

Re-use Partnership Diverts Electricals from Landfill



Company: A large logistics Specialist

Innovative business model type: Repair and re-use

Sector: Electrical

Company size: Large

Service: Contract to handle returns from a major electrical goods retailer using prison labour force in UK

Key points

- The strategy aimed to reduce e-waste going to landfill, help to meet a growing demand for good quality re-used items and maximise product value through extended asset life.
- REBus helped set up a pilot to determine the potential for working with prison inmates to refurbish waste electrical items for re-sale.
- The company managed the entire process from return to re-sale, with approximately 50,000 items hauled as waste electrical and electronic equipment (WEEE).
- To date, 1,200 usable items have been re-sold, with some full time jobs created.

Key facts

Introduction

Why REBus?

Results

Case Study



Introduction

The company supports customers in more than 60 countries to optimise complex supply chain processes. It offers warehousing, distribution and managed transport services, as well as business process outsourcing, supply chain management, packaging and consulting solutions.

The company has extensive expertise in producer responsibility, operating waste electrical and electronic equipment, battery and packaging compliance schemes in the UK. It also provides a global compliance service for companies obligated under producer responsibility legislation.

The company has extensive experience of managing large volumes of waste. It handles end-of-life materials such as cardboard, plastic, WEEE, food and oil.

Adding value through supply chains

The company works with UK based electrical retailers hauling 50,000 electrical waste items each year. This waste is of a higher value than many items typically collected through bring-back schemes and the company was keen to make it available for re-use by setting up a repair system.

In other work, the company was re-using less than 5% of WEEE collected, with the remainder often sold for scrap. Fluctuating scrap prices encouraged the company to look for added value options further up the supply chain.

REBM for re-use

The company wanted to generate value further up the supply chain and to improve its re-use rate, to divert material from landfill. In addition, it hoped for a solution that would fulfil its social objectives.

It already had a formal relationship with the Ministry of Justice in Prisons and decided to explore the potential for working with prisoners to refurbish and repair returned goods.

The scheme undertakes the recovery, re-purposing and re-sale of electrical items. Each item comes with a three or six-month warranty.

Initially, the remit was to prepare and sell both small and large domestic appliances (SDA and LDAs), but the project now focuses exclusively on LDAs.

The benefits of the scheme include:

- Closed loop system.
- Social benefits through developing prisoner skills.
- Increased re-use.
- Diversion from landfill through re-sale and parts.
- Strengthening buyer/supplier relationship.
- Developing higher value markets further up the supply chain.

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What would success look like?

The company has already learned a great deal from the project. For example, to account for the low value of many items, the business model must be based on volume, or that items should be subject to pre-qualification.

Indications of success include:

- A commercial return for the company and electrical retailers.
- Diversion of material from landfill.
- Expansion in prison workshops and the number of prisoners benefiting through increased skills.
- Formal accreditation in re-use and repair – they are exploring the creation of an NVQ.
- Monitoring – grading quality and quantity of supply, to include age bracket, type and value.
- For re-sale to be economic, good quality items are needed. The aim is to build a bank of quality items.
- Repair/re-use/parts harvesting service - aimed at white goods producers, not just consumers.
- User-friendly consumer collection system.

The company already has good links with some local authorities, so expanding the collection system to make it easy for consumers would be likely to improve the quality and volume of material available.

Why REBus?

REBus helped to establish a four-month pilot, with the formal launch taking place in January 2016. Setting up a pilot gave the company the opportunity to test processes and sales, and to establish which practices would work and which were likely to fail.

Although the electrical retailer had explored this approach previously, policy barriers proved insurmountable; they needed a partner to take things further. With its logistics operation in place and existing links to the prison system, it was a perfect fit. It also had an established relationship with a charity, which was keen to work with an organisation with the national logistics and reputable brand.

REBus support

REBus offered the company tailored support to pilot its idea, with expert advice and knowledge of the market.

WRAP provided

- Specialist knowledge of the electrical re-use market and route to market.
- Secondary market research for sales outside UK, including values, trends, locations and companies.
- A sounding board for support on the most appropriate business model approach.

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Introduction

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Pilot One

The initial pilot involved third party running of workshops and sales. However, it quickly became apparent that this arrangement was not viable. As a result, the company decided that the success was dependent on managing the entire process itself.

Pilot Two

The second pilot allowed the company to trial and gauge essential facts, such as the most effective type of equipment and the best methods to re-work, refurbish and re-sell items. Roll out was agreed with the charity across seven stores nationally.

As the pilot progressed, it also yielded data showing the volumes needed to make the scheme economically viable. The final model saw the logistics company controlling all aspects of delivery, from products with the retailer taking ownership of training for prison inmates, refurbishment, and re-sale via the charities chain of shops.

Results

- Some full-time jobs have been created at the prison workshop. Project management and administrative support is provided by the company staff.
- No external investment has been sought or raised.
- A broker which sells to charities has set up a new, commercial electrical product line in order to sell secondhand items provided by the company, so that new jobs and income are created further down the supply chain.
- So far, 1,200 items have been refurbished and re-sold, mainly via the charity retailer.
- Indications suggest that more than 50% of items are re-used.

Key drivers to success

- Scale of opportunity.
- Unique approach.
- Enthusiasm of all stakeholders involved.

Next steps

- Contract with electrical retailer is close to finalisation.
- Staff training has taken place.
- Roll out to other prisons. (the company is already working with a second site).
- The company has partnered with a specialist broker to enable re-sale of items through an extended network.

Future plans

- Develop a formal accreditation re-use/repair NVQ.
- Grow the commercial offer.



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Introduction

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Case studies were generated as a result of pilots carried out for REBus by WRAP or RWS and the named organisations from 2013 to 2016.

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