

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)



Every year an estimated 1 million tonnes of waste electronic and electrical equipment (WEEE) is discarded by householders and companies in the UK. Equipment includes most products that have a plug or need batteries.

Large household appliances (e.g. ovens, fridges, washing machines) make up over 40% of WEEE but there are large volumes of other equipment such as IT equipment (mainly computers), TVs (over two million discarded each year), small household appliances such as kettles and hair dryers, electrical tools, digital watches, electronic toys and medical devices.

Not only do these items perform many different functions, they also contain a wide variety of materials (some of which are hazardous). For example, an average TV contains 6% metal

and 50% glass whereas a cooker is 89% metal and only 6% glass. Other materials used include plastics, ceramics and precious metals.

This complex mix of product types and materials makes this waste stream difficult to manage. Most of it currently ends up in a landfill, though many council **recycling** centres accept electrical and electronic equipment such as fridges and freezers.

The UK has developed rules to implement important European Union legislation. The WEEE Directive makes producers and retailers responsible for **recycling** their products ('**producer responsibility**'). Householders are able to return WEEE to collection facilities for free.

How does WEEE affect the environment?

Waste electrical equipment contains a wide variety of materials, some of which are hazardous, including arsenic, cadmium, lead, mercury and certain flame retardants, and this can make it a difficult waste stream to manage.

The disposal of WEEE also represents the loss of large amounts of valuable resources, in particular metals and plastics. If these were to be recycled it would not only divert the waste from disposal but would also reduce the need to use virgin raw materials.

In order to address these problems, the European Commission has introduced legislation which imposes more stringent requirements on those handling WEEE. The legislation also requires most companies who sell and import equipment to recycle WEEE at levels between 50 – 80%.

SEPA's role

SEPA is responsible in Scotland for enforcing the UK regulations that implement the WEEE Directive. It also advises on policy issues and provides advice on the safe **recycling** and disposal of electrical and electronic goods.

What can you do to help?

According to Waste Online (www.wasteonline.org.uk), some of the things you can do are:

- When buying new electronic or electrical items, choose ones which are durable, and which can be upgraded in the future if possible.
- Consider first if a current item of equipment can be upgraded, rather than being completely replaced.
- If an appliance has stopped working, before discarding it, see if it can be repaired/refurbished.



Further information

SEPA
www.sepa.org.uk/waste/waste_regulation/producer_responsibility/weee.aspx
 NetRegs
www.netregs.gov.uk
 DTI
www.berr.gov.uk/whatwedo/sectors/sustainability/weee/page30269.html
 Defra
www.defra.gov.uk/environment/waste/topics/producer-responsibility.htm
 Waste Online
www.wasteonline.org.uk

- In some areas there are projects which take household furniture and basic electrical equipment such as cookers and fridges to pass on to low-income households. Contact the Community Recycling Network for Scotland (www.crns.org.uk/index/our-members) for details.
- Rather than put unusable small appliances in the bin, take them to your local authority **recycling** centre where they can be added to other scrap for **recycling**. If you have bulky items to be discarded, contact your council to arrange collection.
- If your workplace has computers, mobile phones or toner cartridges which are no longer needed, these can be donated to a range of charity organisations.



Related legislation

- The Waste Electrical and Electronic Equipment Directive and the related Directive on Restrictions of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) affect producers, distributors, wholesalers, retailers, and local authorities.
- New UK regulations require manufacturers, brand owners and importers of electrical and electronic equipment to meet **recycling** targets of 50–80%. New products have to comply with restrictions on the use of certain hazardous substances, be marked with certain information to aid **recycling**, and be capable of being reused and recycled. Retailers will have to provide 'take back' services to consumers wishing to throw away old items.

Glossary

Producer responsibility – gives companies that place products on the market responsibility for their environmental impact, particularly when they reach the end of their life.

Recycling – means using things that have already been used to make new things (a new version of the same thing or something completely different), e.g. using recovered materials in new products.

Reuse – means using something again for the same purpose, e.g. donating your WEEE item to a charity that can pass it on to somebody who can use it again.