

## **House of Lords Science and Technology Select Committee Sub-committee on Waste Reduction: Call for Evidence**

### **Memorandum from the Scottish Environment Protection Agency (SEPA)**

1.1 The Scottish Environment Protection Agency (SEPA) is pleased to have the opportunity to comment on the inquiry by the House of Lords Science and Technology Select Committee (Sub-Committee) into Waste Reduction.

1.2 SEPA is Scotland's environmental regulator and adviser, responsible to the Scottish Parliament through Ministers. SEPA's responsibilities include discharges to air, water and land; resource use and radioactivity.

1.3 SEPA in conjunction with the then Scottish Executive developed the Waste Prevention Plan for Scottish household waste which was published in February 2007. SEPA currently provides the secretariat to the Scottish Waste Prevention Expert Group on Household Waste Prevention, which advises the Scottish Government on policies and actions to prevent the growth in household waste. The membership of this group is as follows: Scottish Government; SEPA; Confederation of British Industry (Scotland); Waste and Resources Action Programme (WRAP); Scottish Retail Consortium (SRC); Scottish Consumer Council; Scottish Waste Awareness Group; Scottish Environment LINK; Community Recycling Network Scotland (CRNS); Convention of Scottish Local Authorities (CoSLA); Scottish Environmental Services Association (SESA). DEFRA and Business Enterprise and Regulatory Reform (BERR) have observer status. Membership therefore includes representation across the full product life-cycle.

1.4 The Household Waste Prevention – Action Plan (Scotland) was published in February 2007, with the aim of stabilising the growth in household waste arisings by 2010 ([www.sepa.org.uk/nws/data/index.htm](http://www.sepa.org.uk/nws/data/index.htm)). The latest data on growth of household waste in Scotland indicates that waste is growing at around 1.25% per annum ([www.sepa.org.uk/nws/data/index.htm](http://www.sepa.org.uk/nws/data/index.htm)), as compared with 0.5% in England and Wales. It should be noted however that reliable long term trend data is not available, and therefore the above growth rates should be treated with caution.

1.5 The Action Plan contains 20 actions designed to combat the growth in household waste arisings, and is split into 5 key areas:

- Product designers and manufacturers
- Retailers
- Consumers
- Communities
- Local authorities

A list of all 20 actions is given in the appendix to this memorandum.

1.6 SEPA is very much aware that to combat the growth in waste arisings action is required throughout the product life-cycle; and that the further up the life-cycle you go, the less influence can be brought to bear at a local or regional level, so that in order to influence product design action is required at a UK and International level.

1.7 The remainder of this memorandum addresses a selection of the questions detailed in the Call for Evidence.

## **2. Better design and the use of materials**

### *2.1 What role can better design and materials play in minimising the creation of waste? Are there any barriers to how knowledge in this area can best be translated and applied?*

It is often quoted that 80% of all product related environmental impacts are determined by product design. SEPA is of the view that better design and materials play a vital part in minimising the creation of waste. The work of the Waste and Resources Action Programme (WRAP) has demonstrated that if the top 12 packaged products all moved to Best In Class, then associated packaging waste would be reduced by 61%. It is noted however, that these are early wins, and that further reductions in weight will become more difficult. It is also cautioned that a focus on lightweighting could result in use of materials which are potentially more difficult to deal with at end of life.

SEPA is currently reviewing existing work on the role of design in preventing waste, however notes that products which become waste in Scotland often originate from other countries, therefore influencing design activity in Scotland will have a minimal effect on waste arisings. In addition many products that are manufactured in Scotland are designed elsewhere. In short the issue of sustainable design requires action at an International level and SEPA would welcome the opportunity to work with other UK administrations to this end. SEPA welcomes the work of the EU on Sustainable Consumption and Production and looks forward to the production of the Action Plan in early 2008.

SEPA believes that it is not only the design and materials used which will have an impact on waste generation, but that the marketing model is also important. For instance a switch to product service systems (PSS) could provide the impetus for waste reduction. A PSS is where a consumer buys a service rather than a product (for instance BT's 1571 service replacing answering machines), or some combination of product and service. (For instance leasing equipment such as mobile phones, so that the product returns to the manufacturer at end of life, and there is therefore an incentive to design that product for reuse and recycling).

### *2.2 What factors influence the use of materials? In what way do considerations of sustainability feature in the selection of most commonly used materials?*

A number of factors influence the use of materials. However, means should be found to rationalise the use of materials in specific product areas such as packaging to promote effective design issues such as light-weighting and material recovery. Additionally, a great deal of work needs to be undertaken to better understand absolute resource availability as it is already clear that some technology areas are rate limited by the availability of the raw materials necessary for further development. The scarcity of gallium for the development of new generation photovoltaic panels being one example.

### *2.3 Can better designed products offset the increase in consumption?*

The recent EU consultation on Sustainable Consumption and Production noted that household expenditures are projected to double across the EU-25 by 2030. Decoupling this growth in spending from the growth in waste represents a considerable challenge, where design will play a key role, however only time will tell whether it is possible within current models of consumption, or whether a more fundamental shift is required. It should also be noted that increased efficiency of resource use in manufacturing inevitably acts to reduce product cost, resulting in increased consumption.

### *2.4 Are there any other gaps in knowledge and how are they being addressed?*

There is an ongoing need to further develop the use of product life cycle assessment and the parallel system of eco-footprinting for products. If linked to product eco-labelling this would be a powerful tool to guide product development.

### **3 Business framework**

*3.1 Does the current policy, regulatory and legal framework support and incentivise the development of better, more sustainable products and processes? How is the framework communicated to businesses and what is the level of awareness and understanding among businesses?*

SEPA is of the view that the current business framework does not do enough to incentivise the development of more sustainable products. Products can, by and large, be placed on the marketplace without regard for their end of life impacts. The exception to this is those products which fall under Producer Responsibility legislation – namely packaging, waste electrical and electronic equipment (WEEE) and end of life vehicles (ELVs). There are also voluntary producer responsibility agreements with certain sectors such as newsprint. SEPA supports the further development of producer responsibility initiatives, and is currently working on a report on the potential to introduce these. SEPA welcomes the establishment of a Products and Materials Unit within DEFRA.

*3.2 What other measures can promote a focus on waste reduction among businesses?*

In drawing up the Household Waste Prevention Action Plan for Scotland various actions were considered which were not deemed possible at a Scottish level, but for which there was support, namely: research work to profile the waste associated with individual products; a waste audit requirement prior to placing of products on the marketplace; development of minimum product standards relating to waste; product benchmarking initiatives; variable tax rates for products depending on the amount and type of associated waste; bans on use of certain hazardous materials; development of a 'waste charter' for product designers. Significant benefits to businesses and waste resource management service providers would also be realised in developing an obligation on businesses to provide greater detail on the wastes they produce.

### **4. Government policy**

*4.1 What is and should be the role of Government in addressing the issue of waste reduction?*

SEPA is of the view that the role of Government in waste reduction is to:

- set a clear policy framework across the whole product life-cycle
- where there is market failure to correct this
- to ensure action is guided by research / evidence
- to stimulate action where there are gaps
- to promulgate best practice
- to influence international policy

*4.2 How does Government policy link up with European strategies and action plans?*

SEPA believes that in general there is a good fit between Government policy and European Strategies and action plans. SEPA welcomes the requirement in the revised Waste Framework Directive for every member state to have a Waste Prevention Programme. In some cases the UK is pioneering the way (for instance WRAP's work with retailers), generating approaches which are being picked up for inclusion in the EU's forthcoming Action Plan on Sustainable Production and Consumption. The EU Thematic Strategy on the Sustainable Use of Natural Resources also provides an international framework for the development of initiatives to reduce waste. UK administrations could work together to ensure the UK is well represented in this area of work.

### **5. Consumer behaviour**

*5.1 How can better product design be used to effect a change in consumption patterns and behaviour?*

In order for consumers to buy more sustainable products, these products must firstly be available in the marketplace. Secondly consumers must have the information to be able to

choose the more sustainable products, and thirdly they must be motivated to do so. Better product design is a pre-requisite for changing consumption patterns, but in itself is not sufficient. Various routes are available to provide information to consumers – the most obvious of which is labelling, though there are many potential pitfalls. Others include web based information. Motivation for consumers could be provided through incentive schemes (such as Tesco's green clubcard points), or through differential pricing.

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## **Appendix 1: Household Waste Prevention Action Plan (Scotland) – list of actions**

**Action 1:** SE/SEPA to publish a report by end 2007 on work being done to encourage sustainable design and sustainable products and the impact that work is having on household waste in Scotland.

**Action 2:** SWAG to work with Consumer Protection Bodies, Retailers and others to provide better information to consumers on the expected lifespan of key household products, product guarantees and availability of spare parts. Initial information to be on SWAG website by March 2008.

**Action 3:** SEPA to publish a report by Dec 2007 on potential to introduce further Producer Responsibility initiatives e.g. for disposable products where a reusable alternative exists. SEPA also to continue reporting on existing Producer Responsibility schemes e.g. packaging and those to be introduced e.g. batteries.

**Action 4:** SE will continue to work with WRAP, SWAG and others to reduce the amount of food waste from Scottish households by **10,000** tonnes by 2008 and 15,000 tonnes by 2010. This will be done by:-

- Piloting a new consumer-facing food use / waste campaign, which raises awareness of the environmental and economic significance of food waste and provides practical advice to householders on how to avoid wasting the food that they buy
- developing smarter packaging which may enable food to be kept for longer or which is more appropriate for particular types of households – e.g. better portioning of food for single occupancy households
- working with retailers to develop alternative marketing approaches which will reduce the risk of food being wasted
- working with the Food Standards Agency to improve consumer understanding of food labels and, in particular, “best before” and “use by” dates

**Action 5:** SE will continue to work with WRAP, SWAG and others to reduce the amount of packaging waste from Scottish households by **8,000** tonnes by 2008 and **34,000** tonnes by 2010. This will be done by:-

- developing lighter weight packaging or reusable packaging
- explaining the purpose of packaging to enable households to recognise what represents excessive packaging
- developing improved systems for consumers to complain to retailers and Trading Standards about excess packaging
- considering, after carrying out further promotion of packaging regulations, whether further action is required
- developing improved packaging guidelines for adoption by retailers and their suppliers

N.B. If the Courtauld Commitment should not produce expected results SE will consider further legislative steps for Retailers in relation to food and packaging waste.

Although not strictly waste prevention, we will also monitor progress on reverse vending systems and deposit return schemes used to encourage reuse and recycling.

In addition we will ask the Scottish Retail Consortium to consider extending their annual Scottish Retail Excellence Awards to include a category on ‘waste prevention’.

**Action 6:** SWAG and others to further promote ways in which consumers can consider their purchasing decisions and prevent household waste. For example by:-

- promoting online waste exchanges e.g. Ebay, Freecycle
- promoting the use of charity shops and auctions for unwanted but reusable items
- promoting buying 'experiences' rather than gifts
- promoting borrowing / hiring of items

**Action 7:** SE to work with the British Retail Consortium, retailers, UK Government and plastics industry to agree a code of practice to reduce the environmental impact of plastic and paper carrier bags by 2008 (equating to **1,000** tonnes per year).

**Action 8:** SE/SEPA will take further action with SWAG and others to reduce the amount of unwanted mail delivered to householders by 10% by 2010. We will ensure any code of practice with the Direct Mailing Association extends to Scotland and is publicised.

**Action 9:** WRAP, SWAG and others to further encourage home composting to increase diversion rates from **8,500** in 2006-07 to **17,000** tonnes by 2007-08 and **24,000** tonnes by 2009-10 (see Annex B). WRAP, SWAG, community groups and others to support Master Composter schemes and to further encourage the use of home food digesters.

**Action 10:** SE / SEPA to continue to work with SWAG, Local authorities, manufacturers and Community sector groups to reduce the waste impact of nappies (to divert **3,000** tonnes per year).

N.B. SEPA has produced a 'Household Waste Prevention Guide' for local authorities, community groups and others seeking to develop and implement waste prevention projects or campaigns. The guide is available at: <http://www.sepa.org.uk/nws/prevention/toolkit.htm>

**Action 11:** SE/SEPA will develop a 'Reuse Framework' with the Community Recycling Network for Scotland (CRNS) and local authorities by Dec 2007. This will include actions such as:-

- encouraging the establishment of local waste exchanges
- improving collection methods for large household items
- improving reuse facilities at recycling centres
- ensuring bulky uplift materials are put to good use
- running a campaign to discourage householders from putting reusable items in the residual waste bin
- consider whether further action can be taken to encourage repair and refurbishment (taking into account WEEE regulations).
- ensuring leftover paint is used e.g. through REPAINT schemes
- encouraging further reuse of goods such as furniture, carpets, mattresses etc
- learning from experience in other jurisdictions e.g. Flanders
- encouraging retailers and the community sector / social economy organisations to work together
- considering the establishment of skills training for refurbishment activities

**Action 12:** SE / SEPA will work with CRNS to encourage the establishment of a further 20 community compost schemes by 2008 diverting an additional **500** tonnes. This will be done in line with existing regulations and involve volunteers where possible. We will also consider what further work can be done in this area.

**Action 13:** SE will work with Momenta to monitor and report the success of projects funded by INCREASE (the Scottish Executive grant scheme for the community recycling sector) in 2006-07, 2007-08 which contribute to household waste prevention. Some of these projects relate to the provision of in-depth advice to householders on what they can do to minimise waste.

**Action 14:** SE to ensure waste prevention messages are mainstreamed in the Ecoschools Programme and other waste awareness / education initiatives.

**Action 15:** SE will provide advice to local authorities on size of residual bins, frequency of residual collections and use of receptacles for recycling, taking into account local variations.

**Action 16:** SE, working with SEPA, will review annually the possibility of introducing further landfill bans on materials.

**Action 17:** SE, working with SEPA, will review the existing regulations (the Controlled Waste Regulations 1992) which allow charges to be made by local authorities for the collection of specific types of household waste.

**Action 18:** SE will issue guidance to local authorities on mainstreaming waste prevention into Service Level Agreements / Contracts.

**Action 19:** SE will consider further with local authorities and others the role of incentives in recycling / waste prevention.

**Action 20:** SE will consider, as part of Spending Review 2007, if further resources should be allocated to waste prevention specifically and how resources should be allocated to ensure waste is prevented.