

Making the connection

Ending digital exclusion with reused devices



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Authors

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Summary

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Too many usable devices are discarded rather than reused." In the UK, millions of people face digital exclusion, lacking the devices (smartphones, computers or tablets) and internet access now essential for daily life. Simultaneously, the country has a growing e-waste problem, as too many usable devices are discarded rather than reused. The redistribution of these devices is a practical solution, enabling unused technology to be refurbished and given to those in need, increasing digital inclusion while reducing waste.

The journey of a second hand device to someone that needs it typically involves three steps: a device is donated, a redistribution charity processes and refurbishes it, and it is delivered to a recipient. To identify how to overcome the barriers to scaling up these operations, we spoke to over 25 organisations involved at all these stages.

The greatest challenge to expanding device redistribution is insufficient supply of usable devices, with current efforts meeting only a fifth of demand. Businesses, public sector organisations and individuals are not donating enough high quality devices to meet the needs of digitally excluded people. Our interviewees told us there were three main reasons:

- 1. Insufficient incentive to donate
- 2. Unusable devices being donated
- 3. Concerns around data security

In this report, we propose the following measures to increase device redistribution and tackle digital exclusion and e-waste in the UK:

Reform the extended producer responsibility regime to make manufacturers more responsible for what happens to devices:

- set targets for reuse;
- oblige producers to provide free collection services to reuse organisations;
- phase-in a ban on sending whole items of electronic equipment to landfill or incineration.

Introduce a real right to repair:

- match EU ecodesign standards for repairability and durability;
- ban the contractual, hardware or software techniques that prevent repair;
- make spare parts and repair information accessible to everyone.

Include the redistribution of devices in requirements for government contracts.

Update the 2014 Digital Inclusion Strategy.

Standardise data security protocols for device donation.

Two problems in search of the same solution

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Without intervention, a million more families are at risk of falling on the wrong side of the digital divide."

The UK's digital inclusion problem

As the use of technology advances at pace, continuous effort will be needed to ensure no one is left behind and everyone can participate fully in modern life. The UK starts from a worrying baseline, with millions already digitally excluded, unable to go online because they do not have a device, internet connection or digital skills.

The UK's e-waste problem

Electronic waste is a growing problem worldwide and the UK has a poor track record, ranking second worst in the world, after Norway, for the amount it produces per person.¹ What is more, many devices being wasted are in working condition and could be reused.

The big opportunity

The cost of living crisis has worsened digital exclusion. The House of Lords Communications and Digital Select Committee's inquiry into digital exclusion and the cost of living in 2023 painted a bleak picture.² Over 11 million people in the UK cut back on internet related expenses to pay other bills in 2023, and more than 35 per cent of adults said the cost of living crisis would affect their ability to go online.³ Without intervention, a million more families are at risk of falling on the wrong side of the digital divide.⁴

Yet, faced with the need to do something about both e-waste and digital exclusion, the government has overlooked an obvious solution: device redistribution. Schemes can take devices, like laptops, tablets or smartphones, that might otherwise go to waste or be left unused, refurbish them as needed and then distribute them 66

Redistribution maximises the social and economic value of unused devices and prevents tonnes of e-waste." to people that need them. This maximises the social and economic value of unused devices and prevents tonnes of e-waste.

Solving digital exclusion has been conspicuously absent from previous government waste initiatives. A consultation and call for evidence in 2023, on reforming producer responsibility for waste electrical and electronic equipment (WEEE) did not refer to this as an aspiration.^{5,6}

Surprisingly, it is also not mentioned in the remit of a joint project between the Department for Energy Security and Net Zero (DESNZ) and the Department for Environment, Food and Rural Affairs (Defra) which aims to increase resource efficiency by creating a comprehensive list of measures for high impact sectors like electronics.⁷

Likewise, the national Digital Inclusion Strategy, launched in 2014, which outlines ten steps to address digital exclusion related to device access, connectivity and digital skills, makes no mention of e-waste or the immense potential of device redistribution schemes.⁸

The government has a chance to link policy that addresses both environmental impacts and the need for greater digital inclusion. This would help to support and expand existing efforts.

The scale of the problem

Digital exclusion in the UK



5.8m

people will be digitally excluded in 2032 without action¹¹



18% of people are only able to access the internet using a smartphone, and 28% of those feel that is a disadvantage¹²



The UK's e-waste mountain

E-waste per capita, 2022¹³



Good devices are going to waste in the UK

30,000

small electrical and electronic products that could easily be reused are needlessly recycled each week.¹⁴



Almost **40%** of laptops dropped off for recycling are likely to be fit for reuse instead.¹⁵



'Drawers of doom' hold up to 880 million unused hoarded electrical items including mobile phones, tablets and laptops that could either be reused or recycled.¹⁶



Life without the internet

A laptop, tablet or smartphone is not a luxury but a vital tool for engaging fully in everyday life. Living without them can lead to serious educational, health or social disadvantages, preventing individuals from reaching their full potential.

Existing device redistribution schemes in the UK that help people access the internet can only meet a fifth of the demand.¹⁷ For every person that benefits and is helped to go online, four are excluded.

We describe below the real experiences of Sarah, Alex, Sam and Abdel who were all ultimately supported by a device redistribution charity.

It was so frustrating getting detentions for something out of my control. Sarah

Sarah, a secondary school student, faced significant challenges in completing her homework due to limited access to an internet connected device at home. With only one shared computer in her household, finding time to complete her homework was difficult, especially with other family members needing access. She was frequently given detention for not submitting homework on time, creating a cycle of stress and frustration that affected her overall engagement in school. I started to think there was no way I was going to be able to find a job. Alex

Alex had the daunting challenge of job searching without access to a phone. This made it difficult for him to search for jobs effectively and receive important communications about interviews and next steps. He had to rely on a computer at his local library and often worried that potential employers couldn't reach him, which deepened his anxiety about the future.¹⁸

> I had nothing. No computer, no WiFi. I didn't know what to do. I thought I wouldn't be able to get to university just because I didn't have access to a working computer. Sam

Sam arrived in the UK from Afghanistan in 2022. While living in asylum accommodation, an education charity suggested he contact the local university, who were interested in his story. The university told him it was late in the year but asked him to write an essay to see if he was suitable for the politics and international relations course. He didn't have a working laptop, and there were only a few days until the deadline.

When I arrived, I didn't have anything. I needed a laptop to learn and live, and to contact my family. Abdel

Abdel arrived in the UK from Sudan in 2022. He had no laptop or phone, and no way of reaching his family, who he hadn't spoken to for around six months. In his asylum accommodation there were phones to make calls but none of them connected to the internet. He was reliant on borrowing his roommate's smartphone and was worried about his future and education.¹⁹



Three steps to digital inclusion

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We reveal insights gleaned from interviews with over 25 organisations." Access to a phone, tablet or laptop can transform the lives of digitally excluded individuals, opening up routes to jobs, education and necessary contact with banks, businesses and other organisations. The four stories of those without devices (on pages 8 and 9) are illustrations of what millions of digitally excluded people across the UK experience on a daily basis.

To highlight how people can be helped by device redistribution schemes, we follow the journey of a device, from the point of its donation to its destination. At each stage, we reveal insights gleaned from interviews with over 25 organisations, identifying where policy interventions could help overcome the barriers preventing functional used devices reaching the people who need them.

The journey of a donated device



Step 1 Donation



Many individuals, businesses and public sector organisations have internet connected devices they can no longer use. Often described as 'end of life' devices, they have, in fact, only reached the end of their first life.

At this stage, a choice is often made whether to recycle them or opt for reuse or redistribution. These are the least popular end of life options for electronic waste, with the UK diverting only 14 per cent of its electrical and electronic equipment for reuse, while recycling takes 53 per cent.²⁰

Here, we share the insights of a large public sector organisation, NHS Coventry and Warwickshire Integrated Care Board (ICB), and SUEZ, the waste management company, about what they think will enable and encourage more organisations, businesses and individuals to opt for reuse.

Reusing end of first life devices

With more NHS tools and services being provided online, digital inclusion has become an increasingly important issue for the organisation. Recognising this, NHS Coventry and Warwickshire ICB established a partnership with the local authority to redistribute its end of first life devices to those in need locally. This was a change from a previous approach, which shredded usable devices for recycling. The ICB typically uses devices for three years before decommissioning them, because expiring warranties make maintenance too expensive.

Redistributing devices is not standard practice across the NHS's 42 ICBs, nor is every local authority involved in redistribution schemes. So, this approach relied heavily on motivated individuals within the ICB and the local 66

Often described as 'end of life' devices, they have, in fact, only reached the end of their first life." authority. The CEO and chair recognised that the care board had a role to play in tackling digital exclusion, to ensure its patients could access the full range of NHS tools and services. The chief digital information officer led the process, while an executive whose role is focused on green practices identified how the scheme could provide environmental benefits, and the local authority digital inclusion lead helped to make it a reality.

"It came about, as part of our digital strategy championed by the CEO and the chair, that we have a role to play as an ICB in understanding and getting rid of digital poverty."

Eddie Olla, chief digital information officer, NHS Coventry and Warwickshire ICB

For the local authority, the ICB is a critical 'anchor partner' for its device redistribution scheme. The consistent donation of a large quantity of devices ensures the scheme's effective operation, while they developed partnerships with other device donors. The donated devices from the ICB are of uniform and consistent good quality, and are well suited for the target audience's needs.

Giving devices a second life

SUEZ Recycling and Recovery UK, a recycling and waste management services provider, is attempting to increase the number of electronic devices it handles from households and businesses going to reuse and repair, instead of straight to recycling.

To increase donations from individuals, it is trialling an initiative with the Salvation Army at five Devon household waste recycling centres (HWRCs). People place their laptops, smartphones and tablets into sealed containers at the HWRC, which are then transferred directly to the Salvation Army, still sealed, with minimal staff intervention. No changes in behaviour are required of people who take their devices to the site, they are simply directed to reuse rather than recycling. Partnership with an established charity and the high level of security used in handling the devices helps to boost trust in the process, potentially increasing the number of devices collected.

SUEZ also facilitates larger donations of devices from businesses and local authorities, as well as their own equipment, predominantly sending them to their partner charity, Computers for Charity.

SUEZ's clients, particularly public sector organisations, are adding social value requirements into contracts with them. These have motivated clients to request redistribution schemes instead of recycling for their end of first life devices. Increasingly, private companies that supply public sector organisations are looking for social value requirements in their contracts too, demonstrating the power of public sector role modelling.

"We're seeing social value increasingly influence public and commercial procurement practices. Where commercial companies provide to the public sector, this impact is particularly strong. Procurement is a powerful tool for change."

Sarah Ottoway, sustainability and social value lead, SUEZ Recycling and Recovery UK

Step 2 Redistribution



Once a device reaches a redistribution charity, it can take different routes. Some charities are small, local operations which process a handful of devices in-house, while others are larger national organisations that outsource key processes like device management. Both types play a vital role in the redistribution ecosystem, though their experiences and challenges vary.

The following examples are insights from three charities involved in redistribution, Giroscope, a small community based organisation, Good Things Foundation, a larger nationwide organisation, and Community Calling, a smartphone redistribution project, co-ordinated by Virgin Media O2 and Hubbub.

A community approach

Giroscope is a charity focused on providing affordable housing in Hull. It has also launched a device redistribution scheme offering free devices to digitally excluded people in its community. Initially focused on individual donations, the scheme has evolved to accept corporate donations. It prepares the devices in-house, conducting repairs with the help of volunteers, primarily neurodivergent individuals from a local charity, Matthew's Hub.

Strong local connections have been important to the scheme's success. The organisation has built a network of partnerships, to find both volunteers and digitally excluded people who need support. These ties have enabled Giroscope to reach those otherwise unlikely to seek support. At this local scale, word of mouth and the visible presence in Hull have helped it to gain the community's trust and expand the number of people helped. While this community focused approach has its benefits, it also presents challenges, particularly in gaining trust from corporate donors, who can be hesitant around data security concerns. Giroscope has made significant investments in specialised software and training to ensure data wiping meets military grade standards, but the organisation is still struggling to secure larger scale donations because data wiping requirements vary widely.

Additionally, the design of modern devices, especially smartphones and tablets, poses significant repair challenges for this small operation. Many components require specialist equipment it cannot afford. It recently invested in a microscope to enable finer repairs than were previously possible, allowing it to increase its supply of devices, but this is just one of the pieces of kit needed for a full service. Lack of product standardisation also means it requires a diverse inventory of spare parts and tools, which increases upfront costs. Acquiring spare parts as a small community organisation has been a big challenge and it often encounters devices that are simply not designed for repair.

"We had a keyboard that's come in for repair. There's not a single screw in the back of it, it's all bonded together. We've got a heat plate; we'll heat it up, try and separate it apart, but there's a fair chance we could crack the back. If they just put four or six screws in the back, we could take the back off and get it working again"

Jim Rintoul, support worker, Giroscope

Large scale redistribution

Good Things Foundation

Good Things Foundation, the UK's digital inclusion charity, runs a National Device Bank that refurbishes used devices received from organisations, collecting over 53,000 so far, distributing to people unable to access their own device.

In the UK, 1.5 million people suffer digital exclusion because they lack access to a smartphone, tablet or laptop, as opposed to lacking internet connectivity or digital skills. The National Device Bank goes some way to address this exclusion, offering a free alternative to IT asset disposal. As a countrywide initiative, it can accept all devices donated from a business without setting minimum quality standards. This matters because donors might have a combination of both valuable and low quality devices but would not send anything for reuse if standards were imposed.

"I'm very resistant to having a benchmark for quality. From a behaviour change point of view, people would think 'If they won't take everything, we'll have to sort it. That's a hassle, we won't do it.' Someone might have 100 iPads and two rubbish phones, but they wouldn't give anything to us if we didn't say we take everything. And from an environmental point of view, if someone's hoarding e-waste, the quicker you get hold of it the better, because there's a higher probability it can be reused."

Helen Milner, group chief executive officer, Good Things Foundation

The preparation of devices for reuse by tech partner Reconome is funded by selling on devices unsuitable for direct reuse, like printers and monitors or those of higher value, like MacBooks. Refurbished devices are then distributed through the National Digital Inclusion Network, made up of 5,000 organisations which support their local communities, often also providing free mobile data too from the National Databank. Although only around 30 per cent of the devices are redistributed, the foundation's approach boosts the number received. Through the partnership with Reconome, devices that cannot be reused are handled to the highest environmental standards.

Community Calling

Community Calling is a smartphone redistribution scheme, led and co-ordinated by Hubbub and Virgin Media O2 with support from tech partner, Genuine Solutions. Since 2020 it has distributed over 20,000 devices by working with a network of charities, community groups and local councils. People supported include survivors of domestic abuse, children with diabetes, those experiencing homelessness, low income families struggling with home schooling, asylum seekers and older people.

The project takes a three-pronged approach: access, connectivity and skills. Recipients are also given free O2 mobile data from the National Databank and are offered training to support them in navigating the digital world.

As well as being a free way for the public to donate old devices, the scheme also works with businesses which recognise that device redistribution has both environmental and social benefits. Extending the life of smartphones in this way enables businesses to support digital inclusion, whilst also working towards environment, social and governance (ESG) goals. By providing case studies and testimonials from those who have received devices, Community Calling encourages businesses to continue donating and attracts other businesses and the public to start.

"Community Calling showcases how cross sector collaboration between charities, businesses and the public, and a reuse-first approach to digital inclusion, can deliver life changing impact and significant environmental benefits. By making it simple and secure for businesses and the public to pass on unused devices, we can shift behaviour to make this the norm."

Emily Watson Smith, strategic partnerships lead, Hubbub

"Though it began as a way for the public to donate unused smartphones, Community Calling has evolved to enable our business clients to donate devices. From early 2025, we will also donate handsets from our supply chain, supporting more people to get connected. Involvement in the scheme has been a catalyst to drive broader circular actions within our own business and beyond, and we're excited by what comes next."

Rob McCann, head of environment, climate and nature, Virgin Media O2

Step 3 A new home for the device



Once processed by the charity, a device is handed to a recipient, who will be prioritised based on the criteria of the council or the charity, or on a first come first served basis.

Many charities also offer digital skills training to ensure the recipient knows how to use the device and it does not end up unused and ultimately going to waste. This is how Sarah, Alex, Sam and Abdel, whose stories we told earlier (on pages 8 and 9), had their lives transformed after receiving devices.

The transformational power of a laptop, tablet or smartphone

Sarah

"I'm so relieved that I can complete my schoolwork at home, and now I can actually keep up with my class."

With her own laptop, Sarah could finally complete her homework on time without waiting for a turn on the family computer. This small change broke the cycle of stress and detentions, helping her to engage better at school. Having reliable access to a device improved her confidence and, with less worry about falling behind, she's feeling more positive about her schoolwork and her future.

Alex

"It's had such a positive impact on me professionally and allowed me to take control of my life."

To help with his job search, Alex received a refurbished smartphone. He was then able to search and successfully secured a position at a local coffee shop. He explained how the technology has positively impacted his life, "I've been able to set up online banking, access my work rota, and communicate with my team. I don't know how I could have done this without my phone."

Sam

"It's amazing how one laptop can change not only my life but other people's lives too."

After receiving his laptop, Sam managed to finish his essay just in time and was admitted to his university course, saying, "I love every minute of it." While waiting for classes to start, he used the laptop to take the required English language test, which he passed. Soon after, he was invited to help others in situations similar to his to sign up for benefits, using his laptop for this work. Next year, he plans to run for president of Student Action for Refugees, to help other students access refurbished laptops and online courses. He said, "I wouldn't be here without my Screen Share laptop. I have big plans now, and they wouldn't have started without it."

Abdel

"For people coming from conflict, fleeing war, we need something to divert our attention because we think about war all the time. When you have a laptop you can do other things. It's really helpful for wellbeing."

Gaining a laptop has opened up new opportunities for Abdel in the UK, allowing him to learn maths, take an online warehouse training course and improve his English using YouTube and apps like Duolingo. He also used his laptop to create his CV and send it to traders and wholesalers. He explained: "I hope they will offer me a workplace. I'm aiming to have an apprenticeship to become an electrician." He wants more people to support these schemes, as they have transformed his situation from having no means of learning or staying in touch with his family to one of opportunity and connectedness. His laptop has been essential for his wellbeing, providing a distraction and helping him to focus on the future.

Why can't more devices be redistributed?

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The biggest issue is insufficient supply of usable devices."

The biggest issue preventing the expansion of device redistribution schemes is insufficient supply of usable devices. Every redistribution organisation we spoke to said it cannot support everyone in need. Businesses, public sector organisations and individuals are not donating enough.

The organisations we interviewed for this report identified three significant challenges contributing to this problem: insufficient incentive to donate; donation of unusable devices; and concerns around data security.

Here, we provide an overview of best practice, while also highlighting unresolved issues policy needs to address.

Insufficient incentive to donate

Many companies are committed to their existing device disposal services and are resistant to change, and many individuals hoard old devices or dispose of them improperly because donation is not the norm. Device donation is higher when a redistribution scheme can:

- **Quantify the impacts:** measuring and reporting the social and environmental impacts helps maintain and attract corporate partners. Aligning with environment, social and governance (ESG) targets, makes it more appealing for companies to participate.
- **Create 'anchor' partnerships:** it helps to establish a longstanding anchor partner, such as a large organisation in the public or private sector, that consistently donates. Publicising the partnership and showcasing its effectiveness builds trust and attracts new donors.
- Minimise friction for donors: for individual donations, collection points should be placed in trusted, high traffic

locations. Well visited sites like household waste and recycling centres or community centres should be used as collection points.

The following barriers outside redistribution schemes' control require policy intervention:

- Dependence on motivated individuals: changing an organisation's practice from disposal to redistribution often hinges on the dedication of motivated individuals passionate about the cause, rather than distribution being integrated as standard into organisational structures and processes.
- Weak incentives for corporate donors: while social benefits can be quantified and promoted, if the social and environmental value of a practice is not considered in procurement processes, there might not be a strong enough incentive for businesses to adopt new practices, particularly if they increase costs.
- Lack of national awareness raising: scaling up redistribution sufficiently to meet the needs of digitally excluded people will be harder without comprehensive national communications, to raise awareness and increase the flow of donations.

Unusable devices

Charities receive many items that cannot be redistributed due to damage or unsuitability. Older devices may become unusable due to planned obsolescence or the withdrawal of operating system support. The removal of operating system support for Windows 10 in October 2025 is a particular concern for device redistribution because Microsoft Windows is the most widely used operating system in the world. And even minor repairs can be hampered by design constraints or a lack of spare parts. Some devices may also be locked to a business's mobile device management (MDM) system, leaving redistributors no choice but to recycle them, unless businesses unlock them before donating. Device donation is higher when a redistribution scheme can:

- Set minimum standards: age or condition criteria, aligned with the repair capability of the organisation, minimises

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Scaling up redistribution will be harder without comprehensive national communications." 66

Some devices cannot be repaired due to their original design, regardless of repair skills." the number of unusable devices donated. This will increase the proportion of devices received that can be redistributed, while minimising time and costs associated with processing unusable devices. Standards can be as simple as requiring that the device has an intact screen and can be turned on. However, this can also act as a deterrent to donation (see over).

- **Collaborate with skilled device managers:** partnership with a device management company skilled in repair, could help to reduce the number of unusable devices. compared to what an in-house or voluntary team could manage.
- Use and disseminate best practice guides: organisations like the London Office of Technology and Innovation (LOTI) and Reboot provide step by step guides to dealing with common challenges. This includes overcoming the withdrawal of operating system support by turning devices into Chromebooks, using Google's free lightweight operating system, suitable for older devices, or suggesting effective wording for donation forms and instructions, so device preparation, including MDM unlocking, is completed correctly.^{21,22}

The following barriers outside redistribution schemes' control require policy intervention:

- Design that prohibits repair: some devices cannot be repaired due to their original design, regardless of repair skills. Planned obsolescence, lack of standardisation, unavailability of spare parts, inadequate repair information and poor quality 'fast tech' all contribute to this problem.
- **Obstructive donation standards:** efforts to change behaviour and encourage donation can be hindered by hurdles in the process which put people off. It is preferable for redistributors to accept all devices, including those needing repair; but, until they can be confident devices are repairable, they will feel pressured to set minimum standards, even though this may deter donors.

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The cost of sorting and processing devices can be substantial for small operators."

- **Financial risks for small operators:** the costs of sorting and processing devices can be substantial for smaller operators that primarily want to spend their time and money redistributing usable devices.
- **Expiring operating system support:** software support often does not last as long as the lifespan of hardware. Even if devices with unsupported software are converted into Chromebooks, this is a compromise solution as they still lack full functionality.

Data security

Data security concerns deter businesses and individuals from donating. Individuals often worry about sensitive personal information falling into the wrong hands, while larger organisations may destroy devices for data security reasons. Varying data security standards and certification requirements across different organisations also pose challenges. Device donation is higher when a redistribution scheme can:

- Partner with certified providers: collaboration with IT asset disposal providers enables secure data destruction and certification in line with donors' expectations. Publicising these partnerships builds trust.
- Educate donors: educational resources should be given to chief technology officers and other key personnel on data security. Existing partners can assist in spreading awareness about the safety of systems used.
- Use trusted drop off locations: for individual donations, establishing trusted, secure drop off locations that provide clear information about the processes involved fosters confidence in the process.

The following barriers outside redistribution schemes' control require policy intervention:

- Need for standardisation: a gold standard is needed for data security practices. The current situation depends heavily on the attitudes and risk tolerance of individual IT officers.
- **Destruction is too cheap and easy:** as long as the destruction of devices, including through recycling, is cheap and easy, it will continue to be the preferred choice. Cost is a significant motivator, and there are no equally strong disincentives to steer people and businesses away from this option.

66 A gold standard is needed for data security practices."



How to get more devices to people that need them

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The government should build redistribution into the ongoing reforms." We have identified the following policy interventions that will increase the supply of devices for redistribution to reduce digital exclusion while contributing to UK efforts to lower its ranking as the second worst e-waste producer in the world.

Reform extended producer responsibility to make manufacturers more responsible

Extended producer responsibility (EPR) ensures those controlling a product's environmental impacts bear the full lifecycle costs, aligning with the 'polluter pays' principle, which is consistently popular with the public.²³ In 2023, Defra initiated EPR reforms for e-waste. The government should build redistribution into the ongoing reforms, acting on the following ideas from its call for evidence:

Set targets for reuse

Recycling and reuse targets are grouped together, which provides limited incentive for careful, separate collection and reuse of products in good condition. Reuse targets are popular. A 2023 YouGov poll, commissioned by The Restart Project on electronic waste, found that 83 per cent of respondents supported targets which ensure that reuse is prioritised over recycling.²⁴

- Oblige electronics producers to provide free collection services to reuse organisations

Producers must currently finance the treatment of e-waste returned to them by retailers, but not by reuse organisations. Free collection services for reuse organisations of equipment deemed unusable would separate this waste stream and help redistributors reduce the cost, time and storage involved in receiving and processing unusable devices. More redistributors could then afford to accept donations without imposing potentially obstructive minimum standards on what they collect.

 Phase-in a ban on sending whole items of electronic equipment to landfill or incineration

The landfill or incineration of surplus or unsold devices is unjustified, especially when there are people who need them and when redistributors are facing a supply problem. A ban on this practice must include safeguards that stop reuse organisations from becoming dumping grounds for unusable technology. It should also avoid loopholes that allow electronics to be exported abroad, putting a burden on and polluting developing countries. And when whole electronic products become waste, they should not be sent to landfill or incineration. Wales is extending its landfill and incineration bans to include items like laptops, tablets and mobile phones.²⁵

Introduce a real right to repair

The 'right to repair' is built on three principles: products should be designed for repairability, spare parts and repair services should be affordable and people should have access to all the information they need to carry out repairs.²⁶ Current ecodesign standards related to repair are very limited in the UK and do not constitute a real right to repair. They apply to a limited range of products (mainly kitchen white goods), make no provisions to make repair affordable and mainly benefit professional repair services.²⁷ While the UK has promised to "match or exceed" EU ecodesign standards, it is not doing so.²⁸ To help redistribution schemes overcome the challenge of receiving unrepairable devices, the UK should follow or exceed the EU in the following three steps:

- Match EU ecodesign standards for repairability and durability Standards for repairability and durability will increase the flow of usable, quality devices for redistribution. The EU recently implemented new requirements for tablets and phones which include durability and repairability standards. Battery longevity information and repairability scores are mandatory, and there is a

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Landfill or incineration of surplus or unsold devices is unjustified, especially when there are people that need them." 66

The UK should match EU standards for the repairability and durability of phones and tablets." requirement for a minimum operating system support period of at least five years after a product's release, ensuring devices remain usable.²⁹

The EU plans to go further, establishing a new Ecodesign for Sustainable Products Regulation (ESPR), allowing it to set standards for broader product categories, rather than individual products, including for product durability, reusability, upgradability and repairability.³⁰

The UK should match EU standards for the repairability and durability of phones and tablets. It should also either establish its own standards for laptops or match any future EU standards developed through the ESPR framework.³¹

 Ban contractual, hardware or software techniques that prevent repair

Planned obsolescence makes devices unusable before their hardware expires, creating significant challenges for redistribution schemes that rely on functional devices. The EU has introduced a ban on knowingly promoting goods with artificially limited lifespans. France has gone further and made planned obsolescence a criminal offence, with penalties of up to two years in prison and substantial fines of €300,000 or five per cent of average annual turnover.^{32,33} The UK should exceed the EU's ambition and follow France's lead, prohibiting all techniques that intentionally prevent repair and shorten product lifetimes.

 Make spare parts and repair information accessible to everyone

Spare parts should be affordable to support repair and manufacturers should make them available to everyone, not just professional repairers. This should come with comprehensive repair information. In the EU, the ESPR could be used to ensure producers make spare parts and information available to all, and there are plans to deliver digital product passports for electronics by 2030, containing this key information. The UK should follow the EU's lead.

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By embedding device redistribution into government contracts, reuse can be prioritised."

Include device redistribution in government contracts

Public procurement is a powerful way to lead by example in addressing the digital divide. By embedding device redistribution into government contracts, reuse can be prioritised for publicly funded IT equipment.

Contracting authorities should encourage device donation for social good in the procurement of IT products and services. Government IT contracts should require suppliers to donate usable devices for redistribution, prioritising it over recycling. Procurement Policy Note 06-20 'Taking account of social value in the award of central government contracts' should be updated to explicitly require this. The Greening Government ICT and Digital Services Strategy should also be updated to include clear guidelines on device donation for social good, encouraging public sector organisations to partner with redistribution initiatives.³⁴

Update the digital inclusion strategy

The Digital Inclusion Strategy is more than a decade old and commentators, including the House of Lords Communications and Digital Committee, have called for a new nationwide strategy to guide action.³⁵ This could usefully address the joint problems of e-waste and digital exclusion, helping redistributors to alleviate impacts of the cost of living crisis. The government should collaborate with sector stakeholders to develop a strategy fully adapted to the current context.

Standardise data security protocols for donation

The government should set a gold standard for data security protocols for device donation to ensure consistency across all sectors and prevent excessive caution around security and unnecessary waste. A clear standard, outlining best practice for erasing data, within the context of device donation, should be prepared, in collaboration with industry leaders, to drive up rates of reuse and redistribution.

Endnotes

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