Reuse Electrical and electronic goods

Electrical and Electronic Equipment Sustainability Action Plan (esap)

Generating value for business through sustainability

Collaborative action to improve the business efficiency and sustainability of electrical and electronic products throughout their lifecycle.

The Electrical and Electronic Equipment Sustainability Action Plan (esap) seeks to catalyse sector action, share evidence and bring together the many different stakeholders to deliver tangible economic and environmental benefits.

esap, underpinned by WRAP research, focuses on consumer electronics and household appliances: televisions, laptop computers, vacuum cleaners, refrigeration products and washing machines. Better efficiency in these key product groups is likely to deliver the greatest savings.

How you can get involved

esap will build on the work of WRAP's Electronic Products 'Pathfinder' Group by partnering with a wider range of stakeholders from the sector.

A broad range of **organisations and businesses** across the sector have already signed up to say that they will 'Play their part in working with WRAP to develop and implement esap.'

Watch **iFixit video** with Kyle Wiens for WRAP Resources Limited conference >>

Watch **LG Electronics video** with Steve Beaman for WRAP Resources Limited conference >>

Action areas

esap will take specific actions, by product category, across five themes:

- Extending product durability through design and customer information
- Minimising product returns
- Understanding and influencing consumer behaviour on product durability and reparability
- Implementing profitable, resilient and resource efficient business models
- Gaining greater value from reuse and recycling

Download a summary of esap >>

Find out more

Further partners are welcome to join. Contact us if you want to be involved and can demonstrate how you can deliver significant change.

Switched on to Value

Why extending appliance and consumer electronic product lifetimes and trading used products can benefit consumers, retailers, suppliers and the environment.

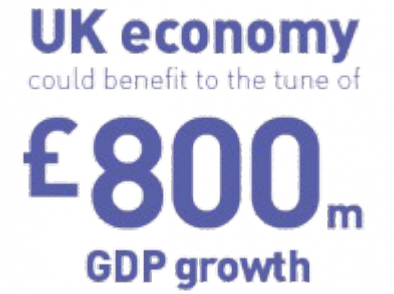
New research from WRAP found that:

The average home contains around **£1,200 worth of electrical and electronic** equipment but many householders don't realise their used products still have significant value – this value amounts to around **£3 billion** across the UK

When asked **two-thirds** of UK consumers expressed a willingness to **trade-in** consumer electronic products and would prefer to do so with **reputable high-street retailers**.

Around a **third of all washing machines and fridges**, and **a quarter of all the vacuum cleaners** replaced in the UK each year failed to meet the average customer's expectation for each product's lifetime.

Extending the average life of lower-end appliances to match the current market average for all appliances would save around **750,000 tonnes** of carbon emissions associated with production, roughly equivalent to **one week's CO_2 eq emissions from all the cars in the UK**.



Changing how we design, make, buy and dispose of electrical and electronic equipment could **reduce our carbon footprint by up to 15%** and add **£800 million** in GDP to the UK economy.

Guidance to improve product durability

Would you like to procure and build better, more durable products helping you to enhance your brand reputation?

Our Better Appliances website contains guidance and technical details to help you procure and build better, durable products at the required price point. By incorporating the principles and quick win solutions this will help you enhance your brand reputation for quality and reduce return and warranty claim rates.

Guidance is available for fridge freezers, washing machines, microwaves, vacuum cleaners, kettles and TV's

Key areas of the Better Appliances website are:

- Identification of the main failure points of the critical components and how these failures can be addressed. This includes both the cost implications and suggestions for how to test for performance.
- Simple changes that can improve product durability and reduce returns. These are the biggest areas of opportunity for you to improve the specification for little or no cost
- Downloadable guidance is available for each product

Our research provides new evidence of the value placed on longer-lasting appliances and pre-owned consumer electronics.

In our survey, reliability, quality and durability were rated as the most important buying criteria. Over 80% of survey respondents said they want a minimum two-year guarantee as standard on new appliances.

Longer-lasting appliances

Longer product life does not always mean higher product cost. Expert reviews identified cost savings from design changes on 15 out of 16 products that we stripped down. Greater reliability will reduce product returns due to failure, which currently cost UK retailers and brands up to £400 million every year.

Minimising product returns

There is poor understanding of the full cost and resource impacts of EEE product returns in the UK.

In Switched on to Value the cost of a 2% return rate for EEE products was estimated to be £400m p.a. The full cost of returns is believed to be substantially higher than this. For example, several esap stakeholders have shared confidential data highlighting product returns at over 4% for many products.

Our work in this area will be delivered in two phases:

- Working with major retailers and brands to collate data on the costs and causes of product returns.
- Provide best practice guidance for retailers and brands to minimise the amount of product returns and to reduce costs and recover more value from product returns.

If you want to be involved in this area of work, please contact us.

Reusing and repairing electricals

Highlighting the opportunities and potential of reusing and repairing electrical and electronic equipment.

Research indicated that 23% of electrical items disposed of at HWRC sites have re-use potential and market value, greater than that of their material value. This represents a significant opportunity that should be explored. How and where products are collected can impact their reuseability and increase their lifetime.

The Repair of products is also a strong opportunity that is realised by some organisations but could be vastly increased to maximise the lifetime of a product. Business models to further broaden this offering are being explored.

The repair and reuse of electronic products has a range of environmental and social benefits.

Sign up to receive the WRAP Reuse and Repair enewsletter

The value of re-using household waste electrical and electronic equipment

In 2011 WRAP looked at WEEE being disposed of via Household Waste Recycling Centres (HWRCs) and local authority bulky waste collections.

HWRCs represent one of the key places for collection of waste electronics. Research indicated that 23% of the WEEE separately collected at HWRCs could be re-used with a small amount of repair. This volume of product represents a large re-sale value for the re-use sector and highlights the benefits of increased segregation or capture of electrical products for re-use.

Taking this research a step further, WRAP and Zero Waste Scotland conducted a series of trials. They clearly show the advantages of developing strong partnerships to help realise the true value of re-use, both financially and environmentally.

Trials

Case study: Trialling the re-use of used EEE from Leeds City Council (LCC) HWRCs

This trial was about LCC working in close partnership with its WEEE producer compliance scheme, WeeeLink, to establish better systems for managing used EEE. A formal segregation system was established and now applies across nine of LCC's HWRC sites. The trial items targeted included: large domestic appliances and white goods; fridges; Dyson vacuums and display equipment.

Summary Report: Zero Waste Scotland: Re-use of WEEE from Household Waste Recycling Centres (HWRCs)

This report provides a summary of the opportunities to maximise the re-use of WEEE products disposed of at HWRC sites in Scotland. The project used four trials to

identify the key issues, potential solutions to barriers and provide an economic analysis to identify the most cost effective options.

The trials have resulted in commitments by the participating councils to continue the trials and expand them into permanent activity. In real terms, this means that 770,000 people, almost 15% of Scotland's population, now have the option to re-use their unwanted electrical items.

2011

Information Sheet: The value of re-using household WEEE

WRAP carried out a detailed study of the potential re-use value of unwanted WEEE disposed of at HWRCs and via local authority bulky waste collections. Re-using WEEE, either directly or after repair is a promising route to reducing waste and extending the life of often perfectly serviceable products.

The research found that there is the potential to generate a large amount of re-sale value from the repair, refurbishment and open market re-sale of WEEE.

Summary Report: Realising the Re-use value of household WEEE

A summary of a study investigating WEEE being disposed of via HWRCs and local authority bulky waste collections, the reasons for disposal, its state of repair, and its potential value.
Are your repaired electrical goods fit for purpose?

Guidance and tools

PAS 141 Standard: a process management specification for the re-use of used and waste electrical and electronic equipment (UEEE and WEEE).

Re-use website.

Re-use e-newsletter.