

Back to the future

Our landfills didn't use to overflow with unnecessary packaging and obsolete products. **Janine Derry** looks at extended producer responsibility, a not-so-new idea that could ensure our landfills are free of products and packaging once more

A hundred years ago, products comprised less than 10 per cent of all municipal waste – the rest was coal ash and food scraps. At the time, local authorities assumed responsibility for waste management because there was a public health crisis arising, mainly from mismanagement of organic wastes.



Times have changed. As Bill Sheehan, an American waste activist and director of the [Product Policy Institute](#), points out: "This was before the consumer society and proliferation of consumer goods. Now, three-quarters of municipal waste is manufactured products and packaging designed to be thrown away. A waste stream dominated by products and packaging is difficult to manage safely in traditional municipal waste systems." He also suggests that, ironically, universal public waste management services enabled the proliferation of throwaway products because in the current system, the taxpayer bears the cost of disposal, not the manufacturer.

As a result, by the late 1980s governments of northern Europe were facing severe landfill shortages. Looking for ways to deal with the problem, Germany adopted its Packaging Ordinance in 1991. The new law, the first of its kind, shifted the responsibility for the disposal of products and related costs to manufacturers. However, it became clear the policy's benefits went beyond simply reducing the pressure on landfills and in May 1999, under Germany Presidency, the EU concluded: "In seeking to achieve sustainable development in Europe, increasing importance attaches [itself] to the impacts on the environment associated with the pre-production process, manufacture, distribution, use and disposal of products. Environment policy must concentrate more on developing and implementing an integrated approach that deals with the entire lifecycle of products."

Even if we don't realise it, we're all familiar with the concept of producer responsibility, the idea that manufacturers must ensure products do what they say they will and adhere to safety guidelines. Extended producer responsibility (EPR), as the name suggests, extends manufacturers' responsibility for products to the post-consumer stage. That is, the manufacturer is accountable not only for product creation and function, but also for what happens to the product after it is no longer useful.

Sheehan explains that EPR transfers "responsibility for waste management from local government authorities and the general taxpayer to the producer. Environmental costs of treatment and disposal can then be incorporated into the cost of the product. This creates the setting for a market to emerge that truly reflects the environmental impacts of the product, and in which consumers could make their selection accordingly." For any overburdened council budget, this can only be a good thing.

Bette Fishbein, a senior fellow at environmental organisation INFORM, Inc, elaborates: "While EPR is intended to reduce the amount of materials going to landfill, it is also aimed upstream – at product design and material selection. Its underlying theory is that if producers must pay for waste, they will have an incentive to make products that are less wasteful. The movement

toward designing for disassembly, developing reverse logistical systems and demanufacturing are strategies industry has used in response to the new incentives posed by EPR."

The Xerox Corporation was one of the first companies to take such ideas on board. In 1993, after recognising that the Packaging Ordinance would set the trend in waste legislation for Europe, Xerox voluntarily started a take-back programme for its copiers, began using old parts in new products and increasingly marketed

its remanufactured machinery. Just in the European division of the company, this initiative created 400 new jobs and saved \$80 million in disposal costs, making Xerox a leader in take-back and recycling schemes.

Now, the EU Directives on Packaging and Packaging Waste, Waste Electrical and Electronic Equipment (WEEE), End-of-Life Vehicles (ELV) and Batteries and Accumulators are intended to compel all companies to take up similar programmes. Unfortunately, their implementation in the UK, especially of the WEEE Directive, has not gone smoothly and, more significantly, the cradle-to-cradle mentality and infrastructure is still largely non-existent. According to the European Commission (EC), however, it is still too early to take a stance on its success or failure. Barbara Helfferich, spokesperson for the Environment Directorate, notes: "At the moment we're checking to what extent the WEEE Directive has been transposed and what

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is happening in the different member states. Through the process we may see that there have been some member states which end up being in breach of legislation, but first we must do an overall assessment."

Regardless, the shortcomings are worrying. Sheehan argues: "Most concerning is the recent trend to build large-scale waste incinerators and tell the public that 'energy from waste' is a satisfactory alternative to recycling. In Europe, recycling and burning are starting to be seen as equivalent in environmental benefits, a trend that threatens to undermine the potential of EPR to drive more beneficial changes in design that prolong the service life of products and packaging."

Despite criticisms, the UK government is taking the enforcement of new EPR policies seriously. When companies whose activities fall under the scope of current EU directives on waste haven't complied with the new laws, there have been a

number of successful prosecutions. Usually, these are of businesses failing to register as producers and, therefore, avoiding compliance costs. One notable case recently involved beverage company Red Bull, which was ordered to pay over £270,000 combined in fines and fees. This is the highest fine imposed in the UK to date.

But companies have generally complied with new laws and some companies are adopting EPR policies as best practice standards, ahead of any legal mandate and without much financial gain. What's more, it's no longer only companies like Xerox with such obvious financial incentives to do the right thing that are leading the way. Orangebox, for example, a small, privately-owned office furniture manufacturer based in Wales, has made ecodesign and sustainability part of its business plan. Orangebox designer

Luke Palmer explains: "For some time we have been trying to establish carbon footprinting as the industry benchmarking system. Obviously, design plays a major role in this process, as does the increasing involvement of material scientists – sourcing the best materials for use can be an expensive and drawn-out process, but we believe it's worth the investment."

Because Orangebox is trying to increase the recycled content of its products, in 2007, the company established its own recycling centre for all its seating products as well as those of other brands. The centre offers an affordable take-back service to customers, which reuses the products in one of two ways: If the product is in reasonably good condition, it is given to the St. David's Foundation for resale in one of the charity's 27 shops. If the product is not suitable for resale, it is disassembled and the materials are recycled into new products or downcycled for other uses,

depending on their quality. However, for some of its products, such as the G64 chair, Orangebox also offers a refurbishment service to prolong items' lives before they are recycled. Furthermore, the company has received cradle-to-cradle accreditation for its flagship product, the ARA chair. All this in a company that only employs 160 people.

While companies like Orangebox or Xerox might be the exception rather than the rule at the moment, they are a vision of things to come. The EU directives are setting a benchmark for the way governments handle waste and ensuring we seriously rethink not only the way we throw away but also the way we consume in the first place. Even if change is slow in coming, progress is being made as consumers increasingly demand we do away with waste. Perhaps one day we will look back from a world where EPR is standard and wonder how we ever managed otherwise. 📄

