Executive Summary









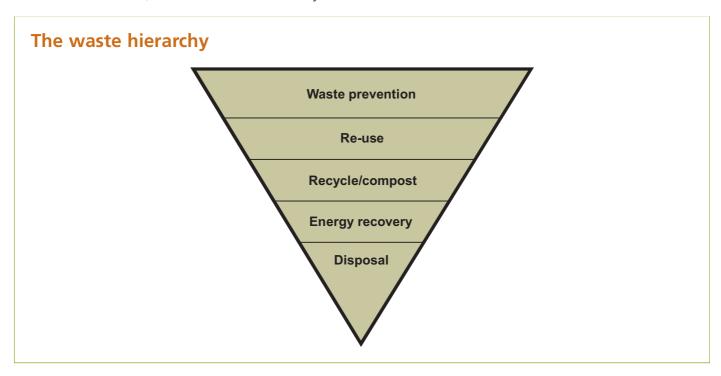
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Executive Summary

Aim

- i. As a society, we are consuming natural resources at an unsustainable rate. If every country consumed natural resources at the rate the UK does, we would need three planets to live on. The most crucial threat is from dangerous climate change. Our goal is to make the transition towards what the WWF and BioRegional call 'One Planet Living'.
- ii. Reducing waste is an important contributor to this goal. Each year, we generate about 100 million tonnes of waste from households, commerce and industry. Most of this ends up in landfill where the biodegradable part generates methane (a potent greenhouse gas) while valuable energy is used in extracting and processing new raw materials.
- iii. Our aim must be to reduce waste by making products with fewer natural resources. We must break the link between economic growth and waste growth. Most products should be re-used or their materials recycled. Energy should be recovered from other wastes where possible. For a small amount of residual material, landfill will be necessary.



iv. The dividends of applying the waste hierarchy will not just be environmental. We can save money by making products with fewer natural resources, and we can reduce the costs of waste treatment and disposal. Waste is a drag on the economy and business productivity. Improving the productivity with which we use natural resources can generate new opportunities and jobs.

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Progress so far

- v. Since the waste strategy in 2000, England has made significant progress. Recycling and composting of waste has nearly quadrupled since 1996-97, achieving 27% in 2005-06. The recycling of packaging waste has increased from 27% to 56% since 1998. Less waste is being landfilled, with a 9% fall between 2000-01 and 2004-05. Waste growth is also being reduced with municipal waste growing much less quickly than the economy at 0.5% per year.
- vi. This progress has been driven by significant changes in policy. The landfill tax escalator and the introduction of the Landfill Allowance Trading Scheme (LATS) has created sharp incentives to divert waste from landfill. Additional funding for local authorities, including through the private finance initiative, has led to a major increase in kerbside recycling facilities and new waste treatment facilities. European directives are targeting sectors, including vehicles, electrical and electronic equipment and packaging. New delivery arrangements have helped to drive the strategy, including the Waste Implementation Programme (WIP), the Waste and Resources Action Programme (WRAP) and the Business Resource Efficiency and Waste (BREW) programme.

Vision – producer and consumer responsibility

- vii. Despite major progress since 2000, England's performance on waste still lags behind many European countries. All parts of society will have to share responsibility:
 - **producers** will have to make products using more recycled materials and less newly extracted raw materials. They will have to design products that are less wasteful and take responsibility for the environmental impact of their products throughout their life;
 - **retailers** will have to reduce packaging, source and market products that are less wasteful, and help their consumers to be less wasteful;
 - **consumers** both business and individual households will have the opportunity to reduce their own waste, purchase products and services that generate less waste and reduce environmental impacts, and separate their waste for recycling;
 - **local authorities** will have to commission or provide convenient recycling services for their residents and commercial customers and advice and information on how to reduce waste. They will also have to work with their communities to plan and invest in new collection and reprocessing facilities; and
 - the waste management industry will have to invest in facilities to recycle and recover waste, and provide convenient waste services to their customers to recycle and recover their waste.

Strategy

viii. The role of central government is to enable each part of society to take responsibility, and show leadership through reducing its own waste. This new strategy builds on Waste Strategy 2000 (WS2000) and the progress since then but aims for greater ambition by addressing the key challenges for the future through additional steps.

Objectives and targets

- ix. The Government's key objectives are to:
 - decouple waste growth (in all sectors) from economic growth and put more emphasis on waste **prevention and re-use**;
 - meet and exceed the **Landfill Directive diversion targets** for biodegradable municipal waste in 2010, 2013 and 2020;
 - increase diversion from landfill of **non-municipal waste** and secure better integration of treatment for municipal and non-municipal waste;
 - secure the **investment in infrastructure** needed to divert waste from landfill and for the management of hazardous waste; and
 - get the most environmental benefit from that investment, through increased **recycling of resources and recovery of energy** from residual waste using a mix of technologies.
- x. The overall impact of this strategy is expected to be an annual net reduction in global greenhouse gas emissions from waste management of at least **9.3 million tonnes of carbon dioxide equivalent per year compared to 2006 (equivalent to annual use of around 3 million cars)**. The additional greenhouse gas emissions reductions result from an increase in diversion of waste from landfill of around 25 million tonnes of waste per annum. These benefits will be further boosted by significant extra greenhouse gas benefits from the waste prevention measures in the strategy.
- xi. A greater focus on waste prevention will be recognised through a new target to reduce the amount of household waste not re-used, recycled or composted from over 22.2 million tonnes in 2000 by 29% to 15.8 million tonnes in 2010 with an aspiration to reduce it to 12.2 million tonnes in 2020 a reduction of 45%. This is equivalent to a fall of 50% per person (from 450 kg per person in 2000 to 225 kg in 2020).
- xii. Higher national targets than in 2000 have been set for:
 - recycling and composting of household waste at least 40% by 2010, 45% by 2015 and 50% by 2020; and
 - recovery of municipal waste 53% by 2010, 67% by 2015 and 75% by 2020.
- xiii. Because **lower levels of waste growth** are expected than when the consultation document was published, meeting these targets implies lower levels of residual waste than were previously assumed. The Government will review the targets for 2015 and 2020 in the light of progress to 2010 and future forecasts, to see if they can be even more ambitious.
- xiv. The Government will shortly be setting a new national target for the reduction of commercial and industrial waste going to landfill. On the basis of the policies set out in *Waste Strategy for England 2007*, levels of **commercial and industrial waste landfilled are expected to fall by 20% by 2010 compared to 2004**. The Government is considering, in conjunction with the construction industry, a target to halve the amount of **construction, demolition and excavation** wastes going to landfill by 2012 as a result of waste reduction, re-use and recycling.

Key proposals for action

- xv. The main elements of the new strategy are to:
 - incentivise efforts to reduce, re-use, recycle waste and recover energy from waste;
 - reform regulation to drive the reduction of waste and diversion from landfill while reducing costs to compliant businesses and the regulator;
 - target action on materials, products and sectors with the greatest scope for improving environmental and economic outcomes;
 - stimulate investment in collection, recycling and recovery infrastructure, and markets for recovered materials that will maximise the value of materials and energy recovered; and
 - improve national, regional and local governance, with a clearer performance and institutional framework to deliver better coordinated action and services on the ground.

Incentives

xvi. The aim is to create incentives that reflect the waste hierarchy and create opportunities for the reduction, re-use, and recycling of waste, and recovery of energy from waste. The Government is therefore:

- increasing the **landfill tax escalator** so that the standard rate of tax will increase by £8 per year from 2008 until at least 2010/2011 to give greater financial incentives to businesses to reduce, re-use and recycle waste (from £24 now to £48 in 2010);
- consulting on removing the ban on local authorities introducing household financial incentives for waste reduction and recycling, through early legislative change. Local government would be free to introduce schemes where householders who recycle their
 - waste receive payments funded by householders who do not recycle. All schemes would have to be revenue neutral. Schemes would not result in any overall increase in costs. The behaviour change created by the schemes would reduce the amount of waste to be disposed of, generating cost savings. Removing the ban would bring England in line with most other European countries and could reduce the amount of annual residual waste landfilled by up to 15% equivalent to 1.5 million tonnes or 130kg per household; and
- introducing enhanced capital allowances for investment involving the use of secondary recovered fuel (SRF) for combined heat and power facilities.



Compost from kitchen and garden waste that meets the WRAP/EA quality protocol. Credit: WRAP

Effective regulation

xvii. Regulation plays a crucial role in ensuring sound environmental and public health protection. It can also provide the right context for encouraging resource efficiency by business within a competitive environment. But it can cost business time and money.

xviii. The Government is therefore simplifying the regulatory system, making it more proportionate and risk based, through **waste protocols** that clarify when waste ceases to be waste (and so not subject to regulation); reforms of the permitting and exemption systems and the controls on handling, transfer and transport of waste, (with cost savings to business and regulator of, e.g. on permitting, at least £90 million); and better and earlier communication with all stakeholders.

xix. Several other EU Member States have found that imposing legal restrictions on the types of waste that can be landfilled has encouraged higher rates of recycling and recovery. We intend, subject to further analysis, to consult on whether the introduction of further restrictions on the landfilling of biodegradable wastes or recyclable materials would make an effective contribution to meeting the objectives set out in this strategy, to reduce greenhouse gas emissions and increase resource efficiency. This consultation will be linked to the work on priority waste materials set out below.

xx. Regulation only achieves its aims to the extent to which it is complied with, so effective **action on flytipping and on illegal dumping abroad** is essential. The Government is addressing this through prevention, more effective risk-based enforcement, strengthened export controls, data improvements and encouraging the courts to take illegal waste activities seriously.

Targeting action on materials, products and sectors

xxi. Waste is a mix of very different products and materials. So we need to target action on where we can achieve the greatest improvement in environmental and economic outcomes. We have identified **key waste materials** where diversion from landfill could realise significant further environmental benefits. The Government is taking action on paper, food, glass, aluminium, wood, plastic and textiles. Examples include:

Paper

establishing with the paper industry an agreement with challenging targets to reduce paper
waste and increase paper recycling incorporating and developing existing agreements for
newspapers, magazines and direct mail but extended to office papers, free newspapers,
catalogues and directories;

Food and green wastes

• support for anaerobic digestion through the new technologies programme, Renewable Obligations system, Private Finance Initiative (PFI) and a digestate standard that will establish the use of this technology in this country as in some other European countries; and

Plastics and aluminium

• proposals (subject to further analysis) for higher packaging recycling requirements beyond the 2008 European targets to increase recycling (each tonne of aluminium recycled saves 11 tonnes of CO2).



A range of materials can be re-used or recycled. Clockwise from top left: metals, glass, wood, food, paper, plastic and textiles.

Credit: WRAP, NISP, Photofusion

xxii. Product policy can help to reduce waste impacts, including at the design stage, and business support services are increasing resource efficiency through waste reduction and material re-use. The Government is:

- establishing a new products and materials unit to identify and catalyse actions across the supply chain, to improve the environmental performance of products throughout their life cycle, publishing a progress report on delivery in Spring 2008;
- to develop, in due course, **eco-design requirements** which will consider waste impacts as part of the wider life cycle assessment of energy using products; and
- encouraging **re-use and re-manufacture** of products and material resources and stimulating resource efficiency through business advice services (with around £4 saved by business for each £1 of government-funded advice and support).

xxiii. **Producer responsibility** arrangements (both statutory and voluntary) place responsibility on businesses for the environmental impact of products they place on the market, while wider sectoral agreements can cover a range of product and material impacts. In addition to proposals for statutory higher packaging recycling targets, the Government is seeking further voluntary action, but is prepared to regulate if this does not deliver. It is introducing measures to:

- reduce excess packaging, for example by setting optimal packaging standards for a product class;
- support development of a joint protocol to ensure that local government and industry both identify the best systems for cost effective collection of packaging waste;

- develop an opt-out for unaddressed mail with the Direct Marketing Association alongside delivery of their action on addressed mail, to reduce the amount of unwanted direct mail (of the 16 billion items delivered annually); and explore the scope for an opt-in mechanism;
- extend WRAP's Courtauld Commitment to non-food retailers to increase the total commitments by retailers to reductions in packaging, food and other post-consumer waste; and
- make, subject to consultation, Site Waste
 Management Plans a mandatory requirement
 for construction projects over a certain value,
 and extend to other parts of the supply chain
 the recent agreement with the manufacturers
 on recycling of plasterboard, as part of reducing
 waste and increasing re-use and recycling by
 the construction sector.



On-site separation of construction waste. *Credit:* WRAP

Investment in infrastructure

xxiv. A key to more efficient recovery of materials and energy is the **greater segregation and sorting of waste** at (or close to) its source by households and businesses. This requires planning for and investment in collection, sorting, reprocessing and treatment facilities by local authorities, businesses and the third sector. The Government is:

- increasing the (environmental and financial) value obtained from recyclate material collected by local authorities through a **strengthened advice service**, including on waste collection, the use of different kinds of material recycling facilities (MRFs), and contractual arrangements for collection services;
- ensuring that **Regional Spatial Strategies** and local development plans conform to national planning guidance on waste so that the waste infrastructure projects needed to deliver this strategy receive planning approval, while promoting best practice in the way that local authorities consult stakeholders on their waste strategies;
- improving **procurement** and investment by local authorities through comprehensive support and strengthened central and regional coordination by the Waste Infrastructure Delivery Programme (WIDP), a new WIP-led unit to ensure cost effective and timely delivery of the major infrastructure required;
- using PFI, and, where appropriate, Enhanced Capital Allowances, and/or Renewable Obligation Certificates (ROCs) to encourage a variety of energy recovery technologies (including anaerobic digestion) so that unavoidable residual waste is treated in the way which provides the greatest benefits to energy policy. Recovering energy from waste (EfW) which cannot sensibly be recycled is an essential component of a well-balanced energy policy. Energy from waste is expected to account for 25% of municipal waste by 2020 compared to 10% today which is less than the 34% by 2015 anticipated in 2000; and

 developing the energy market for wood waste (the bulk of which is landfilled) and which, if a third of this were used, could generate 2600 GWh electricity and save 1.15 million tonnes of carbon dioxide equivalent emissions.

xxv. To get the most benefit from recycling, markets for high quality uses of materials and resources (displacing virgin sources) need to work more efficiently and the Government will continue to support WRAP's market development work (focusing on priority materials). This will include development of a centre of expertise on export markets to help businesses manage the market risks, maintain the value of recycled material and comply with the controls on export of waste.

Local and regional governance

xxvi. Changing our waste management practices has already made waste management a more complex task. As waste is increasingly treated as a resource, a much wider range of actions by a larger range of players is required but these actions need to be coordinated. Local government and regional bodies have a vital role in providing advice and services to business and



ECT, a leading social enterprise and the UK's largest community recycling provider operates doorstep recycling services.

Credit: ECT

householders and developing partnership working. They need the right structures, tools and support to do their job. The Government is:

- strengthening the ability of **local authorities in two-tier areas to work together** and encouraging partnership working between local authorities through: new powers in the current Local Government and Public Involvement in Health Bill; use of Local Area Agreements; and the new local government performance framework resulting in better, more cost-effective local services:
- establishing a **new local performance package for local authorities** to support delivery of the Government's waste outcomes;
- encouraging local authorities to take on a wider role (in partnerships) to help local (particularly smaller) businesses reduce and recycle their waste with cost savings through more integrated management of different waste streams; and
- encouraging the Regional Development Agencies and other regional bodies to coordinate business waste and resource management in partnership with local authorities and third sector organisations.

Culture change

xxvii. Changing how we deal with our waste requires action by all of us as individuals – consumers, householders and at work and leisure. Many people are already participating actively in recycling. The Government will build on this to stimulate further action by both individuals and businesses so that changed behaviour is embedded across all aspects of our lives by:

- extending the **campaigns** for recycling to awareness and action on reducing waste;
- incentivising excellence in sustainable waste management through a **zero waste places** initiative to develop innovative and exemplary practice;
- helping third sector organisations to win a larger share of local authority contract work, as well
 as making greater use of **third sector expertise**, particularly to prevent waste, raise
 awareness, segregate waste at source, and increase re-use and recycling of waste through
 capacity-building support;
- reducing single use **shopping bags** through a retailer commitment to a programme of action

to reduce the environmental impact of carrier bags by 25% by the end of 2008;

- providing more recycling bins in public places through cooperation with the owners and managers of relevant land and premises used by the public to make it easier to recycle away from home, and the development of guidance and a voluntary code of practice for such owners and managers; and
- placing greater emphasis on promoting the reduction of waste and increase of recycling in schools by working with DfES and other partners to help schools overcome barriers, issuing new guidance and the use of award schemes (such as Eco-Schools).



WRAP's recycler robot challenges children to think about their waste and recycling.

Credit: WRAP

xxviii. The Government is determined to lead the way with action in the public sector. This should give confidence for other key players to play their part in achieving a sustainable environment where waste is treated as a resource and dangerous climate change impacts are minimised. For its part, the Government:

 has set itself demanding targets for reducing and recycling its own waste; and will use public procurement operations to stimulate the market for recycled materials and waste reduction.

Delivery

xxix. To drive implementation of the strategy the Government is establishing a Defra-led **Waste Strategy Board** to provide leadership within and across government. The Board will be responsible for taking forward the delivery of this strategy and developing new policy actions as necessary to deliver the ambitious outcomes we seek in the light of progress. The strategy and its policies will need to adapt to external developments (including the European legislative framework within which this strategy sits).

xxx. A new **Waste Stakeholder Group** will provide external advice, challenge and assistance with delivery. Periodic reports on progress will be published.

xxxi. The strategy includes a high-level **implementation plan**, showing key new actions, timeframes for these and responsibilities for delivery. Monitoring and review of the strategy will use our improved evidence base as our research and development and data strategies bear fruit.

xxxii. The strategy has greatly benefited from the responses to our consultation in 2006, which broadly welcomed the direction we proposed at that time of a greater emphasis on viewing waste as a global resource.

xxxiii. Figure E1 summarises the strategy's objectives, action for different parts of society, the policy approach, and indicators and targets.

Figure E1

Less waste, more material recovery, energy from waste and much less landfill

REDUCE RECYCLE DISPOSE REUSE RECOVER Waste management Local Retailers authorities **Business** industry Consumers Provide **Build resource** Produce less Provide flexible Reduce efficiency into convenient waste sustainable packaging business recycling waste waste model service for services to household Reduce customers Produce less and Purchase usage of waste commercial single use responsibly Invest in customers carrier bags recycling and Design less recovery Provide local wasteful Use influence facilities products leadership to on consumers Separate their plan and and supply Observe high waste into invest in new Use recycled chain environmental recyclables inputs infrastructure standards

Targets and indicators

Annual greenhouse gas emissions:

2020: reduction of 10 million tonnes of CO₂ equivalents

Household waste recycling:

2010: 40% 2015: 45% 2020: 50%

Household residual waste

2010: 29% reduction2015: 35% reduction2020: 45% reductionfrom 2000 levels

Municipal waste recovery:

2010: 53% 2015: 67% 2020: 75%

Commercial and industrial waste landfilled:

2010: expected 20% reduction from 2004 levels

Policies

Inform consumers retailers and producers about how to reduce, re-use and recycle waste

Set up **voluntary agreements** with producers and retailers

Use government **procurement** to accelerate development of products which use less natural resources

Invest in local government waste collection and disposal

Incentivise producers, consumers, and disposers to reduce, reuse, and recycle waste and divert from landfill through tax or trading

If incentives are insufficient **regulate both** upstream (materials) and
downstream (landfill)

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