



Re-use – seizing the opportunity

Exploring the potential for implementing re-use on a larger scale to realise the benefits to people, planet and the economy.

Introduction

Re-use and repair sit just below prevention at the pinnacle of the waste hierarchy. Retaining items in their original state, so they can be used again for the same or a similar purpose, benefits the environment by reducing the need to transport and process the materials, and also by avoiding the raw materials and energy required to produce an entirely new product. For local communities, re-use can provide access to goods at reduced prices and create skilled local jobs.

To achieve a truly circular economy, re-use and repair need to become the norm rather than the exception – they need to be the first thing we think of when an item breaks or we no longer have a use for it. Making re-use and repair the backbone of a business model for any product-focused company and the fundamental purpose of any resource management system is an essential foundation.

To accelerate this transition, the UK needs to develop a more competitive and accessible re-use retail market that represents a viable alternative to buying new. This means that items need to be price-competitive, trusted in terms of their quality and safety, and conveniently available when people need them. To enable this, the sector needs to attract the talent and investment required to ensure re-use businesses, enterprises and specialist repairers can start and/or grow successfully throughout the country.

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Seizing the opportunity

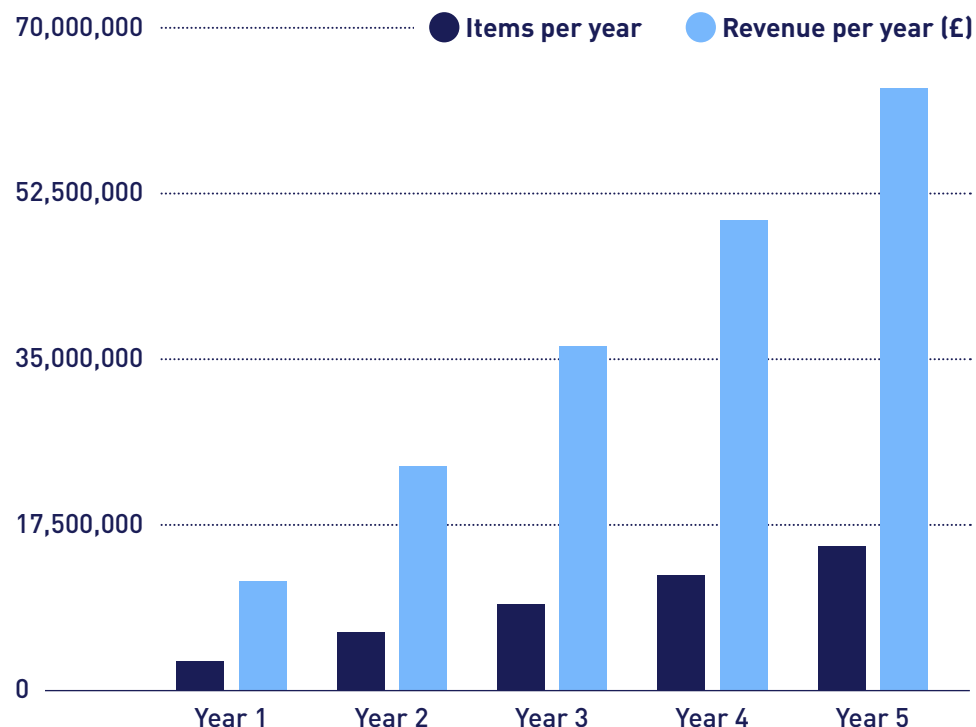
We're not starting from scratch. Re-use and repair are already happening in a variety of ways across our economy – from the remanufacturing of industrial machinery to refurbishing high-end tech, such as mobile phones and tablets for resale.

To accelerate the development of a more circular economy with re-use and repair at its core and that meets the needs of both consumers and businesses, the public sector has a critical role to play with the tens of thousands of items arriving at local authority household waste recycling centres up and down the country every day, or collected through bulky waste collections. These services are the last opportunity to salvage reusable items that haven't been given away, taken to a charity shop or sold on (for example, through online channels) by their original owner.

Re-usable items have a value, both to the new owner and to the local authority – financially through their retained value, environmentally through reduced carbon emissions and material use, and socially through the jobs they can help to create – whilst their lower cost compared with an alternative new product offers additional social benefits. Using data from over a hundred household waste recycling centres, and the re-use shops and resale opportunities SUEZ manages, we have estimated the potential for the resources sector over the next five years.

Based upon the assumptions that policy is developed to support the development of re-use and a systemic change begins to take place, we estimate that by 2028, the repair and re-use sector has the potential to manage more than 15 million items and generate sales revenues in excess of £63 million per year.

UK household waste recycling centre re-use, repair, refurbish growth potential (2023–2028)



Re-use is an often-neglected means of supporting and responding to the many challenges local authorities face, including increased financial pressures, achieving net zero carbon emissions, local economic development and rising social inequality. Every day where progress is delayed is a missed opportunity for local authorities, communities and individuals to benefit.

Looking to the future

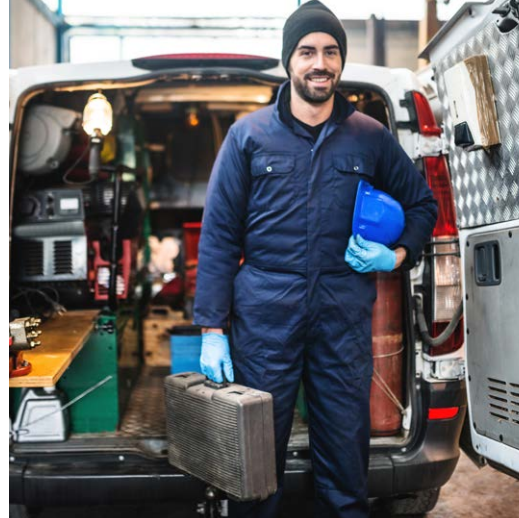
With more than a decade's experience in re-use – with 30 re-use shops on household waste recycling centres across the UK and the award-winning Renew Hub in Greater Manchester specialising in repair and upcycling – at SUEZ, we're busy planning and designing for the future.

Understanding what a re-use and repair-based system could look like on a local and regional level is essential, including how our current services need to evolve, and how to support and work with a growing number of re-use and repair specialists. If we are successful, the wider benefits derived from a more holistic and systemic approach to re-use and repair are considerable for all.

We can demonstrate the opportunity that re-use brings, both from the social value it creates and from the financial benefit it can generate when approached with a retail mindset, which we share with our local authority customers and local communities. We recognise the potential of re-use to bring extensive benefits to people, planet and the economy if operated at scale.

In our previous two re-use and repair guides, we delved into the practical aspects of introducing re-use and repair, to provide insights for local authorities to consider when developing their approach. In this publication, we look to the future and explore the possibilities of working at scale, and the benefits of making re-use and repair a more mainstream activity.

We consider this vital, as without re-use millions of items will be lost to recycling or disposal routes every day and the circular economy will be beyond our collective reach. We need re-use to work, we need it to become mainstream and we need it to operate at a scale that makes it convenient for the consumer, economically viable and environmentally impactful.



What is the opportunity being missed?

The scale of the opportunity being missed locally, regionally and nationally is significant.

The extensive datasets collected during the last decade of re-use activity at our sites informs our understanding of the potential benefits that re-use could deliver. Adding to this factors for production per person per year and individual calculations per local authority across the UK, we estimate that there are nearly 13 million items per year that the sector is missing the opportunity to put back into use.

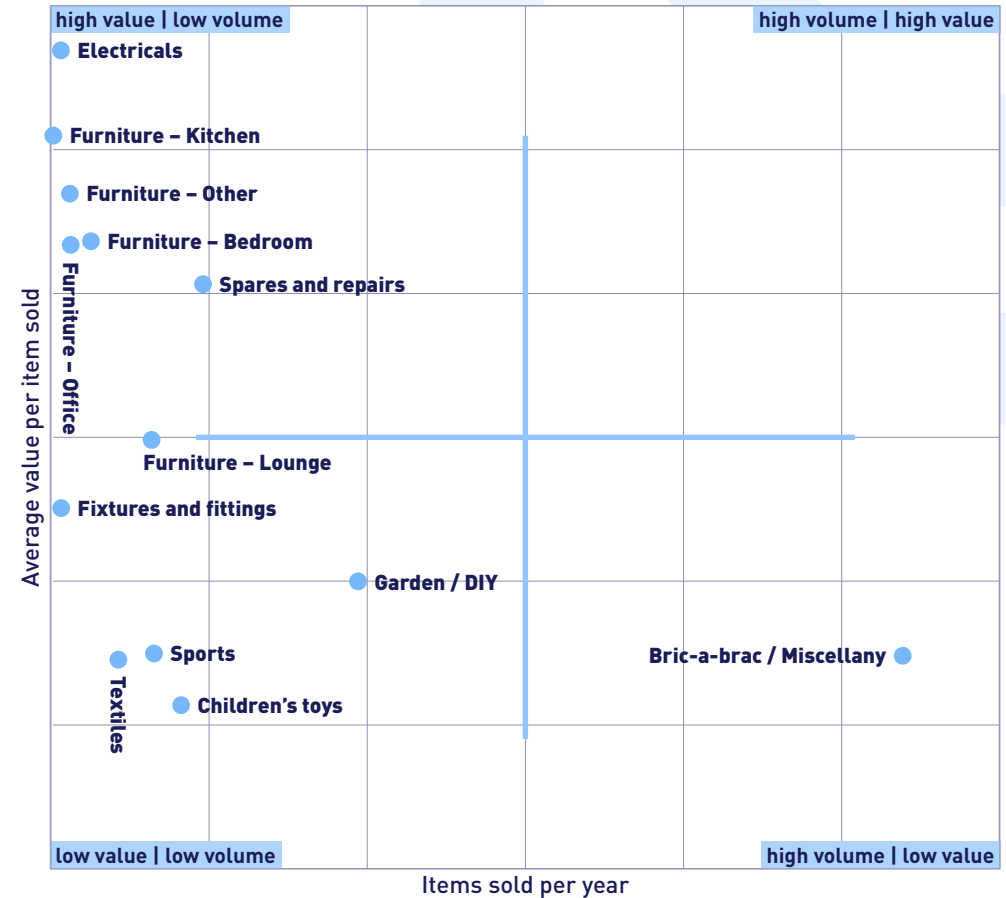
We estimate that more than 35,500 reusable items are missed every day at household waste recycling centres.

By adopting a retail approach to our re-use activities and capturing data for many years on the millions of items that have been sold for re-use in that time, we have developed insights into what products are likely to sell and when, along with their average value.

Using our key item categories and comparing the volume (the number of items sold per year) with their average sale value, a distinct pattern emerges.

Through this analysis, we see that higher value items are less likely to be taken to and sold through a household waste recycling centre re-use shop. As they are more likely to be recognised as having an intrinsic value, they will have already been resold or sent to a charity or other resale route.

SUEZ re-use shop average sales vs value per year



It's important to note that the types of items reused and their value will vary in each area, based on a variety of factors including economic circumstances and rurality. However, understanding the types of items that are likely to arrive and those that will be in demand is important to help shape future repair and re-use services and activities.

The return on investment

Items sold for re-use retain their intrinsic value and are generally more valuable than if they were recycled or disposed of. For example, in a SUEZ operated re-use shop between 2018 and 2021, a wooden chair sold for an average of £6.83. If a typical wooden chair was recycled at a household waste recycling centre, it would either cost 7p or make 1p¹ depending on the end destination and the overall quality of the wood being presented. Re-use provides an increase in value of almost 700% in this example.

It's also worthwhile highlighting that these benefits will differ based on the local area and its general economic circumstances. SUEZ's data from each of our re-use shops shows a clear swing of 23% in average item value between the average highest and lowest price points.

These will be influenced by a number of factors, including the condition of items, their cost versus buying new, their desirability and the social climate (such as the current rising cost of living). Each of these factors is subject to change over time and can change during the course of a year – for example, gardening products are typically more desirable during the spring and summer months.

As we continue to develop and scale up our re-use and repair activities, we are increasing the revenue generated, which supports not only the continued expansion of these services, but also the costs of the wider services and returns more to local communities and local authority customers.

¹ Based on letsrecycle.com's material prices index Sept 2022 - <https://www.letsrecycle.com/prices/wood/>

Reducing the cost of buying something 'new'

As living costs continue to rise, the ability for people to access items they need at a more affordable price point than buying new will benefit those who are less affluent, as well as those in other difficult financial situations. While the benefits for those on lower incomes are greater, re-use needs to benefit everyone if it's to become mainstream.

On average, the saving made per shopper per item purchased in a SUEZ re-use shop between 2018 and 2021 was £141² – ranging from an average of £6 for a media item such as a book or DVD to £137 for leisure equipment such as a bike or a set of golf clubs.

Category	Examples of items	Average saving per item
Media	Book, DVD	£6
Household item	Mirror, crockery	£18
Garden	Plant pot, lawnmower (not electrical)	£68
Electrical	Lamp, TV	£83
Leisure	Bike, golf club	£137
Furniture	Chair, bedframe	£247

On a wider scale, tonnage will continue to be a key measure to compare the progress of re-use with waste management and treatment processes. When considering these figures and the relative proportion of items in each category we would expect to sell (based on SUEZ's historical sales data), **the potential savings for every tonne sold for re-use could be more than £10,000 for individuals and their families, when compared to buying new.**

² Based on re-use shop retail data from 2018 to 2021 and comparison with major retailers on 15 commonly purchased and/or essential products priced as of March 2023.

Skilled jobs for local people

For the repair and upcycling of key items – such as furniture, bikes and large electricals – to become an everyday way of managing items that are broken or past their best, skilled technicians will be needed, along with the equipment, support services and supply chains to enable their activities to flourish. As the demand for re-use and repair grows, so too does the interest from those looking for creative and practical jobs that they can develop into rewarding and long-term careers.

SUEZ estimates that if every person had just one item repaired every year, **this would require 40,000 jobs across the country with training, certification and annual competency assessments.**



Carbon savings

With almost every local authority having a commitment towards achieving net zero carbon emissions – in many cases ahead of the government's legally binding 2050 target – “reducing waste and increasing recycling are key to cutting this source of emissions”³. Items captured at household waste recycling centres for re-use rather than recycling will have a reduced carbon impact, as they will be:

- ✔ Transported shorter distances (often within the immediate local area rather than the typically greater distances for a product that's recycled and then moved again for onward recycling / reprocessing).
- ✔ Kept largely in their original form, rather than going through a treatment process to be broken down and remanufactured into a new product.
- ✔ Offsetting the raw materials, processes and transport needed to produce a new product.

Using a study of the benefits of repair compared to new⁴, it's estimated that approximately 10kgCO₂e is saved for every kilogramme of item repaired. For re-use with no carbon burdens related to a repair or additional process, the benefits are higher. For our analysis, we have assumed the same benefits for repair and re-use.

For example, for our re-use activities in Surrey, selling on average over 100,000 items a year, this equates to an estimated annual carbon saving in excess of 8,000 tonnes of CO₂e. This carbon saving varies considerably by type of product, with some far higher benefits coming from the repair and re-use of electronic items for example.

Looking at a national picture and using our projections of the potential growth of re-use and repair from household waste recycling centres in the next five years, **the potential national carbon saving would equate to over 930,000 tonnes of CO₂e per year.**

The benefits of re-use and repair are even greater where an item is otherwise disposed of via energy recovery or landfill rather than recycled.

³ Local Government and Net Zero in England. July 2021. (www.nao.org.uk)

⁴ Privett · Impact of UK Repair Cafés on GHG emissions (cfsd.org.uk)

Social value created

As our analysis demonstrated, the potential social value generated throughout the process of re-use and repair is significant.

The social value generated will vary by region and by item. Social value helps us to understand the different impacts of our re-use activities and how our stakeholders (for example, local authorities, visitors to a household waste recycling centre, staff) are each affected and could benefit further through increasing the volume of items being diverted for re-use and repair.

Social

Jobs created through running shops, repair processes and supporting activities – such as management, transport, admin, supplies.

Training opportunities for repair, PAT testing etc.

Environmental

Offsetting the material and carbon investment to produce an item from new.

A reduced carbon impact when compared with recycling due to lower transport (most re-use happens locally) and minimal processing activities. Average environmental benefits will increase for items which are not recyclable and those which don't need new components for repair.

Economic

Access to goods at a reduced cost.

Revenue can be used to support community projects, reduced costs for local authorities or investment in campaigns/developments – such as waste prevention or further re-use and repair.



What needs to change?

Government policy and support

Whilst re-use has been developing in the absence of a clear policy direction from central government, we have demonstrated a clear, growing need to accelerate its development and this requires policy certainty, enabling business cases to be developed and investment decisions to be taken. Clear policy in relation to re-use and repair has so far been lacking when compared with other layers of the waste hierarchy.

We recommend that the three priority areas for government are:

1. **Setting an ambitious agenda through the maximising resources and minimising waste programme**
2. **Pricing for externalities**
3. **Recognising the opportunities for other departments**

① **Setting an ambitious agenda through the maximising resources and minimising waste programme**

Two years ago, DEFRA's draft waste prevention programme was released for consultation. While there has been some activity since the consultation closed, we are yet to see the outcomes.

This programme is the ideal opportunity to provide clear direction on prevention, including re-use and repair, whilst aligning with other resource-related agendas – such as increasing resource productivity and reducing residual waste – to create certainty and clear priorities. We anticipate that it will include:

- ✓ Clear targets and timescales to give direction to both industry and the value chain.
- ✓ A requirement to collect and report key data along the value chain to inform strategic decisions and to accelerate progress.
- ✓ A level of ambition that builds on the path set out by the Resources and Waste Strategy and supported by the recent [Mission Zero \(Independent Review of Net Zero\)](#)⁵, to enable it to reach out to all stakeholders in the value chain and ensure it holds its political weight alongside competing agendas.

⁵ Mission Zero - Independent Review of Net Zero (gov.uk)

② Pricing for externalities

Repair for expensive assets, such as cars, is commonplace. However, beyond this, repair typically struggles to compete on price compared with buying new in most other circumstances, as new items:

- ✓ Do not include the full cost of their production – such as carbon, water and the environmental impact of the raw materials – in their selling price.
- ✓ Are designed in a way that makes them very difficult to disassemble and repair, increasing costs or making repair technically impossible.
- ✓ Have a limited period where replacement parts and support are available, after which repair becomes reliant on spare parts from other sources, such as other items that are beyond repair.
- ✓ Rely on domestic labour and energy costs for repair, which are higher than in many other countries where the bulk of new goods are manufactured.

To level the playing field and support the growth of domestic repair and re-use, the UK government needs to establish a ‘green hurdle’ for imports that accounts for environmental factors in the production of new items outside of the UK and the standards and expectations of those products domestically manufactured, repaired and/or reused.

One potential method of doing this is by fully including the resource and waste management sector in the UK Emissions Trading Scheme (UK-ETS). For instance, when applied between primary and recycled secondary resources, this will create a carbon price matrix that would better represent the environmental benefits of each layer of the waste hierarchy – from prevention through to disposal – due to the carbon savings associated with a more effective use of resources.



For example, SUEZ has calculated that a carbon levelling price for textiles could support and enable prevention, repair, re-use and recycling to become more commercially viable, with a quantum of nearly £1,000 per tonne. A true value shift in this material stream would be fundamental to how textiles are purchased, used, reused, repaired and ultimately recycled. **If the UK Emissions Trading Scheme is only applied to energy-from-waste, then the cost of sending textiles to energy-from-waste would amount to near £0 (if they are made from natural resources, such as cotton or wool) and only £36 per tonne⁶ if made from oil-based products, such as polyester, disincentivising investment higher up the waste hierarchy.**

⁶ Assuming a UK Emissions Trading Scheme carbon price of £80/tCO₂e.

③ Recognising the opportunities for other departments

Re-use and repair currently sit within Defra's remit, though should be considered a growing green industry. According to the Chancellor of the Exchequer, this is one of the core industries with "the greatest potential to unlock growth"⁷ that can therefore contribute significantly to other government agendas, including:

- ✓ The carbon savings associated with re-use compared with lower tiers on the waste hierarchy could make a significant contribution towards the UK's net zero target and should be of interest to the newly formed Department for Energy Security and Net Zero.
- ✓ As the sector moves re-use and repair to a more business-focused activity, employing more people on wages that reflect their skill and contribution to the outcomes of the activity will increase tax revenues and contribute to wider economic growth, making re-use and repair an appealing prospect to HM Treasury.
- ✓ The 40,000 skilled jobs and opportunities, along with the additional opportunities created through the support and service industries that will grow alongside them, will contribute to the 74,200 roles estimated to be needed within the sector by 2030, set to rise to an aggregate of 240,000 new roles by 2040⁸.
- ✓ The increases in productivity, improvements in living standards (as a result of the roles created through the "geographically dispersed employment"⁹ that re-use and repair will need across the country) and the access to items at lower prices supports the nation's levelling up agenda from the Department for Levelling Up, Housing and Communities.
- ✓ The opportunity to export the expertise, skills and innovations that develop with this sector could see the UK as a world leader in the transition to a more circular economy through re-use and repair, supporting the newly formed Department for Business and Trade's ambition to boost British business on the world stage.

⁷ HMT Autumn Statement 2022, November 2022 (gov.uk)

⁸ Chartered Institution of Wastes Management, Beyond Waste: Essential Skills for a Greener Tomorrow (www.circularonline.co.uk)

⁹ Rt Hon Chris Skidmore MP "Mission Zero, Independent Review of Net Zero" January 2023

Local authorities can take the lead

As custodians of the items that consumers dispose of through a household waste recycling centre or bulky waste household collection, the public sector has an important role to play.

There are substantial environmental, social and economic benefits from moving these items up the waste hierarchy. To do this, an authority should consider:

- ✔ **Incorporating re-use and repair within an authority's organisational or resources and waste strategy**

As with central government, re-use can deliver wider benefits and support objectives beyond resources and waste. Connecting with other departments – such as social services, education and economic development – can help to build the case for more investment in re-use and cross departmental support.

- ✔ **Looking beyond local authority boundaries**

Re-use of an item doesn't stop or start at an authority boundary. Neighbouring authorities and businesses could go further and faster by working in partnership and sharing resources, ideas and networks.

- ✔ **Supporting and collaborating with local educational services**

Re-use and repair support the development of skilled repairers, who can learn, work and grow through a local authority run service and develop future businesses and networks to grow re-use and repair locally.

- ✔ **Working with contractors and service providers**

In order to deliver the best long-term results, develop a more re-use-based approach to collection and processing services by setting clear objectives and expectations at a procurement stage and continuing to evolve these during a contract term.

- ✔ **Connecting and facilitating coordination and collaborative working between all stakeholders in the re-use and repair sector**

Local authorities are often proven to be one of the most trusted components of society and are ideally placed to facilitate better coordination and collaborative working between all arms of the sector within their communities and neighbours.

The third sector as a key player

The re-use agenda has benefited significantly from the efforts of the third sector, as have hundreds of thousands of people through the items they have been able to access and the training and employment opportunities it has created. The third sector will continue to play an important role in supporting vulnerable groups in society. The development of a more business-based approach to re-use is not intended to compete with the incredible work of the sector, but an evolutionary process for the circular economy that brings with it new, skilled paid jobs and a higher rate of re-use and repair of items across the economy.

Working together, everyone who operates and benefits from re-use and repair will gain from its expansion and formalisation into the circular economy.

Time to seize the opportunity

Re-use and repair already create significant social, environmental and economic benefits wherever they exist. They have untapped potential to grow into a thriving green industry, at both a local and national level, through greater emphasis from both local and national government, alongside investment in skills development, job and business creation.

This is an opportunity for the UK to lead the circular economy, creating benefits that support national agendas, from levelling up to net zero and economic growth.

See also

SUEZ guides designed to support the development of re-use within the resources and waste sector.

↪ <https://suezuk.co/reuseguides>

