glass and metals could also be introduced in the next few years, as the infrastructure to recycle these materials is already in place.⁴⁴ To make sure disposal facilities adhere to the bans, there would have to be appropriately financed checks.

In Massachusetts, there is a landfill ban on 10 different materials, including green waste, paper, cardboard, glass and metals, packaging, and batteries.⁴⁵

Setting up waste prevention measures

There is considerable scope to reduce waste production through reuse and avoidance measures. Friends of the Earth would like to see the Government consult with local authorities on setting a national waste prevention target. WasteWatch has supported targets, suggested by the European Commission, of a 20 per cent reduction by 2010 on 2000 levels, and 50 per cent by 2030.⁴⁶

A national target would need to be supported by individual waste prevention targets for local authorities and a change in best value performance indicators to reflect progress in reducing the volume and weight of waste. Weight-based recycling targets alone encourage authorities to focus on collecting the heaviest materials for recycling – for example, compostable waste and paper. However, evidence suggests that green waste collections can actually increase the amount of waste to be dealt with by local authorities.⁴⁷

There are a range of practical measures to reduce waste that can be taken at local level. Reusable nappies are convenient and cheaper than disposables and a number of local authorities promote nappy laundering schemes. For most food and garden waste, home composting provides the best route for management. We can learn from other countries, such as Austria, which has been particularly successful in encouraging householders to deal with this waste at home.⁴⁸ Likewise, the Flanders strategy includes a number of financial incentives for reducing waste at source, including providing subsidies to reuse centres and financial aid to municipalities setting up prevention policies.⁴⁹

Economic drivers need to be considered at national level too. Taxes on disposable goods would be a good start.

Since the introduction of the bag levy in Ireland there has been a reported 90 per cent reduction in the consumption of plastic carrier bags.⁵⁰

Extending producer responsibility

Rules that regulate the responsibilities of manufacturers play a critical role in making sure products are designed for reuse and recycling, thereby preventing waste.

Existing producer responsibility obligations in the UK include:

- the packaging regulations⁵¹
- the voluntary junk mail scheme, which requires the producers to achieve certain levels of recycling⁵²
- the voluntary agreement on newsprint, which sets targets for the recycled content.⁵³

Properly designed producer responsibility schemes can channel financial support to local authorities where councils collect material covered by legislation, such as packaging, batteries and waste electronic and electrical equipment. The only countries in the EU where there is no direct compensation for local authorities collecting packaging are the UK, the Netherlands, and Denmark (where a packaging tax is designed to encourage the use of multi-trip packaging).⁵⁴

Producer responsibility agreements need to be extended to reduce waste, increase durability and the use of recycled materials, and increase consumers' ability to reuse and recycle products. These schemes do create some extra costs for businesses, but the sums are often much smaller than businesses fear. For example, the estimated cost of complying with the packaging

regulations range from 0.18 per cent of profit for large firms to 2.2 per cent for small and medium-sized firms.⁵⁵

What is more, reducing waste and designing products for reuse should actually bring financial benefits to companies in the long term. For example, a report for the England and Wales Environment Agency found that if manufacturers invested in best practice waste minimisation techniques, they could achieve £2-2.9 billion savings in annual operating costs.⁵⁶

Research by Friends of the Earth suggests that changes are more likely to be delivered by statutory producer responsibility targets for businesses than by voluntary targets – partly because of the large number of players in the sector.⁵⁷ For a number of types of waste, including packaging and tyres, attempted voluntary agreements have been expensive failures, and the Government has ended up having to regulate.



Achieving a 50 per cent recycling rate is not particularly difficult. All you need is the will to do it, a bit of enthusiasm, and the cash! In Cambridgeshire and Peterborough we have set ourselves a target of recycling 60 per cent of household waste by 2020.”

Bernard Warr, Joint Waste Partnership Co-ordinator, Cambridgeshire and Peterborough Council (2003)

Increasing recycling in the UK will help us to decrease the impact of our consumption and waste of natural resources. To enable this change Friends of the Earth would like to see:

The Government and National Assemblies...

- putting in place higher national recycling targets to build on recent improvements
- supporting the drive for increased recycling with economic measures to discourage disposal
- tackling the growth in municipal waste and setting national targets for reduction
- allowing local authorities to implement financial incentive schemes for householders to reduce and separate their waste for recycling and composting
- banning the disposal of compostable and recyclable materials
- implementing statutory agreements for greater producer responsibility in reducing waste and increasing reuse and recycling
- providing sufficient funding for local authorities to put in place effective doorstep collection schemes
- showing greater leadership and implementing bold measures to make the step change required to tackle our current waste crisis.

Local authorities...

- setting higher recycling targets for their area of 50 per cent or more
- encouraging householders to reduce their waste by promoting, for example, home composting and reusable nappies
- putting in place comprehensive doorstep collections of a wide range of materials for recycling and composting, including food waste
- giving householders financial incentives to increase participation in doorstep collection schemes
- supporting calls for higher recycling targets, given increased financial and legislative support from central government.

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