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Delivering a more Circular Economy for Electrical Goods in Retail?

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For decades it has been appreciated that a far less linear approach to finite resource use is necessary, to reduce global warming impacts and maintain quality of life for generations to come. While the concepts of Circular Economy (CE) are not new, making it happen remains difficult; overcoming economic, institutional and policy barriers. One particular area of focus has been around the increasingly short life of electrical and electronic equipment (EEE) and in particular cheap, own-brand products. This is of particular concern as EEE is generally very carbon intensive to make, contains hazardous substances and rare minerals and precious metals that are difficult to fully recover at end of life.

Often products now fail after just a few years and it is cheaper to replace rather than repair, making WEEE one of the fastest growing waste stream in most developed parts of the world. Product return rates, even within a year-long warranty period, can be well over 10%, and often 60% or more of the returns have no fault found on examination; although they are often subsequently damaged in the reverse logistics journey and hence sent for recycling.

In WRAP (the Waste and Resources Action Programme) survey work (2012), around half of all respondents said that they would be willing to pay extra for products that last longer but often have no real way of judging, using cost, brand reputation and the length of the 'free' guarantee period as a proxy for quality and durability. At end of life, WRAP research also shows that 40% to 50% of household 'bulky waste' (including WEEE and furniture) is reusable with just minor repair.

While standards of WEEE recovery have been much improved in the UK, there is still a huge opportunity to keep EEE in use longer, in the UK and secondary markets, and hence reduce the wide range of embodied and end-of-life environmental impacts. The presentation will focus on Mark's own work in the UK with WRAP, ZWS and private clients, with case studies around improving:

- Procurement specifications and buyer practices, taking durability and repair ability into account;
- Reducing product damage in retail distribution;
- Reducing product returns – including better informing consumers (e.g. through mandatory labels and retailer guidance) to a) buy the right product and b) look after products to extend life
- The role of warranties and repair;
- Incentivised return for reuse, e.g. retailer/supplier trade-in approaches (e.g. Argos, Dell, Bosch);
- Good practice in asset management, reverse logistics and refurbishment for resale (e.g. ServiceCare)
- The role of secondary markets, including 'jobbers', e-bay and developing economy markets; and
- Community-based and social enterprise approaches, e.g. :
 - EEE and furniture sharing and reuse models (e.g. Glasgow)
 - Refurbishment and component recovery projects (e.g. Recycling Lives)