

Evidence from the Sustainable Development Commission (SDC) to the House of Lords Science and Technology Select Committee inquiry on Waste Reduction

Summary

The SDC welcomes the Committee's inquiry into waste reduction and how products and production processes can be made more sustainable and therefore produce less waste. We believe this is an important area which has often been neglected by policy makers' focus on immediate concerns with down-stream waste management.

The UK holds one of the poorest records in Europe on waste. We consider that current policies and action to reduce and manage waste are insufficient to achieve UK commitments towards greenhouse gas emissions reduction and sustainable use of resources necessary to achieve "one planet living".

Overarching recommendations:

- the Government's Waste Strategy for England has an over-riding emphasis downstream and post-consumer, on recovery and recycling, rather than tackling the problem of waste further upstream in the supply chain;
- Government needs to adopt a more aspirational approach to reducing waste by setting longer-term targets and introducing enablers to support a culture of zero waste;
- Government should use its significant spending power to bring forward products to the market with lower waste and resource impacts. The products that it purchases should, as a minimum, comply with the Quick Wins mandatory product standards. As stated in the *Waste Strategy for England*, these standards should be further developed to include waste prevention criteria as well as recycled content;
- better co-ordination between Government and retailers, along with stronger targets could achieve greater and more immediate reductions in resource use, packaging and food waste;
- long-lasting improvements in resource efficiency will require a mix of better product design, producer responsibility, recovery and investment in infrastructure;
- the way in which waste is legally defined, measured and costed needs to be reviewed to allow a better understanding of how wastes can be seen as a useful resource, and to encourage more sustainable manufacture and production.

SDC's interest in the subject

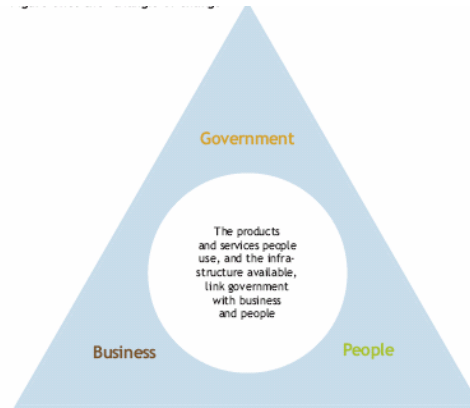
The SDC is the Government's independent watchdog on sustainable development. Through advocacy, advice and appraisal, we help put sustainable development at the heart of Government policy. Five areas of our work are relevant to the issue of waste reduction:

1. Behaviour change (*cf I will if you will: Towards Sustainable Consumption*);
2. Product roadmapping for sustainability (*cf You are What you Sell, Product Roadmapping: Driving Sustainability*);
3. Reducing waste in the food system (*cf Green, Healthy and Fair: a review of government's role in supporting sustainable supermarket food*);
4. Reducing waste in the construction system (*cf Stock Take: Delivering improvement in existing housing*);
5. Reducing waste in government's own operations (*cf Sustainable Development on the Government Estate*).

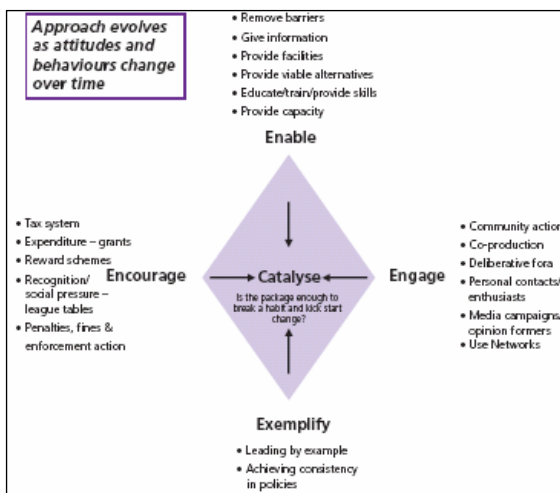
These are discussed further below.

I. Behaviour change

The Sustainable Consumption Roundtable report, *I will if you will*, advocates the triangle of change model of behaviour changeⁱ. This requires business, Government and people to work together to catalyse behaviour change for sustainability.



Government's '4Es' model of behaviour changeⁱⁱ for sustainability identifies four key roles for Government to catalyse behaviour change:



Enabling change by removing barriers and providing the relevant facilities, information and education e.g. enabling change through the Market Transformation Programme, removing barriers to composting of food waste, educating consumers through WRAP's food waste campaign;

Engagement to start changing attitudes through involving people and businesses in deliberation, community actions and media e.g. the Courtauld Commitment, an agreement amongst retailers on waste, brokered by WRAP;

To **exemplify** own policies by leading by example and to achieve consistency in policies e.g. reducing waste in own operations and through public procurement, specifying to promote waste minimisation, giving suppliers freedom to innovate;

To **encourage** businesses and consumers through the tax system, reward schemes and penalties e.g. bottle deposit refund schemes (e.g. Norway, Denmark)

and carrier bag taxes (e.g. Ireland), and current UK policies such as the Producer Responsibility (Packaging Waste).

The role of consumers

I will if you will, recognises the often limited extent to which consumers are able to drive change towards more sustainable consumption, including waste minimisation. For example, despite consumers' growing awareness and concern about waste issues, businesses often cite consumers' preference for packaged convenience products, as a driver towards the increasing amount of packaging and food waste. The lifecycle of products used in the home is also shortening, due to both increasing rapidity of obsolescence, but more intangibly, a greater turnover of goods due to fashion.

The absence of direct incentives and disincentives prompting individual responsibility about levels of waste produced and prompted by households has already caused market distortions. For example, the current system for managing waste lacks any powerful signals from consumers that feed back up to businesses to prompt waste reduction. This leads to situations where it could make business sense for producers and retailers to opt to reduce their own waste from transit packaging, at the expense of increasing consumer waste.

2. Product Roadmapping for Sustainability

The Government's Sustainable Development Framework recognises the need to reconcile the twin objectives of "a strong, healthy and just society" while also "living within environmental limits"ⁱⁱⁱ. Within this framework SDC is highlighting the enormous and still largely untapped potential for products and their supply chains to connect these objectives and help address pressing environmental and social challenges, including waste reduction.

To assist such market transformation we introduced the concept of "product roadmapping" for sustainability in *I will if you will*, the report of the Sustainable Consumption Roundtable^{iv}. We developed the approach further in our report, *You are What You Sell*, which outlines practical steps that businesses and government can take to improve sustainability of products and services. Waste can take many forms, from energy, raw materials,

water, food and other factors and can occur at all stages of supply chains from primary extraction/production, through production, distribution and disposal. Integral to this approach is a focus on minimising negative impacts, including waste, throughout the supply chain.

We highlight the increasing expectations that customers have towards the “stories” of the products they buy. This presents a number of opportunities for business to:

- save money by identifying resource efficiencies that also reduce waste;
- manage resource risks;
- improve the brand value and loyalty of customers and employees;
- grow and access new markets.

Bringing together the interests of businesses along the supply chain can identify innovative solutions to reducing waste and carbon. For example, A supply-chain analysis of their crisps identified how Walkers could save 9.200 tonnes of CO₂ and £1.2 million a year by changing how they bought potatoes^{vi}.

A key element of the roadmap approach is having a long term goal, or vision, or where action and policy interventions are designed to get to. Within such policy frameworks, businesses can invest and innovate. Government has a key role to play in developing such targets. SDC’s experience is that such long term goals and strategies are often lacking. For example, the waste minimisation targets of the voluntary Courtauld Commitment, enshrined within the Government’s Waste Strategy now look unambitious and lack urgency. A further role for Government which we highlight is to create the right “enabling” conditions, and incentives for businesses and consumers to act more sustainably. Government also needs to lead by example. The *Waste Strategy for England* emphasised the important role that reducing waste has in achieving SCP goals, and committed the Government to show leadership through reducing its own waste, and using government procurement to accelerate the development of products which use fewer natural resources and have a lower impact at end of life. We address the role for Government leadership further below.

3. Reducing waste in the food system

Our recent report, *Green, Healthy and Fair*^{vii} addresses the Government’s role in supporting sustainable supermarket food. We identify waste as one of six key priority areas for government and business action.

Packaging

For waste minimisation (and waste management) packaging is clearly a key issue. For example, we found that consumers are often faced with over-packaged supermarket products, and that up to 40 per cent of the packaging in an average shopping basket cannot be recycled.^{viii} Currently households generate 5.2 million tonnes of food-related packaging waste. Stakeholders in our research for the report^{ix} wanted to see retailers and producers doing more to reduce packaging and waste. At the same time, packaging needs to be “fit for purpose” and prevent food waste throughout the supply chain (through transportation, handling by retailers etc) and from the final consumer.

But we also found that the existing Government approach to packaging is currently unambitious and difficult to enforce. For example, though the voluntary Courtauld Commitment has been successful in getting businesses, primarily retailers, engaged with waste issues, its targets are unambitious and lack urgency. Furthermore, there is no indication of what action Government will take should retailers fail to meet even the targets.

We also identify that:

- Recycling provisions of the Packaging Directive have not put high enough costs on producers to force them to rethink product design.^x The cost of Packaging Recovery Notes (PRN) is minimal compared to other business costs;
- The Packaging (Essential Requirements) Regulations have failed to drive waste minimisation as they are “vague, self-monitored and poorly enforced”.^{xi} Local Trading Standards are insufficiently resourced to monitor for over-packaging, and the language of “consumer acceptance” in the regulations is problematic, as it can be used to argue that excessive packaging is justified;
- Implementation of the Producer Responsibility Obligations is too weak as the costs of monitoring compliance are a barrier to enforcement.^{xii} Targets are weight-based, and do not incentivise recycled content and reuse.^{xiii}

We specifically recommend:

- Defra Waste Strategy to be followed by a Packaging Strategy, developed with BERR, WRAP, manufacturers, producers and retailers to set out a clear ambition, and to identify policies and measures for
 - reducing packaging waste at source, avoiding reliance upon downstream recovery and recycling;

- encouraging efficient use of compostable packaging, including clarification of the role of compostable packaging, labelling, and the most environmentally preferable way to deal with it post-consumer;
 - ensuring the necessary long-term waste treatment infrastructure is in place;
 - achieving progress towards closed loop recycling and materials systems in business.
- Defra and the Devolved Administrations' Government Departments—the Environment Agency and SEPA—to develop proposals for stronger and more effective implementation of Producer Responsibility Regulations and Packaging (Essential Requirements) Regulations, to ensure delivery. To include clarification of the ambition for packaging waste reduction and how these regulations can deliver;
 - Defra to convene consumer groups to identify ways of improving sustainable management of waste, such as testing the "consumer acceptance" aspect of packaging in the Packaging (Essential Requirements) Regulations;
 - BERR and DIUS to support innovation for designing out waste, through WRAP where appropriate e.g. an innovation platform and demonstration and venture capital support for innovative ideas that struggle to come to market.

Food waste

Food waste has been identified as making a significant contribution towards climate change impacts, through methane emissions in landfill, and more significantly through the "wasted" emissions and resource use impacts that food waste represents. 6.7 million tonnes of food waste are generated by UK households - equivalent to 15 million tonnes of CO₂.^{xiv} The monetary value of "edible" waste is calculated at £250 - £400 a year per household.^{xv} Food retailers have a significant impact on food waste from products past their sell-by-date, and their price signals to consumers that encourage food waste, e.g. "buy one get one free" offers. Despite the significant scope to reduce the amount of food waste currently sent to landfill, food waste has been excluded from any specific targets in Courtauld or the Waste Strategy.

4. Reducing waste in the construction system

Construction waste, including from demolition, contributes 33 per cent of the total UK waste stream^{xvi}, four times the waste produced by all UK households. In addition thirty per cent of UK fly tipped waste is construction waste. SDC is encouraging BERR to set ambitious targets for reduction of construction, demolition and excavation waste in its Sustainable Construction Strategy, currently under development and due to be launched Summer 2008.

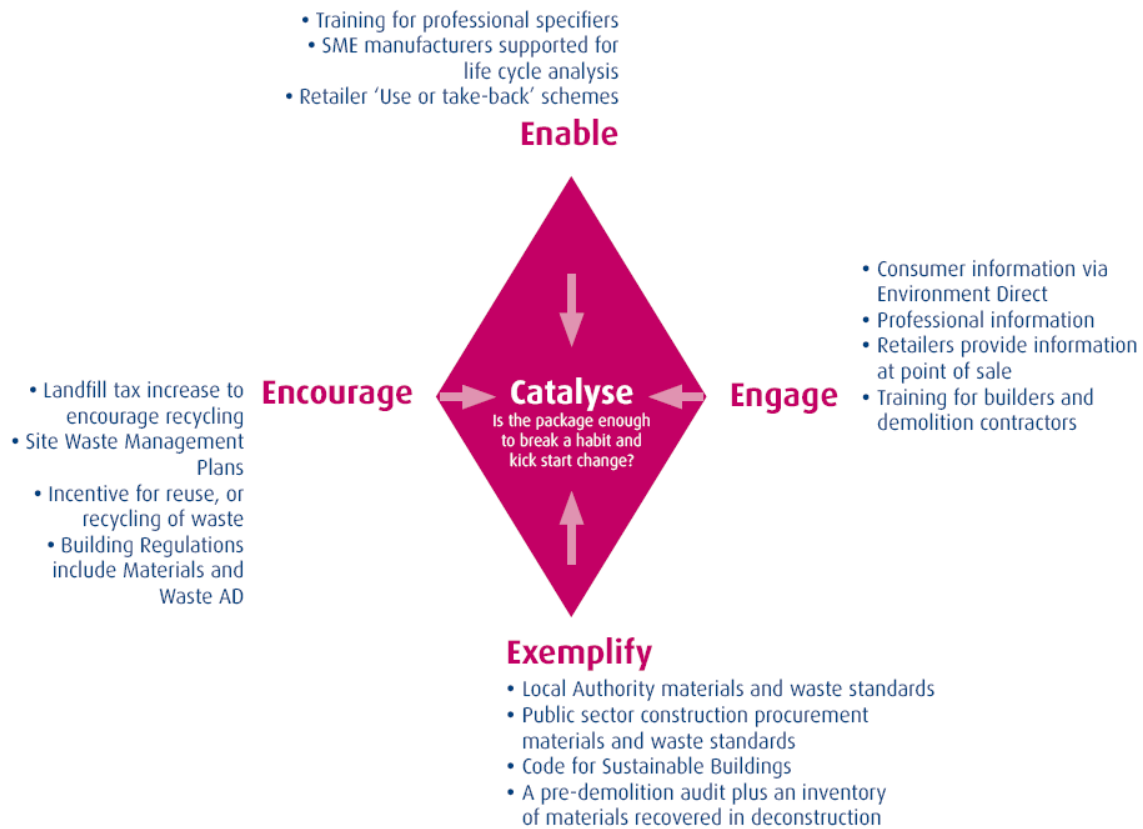
Construction is a fragmented industry, for example, many construction firms are small. We recognise that different measures and policies are necessary for different players. In 2006 SDC estimated that total cost savings of 50 per cent could be achieved on construction sites within a decade if our proposals are implemented.^{xvii} Use of construction materials in the UK is typically characterised by a linear process: extraction; manufacture; assembly; construction; maintenance and refurbishment; demolition; disposal. Sustainable consumption and production would promote a continuous "closed-loop" approach, which allows materials and components to be reclaimed, reused and recycled, reducing consumption of new resources and reducing waste.

While around 90 per cent of demolition waste is currently recycled in the UK, it is largely down-valued e.g. for hardcore, due to the lack of segregation. Our recommendations include providing demolition contractors with training on waste issues to enable separation of waste streams for reuse and recycling, and for the planning system to encourage deconstruction rather than demolition of buildings.

Construction waste constitutes 40-50 per cent of construction and demolition waste across Europe^{xviii}. Over-ordering, off-cuts, damaged materials, packaging and other causes can be reduced through better design and construction management practices. On many construction sites there is little awareness of construction and demolition waste issues, or the existing good practice that could be applied. Contractors are often paying significant costs for waste disposal and are not aware of the savings that could be made.

Public procurement can play an important role in specifying recycled materials, demolition recycling construction waste minimisation and waste reuse/recycling. However the costs of disposal are still not high enough to stimulate the recycled/reused materials markets. The costs of landfill, including landfill tax, remain low compared to more sustainable alternatives and waste disposal costs represent a relatively small proportion of business operation expenses.

The diamond model below summarises SDC's key policy recommendations^{xix} for reducing environmental impacts of materials and construction waste. This shows the steps that need to be taken to deliver change.



5. Leading by example: Reducing waste in Government's own operations

The *Waste Strategy for England* emphasised the important role that reducing waste has in achieving SCP goals, and committed the Government to show leadership through reducing its own waste, and using Government procurement to accelerate the development of products which use fewer natural resources and have a lower impact at end of life. Government has set itself the target for all departments to:

- reduce their waste arisings by 5 per cent by 2010 and by 25 per cent by 2020, relative to 2004/05 levels;
- increase their recycling figures to 40 per cent of their waste arisings by 2010, and to 75 per cent by 2020.

In this year's annual report on *Sustainable Development on the Government Estate* (SDIG)^{xx}, the SDC reported that pan-government performance on reducing waste arisings and increasing recycling appears to be on target to meet the 2010 SOGE targets, with performance reported at 5.3 and 38.5 per cent respectively. However, performance is variable across departments: some have reported excellent progress, whereas others are clearly not on track, and several are still not able to provide complete data for their whole estate.

In particular, MOD (which accounts for around half of waste from the government estate) does not have baseline data for 2004/05, so it is impossible to see the complete picture on pan-government performance on the waste arisings target; and two other "big 5" departments reported incomplete coverage of their waste and recycling data. These factors will have a significant impact on overall performance. Where there are major data collection difficulties departments need to set out how they intend to resolve this. However, the excellent progress made by many departments should be recognised. 13 are already exceeding or are on track to meet the waste reduction target, and 15 are exceeding or are on track to meet the recycling target. Indeed, eight departments are very close to or are already achieving the 2020 targets for reducing waste arisings by 25 per cent, and four are at or near the 75 per cent recycling target.

Departments have shown that the targets in place, on the whole, are highly achievable. Government should consider revising the targets, in particular those for 2020, so that they remain challenging and deliver greater benefits over time. At the same time, those departments who are at a lower starting point need to learn from the good experience elsewhere, and Government should create opportunities for them to do so.

The *SDIG* report also recommended that Government should capitalise on its huge spending power. Government procurement is not just about purchasing the goods and services it currently needs. The way in which this money is spent, by central Government and indeed the whole public sector, should support the delivery of the Government's aims on sustainable development, including resource efficiency. Indeed, the Government's *Sustainable Procurement Action Plan*^{xvii} (SPAP) set out a high level goal for the UK to become one of the EU leaders on sustainable procurement by 2009, to achieve a low carbon, more resource efficient public sector.

The SPAP placed a number of requirements on departments to bring about the shift towards sustainable procurement and support delivery of the SOGE operational targets. However, progress on sustainable procurement to date is disappointing. For example, only just over a half of the 123 contracts reported to the SDC contained sustainability clauses, including a tiny proportion of spend on catering; and compliance with the mandatory Quick Wins product standards is poor - 9 of the 21 departments still do not include clauses regarding these standards in all of the appropriate contracts, even though they have been mandatory since 2003.

Government should use its significant spending power to bring forward products to the market with lower waste and resource impacts. The products that it purchases should, as a minimum, comply with the Quick Wins mandatory product standards. As stated in the *Waste Strategy for England*, these standards should be further developed to include waste prevention criteria as well as recycled content.

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References

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- ⁱⁱ *Securing the Future: UK Government's Sustainable Development Strategy*, 2005
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- ^{iv} *I will if you will: towards sustainable consumption*. Report of the Sustainable Consumption Roundtable. Sustainable Development Commission/National Consumer Council (2006)
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- ^{vii} *Green, Healthy & Fair: a review of the government's role in supporting sustainable supermarket food*, Sustainable Development Commission, 2008
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