



House of Commons
Environment, Food and Rural
Affairs Committee

The Future of Waste Management

Eighth Report of Session 2002–03

Volume I



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*Report, together with Proceedings of the
Committee*

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The Environment, Food and Rural Affairs Committee

The Environment, Food and Rural Affairs Committee is appointed by the House of Commons to examine the expenditure, administration, and policy of the Department for Environment, Food and Rural Affairs and its associated bodies.

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The following members were also members of the committee during the inquiry.

Mr Eric Martlew (*Labour, Carlisle*)
Mr Phil Sawford (*Labour, Kettering*)
Mr Keith Simpson (*Conservative, Mid Norfolk*)
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The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at www.parliament.uk/parliamentary_committees/environment_food_and_rural_affairs.cfm. A list of Reports of the Committee in the present Parliament is at the back of this volume.

Committee staff

The current staff of the Committee are Gavin Devine (Clerk), Tim Jarvis (Second Clerk), Richard Kelly and Kate Trumper (Committee Specialists), Mark Oxborough and Darren Hackett (Committee Assistants) and Anne Woolhouse (Secretary).

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Summary

Until now, the Government has been too timid in its waste management policy. The Strategy Unit's recent report may prove to have been the turning point but we are still concerned that Defra's and the Environment Agency's lack of funds and expertise will delay real progress. Despite warm words from Defra ministers, the Department does not seem to have a real sense of where it wants to go, and the Agency still appears to be underfunded for its regulatory role. Once again, we question the Department's ability to negotiate and implement European Union laws to the best advantage of the United Kingdom.

Although cultural attitudes are a key factor in achieving sustainable waste management, the Government must translate the concept of the waste hierarchy into a workable economic system. At present the Government is relying on just one economic measure—the landfill tax—and is using it timidly. There is a much wider range of instruments available, including graduated disposal taxes and variable household charging. Government should ensure there is a range of viable waste management options, but the choice between them should be a local one.

Local authorities bear much of the responsibility for sustainable management of municipal waste, but have relatively little power and few direct incentives to make waste a priority—particularly if their electorates do not. The truth of Defra's assertion that there is adequate funding for the improvements it wants remains to be proved. What is clear is that the money is either in the form of challenge funds or not specifically for waste. This is unsatisfactory because the problem must be addressed nationwide.

The Government should move away from targets based purely on weight and instead prioritise those waste streams which present the greatest threat to the environment, for example hazardous waste and landfilled biodegradable waste, and those where recycling presents the greatest savings of materials and energy.

Above all, we strongly urge the Government to demonstrate that it has seized the initiative in moving the United Kingdom away from arguments about different forms of disposal and towards a more efficient and less wasteful approach to resources.

1 Introduction

Glossary

Biowaste or organic waste. Waste which derives from living material, and which can rot. Includes paper, wood, plant and animal material and cloth made from natural fibres.

Energy from Waste. A process by which heat and/or power are derived from waste. Includes incineration and newer technologies such as pyrolysis.

Producer responsibility. The manufacturers and others involved in the distribution and sale of goods take responsibility for those goods at the end of the goods' useful life, i.e. when they become waste. This could mean that manufacturers actually take the goods back, or that they contribute to the recycling or safe management of the waste.

Waste arisings. The amount of waste generated in a particular area during a given time.

Waste hierarchy. The hierarchy in descending order of environmental benefit, as determined by the EC Framework Directive on Waste is:

- (a) Prevention or minimisation of waste;
- (b) Re-use;
- (c) Recovery (i.e. is recycling and composting)
- (d) Energy recovery from waste;
- (e) Disposal.

Background to the inquiry

1. This Committee and our predecessor, the Environment, Transport and Regional Affairs Committee, have long taken an interest in the Government's waste policies.¹ In particular, our predecessor undertook a close examination of the Government's most recent published policy, *Waste Strategy 2000*,² and concluded that it "fails to offer an inspiring vision of sustainable waste management"; that the Government did not "appear to be taking waste minimisation seriously"; and that recycling and composting targets for 2010 and beyond were "depressingly unambitious".³ The Government did not accept those criticisms, but did recognise the need "to review the delivery mechanisms".⁴

¹ For example, see EFRA Committee, Eighth Report of Session 2001–02, *Hazardous Waste*, HC 919; Third Report of Session 2001–02, *Radioactive Waste: the Government's Consultative Process*, HC 1221; Fourth Report of Session 2001–02, *Disposal of Refrigerators*, HC 673; ETRA Committee, Sixth Report of Session 1997–98, *Sustainable Waste Management*, HC 481; and ETRA Committee, Fifth Report, Session 2000–01, *Delivering Sustainable Waste Management*, HC 36-l.

² DETR, *Waste Strategy 2000*, Cm 4693, May 2000.

³ Environment, Transport and Regional Affairs Committee, Fifth Report, Session 2000–01, *Delivering Sustainable Waste Management*, HC 36-l, paras 21, 22 and 32.

⁴ EFRA Committee, Fourth Special Report of Session 2002–02, *Delivering Sustainable Waste Management: Government Reply*, HC 659, para 1.

2. Such a review was necessary because of poor progress towards meeting the recycling targets in Waste Strategy 2000 and looming deadlines set by European legislation for reducing the amount of waste sent to landfill. Accordingly, the Government asked the Cabinet Office's Performance and Innovation Unit (now the Strategy Unit) to carry out a review of the mechanisms to deliver the policies set out in Waste Strategy 2000. The review began with a "Waste Summit" held by the Secretary of State for the Environment, Food and Rural Affairs in November 2001 and concluded with the publication of a report to Government, *Waste Not, Want Not*, in November 2002.⁵ The Government published its response to the report on 6 May 2003.⁶

3. In August 2002, the Environmental Audit Committee announced an inquiry to examine progress towards achieving sustainable waste management. Its main purpose was to audit the implementation of the Government's Waste Strategy 2000 and performance against the waste targets set out in the Strategy and those derived from European Union directives, but would also reflect on the impact of the increase in the landfill tax announced by the Chancellor when the Strategy Unit's report was published.⁷ The report was published on 23 April 2003.⁸

Aims of our inquiry

4. We decided to undertake an inquiry into the future of waste management and particularly how the Government should encourage waste management options that are further up the 'waste hierarchy'. The waste hierarchy was set out in the European Community's Framework Directive on Waste (Council Directive 75/442/EEC). It states that waste prevention and minimisation of waste generation is the first priority for waste strategy. Where this is not possible, the preferred means of managing waste, in descending order of desirability are re-use, recycling, use of waste as a source of energy, incineration without energy recovery and landfilling. The Government accepted the waste hierarchy as a guiding principle in Waste Strategy 2000 and the Strategy Unit's review endorsed it as well. Consequently we decided that our terms of reference should be:

"Taking account of the on-going inquiry by the Environmental Audit Committee into current and past practice, as well as the report from the Government's Strategy Unit, the Committee will examine what steps should in future be taken in order to move waste management up the 'waste hierarchy' (as set out in the Waste Framework Directive). In particular the Committee will look at best practice in recycling, energy recovery during incineration, producer responsibility, and waste minimisation."⁹

5. In this report, we have concentrated on municipal waste, most of which is household waste, because that was the topic of the Strategy Unit's review. Furthermore, we do not attempt an exhaustive analysis of the barriers to change and the lessons that could be learnt

⁵ Strategy Unit, 2002, *Waste Not, Want Not*.

⁶ Defra, May 2003, *Government response to Strategy Unit report 'Waste not, want not'*.

⁷ See EAC Press Notices of 28 August 2002 and 4 December 2002.

⁸ Environmental Audit Committee, Fifth Report of Session 2002–03, *Waste – an audit*, HC 99-I.

⁹ See EFRA Committee Press Notice of 28 November 2002 (No. 4 of Session 2002–03).

from the rest of European Union: those topics are amply discussed elsewhere.¹⁰ Instead we aim to identify areas that still need attention and to focus debate on what we see as overarching problems, and to discuss the priorities which should be set, and the incentives which should be provided, to permit sustainable waste management.

6. We took oral evidence between January and April 2003, hearing from Waste Watch, the Waste and Resources Action Programme (WRAP), the Industry Council for Packaging and the Environment (INCPEN), London Borough of Southwark Council, Bath and North East Somerset Council, the Local Government Association, the Composting Association, the Environmental Services Association, the Environment Agency and Defra. We were ably assisted throughout by our specialist advisor for this inquiry, Robin Murray.

7. During the inquiry, we visited a materials recovery facility and a composting site in Rainham in Essex, a municipal waste incinerator providing combined heat and power in Lewisham in London, a cement plant using waste as fuel in Ketton in Rutland and a plastics recycling project in Leicester. The Committee also visited Denmark to learn from Danish experiences of managing waste. Further details of all the visits we made are given on pages 17 and 20 and in the Appendix.

8. We would like to express our gratitude to all those who gave evidence, both in writing and in person, to the people and organisations who hosted our visits and to all those who discussed waste with us, both formally and informally.

2 Waste legislation

9. The UK Government negotiates waste legislation in the European Union, but, with the exception of most economic instruments, national waste policy is devolved. Wales, Scotland and Northern Ireland have their own waste strategies;¹¹ this Report is mainly concerned with waste policy in England.

10. Government policy on waste is set out in Waste Strategy 2000. Although this strategy deals with wider wastes, its main focus is on diverting municipal waste from landfill in order to meet the targets set out in the European Union's Landfill Directive. The Landfill (England and Wales) Regulations 2002 are intended to implement the requirements of the Landfill Directive in England and Wales, and came into force in June 2002. They set out a pollution control regime and set standards for managing and monitoring landfill sites.

11. There is a great deal of legislation that touches on waste and much of it is complex. We have not attempted to summarise it all here but only some aspects that are particularly relevant to the topics covered in our inquiry.

¹⁰ For example, see Strategy Unit, 2002, *Waste Not, Want Not*, Biffa, 2002, *Future Perfect*, Green Alliance, 2002, *Creative Policy Packages for Waste: lessons for the UK*.

¹¹ Northern Ireland Executive, 2002, *Waste Management Strategy for Northern Ireland*,

Welsh Assembly Government, 2002, *Wise about waste: the national waste strategy for Wales*, Scottish Executive, 2003, *The National Waste Plan 2003*.

The Landfill Directive (Council Directive 99/31/EC)

The directive came into force 16 July 1999 and the deadline for implementation by Member States was 16 July 2001. Its most important requirements are:

- 1) The separation of landfills into three types: hazardous, non-hazardous or inert waste. This will mean that the three types of waste must be disposed of separately.
- 2) The development and introduction of waste acceptance criteria which define which types of waste can be accepted at each type of landfill.
- 3) The requirement to treat most wastes before landfill in order to minimise their undesirable properties.
- 4) The banning of certain types of waste from landfill including liquid wastes and waste which is 'in landfill conditions', explosive, corrosive, oxidising, highly flammable or flammable and infectious hospital and clinical waste. (Flammable and explosive wastes are not currently landfilled in the United Kingdom in any case.)
- 5) The reduction in the volume of biodegradable waste sent to landfill.

12. Under the Environment Act 1995, the Environment Agency is the regulator for waste management activities in England and Wales but the local organisation of waste management varies with the structure of local government. Unitary authorities are in charge of all waste management functions. In two-tier authorities responsibility is split between waste collection authorities (mainly district councils in England) and waste disposal authorities (mainly county councils in England). Waste collection authorities arrange for the collection of waste and its delivery to sites specified by disposal authorities and draw up and implement plans for recycling. Waste disposal authorities do not carry out disposal themselves. Instead they contract, after competitive tender, private operators or local authority waste disposal companies (LAWDC) to do so. Waste disposal authorities may establish LAWDC as 'arm's length' companies. They must have regard to recycling in their tendering and contract agreements for waste disposal. In addition, they must pay waste collection authorities recycling credits for all waste which the latter recycle. The value of the recycling credit paid is equal to the saving the disposal authority makes through not having to dispose of the recycled material.¹²

13. There are two further items of legislation currently that are pertinent to this inquiry.

The Waste and Emissions Trading Bill, currently before Parliament, would if passed create a system of tradable landfill allowances, and would be "a very powerful driver" to reduce the amount of waste sent to landfill.¹³

The European Union Regulation laying down health rules concerning animal by-products not intended for human consumption (EC/1774/2002), which came into force on 1 May 2003, has implications for the composting industry because it specifies operating requirements for plant, including compost plant, that treat catering waste.

¹² Institute for European Environmental Policy, 2000, *Manual of Environmental Policy: the European Union and Britain*, chapter 5.1

¹³ Q 392.

3 Targets and international comparisons

14. European Union Directives on waste management, and the mandatory targets they include, are among the main reasons why so much attention has been focussed on municipal waste management recently. As described above, the Landfill Directive sets mandatory targets for the amount of biodegradable waste being disposed of in landfill. If the Government makes use of the derogations available to it under the Directive, the targets (for the United Kingdom) are a reduction to 75% of 1995 levels by 2010, to 50% by 2013 and to 35% by 2020.

15. The Government accepts that a critical factor in meeting these targets will be a reduction in the rate of growth of waste production. However, so far, one of the main mechanisms for meeting the Landfill Directive targets has been to set targets for the recycling or composting of municipal waste. At present these targets are to recycle or compost at least 25% of household waste by 2005, 30% by 2010 and 33% by 2015.

16. These are national targets. Statutory performance standards set targets for individual local authorities. These targets take into account local difficulties in establishing recycling because they depend in part on the authorities' past performance. So, for example, local authorities which recycled less than 5% of waste in 1998–99 must recycle more than 10% in 2003, but authorities who were already recycling more than 15% in 1998–99 must recycle more than 33% now. The targets apply to both disposal and collection authorities and the Government encourages authorities within the same disposal authority area to pool their targets and work together to achieve them.¹⁴

17. The Government accepts that the United Kingdom has had a very poor record of waste minimisation and recycling so far.¹⁵ The OECD has said that “measures to encourage waste minimisation [in the UK] remain very weak”.¹⁶ The Strategy Unit stated that household waste in England is growing at 3% annually, which is faster than the growth in GDP.¹⁷ Despite the fact that international comparisons of waste and recycling statistics should be treated with caution,¹⁸ it is worth noting that a Resource Recovery Forum report indicated that the United Kingdom recycled 8% of its municipal solid waste in 1998–99, but high performing countries such as the Netherlands and Germany were already recycling around 38% in 1996.¹⁹

18. A 2002 study for the Community Recycling Network tried to resolve some of the difficulties in making international comparisons by examining recycling rates of specific material streams.²⁰ The results reflected the pattern for all municipal solid waste. For example, the United Kingdom recycled 5.7% of organic waste, but Austria recycled 75%.

¹⁴ Defra Guidance on municipal waste strategies, 12 April 2001 Annex A. See <http://www.defra.gov.uk/environment/waste>.

¹⁵ Q 350.

¹⁶ OECD, 2002, *OECD Environmental Performance Reviews: United Kingdom*, p.24.

¹⁷ *Waste Not, Want Not*, p.7.

¹⁸ The Forum points out that data collection techniques differ and definitions of important variables such as ‘municipal waste’ are not the same in different countries.

¹⁹ Resource Recovery Forum, 2000, *Recycling achievement in Europe*.

²⁰ D. Hogg, D. Mansell and Network Recycling, 2002, *Maximising recycling rates, tackling residuals. Final Report to the Community Recycling Network*.

The United Kingdom figure for paper and card was higher, at 47%, but was still dwarfed by Germany's 90%.

4 Institutional issues

19. During the course of our inquiry, it has become clear that sustainable waste management is not hindered by lack of knowledge or appropriate technology so much as by lack of capacity in key institutions responsible for delivering it.

Defra

20. Dismal comparisons such as those outlined above, and the glacially slow rate of change, have led successive Select Committee reports to be highly critical of the Government's poor performance and lack of vision in encouraging sustainable waste management. We hope that the focus provided by the Strategy Unit's examination of the issue and impending deadlines under the Landfill Directive may at last provide the impetus for real change. It is, of course, too early to judge the effects of measures announced in the Budget and in the Government's response to the Strategy Unit's review. Nevertheless, **we are concerned that Defra still appears to lack the capacity, the vision, the sense of urgency and the political will to break the mould and bring about truly sustainable waste management in this country.**

21. These concerns are most acute in two areas. First, Defra has failed to forge effective partnerships with key actors in waste management to the extent that those charged with delivering the strategy, including local authorities, are not sure what Government wants of them. Second, this and earlier inquiries have left us with grave misgivings about Defra's approach to negotiating and implementing European Union environmental Directives.

Partnerships

22. We commented in our report on hazardous waste that "the Government does not have an adequate strategic relationship with industry."²¹ This appears to be true for municipal waste too and for a wider group of stakeholders. The Environmental Services Association did not feel that Defra understood their business well enough and commented that there was "an incredible lack of engagement" with the industry.²² Many small- and medium-sized enterprises have not been engaged in the debate and are not aware of what help there is available through, for example, Envirowise the government programme that aims to help businesses become more competitive while improving their environmental performance.²³

23. The problem is, if anything, more acute for local authorities. The Local Government Association (LGA) commented that, although it did work closely with Defra, it wanted "to be really engaged at the point at which these decisions [about waste policy] are taken and not just told about it afterwards."²⁴ Despite the Minister's assertion that "local authorities

²¹ EFRA Committee, Eighth Report of Session 2001–02, *Hazardous Waste*, HC 919, p.1.

²² Q 295.

²³ Ev 171 and Ev 263.

²⁴ Q 212.

are in no doubt whatsoever what they have got to do”,²⁵ Blaby District Council said “the statutory duties relating to re-use, recycling and recovery of waste are vague and couched in terms of targets (with unspecified and uncertain penalties for failure) and the making of plans (with no requirement to implement)”.²⁶ This viewpoint was echoed by the LGA, which said “we do not yet know what we are going to be asked to deliver”.²⁷

24. Part of the problem is that, at present, different Government departments lead on different aspects of waste policy. Defra leads on most waste issues, including setting targets, but the Department for Trade and Industry (DTI) is involved in innovation and producer responsibility and the Office of the Deputy Prime Minister (ODPM) is responsible for wider local authority issues. Our witnesses expressed the view that all Government responsibility for waste management should be located in a single department and that that department should logically be Defra.²⁸

25. Defra, DTI and ODPM told us that there is no problem with communication between the departments and that they work closely together under the current arrangement. This has not always been the experience of our witnesses. The LGA said “we are still not getting coherent, joined-up strategic thinking”,²⁹ and the CBI said that split responsibility for waste “has caused confusion and has made it difficult for Government to develop coherent waste strategy”.³⁰

26. The Government has accepted the Strategy Unit’s recommendation that a review of the merits of focussing all waste policy in one department should be conducted. The Cabinet Office will carry out the review, which is to be completed by the end of December 2003.

27. The current fragmentation of responsibility between three Government departments has hindered the evolution of a consistent approach to resource use and waste management. The Government as a whole must ensure that its policies are consistent and mutually supportive. However, whether or not the Government decides to concentrate waste and resource use policy-making in a single department, these issues are so far-reaching that there will always be some degree of shared responsibility. Defra’s particular tasks are to prove that there is sufficient political will to pay for sustainable waste management and to give the clearest possible signals of exactly what is required of all the stakeholders involved.

Negotiations with the European Union

28. Much of the UK’s environmental legislation originates in the European Union, and waste is a topic to which the Commission is paying more and more attention. Defra, then, is one of the Government departments that is most closely affected by decisions made in the Council of Ministers, yet its ability to manage European Union Directives is still disappointing.

²⁵ Q 356.

²⁶ Ev 188, para 5.3.

²⁷ Q 187.

²⁸ For example, see Ev 246, para 3.1, Q 230.

²⁹ Q 231.

³⁰ Ev 255, para 2.1.3

29, We accept that, with Qualified Majority Voting on most environmental decisions and in particular with a much larger European Union to come, it may not always be possible to negotiate the ideal outcome for this country. Nevertheless, we are left with the impression that Defra views the negotiation and implementation of environmental Directives as a painful chore rather than as a positive opportunity for change. Our witnesses accused Defra of adopting a “compliance approach” and taking a stance that was “too often to drag its feet until the last minute”.³¹ The LGA told us that it wanted to see “a department which is going into bat for waste management [...] that is not afraid to engage with the European Union on emerging Directives”³². We echo that wish. A much more pro-active approach is vital if Defra is serious about sustainable waste management.

30. Both the LGA and the Environmental Services Association complained that the Government did not issue clear guidance on new Directives. The LGA said that local governments needed more warning of changes, and that it wanted “no more surprises in terms of the European legislation. Let us be ahead of the game and see what is coming and be prepared for it”.³³ The ESA said that “after years and years of engagement we still do not even begin to know what Defra’s position [on financial regulations under the Landfill Directive] is likely to be”.³⁴ It is vital that Defra improves its approach to European Union Directives. It should consult with its stakeholders earlier and we would like it to adopt a “maximum benefit” approach rather than the “least short-term cost” attitude it seems to have now.

31. The problem does not appear to be one of a lack of commitment at senior levels in Defra. On the contrary, both the Secretary of State and the Minister have been frank about the shortcomings of England’s waste performance and have emphasised the need for change. Rather, the problem seems to be a lack of capacity: a lack of funds and a lack of sufficiently experienced staff. The Environmental Services Association was “very concerned about the skill and the resource level in Defra at the moment”;³⁵ the Composting Association told us that Defra staff are “definitely overworked. They are definitely underfunded [...] they do not have the expertise”;³⁶ and the Environment Agency said that Defra “are very stretched”.³⁷

32. The Minister told us that this was a matter to which Defra had given a lot of attention. He told us, “it is absolutely the case that we are stressed and strained in order to deliver, but we are trying to meet that challenge”.³⁸ On 6 May 2003, Defra announced that it was establishing a new delivery team to “drive implementation of the sustainable waste delivery programme”.³⁹ Defra’s lack of capacity is an important issue not only for sustainable waste management but for sustainable development as a whole. We are encouraged that Defra

³¹ Ev 2, para 10 and Ev 246, para 3.3.

³² Q 231.

³³ Q 213.

³⁴ Q 295.

³⁵ Q 295.

³⁶ Q 287.

³⁷ Q 325.

³⁸ Q 345.

³⁹ Defra, May 2003, *Government response to Strategy Unit report ‘Waste not, want not’*, p. 17.

has recognised that this is a matter that needs attention and we will return to this issue in future inquiries.

Environment Agency

33. As we discuss later, effective and consistent regulation is an important prerequisite for acceptable waste disposal. In our view, regulation of waste facilities and prevention and prosecution of environmental crimes are the Environment Agency's most important roles in waste management. We recognise that it can also offer information and expert advice, but should the two come into competition, for example for funding, the Agency must ensure its regulatory obligations are met first.

34. There is some evidence that many of the Agency's core customers are not satisfied with its record on regulation and environmental crime. The LGA told us that "[the Agency's] environment protection budget has been curtailed this year. Personally I think they should have a ring-fenced amount of money to pursue fly-tipping issues because it is something that the public finds very distasteful and there are not the resources to prosecute and follow up".⁴⁰ The London Borough of Southwark said that the Agency was "overstretched" and had done little to pursue prosecutions for crimes such as fly-tipping. Moreover, the Agency had rejected the local authority's offer of seconded local authority officer to work with the Agency on this kind of crime.⁴¹

35. The Environmental Services Association emphasised the need for a "level playing field"⁴² for regulation so that companies that invested in expensive environmental protection systems could be certain that illegally polluting rivals would be punished.⁴³ The National Audit Office's recent report on the Environment Agency's regulation of waste management recommended that the Agency carry out fewer but more comprehensive and in-depth inspections of waste operators and improve its detection of illegal waste activities, such as fly tipping.⁴⁴

36. The Agency said that it had sufficient resources to enforce compliance with landfill diversion targets and prosecuted polluting waste management facilities "where necessary".⁴⁵ It cautioned, however, that penalties imposed by the courts for waste-related offences did not match the potential gains of illegal activity and that therefore the penalties did not yet act as deterrents in their own right.⁴⁶ In its response to the Strategy Unit report, the Government said that "the Home Office is already working with the Magistrates' Association and with District Judges regarding guidance on sentencing" and that it would investigate other deterrents.⁴⁷ We are pleased that the Government is pressing for higher

⁴⁰ Q 215.

⁴¹ Q 165.

⁴² Q 292.

⁴³ Q 320.

⁴⁴ National Audit Office, December 2002, *Environment Agency: Protecting the Public from Waste*, HC 156 and see uncorrected evidence taken by the Public Accounts Committee on 22 January 2003, available at <http://www.parliament.uk>.

⁴⁵ Q 337.

⁴⁶ Q 336.

⁴⁷ Defra, May 2003, *Government Response to Strategy Unit report 'Waste not, want not'*, p. 11.

penalties for serious environmental crimes. We recommend that the proceeds of fines imposed for such crimes be passed to the Agency to support its work.

37. As waste management becomes less polluting it is likely to become more expensive, which increases the incentives to commit environmental crimes. The Government must ensure that the Environment Agency is adequately resourced to enforce waste legislation. In its focus on the most seriously polluting incidents, the Agency must not lose sight of the smaller scale but cumulatively damaging crimes such as fly-tipping.

38. The Environment Agency foresees that “at least 1000 new waste treatment facilities will be required [in order to meet the requirements of the Landfill Directive.] This will place a strain on the planning system and on the environmental licensing process”.⁴⁸ The Agency is responsible for licensing waste management activities. The Environmental Services Association and the British Cement Association both complained that the Agency took far longer to decide on permits and licences than its counterparts in other European Union Member States. The ESA wants “type approval” introduced: “we do not want to have to go to the Agency in Stockport and go through the same rigmarole that we went through with the Agency in South Wales or Dover for the same machine”.⁴⁹ The Agency told us that it was trying to streamline its systems and was “increasingly using standard template permits, so there are standard conditions which all sites have to meet”, but that differences between sites had to be accounted for in their licences.⁵⁰

39. New waste management plants must be judged against the best available techniques and each must be considered within its local context. Nevertheless, the Environment Agency must speed up its licensing procedures, without compromising the level of environmental protection offered, if the necessary increase in waste treatment facilities is to be achieved.

⁴⁸ Ev 104, para 1.

⁴⁹ Q 320.

⁵⁰ Q 338.

Making use of waste

On 12 February 2003, members of the Committee visited a cement plant operated by Castle Cement at Ketton in Rutland and a presentation given by partners in a plastics recycling project called Panel Plus in Leicester.

Waste incineration in cement manufacture

Castle Cement is part of the HeidelbergCement group. The Castle cement works at Ketton has two kilns, produces 1.4 million tonnes of cement a year and has a workforce of 360 people.

The cement making process consumes a lot of energy, because of the very high temperatures needed to convert limestone into clinker ready to be ground into cement (1450°C, although the kiln flame burns at 2000°C). In turn, this means that cement manufacture consumes a lot of fuel. Energy represents 70% of the company's variable costs. In addition to coal, Castle uses three waste-derived fuels at Ketton: 'Cemfuel', 'Profuel' and tyres.

Representatives from the British Cement Association and from all the cement manufactures in the United Kingdom were present.

The Environment Agency granted approval for the permanent use of Cemfuel as an alternative fuel at Ketton in December 1995. Cemfuel (also called secondary liquid fuel or SLF) is manufactured from waste solvents and oils that are not able to be recycled or re-used. One tonne of Cemfuel replaces one tonne of coal and up to the end of 2002, 193,828 tonnes of Cemfuel had been used at Ketton.

The Environment Agency granted approval for the permanent use of Profuel at Ketton in December 2000. Profuel is a solid fuel manufactured from certain paper, plastic and fibre wastes. As an example, the Committee saw offcuts from disposable nappies being used. The material has a slightly lower calorific value than coal.

There is a Profuel factory managed by Castle's sister company SRM on the Ketton site. The factory accepts the waste material, and inspects, sorts and blends it. The material is then shredded, which helps its complete combustion in the kiln. The factory was commissioned in 2002 and produced 10,000 tonnes of Profuel in that year, which was used in cement manufacture.

The Environment Agency granted approval for the permanent use of tyres as an alternative fuel at Ketton in July 1998. Tyres have a very high energy content, approximately equivalent to that of coal. The steel reinforcing in tyres replaces a portion of the iron that is otherwise used in cement manufacture. 9,000 tonnes of tyres (more than a million tyres) had been used at Ketton by the end of 2002.

Plastics Recycling

Panel Plus is a plastics recycling project developed by a consortium and supported by WRAP, the Waste and Resources Action Programme. The consortium consists of Euro-projects LTTC Ltd., Leicester City Council, Loughborough University, Plastics Reclamation Ltd., Safecomp Ltd. and Southfields Coachworks Ltd. It aims to take

Plastics recycling (continued)

municipal waste plastic and recycle it into lightweight but tough panels, which can be used in a range of applications such as bodywork for trucks, caravans and boats.

The project covers all stages of plastic recycling, from collection from the municipal waste stream, through manufacture and sale of the new product and back to recycling of the new product once it becomes waste.

The first step is collection of waste plastic. The plastic fraction of the waste will then be sorted and shredded into flakes which are melted and re-formed into sheets. These sheets are coated with a thermoplastic 'skin'. The properties of the skins, and so of the panels, can be varied according to the product's final application. For example, they can be made to be fire resistant. The technology involved in the formulation and large-scale manufacture of both the core and of the skins is still under development.

The panels can be used in a number of applications. At the moment the consortium is concentrating on their use as lightweight bodywork panels for trucks. There is a demand for more lightweight trucks that can carry a greater payload for the amount of fuel used.

The consortium involves industry, local government and academics. Leicester City Council provides the waste plastic from its municipal waste. The Council has just entered into an agreement with the waste management firm Biffa with the aim of diverting 80% of its waste from landfill and plastic recycling will help towards this goal. The Institute of Polymer Technology and Materials Engineering at Loughborough University is carrying out much of the research and development side: the development of the skins, manufacture of the recycled panel cores, analysis of the resulting materials, panel testing and panel recycling.

Plastics Reclamation is a company that already makes recycled plastic products. It accepts and sorts the waste plastics and manufactures the panel cores from this waste. The thermoplastic skins are being developed by, and will be manufactured by Safecomp and Euro-projects. Safecomp already makes polymer composite compounds for use in, for example, crash barriers and lighting columns. Euro-projects LTTC Ltd is a research, development and technology transfer centre, specialising in the processing and application of thermoplastic composite materials.

Southfields Coachworks manufactures commercial vehicle bodies. It will use the panels in its trucks to make the trucks lighter.

The consortium won funding from WRAP for the project's research and development phase.

Local Authorities

40. As we discuss above, local government responsibility for waste is split between County and District Councils, except where there is a unitary authority. This has some disadvantages, which were outlined by Lancashire County Council:

“One of the major barriers [to improvement of waste management performance] was the split of responsibilities between Waste Disposal and Waste collection Authorities, and in particular that the primary responsibility for recycling is placed with the Collection Authority, i.e. District Councils. The barrier is not just

organisational or functional, it also concerns finance and resources and general issues of Local Government Finance.”⁵¹

41. The LGA conceded that “there are inefficiencies in the two-tier system, there is no doubt about that, not with every two-tier system but with some” and suggested that joint waste strategies would be “a big step towards improving efficiency.”⁵² Efficiency aside, there is also the problem that Disposal Authorities lack incentives to encourage recycling, because any savings in disposal costs made by recycling have to be paid to the collection authority.

42. Although we do not agree with Oxfordshire County Council’s view that unitary resource management authorities are “essential”,⁵³ we think there are considerable benefits to be gained from local authorities working together. For example, Danish municipalities jointly own waste treatment facilities, which allows them to benefit from economies of scale. Here, where it is more likely that such facilities will be privately owned, regional waste plans can encourage the development of a flexible mix of local waste management options. Local authorities working together through Best Value can also learn from one another’s experiences. We recommend that, where possible, local authorities produce joint waste strategies to minimise disposal and to encourage waste minimisation, re-use and recycling. We also recommend that the Government consider what incentives it could introduce for disposal authorities to encourage recycling and composting.

Waste Management Techniques

On 22 January 2002 Members of the Committee visited a Materials Recycling Facility (MRF) and a pilot composting plant, both operated at Rainham in Essex by Cleanaway Ltd, and SELCHIP, an energy from waste facility in Lewisham, operated by Onyx.

Rainham Materials Recycling Facility (MRF)

Cleanaway operates a materials recovery facility at Rainham that can sort and bale 50,000 tonnes of material a year. The plant accepts mixed, but dry, recyclables from household waste. The mixed material can contain clean paper and cardboard, food and drinks cans, aluminium foil, plastic bottles and containers and thin plastic carrier bags.

Composting pilot

Cleanaway also has a composting facility at Rainham. We saw three types of composting: open windrow, GORE static and in-vessel composting. In the open windrow system, green waste only is shredded then piled in long rows in the open air. These are turned from time to time.

In the GORE method, the shredded material is covered and the air supply and temperature of the pile is controlled. The in-vessel system can take kitchen or catering waste as well as green waste. Once in the unit it undergoes seven to ten days of high temperature composting. After this it is turned out onto a windrow where the partially composted material matures for several weeks.

⁵¹ Ev 224, section 4.

⁵² Q 197.

⁵³ Ev 228.

Rainham Materials Recycling Facility (MRF) (continued)

The materials are currently being tested for their suitability for use as garden compost and in other applications on-site.

SELCHIP

Onyx operates a mass-burn incineration plant in Lewisham. This plant was established as a result of partnership between the public sector (the London boroughs of Lewisham, Southwark and Greenwich) and private companies (Martin Engineering Systems and some other, minority, shareholders). SELCHIP stands for South East London Combined Heat and Power Consortium.

The plant can handle 420,000 tonnes of household waste a year. This waste is burnt on an incineration grate. The burning layer of refuse on the grate is mixed and rotated for even burning. Extra fuel is only needed when the plant is started up. The energy released in the process is recovered in a boiler; the steam feeds directly into a 35 mega-watt steam turbine generator in a turbine hall next to the incinerator. The flue gases from the incineration process are cleaned using a selective Non-Catalytic Reduction (to reduce oxides of nitrogen to nitrogen and water), then acid gases are neutralised and an activated carbon scrubber is used to absorb dioxins and heavy metals. Particulate matter is removed by a filter and then the gases are ejected into the atmosphere.

5 Incentives for waste producers

43. Greater resource efficiency and waste minimisation may pay for themselves, but shifting from cheap disposal via landfill to higher recycling and less polluting disposal methods will be expensive, at least in the short term. An important question for the Government, then, is how it can persuade local authorities, businesses and individuals to adopt a more sustainable approach to waste management.

44. We note the Government's recognition that markets involving the environment are particularly likely to be subject to imperfections or failures and that economic instruments are often needed to correct these failures.⁵⁴ This is very much the case for waste management. At present in England, the price of waste management options is almost the reverse of the waste hierarchy; landfill is still by far the cheapest option, incineration is often the next cheapest and recycling is considered very expensive.

45. There are a range of incentives and disincentives that can be applied. What is important is that economic instruments are designed to achieve the ultimate goals of sustainable waste management – best use of resources, waste minimisation and high levels of re-use and recovery. Local authorities and industries are naturally concerned with cost effectiveness and we fear that increases in the landfill tax could simply drive waste to the next cheapest option, which is likely to be another form of disposal such as incineration.

⁵⁴ HM Treasury, 2002, *Tax and the Environment: using economic instruments*, para 1.2.

We would like to see a system where the relative net costs of waste management options reflect their position in the waste hierarchy.

Disposal taxes

46. Our witnesses welcomed the increase in the landfill tax announced in the Pre-Budget Report of November 2002, but many would have liked the tax to be raised faster because they believe that £35 per tonne is the minimum rate required to change waste management choices. The Minister said that the tax would not be high enough to meet the first deadlines of the Landfill Directive, but that other important drivers, such as the Waste and Emissions Trading Bill would be in place in time. We welcome the increase in the landfill tax and recognise the need for waste producers and local authorities to have adequate time to prepare for it, but we urge the Government to raise it more rapidly than the minimum £3 per year outlined in the Pre-Budget Report. We are persuaded that the tax will have little influence until it reaches a rate of £35 per tonne.

47. The Danish model, whereby waste management options are subject to a differentiated tax according to their environmental impact, has been very successful in diverting waste to their Government's preferred management techniques. Landfill attracts the highest rate of tax; in addition, many types of waste are banned from landfill. Incineration attracts a lower rate, and recycling and composting are zero-rated. In the past, incinerators that generated both heat and power attracted a lower rate than ones that generated heat alone, which in turn were subject to less tax than incinerators which recovered no value from the waste at all. All municipal waste incinerators in Denmark are now required to provide both heat and power.

48. Several of our witnesses were in favour of replicating such a graduated disposal tax here.⁵⁵ However the ESA and INCPEN took the view that, although not opposed to an incineration tax in principle, there was still a need to expand incineration capacity in England in order to meet landfill diversion targets and a tax would be counter-productive at this stage. The Government has commissioned a review of the environmental and health effects of all waste management options and said that it will consider the case for an incineration tax in the light of the findings of that review and in consultation with stakeholders.⁵⁶

49. The current economic and fiscal regime has failed to promote sustainable waste management. We are therefore sympathetic to calls for graduated disposal tax. It is not, however, the only way in which the Government can influence the attractiveness of different ways of dealing with waste. For example, Eunomia Consulting criticised the fact that energy from waste plants receive support under the Renewables Obligation.⁵⁷ The Centre for Business Relationships, Accountability, Sustainability and Society recommended that the Government withdraw the current exemption from the Climate Change Levy for power produced by incineration of mixed wastes.⁵⁸ We recommend that the Government ensure that all economic instruments – both taxes and subsidies – are

⁵⁵ See, for example, Q 208, Ev 246, para 3.2, Ev 3, para 18, Ev 263.

⁵⁶ Defra, May 2003, *Government response to Strategy Unit report 'Waste not, want not'*, p. 12.

⁵⁷ Ev 237, para 45.

⁵⁸ Ev 263.

used in such a way that they reflect the position of each waste management option in the waste hierarchy.

50. The Government does not support “any significant expansion of incineration”⁵⁹ and has said that it is “not providing any incentives for incineration [...] we are clear about the waste hierarchy and incineration is just above landfill.”⁶⁰ Its policy on municipal waste incinerators or other energy from waste facilities is that “they should be considered only where it can be shown that they are appropriately sized so that they would not ‘crowd out’ recycling.”⁶¹

51. It seems, then, that the Government’s position on incineration is based upon incineration’s low ranking in the waste hierarchy and the possibility that it can pose a threat to recycling. Public opposition, on the other hand, centres largely on the belief that incinerators pose a threat to human health. The Government does not “rule out the possibility that it [incineration] may be necessary in some cases”.⁶² The Government should publish a report on the use of incineration techniques setting out the case both for and against this type of waste disposal. It should also make its own position clear on incineration addressing particularly the health and environmental implications of this type of disposal.

52. We welcome the Government’s decision to commission a survey of the environmental and health effects of all waste management options but are worried that a simple review of material already in the public domain will do little to influence what are often entrenched views. Where there is still significant scientific doubt about the impacts of different methods of waste management, the Government should commission new research into those impacts.

53. We accept that well managed, well regulated waste management facilities that operate to the best available techniques pose a minimal threat to public health. However, we are concerned that the Environment Agency does not have the capacity to regulate effectively, particularly in the face of the increasing demands on it. Unless the public and the waste management industry can be assured that all facilities are stringently regulated and operate to the best of international standards, public confidence in the safety of such facilities and industry’s willingness to invest in the best available equipment will both be compromised.

Household charging

54. Householders pay for the collection and management of their waste through their council tax. The cost of waste management is not differentiated from the costs of the other services their council provides, and few people know how much of their council tax is spent on waste. In addition, the cost to the householder is the same no matter how much waste they throw away or recycle, so there is little incentive for individuals to try to reduce the amount of waste they produce.

⁵⁹ HC Deb, 6 March 2003, col 945 [Commons Chamber].

⁶⁰ HC Deb, 20 Mar 2003, col 1130 [Commons Chamber].

⁶¹ HC Deb, 8 Apr 2003, col 137W [Commons written answer].

⁶² HC Deb, 6 March 2003, col 945 [Commons Chamber].

55. Consumers need to be made aware of waste as an important environmental issue. At the moment it is easy for them to ignore the problem. Waste minimisation, producer responsibility, and the ‘polluter pays’ principle are all at the heart of a sustainable waste management policy and there is no reason why the householder should be exempt.

56. We agree with the Local Government Association that variable charging for household waste collection should not be regarded as an additional source of revenue for local authorities but primarily as a means of changing householders’ behaviour. We understand their concern that, in some areas, introducing direct charges could result in fly-tipping. It should therefore be for the council concerned to decide what type of incentives or disincentives are most appropriate for each area.

57. There is also concern that variable charging for waste collection can be regressive. Variable charging is only fair if people have a means of controlling the amount of waste they dispose of and this means that good recycling services must be in place. It is clear that new waste initiatives need to be accompanied by good public awareness and education campaigns.

58. We regret that the Government has not yet decided whether to allow local authorities to introduce household incentive schemes.⁶³ There is already a body of evidence available to draw on⁶⁴ and local authorities themselves are best placed to judge what is suitable for their area. Therefore, we recommend that the Government complete its deliberations about local authority household incentive schemes as soon as practicable and certainly by the time of the next Pre-Budget Report. We are strongly in favour of local authorities being given the ability to introduce incentive schemes if they so wish.

6 Local authorities

59. Local authorities bear the brunt of the responsibility for delivering sustainable waste management. The Government is making great demands on them and the signals they are sent are sometimes clouded if not conflicting. They are required to divert waste from landfill, but re-use and recovery are expensive. This makes incineration an attractive option, but one often rejected by the public, largely because of fears about its safety.

60. In addition, sustainable waste management is not always a priority for the public, particularly in more deprived areas.⁶⁵ The LGA said

“Local councillors are elected by local people to make those judgements [about political priorities] and some of them will not have regarded sustainable waste management as high on their list of priorities and I do not think we can criticise them for that [...] this drive towards more sustainable waste management is a very recent one.”⁶⁶

⁶³ *Budget 2003*, HC (2002–03) 500, para 7.54.

⁶⁴ Eunomia Research and Consulting, *Waste Collection: to charge or not to charge. Final Report to the Chartered Institute of Wastes Management Environmental Body*, 2003 and Strategy Unit, 2002, *Waste Not, Want Not*.

⁶⁵ For example, see Q 162.

⁶⁶ Q 196.

Funding

61. The LGA told us that introducing kerbside collection systems for recyclable waste costs “roughly two to three times as much as black bag collection” and that “there is a mismatch between the public and the Government and European expectations of what we should achieve and the money with which we are supposed to do it.”⁶⁷ The Minister said that he did not think that local authorities “can honestly say they have not got the money”.⁶⁸ He told us that the Government had substantially increased the amount of money available to local authorities for sustainable waste management by increasing their overall funding, by setting up a challenge fund for recycling and waste minimisation projects and by increasing the opportunities for PFI projects. The possibility of funding from revenue from the increased landfill tax has yet to be decided.

62. Southwark Borough Council argued that increases in Environmental, Protective and Cultural Services (EPCS) funding do not take account of increased burdens imposed on local authority waste services by increasing waste generation, greater regulation and higher costs for waste disposal.⁶⁹ Furthermore, the EPCS funding block covers a wide range of council services, many of which the local electorate values more highly than sustainable waste management.

63. It remains to be seen whether the total pot of money available for local authorities to spend on more sustainable waste management is large enough. However, we are dissatisfied that what funding there is has to be bid for in competition with other authorities, or is not specifically for waste, or is tied to the introduction of Private Finance Initiatives.

64. However, adequate funding alone is not enough to secure sustainable waste management. As we were told by Southwark Borough Council, “in some respects, you could throw loads of money at us and we would set up all the infrastructure, we would have all the vehicles, all of the equipment, but it all comes back to changing people’s culture, changing people’s habits.”⁷⁰ In making this statement, Southwark also reflected the practical difficulties in introducing modern waste management policies into difficult inner city areas.

Powers

65. Local authorities welcomed the change to the Environmental Protection Regulations⁷¹ that allow waste collection authorities to serve notices on people who produce, store, transport or dispose of waste illegally.⁷² However, Southwark Borough Council wanted “to be able to take stronger enforcement action and to deal with people driving through our borough [who intend to dump rubbish illegally] we would like [accompanied by a police

⁶⁷ Qq 190 and 197.

⁶⁸ Q 347.

⁶⁹ Ev 46.

⁷⁰ Q 174.

⁷¹ Statutory Instrument 2003, No. 63, *The Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003*.

⁷² Q 163.

officer] to be able to stop these vehicles [and] to seize them”,⁷³ because it felt that the Environment Agency was not able to pursue these kinds of crimes.

66. The Government has accepted that fly tipping must be combated more effectively and is “pursuing greater powers for local authorities to take action against fly tipping through the Anti-Social Behaviour Bill”.⁷⁴ We welcome the measures in the Anti-Social Behaviour Bill that will give local authorities greater powers to take action against fly tipping. We recommend that such powers be accorded to local authorities as soon as practicable.

67. A key task for central and local government is to encourage an environmentally responsible public attitude to waste and thus increase people’s willingness to minimise the waste they produce and to make the effort to recycle and compost where possible. An important way this can be achieved is through educating schoolchildren about waste and resource use. We were therefore troubled to hear from ENCAMS that schools which introduce recycling schemes as a way of minimising waste and educating their pupils in sustainable development and active citizenship are often told that, as commercial organisations, schools cannot be included in local authority recycling schemes. We agree with ENCAMS that this “sends exactly the wrong messages to pupils”.⁷⁵ The Environmental Audit Committee is currently conducting an inquiry into education for sustainable development⁷⁶ and has been told that many schools are nevertheless recycling very successfully. We recommend that the Government fully support school waste minimisation and recycling schemes which involve pupils. The Government should work with local authorities to remove barriers to schools’ inclusion in local authority recycling schemes as soon as possible.

Markets for recyclates

68. It is hard to overstate the importance of markets for recycled goods and materials. A step change is needed to ensure that waste is valued for the resources it contains. The Waste and Resources Action Programme (WRAP), a not-for-profit company set up by Government to increase recycling, initially by encouraging markets for recycled materials and products, has had an impressive record so far. In its response to the Strategy Unit’s report, the Government outlined a much wider role for WRAP. Its new remit includes waste minimisation schemes, education and awareness programmes and the provision of advice on recycling to local authorities. as well. We welcome this wider role for WRAP in principle, but its focus on markets must not be lost.

69. The European Commission has not taken a positive view of state aid to promote recycling and is currently investigating a WRAP grant to a paper reprocessing plant at Shotton.⁷⁷ WRAP believes that this is because few, if any, other Member States have taken a market-led approach to increasing recycling, preferring to subsidise collection. We are disappointed that the Commission does not appear to include recycling under its

⁷³ Q 163.

⁷⁴ Defra, May 2003, *Government response to Strategy Unit report ‘Waste not, want not’*, pp 4 and 22.

⁷⁵ Letter from Robert Stephenson, ENCAMS, 2 April 2003.

⁷⁶ See the Environmental Audit Committee’s press notice of 16 January 2003 at http://www.parliament.uk/parliamentary_committees/environmental_audit_committee/eac_160103.cfm.

⁷⁷ Qq 80–82.

Environmental Guidelines for state aid, and recommend that the Government support WRAP in its negotiations with the Commission.

70. Governments and public bodies can support markets for recycled materials by purchasing recycled goods. The Government accepted, in principle, the Strategy Unit's recommendation that it should set targets for its use of recycled materials but is "not convinced that setting voluntary targets for local authorities [for purchase of recycled goods] would be appropriate at this stage".⁷⁸ We recommend that public bodies adopt green procurement strategies wherever it is economically feasible to do so and that Parliament and central Government take the lead.

7 The community sector

71. Community waste minimisation, re-use, recycling and composting schemes have an impressive record in delivering real gains to local sustainable waste management and in taking forward the sustainable development agenda more broadly through social projects. Members of the Community Recycling Network provide kerbside recycling services to 1.6 million households in the UK.⁷⁹ A survey conducted by the University of Bradford study showed that 35 per cent of community waste projects supported low-income families through the provision of low cost furniture and more than 40 per cent provided training through the New Deal or other intermediate labour market schemes.⁸⁰

72. Moreover, community recycling schemes can often "harness the goodwill"⁸¹ of local residents more readily than either local authorities or commercial enterprises. Southwark Borough Council works with Southwark Community Recycling, which conducts door-to-door collections of recyclable materials. "They get a good response. It is that personal touch."⁸² Bath and North East Somerset Council attributed some of its success in reaching high levels of recycling to its partnership with Avon Friends of the Earth.

73. As we discuss above, there is little incentive at present for householders to sort their waste into different categories for recycling. Any means of increasing participation in recycling schemes is greatly to be welcomed. The Government has already recognised the role that community organisations can play⁸³ and we applaud efforts of waste companies to involve the community sector in their integrated waste management plans.⁸⁴

74. However, community not-for-profit projects face financial barriers to their work and certain aspects of waste policy can act against them. For example, disposal authorities are only obliged to pay recycling credits for recycling carried out by collection authorities. Payment to third parties such as community projects is discretionary. We recommend that both central and local government actively support community waste projects. The

⁷⁸ Defra, May 2003, *Government Response to Strategy Unit report 'Waste not, want not'*.

⁷⁹ Ev 238, para 2.

⁸⁰ D. Luckin and L. Sharpe, 2003, *Sustainable development in practice: community waste projects in the UK*, University of Bradford.

⁸¹ Ev 238.

⁸² Q 174.

⁸³ Defra, 2001, *Guidance on Municipal Waste Management plans*, <http://www.defra.gov.uk/environment>.

⁸⁴ Q 293.

Government should consider making the payment of recycling credits to community waste projects mandatory, or seek other ways in which such projects can minimise their unrecovered costs.

8 Priority waste streams

75. A vast amount of waste is produced in this country every day, and the rate of production is still rising. We were greatly encouraged by the Strategy Unit's emphasis on waste minimisation, but that focus seems to have been somewhat lost in the Government's response. Until the principles of sustainable resource use and waste minimisation are embodied in Government policy and action, waste disposal will continue to be a growing problem. In the face of such a challenge, the Government should prioritise those wastes that cause the greatest damage to the environment when they are disposed of, or whose recycling represents the greatest savings in energy and material use compared to use of the virgin material.

Biodegradable waste

76. Biodegradable (organic) waste is important because it represents a high proportion of household waste and because when disposed of in landfill it produces the greenhouse gas methane. Conversely, when managed well, biodegradable waste can be used to make valuable high quality compost, which in turn can reduce our reliance on peat-based composts and can be used as a soil improver.

77. The difficulty with this waste stream is that household biodegradable waste normally contains products of animal origin. Since the foot and mouth disease outbreak in 2001, the risks posed by animal by-products persisting in compost used on agricultural land have been highlighted. The Government rightly judges that minimising risks to human and animal health should be the first priority and has amended the Animal By-Products Order (SI 1704, 2001) to reflect this. This Order will be superseded by the EU Regulation laying down health rules concerning animal by-products not intended for human consumption (EC/1774/2002), which will impose new controls on animal by-products from 1 May 2003. However, once again the Government has been slow to clarify the meaning of the Regulation and has left those who will be most affected uncertain of how to proceed.

78. The Composting Association expressed concern that animal by-products regulation was being dealt with by the Animal Health Division in Defra and that therefore the waste management aspects were poorly understood. The Association felt that some of the proposals "have been translated from rendering industries, the way abattoirs work, not in the way composting works and waste management works" and that the implications of the legislation have "not been clear at all and it has been extremely ambiguous."⁸⁵

79. Alternative methods of dealing with biodegradable waste are more expensive but may be preferable for waste containing products of animal origin such as kitchen waste. However, once again Defra has been slow to issue guidance. The LGA said "we still await clarity on how that by-product [of anaerobic digestion] [...] will be classified in the UK in

⁸⁵ Q 259.

relation to its future use.”⁸⁶ Defra must ensure that regulations and guidance on the treatment of biodegradable waste are made available as soon as possible and that it makes every effort to minimise the negative impact of such regulations on the composting industry.

80. Kerbside collections of kitchen waste and paper may prove to be essential if England is to meet its landfill targets. We would expect the paper to be recycled, but the choice between home composting and central composting depends on local circumstances.

81. Home composting can be an eminently sustainable way of dealing with garden waste where residents have the space, knowledge and willingness to carry it out. However there is little incentive for local authorities to encourage home composting at present. Green waste collections that are centrally composted count towards councils’ recycling figures but home composting does not. The Government told us that this is because “there is no way of checking systematically whether it is happening and whether it is being done to the appropriate standard”.⁸⁷ We urge the Government to look again at ways of recognising success in promoting home composting in local authorities’ waste performance figures.

82. The European Commission is expected to produce a Biowaste Directive soon, which will require the separate collection of organic waste. At the same time the Commission and Defra are each working on soil strategies to address loss of soil nutrients and declines in soil structure. This is an opportunity for Defra to integrate its soil and organic waste strategies and to provide a springboard for an internationally competitive composting industry to export its expertise. We recommend that it takes the opportunity.

Hazardous waste

83. Hazardous wastes are by their nature the most likely to cause damage to human health and the environment. The Government should prioritise waste minimisation, producer responsibility and safe treatment for these wastes.

84. We undertook an inquiry into hazardous waste in 2002.⁸⁸ At the time, we expressed concern that the Government was ill-prepared for the diversion of hazardous wastes from landfill that is required under the Landfill Directive and recommended that a hazardous waste forum be established to address the problem. Such a forum was set up, but the Environmental Services Association informed us that it has met only once since it was set up and that “in reality we are no farther forward since last summer.”⁸⁹

85. The Environment Agency told us that the number of landfill sites that will accept hazardous waste is expected to fall from 200 to about 25 by 2004.⁹⁰ This leaves very little time to ensure that either hazardous waste production is drastically cut, or that there are sufficient alternative treatment and disposal facilities available. In its response to this

⁸⁶ Q 226.

⁸⁷ Q 396.

⁸⁸ EFRA Committee, Eighth Report of Session 2001–02, *Hazardous Waste*, HC 919 and Eleventh Special Report of Session 2001–02, *Hazardous Waste: Government’s reply to the Committee’s Eighth Report of Session 2001–02*, HC1225.

⁸⁹ Q 291.

⁹⁰ Ev 104, para 1.

report, Defra should set out the progress it has made in preparing for next year's reduction in hazardous waste landfill capacity and also the activities of the hazardous waste forum.

Dry recyclable waste

86. Recycling is not an end in itself, but rather a tool to encourage, among other things, greater resource efficiency. Recycling certain material streams offers greater environmental benefits than others, but so far Government recycling targets have only been weight-based. The LGA said “if we had material-specific targets, then we would direct our attention more towards the aluminium – very recyclable – and certain types of plastic – very recyclable”.⁹¹ At present, many authorities instead focus their attention on heavier categories of household waste. Where local authorities introduce collection of garden waste for large-scale composting, this can have the perverse effect of increasing the amount of waste entering the municipal system, even though their recovery figures are improved.

87. Recycling aluminium represents a great energy saving compared to extraction of the raw material. Paper and card make up a significant fraction of household waste and should be diverted from landfill because they are biodegradable. Introducing a separated collection scheme for paper can be one of the easiest first steps for local authorities,⁹² and has the advantage of getting people accustomed to sorting their waste before a broader kerbside scheme is introduced.

88. We recommend that the Government move towards material specific recycling targets, with an emphasis on those materials whose recycling offers the greatest environmental benefit.

⁹¹ Q 222.

⁹² Q 183.

Conclusions and recommendations

Defra

1. We are concerned that Defra still appears to lack the capacity, the vision, the sense of urgency and the political will to break the mould and bring about truly sustainable waste management in this country. (Paragraph 20)
2. The current fragmentation of responsibility between three Government departments has hindered the evolution of a consistent approach to resource use and waste management. The Government as a whole must ensure that its policies are consistent and mutually supportive. However, whether or not the Government decides to concentrate waste and resource use policy-making in a single department, these issues are so far-reaching that there will always be some degree of shared responsibility. Defra's particular tasks are to prove that there is sufficient political will to pay for sustainable waste management and to give the clearest possible signals of exactly what is required of all the stakeholders involved. (Paragraph 27)
3. It is vital that Defra improves its approach to European Union Directives. It should consult with its stakeholders earlier and we would like it to adopt a "maximum benefit" approach rather than the "least short-term cost" attitude it seems to have now. (Paragraph 30)
4. Defra's lack of capacity is an important issue not only for sustainable waste management but for sustainable development as a whole. We are encouraged that Defra has recognised that this is a matter that needs attention and we will return to this issue in future inquiries. (Paragraph 32)

Environment Agency

5. In our view, regulation of waste facilities and prevention and prosecution of environmental crimes are the Environment Agency's most important roles in waste management. We recognise that it can also offer information and expert advice, but should the two come into competition, for example for funding, the Agency must ensure its regulatory obligations are met first. (Paragraph 33)
6. We are pleased that the Government is pressing for higher penalties for serious environmental crimes. We recommend that the proceeds of fines imposed for such crimes be passed to the Agency to support its work. (Paragraph 36)
7. The Government must ensure that the Environment Agency is adequately resourced to enforce waste legislation. In its focus on the most seriously polluting incidents, the Agency must not lose sight of the smaller scale but cumulatively damaging crimes such as fly-tipping. (Paragraph 37)

8. New waste management plants must be judged against the best available techniques and each must be considered within its local context. Nevertheless, the Environment Agency must speed up its licensing procedures, without compromising the level of environmental protection offered, if the necessary increase in waste treatment facilities is to be achieved. (Paragraph 39)
9. We are concerned that the Environment Agency does not have the capacity to regulate effectively, particularly in the face of the increasing demands on it. Unless the public and the waste management industry can be assured that all facilities are stringently regulated and operate to the best of international standards, public confidence in the safety of such facilities and industry's willingness to invest in the best available equipment will both be compromised. (Paragraph 53)

Local Authorities

10. We recommend that, where possible, local authorities produce joint waste strategies to minimise disposal and to encourage waste minimisation, re-use and recycling. We also recommend that the Government consider what incentives it could introduce for disposal authorities to encourage recycling and composting. (Paragraph 42)
11. We recommend that the Government complete its deliberations about local authority household incentive schemes as soon as practicable and certainly by the time of the next Pre-Budget Report. We are strongly in favour of local authorities being given the ability to introduce incentive schemes if they so wish. (Paragraph 58)
12. It remains to be seen whether the total pot of money available for local authorities to spend on more sustainable waste management is large enough. However, we are dissatisfied that what funding there is has to be bid for in competition with other authorities, or is not specifically for waste, or is tied to the introduction of Private Finance Initiatives. (Paragraph 63)
13. We welcome the measures in the Anti-Social Behaviour Bill that will give local authorities greater powers to take action against fly tipping. We recommend that such powers be accorded to local authorities as soon as practicable. (Paragraph 66)
14. We recommend that the Government fully support school waste minimisation and recycling schemes which involve pupils. The Government should work with local authorities to remove barriers to schools' inclusion in local authority recycling schemes as soon as possible. (Paragraph 67)
15. We recommend that the Government move towards material specific recycling targets, with an emphasis on those materials whose recycling offers the greatest environmental benefit. (Paragraph 88)

16. We urge the Government to look again at ways of recognising success in promoting home composting in local authorities' waste performance figures. (Paragraph 81)

Economic Instruments

17. We welcome the increase in the landfill tax and recognise the need for waste producers and local authorities to have adequate time to prepare for it, but we urge the Government to raise it more rapidly than the minimum £3 per year outlined in the Pre-Budget Report. We are persuaded that the tax will have little influence until it reaches a rate of £35 per tonne. (Paragraph 46)
18. We recommend that the Government ensure that all economic instruments – both taxes and subsidies – are used in such a way that they reflect the position of each waste management option in the waste hierarchy. (Paragraph 49)

Markets for Recyclates

19. We welcome this wider role for WRAP in principle, but its focus on markets must not be lost. (Paragraph 68)
20. We are disappointed that the Commission does not appear to include recycling under its Environmental Guidelines for state aid, and recommend that the Government support WRAP in its negotiations with the Commission. (Paragraph 69)
21. We recommend that public bodies adopt green procurement strategies wherever it is economically feasible to do so and that Parliament and central Government take the lead. (Paragraph 70)

Community Waste Projects

22. We recommend that both central and local government actively support community waste projects. The Government should consider making the payment of recycling credits to community waste projects mandatory, or seek other ways in which such projects can minimise their unrecovered costs. (Paragraph 74)

Biodegradable Waste

23. Defra must ensure that regulations and guidance on the treatment of biodegradable waste are made available as soon as possible and that it makes every effort to minimise the negative impact of such regulations on the composting industry. (Paragraph 79)
24. Kerbside collections of kitchen waste and paper may prove to be essential if England is to meet its landfill targets. We would expect the paper to be recycled, but the choice between home composting and central composting depends on local circumstances. (Paragraph 80)

25. This is an opportunity for Defra to integrate its soil and organic waste strategies and to provide a springboard for an internationally competitive composting industry to export its expertise. We recommend that it takes the opportunity. (Paragraph 82)

Hazardous Waste

26. Hazardous wastes are by their nature the most likely to cause damage to human health and the environment. The Government should prioritise waste minimisation, producer responsibility and safe treatment for these wastes. (Paragraph 83)
27. In its response to this report, Defra should set out the progress it has made in preparing for next year's reduction in hazardous waste landfill capacity and also the activities of the hazardous waste forum. (Paragraph 85)

Incineration

28. Where there is still significant scientific doubt about the impacts of different methods of waste management, the Government should commission new research into those impacts. (Paragraph 52)
29. The Government should publish a report on the use of incineration techniques setting out the case both for and against this type of waste disposal. It should also make its own position clear on incineration addressing particularly the health and environmental implications of this type of disposal. (Paragraph 52)

APPENDIX: Visit to Denmark

The Committee undertook a three-day visit to Denmark in March 2003 to learn about the Danish approach to waste management, because Denmark is often held up as an example of a country with a successful sustainable waste management system for all kinds of waste.

Danish Environmental Protection Agency

The Committee spoke to Christian Fischer, Head of the Household Waste Division and Lene Bjerg Kristensen from the Copenhagen EPA.

Statistics

Of all waste produced in Denmark in 2001, 63% was recycled, 25% was incinerated with energy recovery, 10% was landfilled and 1% went for special treatment. However, recycling of construction and demolition waste accounts for a large part of the recycling figure. When household waste alone is considered, 30% was recycled, almost 60% was incinerated and just over 10% was landfilled. Mr Fischer told the Committee that, except for paper and glass, Denmark does not usually source recycled materials from households as they are too dirty and contaminated with other materials. He said that recycling rates were much higher in other sectors.

History – reasons for change

Until the 1980s, Denmark still relied heavily on landfill. The shift from landfill was precipitated by concerns over groundwater pollution, particularly because all of Denmark's drinking water comes from groundwater. There was also little remaining space to site new landfills and the country relied heavily on imported fuel and was eager to find alternative energy sources.

However, we were told that one of the reasons Denmark could adapt to a new system was that there was already a basic infrastructure that could deal with all kind of waste, that is, incineration with energy recovery, landfill and disposal of hazardous waste. This infrastructure needed to be in place before they could adapt to changed priorities.

Powerful local government

The Danish waste model is based on the premise that waste management is a public sector task⁹³ and depends on a combination of legislation and taxation. The national government formulates nation-wide waste plans and is responsible for national legislation and economic instruments. Municipal and regional councils are in charge of the practical administration of waste management. They must ensure there is sufficient capacity to deal

⁹³ Biodegradable municipal waste management in Europe. Part 1: Strategies and Instruments. European Environment Agency Topic Report 15/2001. January 2002, p.33.

with all the waste that is produced. This is possible because municipalities direct waste from all sources to the treatment or disposal site of their choice and waste producers must comply. For commercial waste, the waste producer hands the waste to an approved carrier (there are a number of approved carriers in each municipality so there is a degree of choice), and the carrier then transfers the waste to an approved treatment plant (there is no choice of treatment plant). Both the carrier and the treatment plant must submit information to the Environment Protection Agency

Since 1992, all landfill sites have had to be owned by municipal authorities (except that some industries may operate landfill sites solely for their own use). Most incinerators are owned by municipalities or groups of municipalities. This public ownership and the fact that municipalities control where and how waste is disposed of (recycling is mainly privately run) mean that there is effectively no competition between landfill sites or incinerators. There is currently a debate about whether the waste sector should be liberalised. Industry would prefer to send its waste to the cheapest plant and not necessarily the one chosen by the municipality. Some industry figures are in favour of liberalisation as a matter of principle and say they would accept higher waste management costs provided there was competition.

There are a number of laws which promote the waste hierarchy. Waste that can be recycled or burnt is banned from landfill. The paper and glass fractions of household waste must be collected separately for recycling (collection may be either via kerbside schemes or through local bring sites and other waste fractions are also often collected). Construction and demolition waste must be separated into separate fractions at source, in order that as much as possible may be recycled.

Graduated waste tax

The EPA attributed much of Denmark's success in moving waste up the hierarchy to its graduated waste tax, which is highest for waste going to landfill at 375 Danish krona per tonne (DKK/t), lower for incineration with energy recovery (all waste incinerators in Denmark recover energy) at 330 DKK/t and zero rated for recycling. The tax is on top of any fee charged by operators of the waste management facility.

The difference in that tax on landfill and incineration is such that some companies 'mine' combustible waste that was landfilled before the ban and incinerate it, in order to claim the rebated landfill tax.

Revenue from the waste tax was 1.1 billion DKK in 2001. There is some discussion about how this revenue should be used; at present 75 million DKK goes to support recycling and the development of clean technologies and the rest goes into the waste budget.

Waste and energy policies coordinated

Since the 1960s, there have been district-heating systems in many Danish towns, including Copenhagen. These were originally based on oil, but the fuel crisis of the 1970s promoted a switch to coal, gas and alternative fuels including waste. Any new incineration plant requires the approval of the Energy Agency and since the mid-1990s it has required that incineration produce electricity as well as heat. Waste incinerators currently provide 10%

of Denmark's heat supply and 3% of its electricity. The Environmental Protection Agency checks that sufficient waste is available for each plant, but equally looks to ensure there is no over-capacity lest there be less motivation for recycling. As a result, incineration capacity relative to total waste arisings is stable, even though new incinerators are being built or existing ones expanded to cope with increases in the amount of waste produced. Planning permission for new incinerators is a matter for the local councils rather than the EPA. The whole process (from seeking permission to coming online) usually lasts between four and six years, including appeals, for a new incinerator. 60% of the plants already meet the requirements of the European Union Waste Incineration Directive.

Incineration

The Committee visited Vestforbrænding, a waste treatment company owned by 21 municipalities. It treats the waste of 800,000 inhabitants in 22 municipalities (the 21 co-owners and one other). The company's main business is incineration: 65% of the waste it deals it is burnt. However it also recycles 30%, landfills 4% and 1% goes to specialist hazardous waste treatment. In 2001, the waste incineration produced 1,066,000 MWh in district heating and 108,000 MWh of electricity production. The waste burnt replaces about 165,000t of fuel oil. The company charges industries a fee of 200DKK/t for handling the waste (the waste tax is added to this charge but goes direct to national government). This fee covers the net costs of treatment once the income from heat and power generation has been deducted. The company expects its cost to decrease as it moves from five lines to two and accordingly expects to drop its fees to about 100DKK/t excluding tax.

Environmental performance is monitored by the Environmental Protection Agency and emissions are controlled. For example, dust is removed by an electrostatic filter, oxides of nitrogen are reduced to nitrogen gas using ammonia and dioxins are bound using lime and active carbon. Where possible, waste products are sold on as raw materials to other companies, but at present the fly ash and flue gas cleaners are exported to Norway for landfill. However the company and the EPA are working on ways to stabilise or recycle this waste as well. We were told that, although fifteen or twenty years ago there were "tough discussions" with people living close to the plant, the incinerator is accepted now. The EPA told us that this was largely because the incinerators were local, so people accepted that it was their waste that was being treated and that useful products – district heating and electricity – were generated.

For a new plant, it takes about seven or eight years between permission first being sought and operation. This includes two years discussing alternatives, two years to obtain the necessary planning permission and licensing and three or four years building the plant.

Recycling – household waste

The Committee visited a municipal recycling centre and a block of flats whose residents voluntarily separate their domestic waste.

There is some kerbside collection of fractions such as paper and glass and some municipalities are experimenting with source separation and collection of a greater range

of recyclable waste types, but the majority of recycling for household waste relies on individuals taking their waste to bottle and paper banks or 'bring sites' for other fractions.

The recycling centre in the municipality of Herlev handles about a third of all the waste in that municipality. It is a 'bring site', where householders and small businesses can take the recyclable fractions of their waste free of charge. It will accept 27 different types of waste and in 2002 the centre processed more than 20,000 tons of waste, delivered in the course of 170,000 visits. 77% of this waste was recycled. About 50% of the waste received is from smaller construction projects in private households or carried out by the building industry. The recycling centre also receives household hazardous waste, such as paint, batteries and household chemicals. The amount of hazardous waste received has been stable at 74 tons per year for the last few years.

The Committee also visited a residential housing block in the Nørrebro district of Copenhagen, where a pilot project on source separation is being conducted. Nørrebro has 30,000 inhabitants and, before the waste sorting project began, sent 15,000t of waste per year for incineration. Now a quarter of the inhabitants take part in the project and those people have cut the amount of waste they send for incineration by half.

The project takes place in residential housing blocks, which in Nørrebro are built around a central courtyard. A 'waste station' is built in the courtyard which houses containers for different types of waste: paper and magazines; glass; food scraps for compost; cardboard; aluminium and other metal. Only non-meat food scraps can be composted, and there is an on-site closed composter. The resulting compost is often used for the courtyard gardens. In addition to the collection points for waste for recycling, composting and disposal, residents can deposit bulky waste (e.g. refrigerators, furniture, electronic equipment) and dangerous or hard-to-handle waste (such as batteries, anything containing mercury, and PVC plastics). There is also an 'exchange corner' where items that could be re-used, such as clothes, shoes, toys can be left. Residents can help themselves to these items and the remainder are periodically collected by charities such as the Red Cross. Finally, there is a 'garbage' bin for the remainder of the waste. The content of this bin are collected by a waste management company and delivered to an incinerator.

The scheme is voluntary, and its success appeared to rely heavily on the caretaker of the apartments, who, in addition to carrying out repairs in the (rented) apartments and managing the garden, also helps residents recycle by advising them on what kinds of waste go into each container and encouraging them to separate their waste. There is an overall saving to the landlord because only the waste sent to the incinerator is subject to the waste tax, but this saving is not very significant for the tenants.

Recycling – construction and demolition waste

About a quarter of Danish waste, or 3.1 million tonnes, comes from construction and demolition. Denmark achieves very high rates of recycling (about 90%) of waste from this sector, partly because there is a tax on waste that is not recycled. The government has also reached agreements with the Danish Contractors' Association about selective demolition, for example. We were told that although a high proportion of construction waste is recycled, the amount recycled is equivalent to only 5% (in 1995) of the raw materials used.

The Committee visited a construction site to see source separation of construction and demolition waste and a company, RGS90, that accepts such waste, treats it and sells it on as a replacement for aggregates, among other things.

At the construction site, there were a number of lorry containers, one for each fraction of waste and, as it arose, the builders put each item of waste into the appropriate container. The containers are taken away several times a week.

RGS90 was originally an aggregates supplier, and moved into recycling construction and demolition waste into replacement aggregates when Denmark's waste tax was raised. This private company occupies a 100 hectare site on the outskirts of Copenhagen and handles between 10% and 15% of all Denmark's waste.

Construction waste is delivered to the site, sorted, and treated if necessary, in order to produce high quality aggregates replacements. The company charges a higher fee for accepting unsorted waste because only a lower-grade product can be made. Since developing the aggregates recycling business the company has expanded into higher technology, value added activities such as soil remediation, PVC recycling and transformation of sewage sludge into a rockwool substitute.

Composting

In Denmark, household waste, including organic waste, is usually sent for incineration, although there are some moves towards composting and biogasification. 'Green' waste, that is, plant material from parks and gardens is composted. The Committee visited the Solum group, which runs large scale composting facilities. Green waste is accepted, sorted, shredded and composted in either windrow or mattress systems for three years. The company charges waste producers to accept the waste and then sells the compost. We were told that the sale of the compost alone did not generate enough income to maintain the company and that the gate fees were therefore essential. The company produces composts of different grades, suitable for different purposes.

The Danish government has said that it would like to increase the proportion of household organic waste that is collected. Biogasification, i.e. anaerobic digestion to produce methane, is the government's preferred route, in order to recover both energy and nutrients from the waste.

Both the EPA and private companies such as the Solum group are conducting research on ways of minimising the human and animal health risks posed by composting animal by-products.

Landfill

In Denmark, landfill is regarded as the last resort for waste, and is only to be used for waste which cannot be re-used, recycled or incinerated. Landfilled wastes include asbestos, non-recyclable PVC, impregnated wood, contaminated soil, residues from car shredding and the bottom ash from municipal incinerators. In the past, the flue gas cleaning residues were also landfilled, but since 1999, these have been sent to Norway. In addition, mixed waste is

stored in separate landfill cells during periods when the incinerators are not operating. This waste is later 'mined' back out and incinerated.

The Committee visited a landfill site owned jointly by two municipal waste treatment companies; Vestforbrænding and Amagerforbrænding. The site was built by the two companies on land reclaimed from the sea specifically for that purpose. A site below sea level was seen as less environmentally damaging because leachate from the landfill site would not leak out into groundwater. (Instead, sea water percolates slowly into the landfill and is pumped out and treated, a system which is easier to control than normal leaching.)

The rate of landfilling waste has slowed over the lifetime of the site, which in turn means that it had more remaining capacity than first anticipated and that it will stay open for longer.

Formal minutes

Wednesday 14 May 2003

Members present:

Mr David Curry, in the Chair

Mr David Borrow	Mr Austin Mitchell
Mr David Drew	Diana Organ
Mr Patrick Hall	Mrs Gillian Shephard
Mr Michael Jack	Paddy Tipping
Mr Mark Lazarowicz	Mr Bill Wiggin

The Committee deliberated.

Draft Report [*The Future of Waste Management*], proposed by the Chairman, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 89 read and agreed to.

Summary read and agreed to.

Appendix read and agreed to.

Resolved, That the Report be the Eighth Report of the Committee to the House.

Ordered, That the Chairman do make the Report to the House.

Several Papers were ordered to be appended to the Minutes of Evidence.

Ordered, That the Appendices to the Minutes of Evidence taken before the Committee be reported to the House.—(*The Chairman*).

A memorandum was ordered to be reported to the House.

The Committee further deliberated.

[Adjourned till Wednesday 21 May at a quarter past Two o'clock.

Reports from the Environment, Food and Rural Affairs Committee since 2001

The following reports have been produced.....

Session 2002–03

First Report	Reform of the Common Fisheries Policy	HC 110
Second Report	Annual Report of the Committee 2002	HC 269
Third Report	The Mid-term Review of the Common Agricultural Policy	HC 151
Fourth Report	Water Framework Directive	HC 130
Fifth Report	The Countryside and Rights of Way Act 2000	HC 394
Sixth Report	Rural Payments Agency	HC 382
Seventh Report	Badgers and Bovine TB	HC 432

Session 2001–02

First Report	The Impact of Food and Mouth Disease (<i>Reply, HC 856</i>)	HC 323
Second Report	The Countryside Agency (<i>Reply, HC 829</i>)	HC 386
Third Report	Radioactive Waste: The Government's Consultation Process (<i>Reply, HC 1221</i>)	HC 407
Fourth Report	Disposal of Refrigerators (<i>Reply, HC 1226</i>)	HC 673
Fifth Report	Genetically Modified Organisms (<i>Reply, HC 1222</i>)	HC 767
Sixth Report	Departmental Annual Report 2002 (<i>Reply, HC 1223</i>)	HC 969
Seventh Report	Illegal Meat Imports (<i>Reply, HC 1224</i>)	HC 968
Eighth Report	Hazardous Waste (<i>Reply, HC 1225</i>)	HC 919
Ninth Report	The Future of UK Agriculture in a Changing World (<i>Reply, HC 384</i>)	HC 550
Tenth Report	The Role of Defra (<i>Reply, HC 384</i>)	HC 991