Summerleaze
RE-GENERATION

Our Ref: regen/topics/wastetreat/wsr06/waste_consult_response

Your Ref:

Date: Fri 10-May-2006

Waste Strategy Review Team
Defra
Room 6/D10
123 Victoria Street
London SW1E 6DE

Dear Sir,

Response to consultation on the Waste Strategy Review

Please find attached our response to the questions in the Consultation Document for the Waste Strategy Review. Your online system did not allow me to submit the full text of our answers to some of the questions in the Consultation Document, nor did it allow the inclusion of illustrations to accompany the text. I hope you will instead accept the submission of our response by email.

The Summerleaze group is involved in the aggregates, waste disposal and renewable energy businesses. We are one of the leading producers in the UK of electricity from landfill gas. We are the operator of the only significant non-sewage anaerobic digestion plant in the country (in Holsworthy, Devon), which treats a combination of special wastes, including farm slurry, food waste and abattoir waste. We also operate landfills in the Thames Valley, and are developing an aggregates recycling facility in one of our old quarries. I hope our views on the Waste Strategy will be of interest.

I hope you will excuse such a lengthy response, but 53 questions cannot easily be answered briefly. Such detailed exposition of the issues warrants detailed response, and our 33 pages only scrape the surface of the many issues covered in the nearly 500 pages of your Documents.

This process could have been much simplified, however, if an entirely different approach to waste management were adopted. The current waste strategy and the one under consideration try to plan every last detail of waste management. The Government could instead implement a handful of simple but powerful policies, and leave the market to deliver a balanced waste solution. We would suggest that, instead of the plethora of measures considered, the Government could:

- institute a carbon tax to internalise the externalities of energy-consumption embedded in the various processes,
- improve the landfill tax to reflect the true external cost of methane emissions from landfills,
- substantially increase enforcement against waste crime,
- implement and enforce standards for the design and operation of the various types of waste management activities,
- return Business Rates receipts to local government, to encourage a more balanced approach to planning, and otherwise
- abandon most of the mechanisms that encourage various forms of technology or intervention, including the waste hierarchy.

This would allow waste management solutions to be developed by the market that accurately

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reflected the environmental realities, not false generalisations, and delivered the most appropriate solutions to the local circumstances.

Yours faithfully,

Bruno Prior
Managing Director
Summerleaze RE-Generation Ltd

Consultation Document on the Review of England's Waste Strategy – Summerleaze's Response

THE CONSULTATION QUESTIONS

CHAPTER 1 2006 PROGRESS REPORT AND CONSULTATION: THE BACKGROUND

Question 1: Please state your views on the overall approach for the revised strategy set out in this document and any other points you wish to make. (You may like to respond to this question once you have considered the rest of the document and the other questions.)

Waste management policy is really about resource management. Why should we not simply throw away what we judge to have no residual value? There is a cost to society if the disposal process is not properly managed, but if people are prepared to pay the cost of proper disposal (as they usually have been), why should government intervene to constrain a legitimate, consensual transaction?

The potential health impacts are no reason to influence behaviour in the way that it is constrained by current waste policy. If landfill gas emissions are harmful to health or the environment, they will be just as harmful whether 100% or 35% of biodegradable material is going to landfill.[1] If incineration of waste poses a threat to health, making it more expensive will not make it any healthier, and if those health impacts are real, there is no price at which they are acceptable. Health impacts should be managed by strict standards for management and emissions, applied equally to all processes, not by skewing the market. The costs of complying with those standards will provide an accurate and sufficient indication to the market of the relative merits of different waste disposal methods with regard to health impacts.

Government does not need to intervene to ensure that scarcity of disposal capacity is reflected in market choices. The market will do that of its own accord. Markets with high investment costs, long payback periods, and low elasticity of demand (such as for waste or energy) may produce unacceptable price spikes before investments are incentivised, unless government intervenes to ensure sufficient forward provision. That has been a traditional role of government, and continues to be a legitimate role. Government fulfils this role by mandating that those parties responsible for waste disposal (typically councils) ensure that sufficient capacity is available and contracted for a sufficient forward period. Apart from enforcement of this rule, no other government action is required to ensure availability of disposal capacity.

The primary reason why government has a role in the waste disposal market (as for other markets), beyond the mandating and enforcement of standards and planning, is to ensure that the externalities of waste disposal are internalised in its costs. The social and environmental externalities are in direct opposition. Environmental considerations require costs of waste management to be forced up. The main social costs[2] of waste management are in the financial burden (via local taxation) on the household, and in the impacts of illegal waste disposal, both of which are exacerbated by higher disposal costs. The only practical way to resolve this tension is for the environmental externalities to be reflected in the costs of waste disposal, and for the government to use other levers of social policy to reduce the impact of those consequently higher costs, to the extent indicated by the government's political philosophy. Thus, government intervention in the waste disposal market should be focused primarily on internalising the environmental externalities.

1 In fact, they are likely to be more harmful at the lower proportion, as the lower proportion of methane in the gas will make it more difficult to capture and dispose of or utilise the gas effectively.

2 Ignoring health externalities, given that they should be controlled by standards, not price mechanisms.

The environmental externalities of waste management are numerous. Local externalities may include the impacts of vehicle movements, litter, dust, vermin, noise, and odour. The broader externalities include the impacts of transport and processing (e.g. carbon releases due to energy consumption), and escapes of harmful substances to air or water.

Local externalities should be dealt with where possible by standards (e.g. for health impacts) and otherwise by the planning process – it is for the community to judge what impacts it is prepared to tolerate relative to the resulting costs and benefits of disposing of the community's waste, within the overarching constraint that the community must make provision somehow to dispose of its waste. One obvious corollary of this approach is that the benefits of a local facility should be attributed to (as the externalities will be incurred by) the local community. If a community accepts (or is forced on appeal) to tolerate the impacts of a waste management facility in its neighbourhood, it should receive the financial benefit of any taxes applied to reflect the local externalities of that facility.[3] In an ideal world, those taxes would be negotiated as part of the planning process.

The costs of satisfying standards, and of obtaining and complying with planning permission will internalise the local externalities of a waste disposal facility into its costs. Scarcity will be reflected automatically in prices, and shortfalls and price spikes prevented by central government enforcing forward provision rules on local government. That leaves only the broader environmental externalities – those that affect more than just the local community – as the basis for direct government intervention in the waste management market. Whilst some specific waste streams or processes have impacts on other global environmental issues[4], climate change is the most significant environmental issue whose costs cannot easily be incorporated in the local assessment and control process. At root, it is the intention to limit emissions of greenhouse gases that is the raison-d'etre for most of the government's waste management policies.

When we recycle glass, metals, paper, plastics or aggregates, or convert putrescibles into compost, we do so on the assumption that the environmental impact of extracting and processing that recyclate will be less than the environmental impact of extracting and processing the raw resource. There may be local environmental impacts to the extraction of the raw resource, but if the local community is prepared to tolerate it (and often it will provide the most significant source of income for the community), who are we to weight the balance against it in that regard? The assessment that government is entitled to make is of the environmental impacts beyond the local area.

Those environmental impacts begin with the energy used (and carbon therefore emitted) in the extraction and processing of the raw resource, and conversely in the collection and sorting of the waste stream. More emissions result in both cases from the transport of the base material to the plant where the final product will be produced. Yet more greenhouse gases are emitted in the process of making that product, and yet more finally in transporting the product to its point of sale. By-products from the processes may need to be dealt with, and again the most significant external cost of dealing with these by-products will be the carbon emissions due to the energy input to the treatment process.

In the case of glass, metals and aggregates, there is little more to the comparison. The alternatives are either to reuse the old, or to dispose of the old and use the new. This distinction is slightly blurred by the fact that the disposal may itself be a form of reuse, where disposal of inert material is used to restore worked land. Nevertheless, it is a fairly straightforward binary choice.

For those products that may biodegrade, there is an additional potential impact, and for those products from which energy can be extracted, there is an additional possibility of reuse. The aerobic decomposition (composting) of putrescible matter will release carbon dioxide into the atmosphere. The anaerobic decomposition of putrescible matter will produce methane and carbon dioxide, some of which will be released into the atmosphere. The process under which the decomposition occurs will determine what proportion is released as methane and what as carbon dioxide. The higher the proportion of methane, the greater the environmental impact of the process.[5] The environmental

3 The hijacking by central government of all the revenues from the landfill tax directly contravenes this principle.

4 Such as waste streams containing CFCs affecting the ozone layer (although this problem is now largely contained) or the emissions of potential contributors to acid rain, such as HCl, SO2 or NOx from combustion processes.

5 Because methane is believed to be approximately 25 times more powerful a greenhouse gas than carbon dioxide.

impact of both carbon dioxide and methane releases should be weighed in the balance of waste management policy.

Energy may be recovered from biomass and plastics by direct thermal treatment, or by transformation into a fuel (through anaerobic digestion, gasification or pyrolysis). The energy recovered should be weighed against the energy consumed in the alternative recycling process and the energy consumption avoided through recycling rather than using a raw resource.

With the addition of a factor for methane emissions to atmosphere, it can be seen that the external costs of the various waste management options can be encompassed effectively in their energy balances. The primary externality of energy consumption (once again) is its impact on climate change, and then only where that energy is derived from fossil fuels. A carbon tax on fossil fuels (in proportion to their carbon emissions) would effectively internalise most of the externalities of waste disposal, as it would for most other processes. With this in place, the most effective environmental option for the circumstances could be judged by simple financial calculation. This calculation would reveal the true picture for the specific circumstances, in contrast to hard rules and targets, which assume improbable uniformity of circumstance across all applications.

Some people would argue that there are other reasons to recycle besides the relative external costs and benefits, which price mechanisms and financial calculations cannot encompass. Most commonly, people believe that we should recycle because of the scarcity of the raw materials that would otherwise be used.

If the reason for recycling or composting were shortage of resources, there would be no need for government intervention. Scarcity of those resources would be reflected in the costs of the process inputs. If fresh resources are cheaper than recycled feedstocks, the market is indicating that those resources are not yet sufficiently scarce to justify replacing them with recycled inputs. If there is an environmental cost to the working of the fresh resources[6], those externalities should be applied to the cost of producing the raw material. To deal with the consequences of resource depletion (or any other factor) by diktat rather than price mechanisms implies that the balance of considerations will always be the same, and can be calculated more accurately by the government than it can be discovered by the market. Why is it rational to recycle or compost 30% (or any other figure) of household waste across the board? Will all waste streams be the same across the country? Will the markets for the products be the same? Will the availability and viability of alternative forms of treatment be the same? Government intervention to internalise external costs, both of waste disposal and of raw material extraction, allows communities to weigh these factors in the balance against the many other considerations. Rules and targets and regulations do not.

Government by targets very rarely produces the desired results. This was the lesson learnt in the Soviet Union, but apparently forgotten in Europe over the past decade. Normally, targets will produce nothing more than bureaucracy and statistics designed to demonstrate that the targets have been met, rather than actual achievement of the targets.

On the rare occasions that people genuinely attempt to deliver the targets (rather than false or misleading statistics), those targets provide perverse incentives that distort rational decision-making. That is the case whether the target is for the proportion of waste recycled, or the number of school-leavers going to university.

The graph below attempts to illustrate the inevitability of this distortion. It is a truism of economics that the marginal utility of an extra unit of something is less, the more you have of it. £1 has more utility to a pauper than a millionaire. This is equally true of goods and services as of money, and to nations as much as to people. The utility of a carpenter to a nation that has no carpenters is very much greater than to a nation where there are more than enough carpenters already. This is depicted graphically as the classic declining curve of marginal utility.

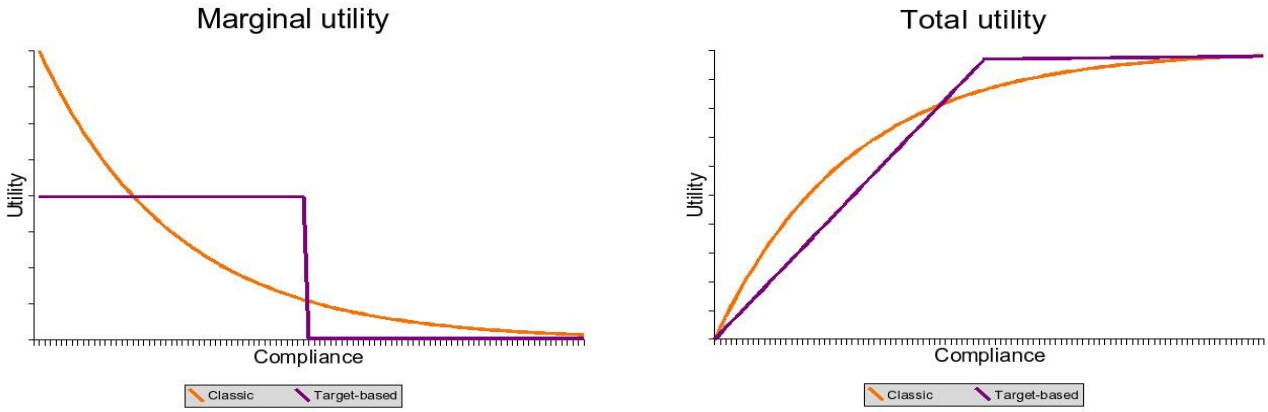
Targets do not reflect this reality. If the target is to deliver 50% of something, this sends a signal that the 49th percentile is just as valuable as the 1st percentile, but the 51st percentile is very much less

6 e.g. extraction of peat rather than use of composted waste, or extraction of metal ores rather than use of recycled metals.

valuable than the 49th percentile. The pattern of marginal utility implied by a target-based approach is depicted graphically by the stepped line, with the step representing the point at which the target is achieved.

It is obvious that reality will be much closer to the classic curve than the target-based curve. When you compare the two curves of marginal utility, it is clear how little they have in common. When something is scarce, a target-based approach tends to undervalue it. As it becomes more common, the lines cross, indicating that the target-based approach now overvalues it. Once the target is reached, they cross again, and the target-based approach once again undervalues it. For no more than two fleeting moments do the lines coincide, which represent the points where the target-based approach provides a rational incentive to delivery. On all other occasions, the target-based approach provides a badly-distorted incentive.

Aggregated to total utility to society, the target-based approach appears to deliver all the benefit society could want by the point where the target is met, and any additional amount has no additional benefit. Target-based utility bears little relation to reality. It does not matter what level the target is set at, or what it applies to. This distortion is inevitable in the use of targets.



Waste management policy is particularly littered with targets (as Annex A to the Consultation Document demonstrates), and is as good an example as any of why they are an inappropriate policy driver. We are producing mountains of compost, electrical goods, treated wood, paper, secondary aggregate rejects and so on, for which there is no market as a product, and which has to be either sold below cost (often given away) or disposed to landfill, wasting the energy that went into the separation process. By diverting the only part of the waste (putrescibles) that is recycled in a landfill (by anaerobic digestion), we are killing the biggest single contributor to the Renewables Obligation (producing twice as much renewable energy as wind power), at a time when energy security and diversity, and the reduction in the use of fossil fuels is a major concern. By emphasising composting over energy-recovery (whether through anaerobic digestion or thermal treatment), the energy value of biodegradable material is simply wasted, in an invisible stream of heat and carbon dioxide released to atmosphere. By encouraging the use of recycled paper (rather than recovering the energy from it), we are reducing the opportunities for managed forestry, with all the benefits that they bring to carbon dioxide reduction (and the rural economy), and encouraging instead a process that sucks in energy and spits out a toxic waste stream in order to reprocess a material that is abundantly sustainable in its raw form. Modern waste management policy represents the triumph of image over substance.

The Government's waste strategy cannot be improved by tweaking and extending targets, or adding and refining regulations. It needs to be torn up and replaced by a simpler, more rational regime, that reflects reality rather than flawed assumptions.

CHAPTER 2 A NEW VISION

Recycling and recovery targets

Question 2: What are your views on proposed national household recycling and composting targets and the level they should be set at?

They should be scrapped, not set at any level.[7] The chance of circumstances being so similar in every council that it is appropriate to require the same level of recycling and composting from all of them, is so small as to be insignificant.

It is likely that it is more efficient for households in rural communities to retain their green waste to produce their own compost, than to put it out for collection to produce an inferior product (as compost from municipally-collected material is bound to be, due to the relatively lower incentives and greater difficulties of quality-control to ensure an uncontaminated feedstock). In a largely rural community, sensible opportunities for centralised composting (which is the only type of composting that can sensibly be measured) may therefore be limited, and incentives to encourage people to compost centrally rather than individually would be perverse. Conversely, some urban communities may produce so little waste that is suitable to produce a high-quality compost, and have so few opportunities for use of what compost is produced, that a very low level of composting would again be appropriate. Most communities will lie somewhere between these two extremes. The appropriate level of centralised composting will be dependent on the balance between rural and urban households, and vary in aggregate between each community.

Although recycling and reuse is strongly encouraged by government policy, it is already often difficult to dispose, at an economic price, of the recyclate whose production is thus incentivised. If the market is already saturated, it hardly makes sense to further increase targets that are already set to increase the volume of recycled product available beyond what the market can absorb. Once again, circumstances will vary. Some communities will be close to plant that has a use for the recyclate, or to ports from where the recyclate can be shipped efficiently to a destination where it can be used. To these communities, recycling the relevant part of their waste stream may well be the most efficient and economic option. For many other communities, the nearest outlet for their recyclate will be distant. In that case, the economic and environmental cost/benefit balance of producing, transporting and reprocessing the recyclate will have to be weighed against the economic and environmental cost/benefit balance of (where appropriate) using the material locally as an energy-source, or else disposing of it locally. Only the most blinkered would argue that recycling is an equally appropriate solution for all communities, regardless of circumstance. Yet the nature of the waste hierarchy and the target-based approach to waste management implies that this is the case.

The widely-ranging levels of recycling and composting currently being achieved by councils reflect this reality. Targets cannot change it. They penalise some and reward others for circumstances outside their control. A price mechanism (e.g. a carbon tax that embodies the true environmental value/cost of raw resources and recycled feedstocks) would be a more flexible and realistic way of dealing with this.

Question 3: What are your views on setting municipal waste total recovery targets?

The same as for household recycling and composting targets (Q.2 above). Targets are inappropriate signals for waste management policy.

It is also strange to increase the targets from 2010, when the assessment of current performance (Annex A to the Consultation document, p.2) states that "the 2005 target seems unlikely to be met". Given a recovery rate in 2003/4 of 28%, the old target of 45% by 2010 looks ambitious, let alone an increased target of 53%.

7 See the answer to Question 1 above

Landfill targets

Question 4: What are your views on proposed targets for the landfilling of commercial and industrial waste and the level they should be set at?

Again, this is the wrong way to decide how waste should be treated.[8]

To reach a target of 37% for the proportion of C&I waste landfilled in 2010, the proportion of waste recovered (for recycling, reuse or as a fuel) will have to increase by at least 35% from the levels of 2002/3.[9] Even if thermal treatment throughput tripled, it would only cater to 9% of the waste arisings.[10] Not all of that incorporates energy recovery, and much of it never will.[11] Thermal treatment without energy recovery should be a fallback position, not an activity to be encouraged.

Energy recovery and diversion from landfill could be enhanced if clear preference (and appropriate incentive) was given to anaerobic digestion of those organic wastes (such as many food wastes) whose moisture content is too high to usefully burn or compost. As landspreading is the most common method of dealing with food wastes, and is counted for the purposes of this target into the landfilling figures, a prohibition of spreading food waste to land could make a significant contribution towards achieving these ambitious targets, and given the experiences of Foot & Mouth and BSE would in any case be a sensible precautionary measure.

Nevertheless, a large proportion of C&I waste (at least one-third and probably nearer one-half) is not amenable to thermal treatment or any other form of energy recovery.[12] These factors combined with the political constraints mean that a tripling of thermal treatment of C&I waste is probably very optimistic. If so, recycling and reuse of C&I waste would have to be increased by at least 29%.[13] This represents a very significant, undesirable and unsustainable increase of supply into a market that is already saturated.

Recycling and reuse should be driven by demand, based on the relative costs (including internalised externalities) of using raw resources or recyclate. It should not be driven by creating an excess of supply, as this will create conditions where uses are found for the material that are not predicated on their usefulness to society, but simply on the basis that you have to get rid of the material somehow. Oversupply of recycled materials could actually bolster the disposable society that recycling is supposed to counter, as the result is likely to be the production of cheap, worthless goods simply to find a use for the recycled materials.

8 See Questions 1 & 2 above

9 35% assumes the total waste stream does not increase. A continuation along current growth trends of waste production would require a significantly higher increase in the

10 Again, assuming that total waste arisings do not increase significantly.

11 The two biggest contributors to the thermal treatment inputs are food wastes and chemical wastes. The moisture content of these wastes and the processes required to ensure that they are safely destroyed make it unlikely that energy will be recovered from the thermal treatment of either material.

12 At least the construction & demolition, combustion wastes, discarded equipment, metallic wastes, mineral wastes and most of the non-metallic wastes streams, and probably a significant proportion of the other waste streams.

13 Assuming the happy if unlikely conditions that thermal treatment had tripled and waste arisings had not increased.

CHAPTER 3 THE POLICY FRAMEWORK

The regulatory framework

Question 5: What further specific improvements, if any, would you like to see to the regulatory framework?

Permitting charges are disproportionate to the costs of their administration. The requirements for the collection and provision of data are excessive.[14] Discounts according to the presence of management systems strongly disadvantage small businesses. In fact, the whole permitting regime is biased against small businesses, who are less able to bear the significant overheads incurred. If charges cannot be reduced across the board, the Government should consider a scaling factor in the OPRA calculation that takes into account the turnover of the party applying for the permit.

Disparities in the attitudes of regulatory officers (primarily at the Environment Agency) from one region to the next are notorious across the industry. Organisations with sites around the country can find themselves with permit requirements that vary widely. Activities can be most effectively managed to minimise risk to the environment, neighbourhood and personnel, if operatives are working to clear, simple, consistent rules, not trying to remember the particular permit requirements for the current site. A review should be conducted of permit conditions applied to waste management facilities (and associated activities such as generation of electricity), decisions made on the most appropriate condition where variety is identified, and operators given an opportunity to apply (without excessive charge) for their permit conditions to be harmonised to the standard thus identified.

Delays in decisions on permit applications and modifications are so common that a timely decision comes as a pleasant surprise. The Government should ensure that the Environment Agency (EA) is adequately resourced to perform its functions, not overburdened with responsibilities that distract from its primary duties, and then ensure that disciplinary action is taken against senior management of the organisation if delays continue. But it should be clear that the primary responsibility for delay lies, to date, not with EA officers, who on the whole do their best to cope with excessive responsibilities and insufficient resources and guidance, but with the Government, who created these conditions. Provision of greater resources and guidance, and a refining of responsibilities, must come before increased pressure on the EA to perform.

Producer responsibility and voluntary action

Question 6: What scope is there for extending the `stewardship' or responsibility of producers and retailers for the impacts of the products they manufacture and sell, and which key products or sectors should be explored?

Caveat emptor appears not to be a phrase that is understood in government nowadays. The responsibility of the producer and retailer is to provide goods fit for purpose. The responsibility of the purchaser is to understand the implications of their purchase. Those implications include end-of-life considerations. It is not sensible to extend to the producer responsibility for a good once it has been sold, beyond that which the producer is willing to provide through the warranty. The ability to reuse, recycle or dispose of a good may depend very much on how it has been used by the purchaser. If the responsibility for its end-of-life treatment is placed on the manufacturer, the purchaser has a reduced incentive to use the good in a manner that maximises its longevity and suitability for recovery. If the responsibility is left where it belongs, with the purchaser, both parties will have an incentive to minimise the costs of recovery or disposal. Customers will demand that manufacturers produce their goods in such a way that the costs of disposal are minimised, and the customer will treat the goods in such a way that those costs are not increased unnecessarily.

14 The collection of half-hourly data on gas quality and flow from landfills and on combustion temperatures in flarestacks may be useful to the operator, but the Environment Agency do not have the resources to track data of this frequency. The operators of this equipment should be required to demonstrate that their equipment and systems are sufficient to meet necessary standards, not obliged to gather data that no one will ever look at.

Yet again, the Government is looking to reduce the responsibilities of the individual. The result is an irresponsible society.

Question 7: What are your views on seeking voluntary agreements as an alternative to statutory approaches?

Voluntary agreements are open to abuse, not only by those who refuse to meet the voluntary requirements, but also by those who may encourage the agreements as a means to limit competition. Where large companies dominate an industry, they may promote higher-than-necessary "standards" as a means to protect themselves from competition from smaller, leaner players, who can operate more efficiently, but cannot so easily afford the overheads of complying with unnecessary standards.

It can be very difficulty for the Government to know that what is being promoted as "the industry view" is really the view of all players, and not the views of a dominant majority. Standards should be applied because they are necessary, not because a majority in an industry recommends them. If they are necessary, they should be mandatory. If not, a voluntary arrangement to operate to unnecessary standards serves little purpose.

An effective pricing framework

Question 8: How effectively do current prices drive the behaviour of those involved in preventing, producing or managing waste?

This section contains by far the most intelligent and significant paragraphs in the Consultation Document. It could usefully have been expanded, and most of the rest thrown away.

The pricing mechanisms are very effective drivers of behaviour. Whether they are appropriate drivers is another matter. Most of them have been put in place to encourage or discourage specific approaches to waste management, rather than to internalise the externalities and allow the market to discover the most appropriate approach according to the circumstances. As was argued extensively in the answer to Question 1, it is highly unlikely that solutions will be equally appropriate across the board. The pricing mechanisms, as they stand, make this assumption.

The landfill tax, for instance, is justifiable because landfilling incurs a significant externality – the release of methane into the atmosphere – that is not incurred (significantly) by other treatment methods. It is, however, a blunt instrument. It could be improved by incorporating adjustments that reflected the efficiency of gas capture and disposal. This would provide an appropriate incentive to maximise gas capture efficiency, even where utilisation was not possible.

Of course, capture efficiency is a notoriously difficult figure to pin down. Given the margins of error in gas modelling (however intricate the model), the method used by the EA of comparing the likely gas production according to the model with the actual gas captured would be even less appropriate for these purposes than it is for monitoring the operational performance.

A few factors are the most significant in contributing to gas escape. The biggest factor is probably the volume of waste that is uncapped, and the length of time that it is in that condition. In capped areas, the most significant factor would be maintaining suction pressure across the cell. Construction techniques could also be a factor, but given the standards to be applied across the board to all new cells, it is perhaps reasonable to assume uniformity of containment, and therefore not build this into the calculations. Gas can be produced outside the site if leachate escapes, so maintaining a low leachate head could be another factor. A number of other issues may contribute to gas containment failures, but they could perhaps be swept up by a ratcheting factor related to identified emissions.

To avoid unnecessary complexity, the current unsophisticated means of calculation, tied only to waste inputs, could be retained as the default. Adjustment mechanisms could be introduced that either increased the level of landfill tax where failures of gas containment were identified, or reduced it where the landfill operator could demonstrate that they were taking measures that could be expected

to reduce fugitive emissions below the levels expected (such as operating small cells and capping them quickly).

There are a number of other mechanisms that influence the cost of various waste disposal options. Their combined effect is to produce widely-varying values for the external costs of climate change from one technology to another. This ensures that technologies are chosen not because they are the best environmental option, but because they are incentivised most heavily. The environmental benefits of those technologies can usually be resolved down to their impacts on climate change[15]. Unless those mechanisms also internalise other externalities, they should be scrapped and replaced across the board with a carbon tax. If any mechanisms do internalise other externalities (and it is hard to think of one), they should be priced at the cost of that externality, and not at a price that is intended to deliver the technology.

Question 9: Are there further tradable allowance (or other) schemes that could be developed to help the market deliver environmental outcomes more efficiently?

Pricing mechanisms should not be used to incentivise a particular solution, but to internalise externalities, allowing the most appropriate solution to be tailored to the specific circumstances of each application. Assuming that certain externalities (such as health impacts) should be dealt with by standards and regulation, and others (such as social costs) cannot effectively be handled within waste management policy without contradicting other objectives of that policy, the main externality that should be internalised through a pricing mechanism is the climate change impact of energy consumption in the management processes.[16] This can most effectively be dealt with by a carbon tax on fossil fuels, driving up the costs of their use and thus rewarding those waste management options that use the least fossil fuel, or that contribute to the avoidance in other processes (whether manufacturing or energy supply) of the use of fossil fuels.

With such a tax in place, there is a strong case that most of the other pricing mechanisms (and certainly the plethora of targets) should be removed, to allow the market the greatest flexibility to deliver the most appropriate solutions. Landfill tax would be an exception, because it takes account of an externality (the release of methane into the atmosphere) that is not contained within a carbon tax on fossil fuels, but all the other mechanisms should go. It is not so much a case of introducing further pricing mechanisms, as rationalising the system down to a couple of very simple mechanisms that incorporate the significant externalities.

Investment and public expenditure

Missing question 9a: is government spending landfill tax receipts effectively?

It was an unfortunate oversight that the Government did not invite opinions on one of the most controversial sections in the Consultation Document. It is to be hoped that the Government will not ignore opinion on this issue, as spending of taxpayers' money is clearly a legitimate interest for stakeholders, and with limited budgets, spending on one thing has to be at the expense of spending on another. This is a question of priorities.

The justification for spending on most of the projects listed on p.34 of the Consultation Document is that it stimulates “more sustainable management of business waste”. If so, the Government is trying to do by cajoling and informing, what would much more effectively be done through the price mechanism. Clear signals from internalised externalities (via carbon and landfill taxes at appropriate levels) will stimulate sustainable waste management very effectively. If that does not deliver the result the Government judged to be the right one, it is more likely that that judgement was wrong, than that the market has acted irrationally. Prices and benefits are more accurately discovered in the market than predicted through planning.

15 See Question 1.
16 See Question 1.

In the presence of clear, strong incentives to sustainable behaviour, the Government could scrap most of the projects listed on p.34. This would free up a large proportion of the estimated £95m for 2006/7 alone. This money could more effectively be spent on the one item in the list that needs substantially increased rather than reduced funding: tackling waste crime[17].

Individuals

Question 10: Should there be greater effort to encourage waste prevention and minimisation relative to recycling and, if so, how should this be done?

Costs of disposal should reflect the true costs (both internal and external). People should be exposed to the costs of disposal directly, rather than having it buried in an all-encompassing bill for local services. They should be charged in proportion to the volume and character of waste produced.[18]

Illegal waste disposal activities could be expected to increase strongly under such a regime. It is impossible to incentivise waste prevention and minimisation without also increasing the incentive to cheat on disposal. There is a simple choice to be made – does society want to encourage people to minimise their waste production or not? If it does, higher costs of disposal are inevitable. The Government would have to balance this by much stronger measures against and greater resources for dealing with illegal disposal activities. There is a strong case that the Government should be doing this anyway. In particular, they should have adequate numbers of enforcement officers, and ensure that the Duty of Care is applied wherever possible all the way back up the chain to the waste producer.[19]

Most of the efforts under consideration relate to assumed lack of knowledge. This is a convenient excuse for those who are failing to respond to government direction, but lack of clear incentives is the more significant factor.

In an analogous manner, ignorance is often given as the excuse why people do not make greater efforts to conserve energy. The author recently attended a course on climate change at Oxford University, given by some of the leading lights of climate research at that institution. The course was attended by around a dozen participants. On desks against the walls of the room in which the course was held were around 20 computers. Every computer and every monitor was on at the start of the day, and they were still on at the end. The course involved use of the computers for less than half an hour. The rest of the time, the computers were simply burning energy. The author asked the Research Fellow (Cameron Hepburn) who presented the economics part of the course why he thought the computers had been left on. Ignorance of climate impacts from energy profligacy could not, for once, be given as an excuse, in the context of a climate change course by experts in the field at the University of Oxford. A number of rather weak possibilities were discussed, such as the inconvenience of turning them off and on, or just plain lethargy, but it was clear that the real problem was insufficient incentive to make it worth thinking about their energy use and turning them off. If the price signal is strong enough, everything else will follow, but in the absence of an effective price signal, softer factors such as education may have little effect. This lesson applies to waste disposal as much as to energy-use.

Business

Questions 11: How can businesses be engaged in their capacity as purchasers and providers of services?

Through their balance sheet and profit and loss account. If externalities are internalised in the costs of

17 See Question 49

18 This need not necessitate expense on complex measuring technology. Simple measures are being tried around the country, such as providing multiple smaller bins, rather than one big wheely bin, and then charging in proportion to the number of bins put out for collection.

19 See Question 49.

waste disposal, businesses will take rational decisions to minimise their environmental costs.

The Consultation Document based its assumption that business could improve its use of resources on a report prepared for the Environment Agency by Cambridge Econometrics and AEA Technology, entitled *The benefits of greener business*. This document was not available on the Environment Agency website two days before the deadline for submission of responses to this consultation.[20] There is perhaps an easy explanation why behaviour that, according to a withdrawn report, is superficially irrational appears to be unaffected by toothless measures such as education and requirements to provide information. But in the absence of the report, it is hard to judge whether the obvious explanation is the right one.

The Consultation Document emphasises the attempts to educate business leaders on how to maximise use of resources, but regrets that this has been ineffective.[21] To the extent that this coincides with maximising shareholder value (as it should if externalities are fully internalised), this would be teaching grandmother to suck eggs. To the extent that this does not coincide with maximising shareholder value, the Government should not be surprised that business leaders make different choices to those that consultants in the pay of the Government with no responsibilities to shareholders would make. When people or businesses are suspected of behaving irrationally, it usually turns out that the priorities of those people or businesses were not properly understood, and that they had a better understanding than outsiders of their own interests. If businesses appear not to value resources as much as the Government would like, the Government should consider whether their mechanisms attribute sufficient value to the externalities of those resources.

The Consultation Document draws a different conclusion. Its judgement is that more needs to be done to "influence businesses". If that meant the provision of clear, simple incentives, then that would be an accurate assessment. However, the Government's track-record leads one to suspect that what is meant by "influence" in this context is yet more spending on "initiatives" to be run by quangos. If so, it will be clear that the Government does not understand how business works.

Government leadership by example

Question 12: What more can the Government do to provide an example in its own waste management and product procurement policies to reduce waste and waste impacts?

Government waste could be reduced significantly by cutting down on the volumes of reports prepared internally and commissioned externally, continuous consultation, legislation and regulation, and the use of task forces, working groups and quangos. If every person in the country were employed writing reports or preparing "initiatives" for the government (and at the current rate, that day cannot be far off), the quality of government would not be enhanced, it would be diminished. Hands-off government by principle, rather than micro-management, would so dramatically reduce the amount of paperwork that is produced by government, and waded through by the rest of us, that whole forests might be conserved.

Government, as much as any business, should try to minimise its costs. If externalities are internalised in those costs, their minimisation will act equally to deliver the environmental objectives of the Government. Alternatively, the Government can try to measure environmental costs and benefits by some means other than placing a value on them, but it will be very hard to weigh up the economic and

20 Consultation Document, p.37, footnote 54. The address indicated (www.environment-agency.gov.uk/business) is a generic address that has no direct connection to the report referenced. The site's Search Engine provided plenty of references to the report, but no links. Eventually a link to the report was found on the page at address http://www.environment-agency.gov.uk/aboutus/512398/516810/516841/. However that link (http://www.environment-agency.gov.uk/business/444217/444661/480057/?version=1&lang=_e?lang=_e) simply returned an error. It appears that the report is not available to the public. It is hard to know if the contentious claim that "manufacturers 'throw away' 7% of their profits in wasted natural resources" has any substance. One might suspect that the consultants had not weighed on the other side the costs (for instance, in managerial time) of greater diligence in the use of resources. 7% is a sufficiently substantial figure to suspect that businesses would not be "wasting" this value simply out of carelessness.

21 An unusual admission that its spending of landfill tax money has been misplaced (see Missing Question 9a)

environmental balance when using different units of measurement. The classic alternative means of measuring benefit is to decide what is the best outcome and then to measure success in achieving that outcome (e.g. a target-based approach). This rather begs the question. How was the best outcome identified in the first place? How would we know if that judgement was wrong? This approach can be attractive to politicians, as they can measure their achievements simply in terms of having done what they intended to do, rather than whether that course of action had any genuine benefit. But it does not allow the public to know whether the Government's achievements are genuine or illusory.

Part D of the *Framework for Sustainable Development on the Government Estate* mandates a bureaucratic approach to improving waste management practices at state-run locations. The senior person at each site could instead have been given responsibility for the budget for the site, and incentivised to minimise that budget. Providing externalities are internalised in the costs of waste disposal, this would have a similar effect, but each site would be able to make rational judgements in relation to its particular circumstances, rather than complying with a set of inflexible rules for the sake of compliance.

The Consultation Document notes that "examples of local authorities and waste management companies engaging their communities" are rare. This is not because waste management companies want to make their lives difficult. Typically, no amount of information will prevent some with an axe to grind in the local community from putting out scare stories about a facility. Whether these troublemakers succeed in poisoning the well can depend on the extent that local councillors are prepared to stand up for the truth in the face of the ignorance of their constituents. Many will not. Local councillors need more reason to argue the difficult case. With relatively low costs of shipping waste out of the constituency, and a relatively small proportion of local finances coming from local taxes, there are few incentives for councillors to try to make their constituents see sense. If business rates (and landfill tax) receipts went to the local community rather than central government, and if the cost of transporting waste out of the constituency incorporated the real environmental cost of doing so, councillors would be inclined to give greater consideration to the benefits of a local facility, and less to the political expediency of simply agreeing with their constituents.

Evidence for development of future policies

Question 13: What are the information gaps requiring waste management-related research in the short and long-term?

Ongoing scientific efforts to understand the rate at which the climate is changing, the extent to which human activity contributes to this change, the likely impacts, costs and benefits of this change and the effects of actions that could be taken to counter this process. These studies would continue to inform the process by which a carbon tax on fossil fuels (and other taxes on climate change externalities, such as the landfill tax) was set. Research would also be needed on the efficacy of these price instruments (such as carbon and landfill taxes) in incentivising technologies and behaviours that have lower impact on the environment. With the externalities of waste management and resource consumption processes reflected in prices on the basis of the best science and economics available, the Government could leave the choice of how to respond to these incentives (including R&D into how best to minimise the environmental costs) to the market. No public investment in R&D would be needed in the waste sector.

CHAPTER 4 WASTE PREVENTION IN THE CONTEXT OF SUSTAINABLE CONSUMPTION AND PRODUCTION

Prioritisation for effective policy intervention

Question 14: What products and materials do you consider should be priorities for action to reduce waste and waste impacts?

- Televisions. There is no discernible reason why HDTV is needed. The adverts for HDTV are being seen on non-HDTVs. If they look good enough on those boxes to attract the consumer to upgrade, the upgrade was unnecessary. There will be very few people watching television tonight thinking "I wish my screen had a higher horizontal and vertical resolution". If they upgrade, their football team will not be any more likely to win, the quality of television drama will not be any higher, their lottery numbers will be no more likely to come up. HDTV is simply a waste of bandwidth and perfectly good electrical equipment, for no better reason than to make old equipment obsolescent and sell new boxes. Government could prevent this waste in one stroke by not approving the introduction of HDTV.
- Computers. The typical lifespan of a computer is around 3 years. By the end of this period, it is considered obsolete. Both hardware and software may continue to function as well as they ever did. But new generations of software have been brought out with new "features", and this software cannot be run at acceptable speed on the old hardware. So people are encouraged by "feature-bloat" to throw away perfectly serviceable equipment, even though they probably use only a small fraction of the features in the software, most of which would have been present since the introduction of Windows and Office 95. This process is driven more aggressively by changes to file formats, APIs etc. breaking backwards compatibility with older software, so that once some people have upgraded and started to use the new formats, others feel the need to upgrade so as not to be excluded. The Government could prevent this ratcheting of software against hardware by mandating the use of documents formats, APIs etc that had been specified through an open process, so that compatibility could easily be provided for older software.
- High-density DVDs. Two rival formats for high-density DVDs are set to be introduced, rekindling the sort of format wars we last saw in the VHS vs Betamax battle. Besides the waste of replacing all those DVD players that implemented the losing format, there is a question whether either format has any significant benefit from a media perspective. Whilst increased storage may be useful in the computing world, the current DVD standard can store at high resolution and with high-quality sound more than enough data for almost any film. Consequently, DVDs are already padded with "bonus features" to use up the extra space. High-density DVDs will only exacerbate this problem. The move to HDTV will help to fill up the space, but as was already noted, it is to be doubted whether the benefit in image quality will justify the pointless waste of serviceable equipment that will result from widespread upgrading to the new format.
- Radios. We are moving to a digital world, and everyone will soon have to switch to DAB radio when the analogue service is switched off. But there is no demand for DAB. Very few people have "upgraded" so far. Most people listen to radio in their cars, and the problems of interference on a moving signal are often more audible with DAB than with the analogue signals. FM already provides a wide variety of channels (if not content), so the further extension of channels provided by the switch to digital has little significance for most people. If the Government wanted to avoid the waste of a large number of serviceable analogue radios, it could abandon its plans to switch to DAB.
- Mobile phones. Mos t people don't need to be able to send video to each other – it is technology looking for a purpose. Yet the mobile operators are busy trying to persuade us to upgrade to 3G, not because we need it, but because they paid heavily for it, and want to be able to charge us for it.

- Clothing. High-street "fashion" is made to be ditched after one year (and probably never looked good in the first place). In Western, consumerist, disposable society, most people have wardrobes full of clothes they no longer wear (and sometimes never wore). They could have bought a few high-quality, long-lasting items, but instead they bought this year's "trend". As the fashion is not expected to be worn next year, it does not have to be made to last. This has led to a decline in manufacture quality. We do not need cheap, throwaway clothes. It would be much more efficient, and consequently better for environment, if we only bought clothes to last.

And yet, people should have the right to choose how to spend their money. If they want to spend it on a screen that looks the same but contains more dots, or a disc that contains more "bonus features", or a computer that does the same job less efficiently, or a radio whose signal breaks up more frequently, or a phone with which to exchange insignificant moments in glorious technicolor, or clothes that look cheap for the brief period that they are worn, they should have the right to do so. PROVIDED that they really have paid for them: not just the cost of producing those goods in China; but the full, unsubsidised, internal and external costs of all the processes that brought those goods to the consumers, including the externalities of extraction, processing and transport of the feedstocks, production of the goods, disposal of the wastes from the production process, and the transport of the goods to the point of sale. If people had to pay the real cost of the goods they purchased, they might be more concerned about the quality and longevity of those goods. Fewer purchases of higher-quality and more long-lived products will go a long way to minimising the production of waste.

Waste within a coherent `product life-cycle' policy

Question 15: What is the scope for reducing waste and achieving more efficient resource use at the product design phase?

A cost of waste disposal that included the true external costs, combined with a clear and strongly-enforced Duty of Care on waste producers, would give consumers a strong incentive to consider the costs of disposal when they purchase products. This would translate into a commercial advantage to those producers that designed their products to minimise the costs of disposal (or maximised the potential to recover value at the product's end-of-life). It would not be necessary for government to micro-manage this process. Cherry-picking certain technologies to try to drive improvements from "front-of-pipe" measures will be a lot less effective than incentives that encourage all manufacturers and all consumers to consider the waste disposal implications of all their goods. This should be driven through consumer demand, not extending producer responsibility.[22]

Question 16: What is the scope for improving the amount of waste-related information provided about products placed on the market?

The Consultation Document suggests that goods might have to carry a "waste profile", to include such elements as "durability, weight, content of hazardous materials, reparability, whether it can be returned to the supplier at end of life, ease of disassembly and recycling, recyclate content, and how to safely dispose of whatever cannot be recycled".

How will "product durability" be assessed? Will manufacturers be prevented from releasing products to the market until "durability tests" have been completed? How long should these tests last to provide useful information? How will they be regulated to ensure that the quality of the goods tested is identical to the quality of the mass-produced goods? How will the tests be conducted so that they give an accurate reflection of the way in which those goods will be used in real life? Will all consumers treat goods in the same way, allowing durability to be usefully predicted?

Is weight a useful guide to the costs (economic and environmental) of disposing of a product at the end of its life? Would a product that was heavy thanks to a high gold content have a high cost of

22 See Question 6.

disposal (or a low recovery value)? Would a product that was light thanks to the use of plastics or other composites have a high residual value, and present little challenge to recovery or disposal? Weight may have some relevance to the costs of transporting the product to the waste treatment destination, but volume (i.e. density) is much more relevant in this regard. But volume can itself be hard to predict. Will the product be transported to the waste treatment destination in its original form, or will it be crushed/dismantled beforehand?

What is a "hazardous material"? Is it just that material in a product that requires disposal in a hazardous waste treatment plant? Or is it the whole product? Most products containing hazardous materials are not currently disassembled before disposal.[23] It would be more effective to indicate those components that require disposal as hazardous wastes, and those that do not.

What is "reparability"? How bad will the damage be that needs repairing? How much will the consumer be willing to spend on repairing the product? What will be the relative environmental and economic costs of repairing the good and replacing it?[24]

Will it be the best environmental option to return the product to the supplier at its end-of-life? What if the supplier is not local, but an alternative disposal route is available close by? Would it be better to know the number and location of disposal points for the product? But for products that last several years, how easy will it be to predict this? If reliance is placed on producers or suppliers to dispose of their products, what happens when producers or suppliers go bankrupt, or relocate overseas?

How does one assess objectively the "ease of disassembly and recycling"? What does "recyclate content" have to do with the ability of the product to be recovered, reused or disposed of?[25] Will the consumer be disposing of "whatever cannot be recycled", or will the consumer dispose of the whole product and the waste handler have the task of recycling what can and disposing of the rest?[26]

It comes back to *caveat emptor*.[27] The consumer should be asking the questions that are relevant to the product to know how easily it can be recycled or disposed of, when making the choice to purchase the product. The information required cannot be boiled down to a *pro forma* in this way. Suppliers should ask manufacturers, and consumers should ask suppliers. Manufacturers and/or suppliers may choose to make certain information available without asking, but the decision of whether and what to make available automatically should be left to their knowledge of their product and their market. If the full cost of the externalities are embedded in the cost of waste disposal, and the consumer has a clear responsibility for that cost, there will be strong market incentives to make that information available.

Product and resource re-use

Question 17: What are your views on how re-use and re-manufacture could be stimulated further?

Through the application (via carbon tax and landfill tax) of the full external costs to the price both of new goods and of waste disposal. If buying new is relatively expensive, and disposing of old products is also relatively expensive, people will be inclined to think more carefully about whether products can be re-used. If the inputs to the production process are relatively expensive and high costs of disposal mean that the end-of-life goods can be obtained relatively cheaply, manufacturers will be inclined to give greater consideration to re-manufacture.

23 For instance, the electrolytes in batteries are not currently separated from the rest of the battery.

24 It cannot be assumed that it is always better to repair, e.g. a product that had to be shipped back to China to be repaired might be better disposed of and replaced.

25 Toilet paper may have a high proportion of recyclate content, but will be difficult to recover or reuse.

26 It will depend on the product – consumers will probably not be disassembling a car or a cooker, but they may nevertheless contain high proportions of material that can be recycled.

27 See Question 6 again.

Engaging business to improve resource efficiency

Question 18: What are the best ways of stimulating business action on resource efficiency, including waste prevention?

Internalise the externalities of production of raw resources and of disposal of resources that can be recovered. The more expensive a resource is, the more likely a business is to be careful with its use and to consider alternative, sustainable supplies.

Encouraging SMEs to reduce waste

Question 19: How can resource efficiency, including waste prevention, be stimulated among SMEs in a way which does not incur disproportionate costs?

SMEs are not different to other businesses. They give great consideration to minimising their costs and maximising their revenues. There may be greater constraints of capital expenditure, where investment is needed to prevent wastage, but some public companies also suffer from tight capital constraints, and usually have less freedom to invest for long-term benefit. If an investment offers an acceptable return and sufficiently low risk, companies big or small should be able to raise the finance. The government's role is in ensuring investment in waste prevention offers sufficient returns, by ensuring the external costs are internalised in the costs of waste disposal, and in minimising risk by ensuring policy stability, and particularly by ensuring that mechanisms to internalise the externalities cannot produce significant volatility in the costs of those externalities. That is a major reason why externalities are better internalised through a carbon tax than through a trading scheme.

Higher waste disposal prices do not necessarily result in higher costs to SMEs, if those SMEs respond to the higher prices by reducing their volumes of waste. If they cannot, the costs of their products or services will have to rise, reflecting the real environmental costs of those products or services. If they can but do not, they deserve to suffer the costs. The discipline of the market will ensure over time that those who fail to make the necessary adjustments will be replaced by companies that do.

Question 20: What role should Business Links, local authorities or other organisations play in engaging small businesses?

Local authorities should give careful consideration to the authorisation within the boundaries, or failing that the identification of the closest alternatives outside the boundaries, of sufficient treatment and disposal facilities to cater to the full volumes of the various waste streams produced by residents and businesses within the constituency. They should make available information on these facilities, and how waste can be collected and delivered to these facilities (i.e. which waste collection companies are active within the constituency). They should be incentivised to make provision within their boundaries, rather than shipping out to a neighbour, by being awarded the tax receipts from those facilities.

Given availability of suitable treatment and disposal routes, and properly-priced costs of waste disposal, small businesses will seek out the information on how best to deal with their waste, rather than authorities, Business Links and other quangos having to chase down businesses and try to get them to absorb information they do not know that they need. You can lead a horse to water, but you can't make it drink. Properly-priced waste disposal costs (and recycling and energy values etc.) and strict enforcement of the Duty of Care will ensure the horse is thirsty and looking for the water.

Extending the sectoral approach: producer responsibility

Question 21: What are your views on developing a sectoral approach to waste prevention including setting waste reduction targets?

The externalities of any particular process do not vary depending on the sector that is utilising that

process, even assuming that businesses can be accurately categorised into distinct sectors. We already have enough discrepancies in the costs of externalities applied through the myriad of targets, regulations and incentives. We do not need more, we need fewer.

Reducing environmental impacts of consumption

Question 22: How do we best engage consumers to reduce waste?

Through price (internalising the externalities). The downside of using price mechanisms to drive waste reduction, reuse and recovery is that higher disposal prices will incentivise some people to dispose of their waste illegally, rather than throw away less and recycle more. Application of external costs to waste disposal prices needs therefore to be accompanied by significantly increased enforcement activities.[28] A significant proportion of the money that is being poured by BREW into a host of bureaucratic schemes could instead be spent on providing sufficient resources to ensure that waste disposal criminals are caught and punished.

It should not be assumed, in any case, that internalising the externalities will necessarily increase the costs of disposal of all forms of waste. If the waste streams have an increased value as resources because the costs of raw resources have been driven up through internalising the externalities, businesses may be prepared to accept those waste streams at a lower price than they currently do. The balance of price increases for some waste streams and price reductions for other waste streams will reflect the true environmental costs and benefits of managing those streams.

28 See Question 49.

CHAPTER 5 RECOVERING RESOURCES FROM WASTE

Local authority performance

Question 23: Should we set future statutory performance standards for Local Authorities related to recycling and composting household waste and how far ahead should any future targets be?

Performance standards are really targets, not standards. Targets are an inappropriate way to incentivise and assess waste management performance.[29] The performance standards should be scrapped and replaced with pricing mechanisms that allow councils to assess and implement the most suitable forms of treatment and disposal for their circumstances. Recycling and composting are not always the best environmental options, and they are not equally suitable across all parts of the country.

Question 24: What are your views on the possible changes to the design of the [performance] standards suggested above?

The current targets are inflexible and unrealistic enough. At least the aggregation of the targets across all materials allows some small degree of flexibility and tailoring to local circumstances. To make them material-specific would tighten the last buckle on the performance standards straitjacket.

A target "for the proportion or amount of waste that is not recycled" is no better than any other target. It may, in fact, drive attempts to recycle material that is not suitable, let alone economic, to be recycled.

Question 25: What are your views on the possible changes to how standards should apply to local authorities suggested above?

There is no obvious reason why recycling will become a progressively more appropriate means of waste disposal over time. Indeed, if ambitions to encourage waste minimisation and reuse are delivered, the proportion of waste that is suitable for recycling may fall. To the extent that minimum performance standards allow more "flexibility to reflect local circumstances", they would be an improvement on the current position. However, a minimum performance standard is not, by definition, very flexible. If the Government are concerned about local circumstances, they should recognise that a rising minimum level of recycling may not be consistent with that flexibility.

Pooling of targets is likewise an improvement to the extent that it allows more flexibility for multiple authorities to reflect the varying circumstances within their areas of responsibility. However, the existence of two tiers of local government with responsibility for waste management is itself an inefficiency that should be removed. And greater flexibility is required than the simple pooling of targets.

Impact on the management of waste further up the hierarchy

Question 26: Do you have any comments on the proposal to encourage the diversion of wastes from landfill to Energy from Waste?

There are more than three main techniques for recovering energy from waste. None of the descriptions of the three techniques seems to cover the anaerobic digestion of wastes.[30] That policy in

29 See Questions 1 and 2 above.

30 To some extent, it could be said to fall into the third category (MBT), but AD is not usually deemed to produce RDF, which is usually used synonymously with the term SRF (solid recovered fuels). Gas from AD is rarely used in separate plant "such as industrial boilers", but in generating equipment on-site. There can be little doubt that what was being considered in this context was plant such as autoclaves that produce a solid combustible fuel, rather than the biological decomposition of waste to produce a gaseous fuel.

this area could be frames around blinkered view of the technological possibilities illustrates the dangers of government by micro-management. Broad-brush policy would be blind to the technologies, and adaptable to whatever new technologies might be invented in the future. Micro-management targets the means rather than the ends, and may unfairly disadvantage certain technologies, including those not yet considered, because they were not included in the policy considerations.

EfW is an area that highlights the contradictions in Government policy. The energy from EfW displaces energy from combustion of fossil-fuels as effectively as any other renewable. Yet EfW does not receive a value[31] for this environmental benefit, as other renewables do. Under modifications to be introduced under the Renewables Obligation 2005, EfW may receive this value in future, providing heat is also recovered from the process, in proportion to the "quality" of the heat use. So displacement of fossil fuels through generation of electricity from waste still has no notional environmental benefit, nor does displacement of fossil fuels through production of heat from waste, but displacement of fossil fuels through production of both heat and electricity from waste does have a notional environmental benefit. However, almost none of the existing EfW stations can receive the value of this environmental benefit, even if they retrofit heat-recovery, because they are mostly subject to a Non-Fossil-Fuel Obligation (NFFO) contract, under which the environmental benefit is contracted to the Non-Fossil Purchasing Agency (NFPA), whose profits from this benefit are returned to the Treasury from time to time.

The Government claims to have been disappointed by the amount of EfW capacity that has come forward, and has consequently downgraded its prediction of how much waste will be treated in this manner. But it was the Government's decision not to award ROCs to EfW plant that was a significant factor (along with difficulties in obtaining planning permission) in the capacity shortfall. It is only now that landfill tax has driven up costs of landfilling that EfW is starting to look competitive as a waste disposal option again, despite the value of its energy being artificially constrained. Sadly, the balance of revenues from the gate fee and from sale of the energy is such (thanks to these constraints) that the primary purpose of a thermal treatment plant will be to minimise volumes of residue, not to maximise energy recovery. Uptake of EfW should have been driven by the internalising of the external costs of fossil-fuel combustion, not by a change of heart in government policy towards waste disposal options.

Generating energy from waste **always had** benefits for the security of our energy supply. It **always reduced** emissions of greenhouse gases through displacement of fossil fuel generation. The health impacts of incineration are **no less** now than they were when the RO was being designed. If these assertions are true now, then EfW should have been part of the RO, and EfW would have been encouraged by that means to maximise its energy-recovery efficiency. Instead, the Government now has to balance a disincentive (in the renewable energy market) against new, though more amorphous and harder to value policy incentives. The obstacle should never have been erected in the first place.

The argument that EfW reduces emissions of greenhouse gases because the wastes would otherwise generate methane in landfills is only partially accurate. This assumes that the methane escaped from the landfill. In modern landfills, most of it will be captured, used as an energy source, and converted to carbon dioxide (the same greenhouse gas emitted in the same proportion to the organic content in EfW plant). Landfilling is a form of anaerobic digestion, and can be a method of energy recovery, as much as thermal treatment can be. The balance between the two choices will depend on costs and local conditions. Though EfW is likely to provide more complete recovery of the energy, and lower greenhouse gas emissions in total, this will not always be the case, nor outweigh other local considerations. In remote areas, the capital costs of building small combustion plant, and the environmental cost of shipping the waste to larger, remote plant may make landfilling and recovery of energy from the gas the more appropriate option. Where the waste stream contains significant volumes of wastes that are hazardous to burn, such as plastics with high halogen content, the better environmental option may again be to landfill.

Once again, we return to the point that waste management policy should not assume that

31 ROCs (Renewables Obligation Certificates) under the RO (Renewables Obligation).

generalisations will suit all circumstances. Effective waste management policy would internalise the external costs of all waste treatment options and allow the market to identify the most suitable option to the circumstances. Bad waste management policy would target specific technologies. EfW should receive the full value of its internal and external benefits, and likewise pay its full costs. The same should apply to all other waste management techniques. Under these circumstances, it could be expected that EfW would become a more favourable option in many locations. But the objective would not be to encourage more or less EfW, but to encourage the most appropriate solutions to the circumstances.

Question 27: Of the two main current Energy from Waste technologies i.e. a) MBT/RDF and b) direct incineration is there any reason to prefer one over the other), and if so, why?

All waste treatment processes should be subject to standards and quality-control that ensure that the process is carried out safely and efficiently. It is more difficult to carry out effective sampling and measurement of direct incineration than of the products of MBT or RDF. Consequently, MBT/RDF may be favoured where direct incineration cannot easily be quality-controlled.

But that does not mean that one option should be favoured over the other. There will be waste streams that are sufficiently homogeneous that it is possible to apply effective quality-control to the unprocessed waste stream, and for which direct incineration is an appropriate option. The Government should mandate standards[32] that all treatment options should satisfy, and then leave the choice of approach to the market. A preference for one technology over another, without reference to the precise circumstances in which that preference would be exercised, is nonsensical.

There are other options besides these "two main" technologies – for instance, gasification and pyrolysis. Inviting preferences to be expressed for one of only two options in a Consultation Document encourages people to take a blinkered view of the wide range of possibilities. The question should have been expressed (if at all) more openly.

The future of landfill

Question 28: Should landfill eventually be the home of last resort taking only nonbiodegradable residues from waste treatment?

A situation to avoid would be one where landfill took modest proportions of biodegradable material. This would result in volumes and quantities of gas being produced that were difficult to capture and treat.[33] There is an argument that landfills should either function as a bioreactor, taking high volumes of putrescibles, or no biodegradable materials at all.

Unfortunately, it is not likely to prove possible to sort waste streams so thoroughly that biodegradable material is never sent to landfill. Nor will it always be possible to treat the putrescible material thermally, and send only the inert residue to landfill. The Government should prepare itself for the almost inevitable result, under policies currently in force or under consideration, that landfills continue to take biodegradable material and produce gas, but only in such volumes that the efficiency

32 In the true sense of the word, not in the sense of targets in which it is repeatedly used in the Consultation Document

33 Small quantities of biodegradable material will release their gas more sporadically, because of the lack of the smoothing effect of higher volumes, making it harder to maintain appropriate suction pressures. Where that gas is captured, it will be harder to utilise, as capital costs of utilisation become prohibitive below a certain volume and quality of gas. Gas with a methane content of less than 35%, as will likely be produced at most landfills once putrescible inputs have been reduced by the extent envisaged in the Landfill Directive, cannot be treated in high-temperature flares nor utilised in spark-ignition engines, currently considered the best available technology for control and utilisation. Below 25% methane, the gas cannot be easily treated in old-fashioned (and less efficient) exposed flares. It is likely that the effect of the Landfill Directive will be to increase methane emissions from landfills, particularly as changes to the Renewables Obligation under the RO Order 2006 will remove the incentive for companies to look for innovative ways to utilise the gas.

of capture, treatment and utilisation is very much reduced, and emissions of methane to atmosphere increased.

Procurement of waste management services

Question 29: Views are invited on the proposed actions to improve the waste [management services] procurement and how to take them forward

Summerleaze is currently involved in the tendering of the Waste Services contract for the City and County of Swansea. At the last bidders' meeting,, the Council announced that they had over 40 interested parties.[34] Many of these are marginal players, looking for a niche in the contract and cooperation with other bigger players. Nevertheless, it is hard to substantiate the contention, quoted from the OGC in the Consultation Document, that there are a "limited number of suppliers" of waste management services.

The constraints to competition in the provision of waste services are not so much questions of fair trade as of geography. Any party wanting to tender for waste services must have a viable final disposal option. Given that final disposal options (landfills and incinerators) are few and far between, and usually owned by vertically-integrated operators (providing collection, treatment and disposal services), this puts the owners of the disposal facilities nearest to the local authority in a strong position to dominate the bidding for the services contract.

In other words, the problem is not in the number of players in the market, but the number of facilities, and to a lesser extent, the vertical-integration in the waste market. The solution is to have more, smaller disposal facilities, operated by a wide range of companies, some of whom should not be vertically-integrated. Planning policies should be tightened to encourage local authorities to approve disposal facilities within their boundaries, and appropriate financial incentives put in place to reward those who provide those facilities and punish those who do not. It is all too often the easiest option for councillors to try to curry favour with their constituents by refusing approval of badly-needed facilities. Councillors should face a significant consequence for failing to represent their constituents' interests by taking difficult decisions, to set against the easy benefit they gain at the polling booth from simply kowtowing to short-termism and NIMBYism. Harsher awards of punitive costs against councils where inspectors at appeal deem that the initial refusal was unreasonable, would be a useful wake-up call to councillors and constituents (who would pay for this failure through their Council Tax bills).

Delivering the market capacity for recycled materials

Question 30: What more could the government do to accelerate the development of markets for recycled materials?

Markets emerge where there is a genuine demand and an available supply. There is no shortage of supply of recycled materials under current waste management policy. If markets are not emerging as quickly as the government would like, that is because there is insufficient demand for those materials. Creating demand for demand's sake is a shortcut to economic disaster. You end up producing goods that people do not want, simply to get rid of a material that would not otherwise have been produced.

If externalities were priced into the costs of production through a carbon tax, genuine demand for recycled materials might emerge, provided the energy balance of producing those recycled materials relative to producing the raw feedstock genuinely favoured the recycled option. Sustainable markets would thus emerge, reflecting genuine demand for the options with the lowest external costs.

34 A list of those parties was made available, and could doubtless be provided for the Government's interest if requested.

Imports and exports

Question 31: How can we improve compliance with the controls that apply to the export of waste for recycling?

The Consultation Document states that "the transport impacts of the exports is generally minimal as the majority of recyclables are exported on container ships which would otherwise return empty having delivered manufactured goods to the UK and other parts of the EU". This assumes that those goods would be manufactured if there were not a supply of cheap recyclate travelling in the opposite direction. By incentivising overproduction of recyclate through targets that do not adapt to levels of demand for the product, the Government is creating conditions where manufacturers will look for uses of the recyclate as it is available so cheaply. It is quite conceivable that, if the material were not available so cheaply, the products would not be produced, the transport would not be incurred, and the British market would not be flooded with cheap tat that encourages a disposable society. In some cases, the recyclate is even disposed of rather than being reused, as there is incentive to separate waste in to recyclable products and send those products abroad, regardless of the quality of the use to which they will be put, than it is to dispose of or recycle it in the UK.

Such abuses of the recycling rules occur because the mechanisms used to incentivise recycling produce unrealistic prices for the product. They could be substantially reduced by ensuring the externalities of all waste management options were valued proportionately (rather than trying to drive certain solutions regardless of market realities). Under these conditions, recyclate would not be cheaper to send recyclate to China than to deal with it in the UK, unless there were a genuine demand in China that added value through the reuse of the recyclate.

Question 32: What should the balance be between the development and encouragement of domestic capacity for recycling and the reliance on overseas markets?

Whatever the market dictates, provided that market incorporates all the externalities of all the processes involved in the various waste management options.

Commercial and industrial waste

Question 33: How can we encourage more recycling and recovery of commercial and industrial waste?

Businesses will look to minimise their waste disposal costs. If recycling a waste stream represents the most economic way of dealing with that stream, recycling will increasingly be adopted as the preferred waste disposal option. The economics of recycling are fundamentally a balance between the energy, capital, labour and disposal costs, and the values of the gate fees and the recovered streams. The Government cannot easily affect many of the costs (other, perhaps, than through capital grants, which would really skew the market). The gate fee will be set relative to the costs of alternative disposal routes, so driving up the costs of these alternatives (for instance, through the landfill tax) will improve the economics of recycling of C&I waste. The Government could also try to drive up the value of the recovered materials by trying to create a market for them, but that has a high risk of backfiring.[35]

It is possible, through a combination of regulation and price mechanisms, for the Government to drive up the proportion of C&I waste that is recycled, to the extent that is physically possible. However, it should not be the objective to do so, but to encourage the most appropriate waste management option for the circumstances. If the externalities are fully embedded in the costs of the various options, and it is practical to recover materials from the waste stream, it is likely that recycling will be an attractive option. But the Government should not put in place mechanisms that assume that this will always be equally the case, regardless of circumstance.

35 See Question 30.

Construction and demolition waste

Question 34: What more should we do to encourage reduction, recycling and recovery of construction and demolition waste?

Construction and demolition waste is just another type of commercial and industrial waste. It should be treated in the same way.[36]

There is something the Government could do with regard to one particular type of waste, which is commonly found in construction and demolition waste. The best environmental option for dealing with waste wood may often be energy recovery. However, this is rarely feasible because of the chemicals that are used to treat the wood. Consequently, that proportion of the waste wood stream that cannot be recovered for use in board mills (which themselves should perhaps be more conservative in their use of this material, for health reasons), is generally sent to landfill, where both the material and energy values will be lost.[37] The level of landfilling of waste wood will be significantly higher than is indicated in the graph on p.70 of the Consultation Document, because landfill companies often use this material (and some notionally "recovered" construction waste) for the construction of temporary haul roads. This use is deemed officially to have recovered the material, even though it has effectively been landfilled. Where volumes of waste wood cannot be used in this way or sent to the board mills, they are being increasingly stockpiled around the country, looking for ways to utilise the recovered material. The chances of doing so could be significantly enhanced in the long-term if the Government commissioned research into treatment options that did not contaminate the emissions from an energy-recovery plant, and then applied the appropriate external costs to the various treatment options, providing a financial incentive for timber mills to use the environmentally-benign options.

Small and medium sized enterprises

Question 35: What are the current practical and cost barriers to recycling SMEs? 

If externalities were fully internalised, the cheapest disposal options would also be the most appropriate options for the environment. There would be no need to treat SMEs specially, as the market would function in the normal way to make the most appropriate options available to SMEs in the same way that they are made available to everyone else.

Question 36: What might business and commercial providers do to overcome these barriers and how could the government support them?

Barriers are usually created by government action (however well-intentioned), not solved by them. The number of natural barriers that may exist in the absence of government intervention in the market is very small. Market failure to take account of externalities would be the most common natural barrier that Government can usefully deal with. The government also has a role in preventing anti-competitive behaviour by monopolists, monopsonists and oligopolists, although the opportunities for such market abuses are themselves most commonly enabled by government intervention in the market. The Government should create mechanisms (such as a carbon tax) to internalise the full value of the externalities, and then leave the market to its own devices, maintaining only a supervisory presence to prevent anti-competitive abuses.

Hazardous waste

36 See Question 33.

37 Although wood is notionally biodegradable, its lignose content will ensure that the decomposition process is so slow that the gas production is too slow to be recoverable.

The graph on p.76 of the Consultation Document is confused. Transfer and treatment are not alternatives to thermal treatment (or other forms of energy recovery), landfilling and recycling/reuse. The waste from the former processes must go eventually to one or more of the latter processes.

Question 37: Do you think the products in paragraph 87 above are sensible priorities for new producer responsibility initiatives and should such initiatives be voluntary or statutory?

Producer responsibility ensures that only the producer has an incentive to consider how to deal with the end-of-life treatment of their product. Consumer responsibility ensures that, not only does the consumer have an incentive to handle the product in such a way to maximise its longevity and its suitability for recovery, but also that any business can enter the market to introduce a novel way of treating the waste. The producer may still enter the market for end-of-life management of their product, if they themselves have an innovative idea. They may choose to modify their products to favour a means of recovery that they will offer, thereby increasing their revenue from the product. But this will not be exclusively their domain, as it is under a producer responsibility regime. Competition is more likely to encourage innovative solutions than is the creation of monopoly conditions.

Hazardous wastes should be charged the full external costs of their disposal. In particular, the costs of disposing of hazardous liquid wastes to sewer should reflect the impact on the processes at the water treatment works. Contamination of the waste water stream by non-organic substances may make energy recovery and use of the sewage sludge more difficult. Charging heavily for this impact on the process would encourage waste producers to treat their waste streams more thoroughly before disposing to sewer. This might enable wider recovery of energy, more opportunities or better values for use of the sewage sludge as a fertiliser (because of its higher quality), and failing that, lower contamination of the waste streams (solid and gaseous) from thermal reduction of the sewage sludge.

Household hazardous waste

Question 38: Which of the options for household hazardous waste outlined above should be taken forward?

The arguments against extended producer responsibility apply equally to household hazardous waste.[38]

While councils are the sole providers of waste management services to households, it is only rational that they should provide clear and easily-accessible information on the disposal services provided, and what to do with a range of waste materials. Where waste materials have a residual value, there may be some scope in allowing businesses to provide recovery services to households, who will have an incentive to use those services if they are paid for the material. Where there is no residual value (and usually a disposal cost), the Government will have to either enforce the Duty of Care of waste producers for the safe disposal of the material (so that markets are created for its disposal), or require councils to make facilities available for its disposal. It is likely, if it is difficult to detect hazardous materials in the general waste stream at the point of collection, that the most efficient way to prevent contamination of the waste stream under these circumstances, is for the council to provide these facilities free to the domestic user, so that they have no incentive and a strong disincentive (from the fear of detection and punishment) to dispose of the material illegally. Under the current system of communal rather than individual responsibility for household waste management, it is therefore rational that the Government should require councils to provide disposal facilities for all common hazardous waste arisings, free at the point of use. If this means extension of the responsibilities placed on councils, so be it, but the Government must provide sufficient funding to enable councils to provide these services free of charge.

38 See Questions 6 and 37.

CHAPTER 6 ROLES AND RESPONSIBILITES

National level

Question 39: What are your views on the proposed Sustainable Waste Programme Board, and on ways for it to engage with waste stakeholders and the wider community?

A waste of money. A clear, coherent and joined-up policy on sustainable waste management does not require the creation of yet another quango. It simply needs the implementation of mechanisms that internalise the externalities of waste management. The price mechanism will send a clearer signal than any amount of hot air from committees.

Regional level

Question 40: Do you agree that more emphasis is needed on partnership working between local authorities at the regional and sub-regional level on waste procurement?

The Welsh Assembly has just forced Swansea City Council to consider regional spatial planning considerations in the tender of their waste services contract. The upside is that greater strategic consideration will be given to the integrated disposal of waste from a wider area of South-West Wales than just Swansea. The downsides include a significant delay in the process, the possibility that wastes may be transported further due to the regionalisation, and the reduction in the amount of competition in the process, as the letting of larger contracts reduces the number of parties with the financial wherewithal to bid credibly for the contract, and reduces the total number of contracts that will be put out round the country. Given that local treatment of waste will often be the best environmental option, the benefit of regionalisation may be limited (or even negative) from an environmental perspective, though the potential benefits should not be discounted entirely.

Of course, if there are strong benefits to regionalisation, the party that wins the first contract put out in a region ought to have a commercial advantage when tendering for the other contracts. It could be argued, therefore, that where regionalisation offers a genuine benefit, it should emerge naturally, and conversely, where it does not emerge naturally, that probably indicates that the benefits of regionalisation were limited. The belief that greater centralisation is inevitably more efficient was the logic that drove nationalisation. It turned out not to be true. Competition drives efficiency more effectively than centralisation and planning.

Question 41: What role should be played by the RDAs and local authorities respectively in developing a more closed-loop resource economy; and what activities should they undertake?

Businesses, not quangos, should be identifying business opportunities. The Government should ensure that councils have strong incentives to welcome innovative waste management proposals from business. The main purpose of RDAs in this context is to open to businesses doors in local government that remain closed to them directly. Councils should want to talk to businesses, not be dragged reluctantly into discussions. If RDAs or other quangos are responsible for developing and promoting the business proposals, there are competition issues about how they select the business partner(s) with whom they develop the idea.

Local level

Question 42: What are your views on the characteristics for good practice in Local Government set out in Box 2?

At a local level, it may not be efficient to use “a range of waste management systems”. The volume of wastes may not be sufficient to justify diverse provision. Diversity should occur naturally on a

national scale, as different localities choose different solutions to suit their circumstances. Diversity is not necessarily a desirable characteristic of local waste management solutions.

The point of the landfill tax is to drive up gate fees to incentivise waste reduction and other forms of waste treatment. It seems contradictory to apply a price mechanism to drive up gate fees, and then to encourage local provision to be operated in such a way that it drives them down again. It is to be suspected that the interest in integrating household and other waste streams does not derive so much from the notional (and largely illusory) economies that can be achieved, as from a philosophical attachment to greater integration and centralisation, and thus to the extension of government provision of services. Given the relative historical efficiencies of state and private provision, this should be considered a last resort, not a desirable objective.

Variable charging for business waste should not be an issue, as local government does not have a responsibility (other than through planning consideration of new waste disposal facilities) for management of business waste. Variable charging for household waste collection (for which councils do have a responsibility) is an interesting concept, that should be adopted to send appropriate price signals to minimise waste, only in combination with significantly strengthened enforcement measures against illegal waste disposal activity (which is likely to be outside the control and the budget of local government). The Government will have to take the lead on enforcement before encouraging councils to look at variable charging.

Business trust in the planning system is as important as public trust. Local planning decisions on waste management facilities are more likely to be biased against businesses (who do not vote for councillors) than against local opinion. Commercial trust (and benefits to the locality) could be enhanced by ensuring that councils (and their residents) receive the financial benefit from the location of waste management facilities in their neighbourhood, by returning business rates receipts to councils.[39]

Cooperation between municipalities should only be considered a characteristic of good practice in Local Government, in the sense of encouraging communication between councils. Commercial cooperation (e.g. in joint letting of contracts) may or may not be a positive characteristic.[40]

Likewise, use of "joint venture public/private delivery mechanisms" should be appropriate to the circumstances, and not considered automatically a positive characteristic. If the market is unfettered and local government not over-funded, it is likely that these types of mechanisms will be adopted, but they should not be mandated.

Individuals should take responsibility for their waste, not the community. The community has no means of controlling or knowing what individuals are putting in their bins. The community's responsibility is in a social contract with the individuals, to provide appropriate disposal facilities if the individuals do their part in managing their waste appropriately upto the point that it is passed to the council services.

As every person and every organisation produces waste, everyone is a stakeholder in local waste services. It may be beyond the council to engage everyone effectively at a local level. The council should provide the opportunity for people and organisations to inform themselves, not be under an obligation to engage with them.

Question 43: How effective have LAAs been to date in helping to deliver waste outcomes; and how could partnership arrangements be strengthened for the future at the local or sub-regional level?

They have not had sufficient impact that we have been aware even of their existence in the more than 20 locations around England and Wales in which our company operates. That may be a good thing.

39 This does not necessarily mean returning the power to set the levels of business rates, whose abuse was the reason why they were centralised in the first place.

40 See Question 40 above.

Improved integration of municipal and business waste management

Question 44: Is there a demand from businesses for increased help from local authorities with recycling services and resource management?

There is a need for recycling services for certain materials or objects (such as batteries) for which there is no obvious alternative means of disposal. They do not have to be provided by local authorities. Government (central or local) should ensure that these services are available, and that information is available and easily-accessible on how these services can be accessed.

A strategic role for local authorities

Question 45: What are your views on the proposed wider strategic role for local authorities and how this could be supported ?

A strategic role for local authorities in facilitating "a more integrated approach to [business] waste and resources at local level" sounds dangerously close to communism. What business does local government have in strategic direction or "facilitation" of business waste management? Standards and incentives ought to be set by central government, but delivery should be left to business. Commercial decisions will not be simplified or improved by the involvement of local government in an area where it does not belong. Local government's role should be limited to planning, procurement, provision of information to residents, and (if assigned the responsibility by central government) enforcement.

Local authorities as wider recycling service providers for business waste

Question 46: What are your views on placing requirements of this kind on local authorities and/or businesses?

The more areas in which local authorities provide services, the more areas will be closed to businesses. Local authorities are not subject to the same financial constraints as businesses. They cannot set prices according to the same financial calculations. Their public-funding and pressure to offer "fair" prices make it very likely that they will charge less than private service providers can justify. The role of local authorities should only be extended if the lessons of the '60s and '70s have been forgotten and public provision is once again preferred to private provision.

Local authorities and producer responsibilities

Question 47: What changes need to be made to ensure better interaction of producer responsibility schemes and local authorities?

Eliminate the producer responsibility schemes, then there will be no tension between products that should be returned to the producer and products that are disposed of in the general waste stream. Products will be recycled if they have a value, not if the producer has an obligation to accept them back.

Development of the voluntary and community waste sector

Question 48: What are your views on the approaches above and how the Government can best facilitate a greater contribution by the voluntary and community sector in delivering waste objectives?

Like the involvement of local government directly, the involvement of VCS organisations in a waste

management activity is likely to make it impossible for businesses to compete in that activity. There may be situations where VCS organisations play an important role in carrying out an activity that would otherwise not be carried out. But, because they are not subject to normal financial considerations, it will be difficult to know whether the services they carry out are the most efficient way of dealing with that particular waste stream. It may be that VCS organisations, by carrying out otherwise uneconomic activities, skew the choices with regard to the most suitable way of dealing with a particular waste. If externalities are internalised in the costs of waste disposal, pursuing an uneconomic option will be synonymous with choosing the wrong environmental option. The Government needs to take great care to ensure that VCS organisations are not used to reduce the role of business in waste management, and to drive the uptake of unsustainable solutions. Greater care must be taken not to undermine the market, if these organisations are to be encouraged to make a greater contribution in delivering waste objectives.

CHAPTER 7 WASTE CRIME

Question 49: What additional action is needed either to achieve effective enforcement or to prevent waste crime?

Proper funding. The recent Dispatches documentary “Britain's Rubbish” on Channel 4 highlighted the failures of enforcement against illegal waste disposal activities in the UK. As someone who lives near a civic amenity site, it is the author's experience that fly tipping is getting worse. One of our nearby roads is more often than not impassable because of whole loads of waste tipped across it (or burnt-out cars due to joyriders from the nearby estate). Waste is tipped almost daily in a small lay-by providing access to the Burnham Beaches World Heritage Site, in the road leading to our house. This is frequently carried out in broad daylight, and by apparently private individuals in their cars as much as by “cowboys” in their vans. There is no fear of being caught and punished, although fly tipping in the area is so commonplace that it would almost certainly repay surveillance if the authorities wished to enforce the law. I am not aware that any attempt to catch fly tippers has ever been carried out in our area.

The Dispatches programme highlighted that the professional criminals involved in illegal waste disposal activities have no fear of or respect for the law. But it is likely that most of the people and businesses that employed them were not so cavalier with their money and their freedom. Whilst enforcement against the professional criminals may not deter them from their activities (although it will prevent them from carrying out those activities while they are in prison), it is likely that their market could be substantially reduced by stricter enforcement of the Duty of Care of waste producers, including exemplar prosecutions. It may be that only 20% of people and businesses are aware of the Duty of Care, but ignorance is no excuse in the eyes of the law. That proportion will rise sharply if the prosecution of someone who engaged cowboys to dispose of their waste was widely reported.

The wife of the author of this response is a garden designer. Most garden designers are involved in the construction of their work, as well as the design. They often sub-contract the construction, overseeing the work, but leaving the responsibility for arranging the disposal of the waste to the sub-contractor. Most designers would consider it to be the responsibility of the sub-contractor to ensure this waste is disposed of legally. Very few would be aware that they have a Duty of Care to ensure that their contractor is doing so. There is a wide range of prices charged by sub-contractors. In a bitterly competitive market, the work tends to go to the cheapest contractor. The author's wife insists on using better-quality contractors whom she trusts. In a competitive situation against a designer with a lower-cost contractor, this usually means that she (or her contractor) will not get the work. From conversations with some of her colleagues, she established that one of the cheaper contractors used by them was tipping in Finchampstead, where the Dispatches programme identified more than one illegal disposal facility. It is likely (though not proven) that the contractor's low prices are related to his use of illegal tipping facilities. While he is able to do this, other contractors will be driven to do the same in order to win business, and designers will be driven to use those who are tipping illegally, so that they also do not lose business.

If people feel that the Duty of Care will not be enforced, standards will be driven downwards. If people felt that they could compete on a level playing-field where everyone had to incur the costs of legal disposal (because the Duty of Care was enforced rigorously), the pressure to use cheap contractors would be reduced substantially and standards would be driven upwards. Both designers and contractors would not consider themselves criminals and a genuine threat of prosecution would undoubtedly be a significant deterrent to the use (conscious or otherwise) of illegal facilities. Criminal activities could be starved of business without having to battle the criminals themselves.

The increasing prevalence of illegal activities should be seen as an unavoidable corollary of the current waste strategy, which inevitably drives up prices along with standards and technological complexity. Driving up prices is the right course of action, to internalise the externalities, to encourage waste minimisation, and to pay for higher standards of treatment. But if so, the Government must accept that we will have to pay much more for enforcement to prevent the avoidance of these costs through illegal activities. Funds should be removed from the host of quangos

and government departments funded by BREW according to the table on p.34 of the Consultation Document, and the landfill tax revenues used instead to pay for massively increased enforcement measures.

Question 50: Is there evidence to link the types and quality of local waste collection services and general cleanliness to levels of fly tipping? What changes can be made to service provision that will reduce fly tipping?

Levels of fly tipping are related to the costs of legal disposal, to the likelihood and consequences of prosecution, and perhaps to the quality of the local environment. The types and quality of local waste collection services will only be a factor to the extent that they influence the costs of legal waste disposal. We would not accept that high burglary rates meant that people should maintain fewer possessions of value. Equally, we cannot allow levels of fly tipping to determine what services are provided, nor at what price.

CHAPTER 8 POLICY SUMMARY

Question 51: Do you have any further comments?

No.

SUPPORTING DOCUMENTS

Alongside this consultation document we are publishing a partial Regulatory Impact Assessment (pRIA)126 and an Environmental Report (ER)127, on which we invite comments.

Environmental Report

Question 52: Do you have any comments on the Environmental Report?

The Environmental Report is inaccurate in its assessment of the environmental effects of anaerobic digestion (AD) facilities (see Appendix B to the Report). Where the material is suitable for digestion, AD is clearly a superior environmental option to composting, as both produce a fertiliser/mulch, but only AD recover the energy value as well. The text used to describe the impact of AD and composting on the climate (final column of Appendix B) is identical for both technologies. Whilst emissions may be similar (CO2 and H2O from both), only one displaces fossil fuel combustion in the production of energy, a clear climate advantage.

Despite this oversight, it has to be said that the comparison nevertheless appears to favour AD in the balance. It is strange, then, that AD is often treated (to the extent that it is given any consideration) as an energy-recovery technique, whereas composting is treated as a recycling technique. This puts AD lower in the waste hierarchy than composting, which can limit the opportunities for implementation of the more valuable technology. If AD were acknowledged as the clearly superior environmental option (where appropriate), the illogicality of the waste hierarchy would be revealed. In reality, there is no basis for energy-recovery to be placed on a different level to other forms of recovery (e.g. recycling) in the hierarchy. It is easier to defend this blinkered attitude if comparison is made only with thermal treatment (where the issues are more complex), than if consideration is also given to the comparison of AD and composting. As a minimum, acknowledgement should be made that AD is as good an option as composting, and preferable for suitable waste inputs. Better still, the waste hierarchy should be scrapped, and replaced with price mechanisms that were more flexible to the specific circumstances of each project.

Partial Regulatory Impact Assessment

Question 53: Do you have any comments on the Partial Regulatory Impact Assessment of the Review of England's Waste Strategy?

No.