

**T**he Waste Electrical and Electronic Equipment Directive (WEEE), which will be transposed into UK regulations early in 2005, will have a significant impact on the UK electrical and electronics industry. It includes a requirement for the UK Government to encourage eco-design of products to facilitate dismantling for recovery and recycling of components and materials. However, very few companies have taken the opportunity to apply eco-design to reduce their WEEE compliance costs and demonstrate their commitment to corporate social responsibility.

Up to 100,000 businesses in the UK (25,000 producers and 75,000 retailers) will be affected by the WEEE directive. Industry data shows that around 60% of these companies sell electrical and electronic equipment to businesses. In recent consultation papers, the Department of Trade and Industry (DTI) focused considerable attention on arrangements for household WEEE. But WEEE compliance for producers who sell electrical and electronic equipment to businesses is fundamentally different from producers who sell it to private consumers.

These business-to-consumer producers will have to finance collection, recycling and recovery of household WEEE deposited at local collection facilities (e.g. local authority recycling centres and high street retailers). A proposed National Clearing House will allocate collections of mixed WEEE to producers who will need to choose which compliance scheme offers the most competitive service to collect and recycle their WEEE allocations. This decision can be left until fairly late in the day and will be a cost that producers will have to pay.

### COLLECTION ARRANGEMENTS

The DTI has confirmed that business-to-business (b2b) sales must also be covered by appropriate contractual arrangements for collection, recovery and recycling. However, there is little guidance available for b2b producers on the practical compliance approaches, and key decisions on treatment requirements for WEEE have yet to be finalised. The proponents of the national clearing house scheme have stated that their scheme would not accept b2b WEEE.

Article 9 of the WEEE Directive allows b2b producers to pass on their legal responsibilities to the customer through appropriate contractual arrangements. In this case the customer is responsible for sending WEEE to an approved treatment facility, arranging for the target levels of recovery and recycling to be met, and reporting compliance data to the Environment Agency.

The Environment Agency has confirmed that certain types of electrical and electronic equipment will be classed as hazardous under the Hazardous Waste Regulations, due to be implemented next year. This raises the prospect of some b2b customers who do accept these contractual arrangements being required to register as hazardous waste producers with the Environment Agency. In practice,

**Dr Aidan Turnbull provides an industry perspective on the impact of the WEEE Directive on business-to-business producers**

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very few b2b producers are planning to pass the full costs of WEEE compliance on to their customers in this way.

### KEY BUSINESS DECISIONS

The biggest difference between b2b WEEE and business-to-consumer WEEE compliance is the collection arrangements. Business customers generally purchase goods over the phone or via the Internet rather than visiting a retailer, and b2b WEEE cannot be disposed of alongside household WEEE at local authority sites. B2b producers need to consider collection arrangements to transport products from customers' premises to recycling companies.

Producers can arrange transport directly to a specialist recycler who can apply tailored recycling approaches to large numbers of separately collected products. This enables the producer to gain financial benefits from any design improvements he introduces to make his products easier to recover and recycle. In view of this, it is essential to get an early indication of end-of-life collection and recycling costs for b2b equipment so that producers can: establish appropriate pricing policies with customers; select optimum logistics and recycling arrangements; select



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an appropriate b2b WEEE compliance scheme (e.g. Valpak) to manage recycling contracts, data collection and, reporting to the appropriate agency; and consider eco-design opportunities to reduce end-of-life recycling costs and gain market advantage.

It is also important to note that, due to the wide range of b2b products, there are many more ambiguities over whether certain b2b products fall into the 10 WEEE and RoHS (Restriction of Hazardous Substances) product categories. Member states have indicated that they will refer decisions on whether particular products fall outside of WEEE and RoHS to the law courts. It is imperative for companies to take early advice on the categorisation of their products to ensure they clearly understand their exposure to the directives.

A producer responsibility scheme, Valpak, has joined forces with ENVIRON to help manufacturers cut the cost of WEEE compliance. Details are available at [www.valpak.co.uk/weee](http://www.valpak.co.uk/weee). More information on Valpak's scheme is in the Online Features at [www.iee.org/mgt](http://www.iee.org/mgt).

## ECO-DESIGN AND CSR

The starting point is to understand what causes the customer to discard the product and what then happens to it (see fig 1). Companies can then identify the best end-of-life option and make design changes to optimise this approach. There is a wide variety of product design changes that can be made, depending on the choice of end-of-life option. Options that avoid the product becoming waste in the first place will generate the greatest economic and environmental benefits.

The issue of corporate social responsibility (CSR) is coming ever higher up the boardroom agenda. Customers, shareholders and suppliers are demanding companies take environmental issues more seriously and those that do will gain tangible market advantages. Many CSR reports have been criticised as being 'green wash' – attempts to present the company in the best possible light while skirting around less flattering issues. Eco-design addresses the fundamental environmental impacts that a manufacturer has on society – the lifecycle impacts of the products it sells to customers. It requires that companies take an objective look at how they could reduce environmental impact and cost in materials selection, manufacture, packaging, use and at end-of-life.

Environmental legislation is also increasing. More eco-design directives from the EC and regulations in China and the US are due to be implemented in the near future. Taking an early lead in eco-design enables the company to get ahead of forthcoming global regulatory pressures and position itself as one that really cares about its environmental responsibilities. One such company is Smiths Group, an international engineering and technology group that employs 29,000 people in 40 countries worldwide. A case study on the benefits this company gained through implementing eco-design is available in the Online Features at [www.iee.org/mgt](http://www.iee.org/mgt)

For further information about ENVIRON's WEEE, RoHS and Eco-Design services see [www.b2bWEEE.com](http://www.b2bWEEE.com) ■

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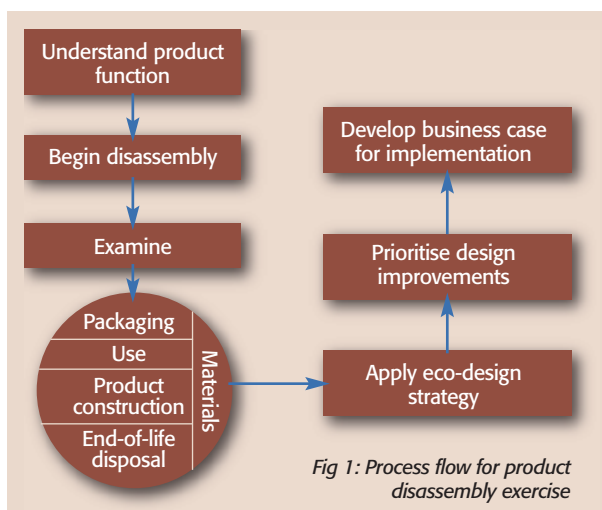


Fig 1: Process flow for product disassembly exercise