MATERIAL FOCUS

Industry briefing

# Electricals reuse across the UK

Based on a sample of reuse data from 2021-25

**November 2026**



# Executive summary

## This report presents a sample of the UK's existing electricals reuse activity and infrastructure.

At Material Focus, we are building a circular electricals future - where electricals are designed to last and valuable materials are never wasted. But to accelerate that transition, we need to understand where we are starting from. Without a clear baseline, we cannot set meaningful targets or measure progress.

An established WEEE measurement system allows us to track and measure recycling tonnages but reuse is harder to measure. Existing regulations focus primarily on tonnage recycled rather than products kept in use. Previous Material Focus research highlights the importance of developing specific metrics to accurately measure repair and reuse in the UK. Currently, available data on reuse only gives us a partial picture of what's happening across the UK.

This report brings together a sample of reuse data from the Reuse Network, Freegle, treatment facilities, and pilots funded through our Electricals Recycling Fund. It offers an initial snapshot of the scale and nature of tracked reuse activity, highlighting both the activity taking place and the significant gaps in what we currently know.

## Key findings

- **8.3 million items kept in use**
  Between 2021 and 2025, around 8.3 million electrical items (roughly 85,000 tonnes) were kept in use across these case studies.
- **Weight versus item count**
  Although large appliances are heavier and account for most of the total weight reused, far more small electrical items are reused.
- **A decline in tracked routes**
  Recorded reuse through treatment facilities and Freegle fell steadily over five years. However reuse may be shifting toward peer-to-peer marketplaces that aren't currently captured in national data.
- **The quality gap**
  The rise of online marketplaces means it's easier than ever to buy lower cost electricals. And rising living costs often means consumers hold onto devices for longer. This means that by the time people get rid of their electricals, they are more likely to be older, lower quality or too costly to repair.
- **Significant data gaps**
  Peer-to-peer and online resale platforms handle huge volumes of reuse, but their data is largely absent from national tracking. Informal reuse through friends or family also presents difficulties for tracking. As a result, official records capture only a fraction of reuse activity across the UK.

## What next?

We are working with Government and organisations across the sector to fill in the gaps and build a stronger evidence base for reuse of electricals. The aim is to develop standardised reporting across all reuse channels, so that reuse is properly counted, valued and supported alongside recycling.

If you or your organisation has relevant data, insights or case studies to contribute, please get in touch at data@materialfocus.org.uk.

# 1. Opportunities for reuse

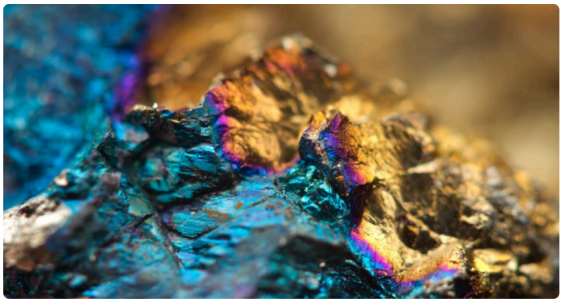
E-waste is one of the fastest growing waste streams globally and across the UK. Every year, UK households bin 103,000 tonnes of electricals. Beyond what gets binned, another 880 million devices sit unused in our homes - an average of 30 items per household.

Meanwhile, demand for electricals continues to rise. Between 2018 and 2025, the volume placed on the UK market jumped 35% from 1.28 million to 1.73 million tonnes. Globally, that figure is set to hit 82 million tonnes by 2030.

Against this backdrop of rising consumption, reusing functional devices is a huge opportunity to keep valuable resources in circulation.

## The value of reuse

Electricals are full of critical, finite materials, from copper in cables to lithium in batteries and gold in circuit boards. Our research estimates over £148 million worth of critical raw materials are hidden inside the electricals we recycle each year, not accounting for the 103,000 tonnes that are simply binned.



Losing these materials harms our planet and our communities.

**Preventing dangerous fires:** Hidden batteries inside electricals can spark fires when crushed in bin lorries and waste facilities, putting waste crews and local communities at serious risk.

**Reducing environmental damage:** Mining virgin materials to replace what we bin generates a carbon footprint equivalent to 128,665 tonnes of $CO_2$. While recycling recovers raw materials, reuse keeps products whole for longer - avoiding the emissions from manufacturing new devices entirely.

**Financial benefits:** Unused tech sitting in UK homes is worth an estimated £36.7 billion. Selling these items could net the average household between £1,300 and £6,300.

**Social benefits:** 2 million young people lack a suitable device for learning, and 34 million adults face digital barriers. Refurbishing and rehoming the millions of working devices sitting unused in UK homes has the power to change lives.

## The reuse market and public appetite

Public demand for second-hand goods is real and growing. Over a third of UK adults are open to buying second hand electricals, and three-quarters want to donate working items to charity.

However, barriers remain to buying, selling and repairing second-hand electricals. Material Focus research found that while 39% of people would sell an unwanted phone, only 21% are open to buying one second-hand. Key barriers include:

**Safety and quality concerns:** Doubts about device condition, fire safety and lifespan put people off.

**Data security:** 1 in 5 adults hold onto devices because they don't know how to securely wipe their personal data.

**Hassle and confusion:** 27% feel reselling takes too much effort. 21% simply don't know where to sell.

**Repair barriers:** High repair costs, lack of trained repairers, cost of spare parts and poor product design make fixing many items harder than buying new.

Making reuse simple, safe and attractive is essential to unlocking these resources.

## A circular ecosystem already in action

A growing ecosystem of organisations is already making reuse easier across the UK. This includes:

- **Reuse and digital inclusion charities**
  Helping to rehome electricals to tackle poverty and digital exclusion.
- **Peer to peer resale and donation platforms**
  Enabling local giving and resale at scale.
- **Second hand tech specialists and platforms**
  Expanding access to quality second-hand tech through refurbishment and remanufacture.
- **Community repair and sharing initiatives**
  Keeping items working longer and building community resilience.
- **Local authorities and waste management companies**
  Diverting reusable electricals from recycling with dedicated Reuse hubs.
- **Electrical retailers and manufacturers**
  Collecting used electricals through take-back and trade-in schemes.

## Circular design and repair

Product design plays an important role in electricals being reused. The introduction of Right to Repair legislation in the UK in 2021 marked a turning point, requiring manufacturers to make spare parts available for certain household electricals.

While repair is not the focus of this report, a wide range of repair initiatives are already taking place across the UK, and making repair easier will continue to play an important part in increasing reuse of electricals going forward.

To accelerate circular design more broadly, Material Focus launched the £1 million Circular Electricals Fund - backing innovative ideas in product design, business models and material recovery.

Ultimately, everyone has a part to play. Electrical producers, retailers, government, the public and organisations across the sector must all contribute at every stage of an electrical's life, to make reuse a simple, visible, and everyday choice for everyone.

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MATERIAL FOCUS
Circular Electricals
Keeping electricals – and their materials – in use for longer.
Mine new materials
Design for longevity
Make/ Re-make
Distribute/ sell
Use
Fix, donate, re-sell
Drop off for recycling
Transport to recycler
Capture energy from unrecyclable waste
Recover materials

# 2. Electricals reuse in the UK: a snapshot

To build a snapshot of UK electricals reuse over the past five years we compiled data from the Reuse Network, Freegle, AATFs and our Electricals Recycling Fund. While these case studies only capture a portion of national activity, they highlight critical trends and data gaps across product types.

An estimated **8.3 million electrical items were reused** between 2021 and 2025 through these channels - approximately **85,000 tonnes of electricals diverted from landfill**.

This only begins to scratch the surface of UK reuse. ReLondon's 2026 report found that approximately 28,680 tonnes of electricals were reused in London in 2024 alone. This demonstrates the scale of the reuse activity which is missing from our data.

| Estimated electricals reused 2021-2025 | | |
|---|---|---|
| **Case study** | **Items reused** | **Tonnes** |
| Reuse Network | 662,702 | 37,593 |
| Freegle | 509,402 | 5,546 |
| AATFs* | 7,052,774 | 41,630 |
| Electricals Recycling Fund | 28,944 | 58 |
| **Total** | **8,254,823** | **84,827** |

**Several Reuse Network members are registered AATFs so these have not been included in the total figures twice. The AATF figures in the tables above exclude data from Reuse Network members.*

## Reuse insights

**Waste electricals received at AATFs account for most of the reuse represented.** By weight, the amount of reuse taking place through the Reuse Network is not far behind, while reuse through Freegle only represents between 6-7% of all reuse presented, whether measured by number of items or weight.

**Significant amounts of reuse activity through second-hand marketplaces are missing.** ReLondon's report found that 93% of the tonnes of electricals reused in 2024 in London took place through second-hand marketplaces like Freegle - such as eBay, Gumtree and Olio. Without access to data from other marketplaces, we are clearly missing a substantial portion of the UK's reuse activity.

**Large electricals make up most of the tonnes reused.** Reuse is heavily concentrated in specific product streams and is not as high within smaller or specialised categories.

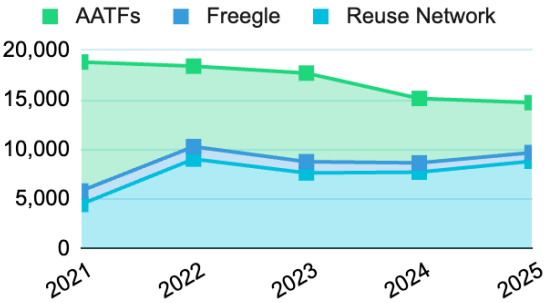
**There is significant untapped potential across certain product streams.** ReLondon report found that small IT equipment, game consoles, flat panel TVs, PV panels and washing machines account for almost half of London's electrical carbon footprint. Low numbers of solar panels were reused between 2021-2025 across all sources. More reuse of these items could have a significant impact but may require specialised handling.

**Some products may not be suitable for reuse.** No gas discharge lamps or LED light sources were reused through AATFs in 2025 and made up only 1% of electricals reused through Freegle. Different electrical categories have

different reuse potential, based on repair viability and hygiene considerations.

**An overall trend in reuse?** Electricals reuse through Freegle has decreased by around a third over the last 5 years and fewer electricals are being received at AATFs for reuse. Meanwhile, reuse through the Reuse Network has increased since 2021. While these initial sources provide a foundation, further data will help establish definitive, long-term trends for electricals reuse.

Fig 1. Tonnes reused over time



# 3. Case studies

## 3.1. Reuse Network

### About the organisation

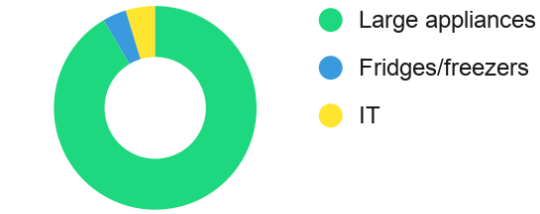
**Who are they?** Reuse Network supports reuse charities across the UK to help them alleviate poverty, reduce waste and tackle climate change. 62 member organisations accept electrical donations. Over 75% of these are based in England, while 9 are in Wales and 6 are in Scotland. No members in Northern Ireland currently accept electrical donations.

**Which electricals do they accept?**
Organisations accept donations of large appliances, fridges and freezers, and IT equipment including display equipment. They do not collect smartphones or other small electricals. Members accept donations from the public as well as private/commercial donations.

### Reuse insights

- **Almost 663,000 electrical items reused between 2021 and 2025**
  The public (as well as commercial partners) donated 662,702 electrical items through Reuse Network member organisations - approx. 37,600 tonnes.
- **Over 90% of these donations were large domestic appliances**
  Large appliances like washing machines and dishwashers account for 92% of the items donated and 97% of the tonnage.

Fig 2. Items reused since 2021




- **Around 4% of items were fridges or freezers**
  These products account for a slightly lower proportion by tonnage - 3%.
- **IT equipment makes up the remaining 5% of items donated**
  Display equipment, laptops, tablets and PCs account for under 1% of the total tonnage reused.
- **Almost £100 million total household savings since 2021**
  Donations helped an average of 66,000 households each year across all Reuse Network members by providing affordable household electrical items.
- **Estimated 38,000 tonnes CO2e saved**
  Diverting old items from landfill has prevented carbon emissions which would have contributed to climate change.
- **Over 60% of items and tonnes reused were in England**
  25% of reuse took place through organisations in Wales and 15% from organisations in Scotland.

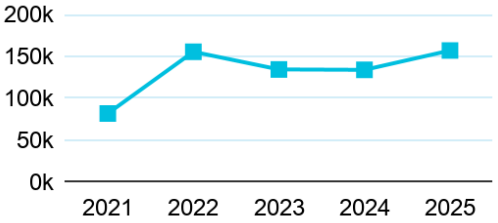
Fig 3. Electricals reused by nation since 2021



## Trends over time

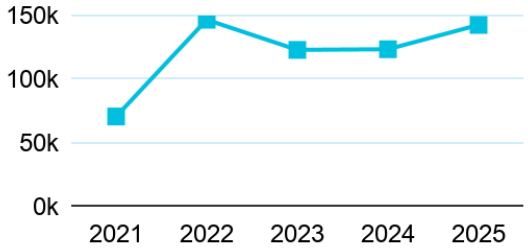
**Reuse through Reuse Network member organisations has remained fairly steady since 2022.** Following an increase of over 90% between 2021 and 2022, reuse figures fell slightly in 2023 and 2024 but rose again in 2025, surpassing 2022 levels.

Fig 4. Electrical items reused over time



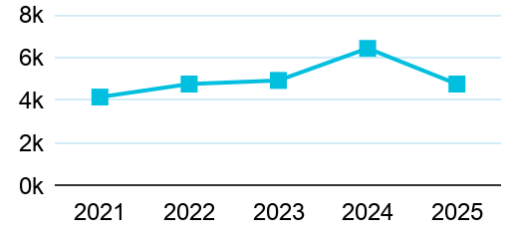

**Large appliances donated doubled between 2021 and 2022.** Following slightly lower donations in 2023 and 2024, donations rose back to almost 2022 levels in 2025.

Fig 5. Large appliances reused over time



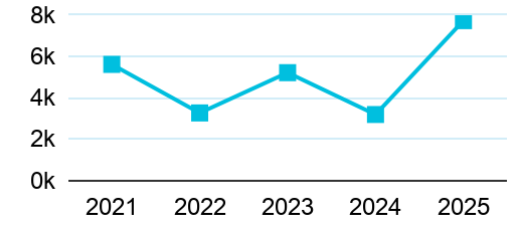

**Fridge and freezer donations reached their highest level in 2024.** Other than a spike in 2024, reuse of cooling equipment stayed fairly consistent with a slight overall increase since 2021.

Fig 6. Fridges and freezers reused over time




**Display and IT equipment reuse doubled between 2024 and 2025.** Laptops, PCs, tablets and display equipment donations all reached their highest level in 2025, doubling donations from 2024.

Fig 7. IT equipment reused over time




| Number of electrical items donated by year to Reuse Network members | | | | | |
|---|---|---|---|---|---|
| **Type** | **2021** | **2022** | **2023** | **2024** | **2025** |
| Large appliances | 70,561 | 146,701 | 122,995 | 123,501 | 142,638 |
| Fridges/freezers | 4,153 | 4,764 | 4,930 | 6,435 | 4,764 |
| Display equipment | 1,403 | 816 | 1,303 | 797 | 1,932 |
| Laptops | 3,508 | 2,040 | 3,259 | 1,994 | 4,830 |
| Tablets | 702 | 408 | 652 | 399 | 966 |
| PCs | 1,403 | 816 | 1,303 | 797 | 1,932 |
| **Total** | **81,730** | **155,545** | **134,442** | **133,923** | **157,062** |

# 3.2. Freegle

## About the organisation

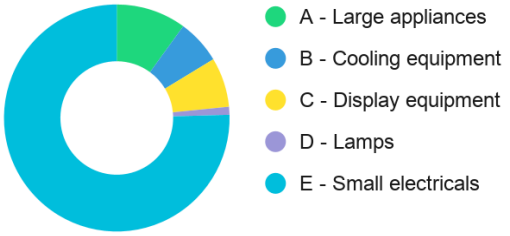
**Who are they?** Freegle is a UK community reuse network, facilitating peer-to-peer giving through their online platform, with a website and app. With approximately 300 local groups, users are able to give away their unwanted but useful items to people in their community for free, or to request an item.

**What do they accept?** Users can list any kind of electrical product on Freegle. With funding from Material Focus, Freegle identified electrical items reused through their platform based on AI classification of the listing text and categorised these by product type.

## Reuse insights

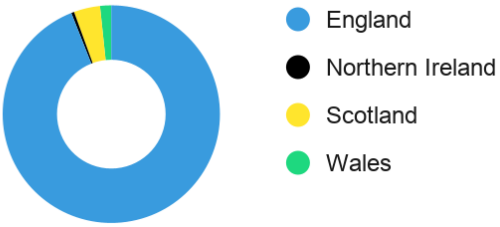
- **Over 509,000 electricals listed on Freegle between 2021 and 2025**
  Users offered or requested 509,402 second-hand electricals - approximately 5,500 tonnes.
- **Small electricals make up 75% of electrical listings since 2021**
  Converted to tonnes, these products make up only approximately 14%.
- **Large appliances were 10% by item but around half of all tonnage listed**
  These heavier items represent approximately 55% of the tonnes reused through Freegle since 2021.
- **Display equipment makes up 7% of electrical items listed**
  By tonnes, these products represent approximately 6%.
- **Reuse of lamps is low, making up 1% of electrical items listed**
  By tonnes, these lighter items account for less than 1% of all tonnes listed.
- **Vapes and solar panels are not represented in community reuse**
  Freegle analysis found that these waste streams, as well as items like EV chargers and smart meters, may require handling outside of community reuse.

Fig 8. Electrical listings between 2021 and 2025




- **Small household appliances and IT represent most small electricals**
  Averaged across 2016-2025, small household appliances made up the greatest share of all electrical offers (20%). IT and telecomms equipment made up the third largest share, following large household appliances.
- **94% of electricals listed were in England**
  Meanwhile, 4% of Freegle's reuse was in Scotland, 2% in Wales and less than 1% was in Northern Ireland.

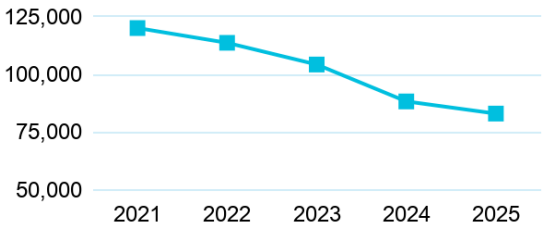
Fig 9. Electricals reused by nation between 2021 and 2025




## Trends over time

**Overall electrical donations peaked in 2021 and have fallen since.** Freegle reported that their overall traffic nearly doubled during the 2020-2022 lockdown and cost-of-living period and has been declining since.

Fig 10. Number of electricals reused through Freegle



**Electricals decreased as a share of community reuse between 2016-2021.** Electricals made up 11% of all approved Freegle offers in 2025, down from 15% in 2016. Since 2021, the share has remained relatively stable.

**Individual product types generally follow the same downwards trajectory.** Most electrical product types follow the overall trend, with year-on-year decreases in the number of offers and requests.

**Low numbers of broken items in need of repair have been listed since 2021.** Items that appear on Freegle are increasingly described in good condition while broken-item listings appear to have moved to specialist repair channels. This suggests these different channels are complementary rather than competitive.

**Users are holding onto certain items for longer before giving them away.** Freegle analysis shows that people are giving away progressively older TVs, with the median age rising from around 4-6 years in 2016-2019 to 10-12 years in 2024 and 2025.

**Electricals listed on Freegle each year by category (items)**

| Type | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|
| Large appliances | 12,675 | 11,475 | 10,437 | 8,508 | 7,940 |
| Cooling equipment | 7,778 | 7,544 | 6,545 | 5,434 | 4,865 |
| Display equipment | 8,575 | 7,755 | 7,345 | 6,178 | 6,118 |
| Lamps | 1,332 | 1,324 | 1,233 | 961 | 918 |
| Small electricals | 89,676 | 85,510 | 78,654 | 67,103 | 63,088 |
| Solar panels | 36 | 56 | 34 | 42 | 33 |
| Vapes | 53 | 47 | 47 | 52 | 31 |
| **Total** | **120,125** | **113,711** | **104,295** | **88,278** | **82,993** |

# 3.3. Treatment facilities

## About the organisations

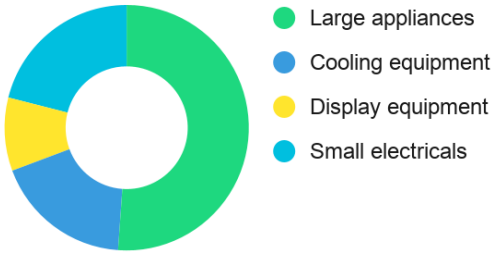
**Who are they?** Approved authorised treatment facilities (AATFs) are licensed sites which are approved by the national environmental regulator to treat electrical waste. This can involve recycling, reuse and refurbishment.

**Which electricals do they accept?** AATFs accept all types of waste electrical and electronic equipment (WEEE) for treatment. These recyclers identify any waste electricals that are suitable for reuse and are obliged to prioritise reuse of whole appliances by removing them from the recycling chain as early as possible. This includes electricals which are fully functional and electrically safe.

## Reuse insights

- **Over 57,000 tonnes of electricals received for reuse**
  Between 2021-2025, AATFs received 57,442 tonnes of electricals which were suitable for reuse - approx. 7 million electrical items.
- **Over half of the tonnage received for reuse was from large appliances**.
  Large appliances made up 51% of the tonnes of electricals - but only an estimated 7% of the number of items.
- **Cooling equipment accounts for 18% of tonnes received for reuse**
  Items like fridges and freezers represent approximately 3% of the total items reused.
- **Display equipment was 10% of the tonnage received for reuse**
  These items reflect approximately 8% of all items received for reuse.
- **Small mixed electricals were 21% of the tonnes received for reuse**
  These likely account for over 80% of electrical items received for reuse.

Fig 11. Tonnes of electricals reused by product type



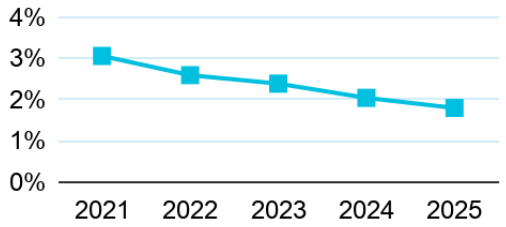

- **80% of small electricals tonnage reused was IT equipment**
  The most common small electricals category reused was IT and telecommunications equipment, followed by small household appliances (11%) and consumer equipment (8%). There was no to little reuse of other types of small electricals.
- **5% of IT equipment received at AATFs was suitable for reuse**
  This product type has the highest proportion of tonnes reused out of the total tonnes received, followed by large household appliances and display equipment.
- **Lamps, solar panels and vapes are not represented in reuse by AATFs**
  These streams are not identified as suitable for reuse.

## Trends over time

**Electricals received for reuse at AATFs decreased by 40% between 2021 and 2025.** Since 2021, the weight of household waste electricals received at AATFs for reuse has decreased every year, falling by 40% overall from 15k tonnes in 2021 to 9k tonnes in 2025.

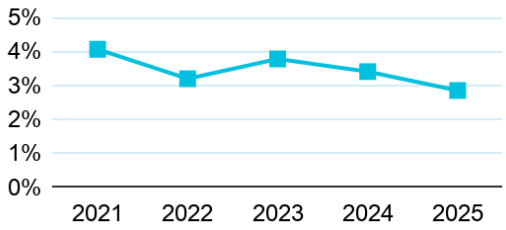
**The proportion of electricals received for reuse had a relative decline of 41% between 2021 and 2025.** The total weight of WEEE received increased each year from 2022 onwards. Meanwhile, the proportion of waste electricals which are received for reuse has gone down each year, falling from 3% in 2021 to less than 2% in 2025.

Fig 12. Proportion of electricals received for reuse




**The proportion of large appliances received for reuse saw a relative decline of 30% between 2021-2025.** The proportion fell dramatically in 2022 and rose again in 2023, before going down each year subsequently.

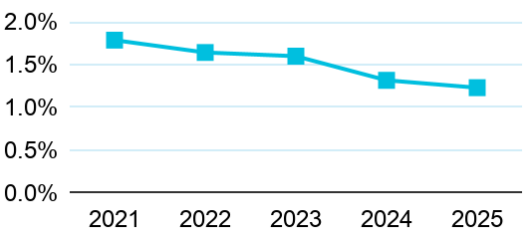
Fig 13. Proportion of large appliances received for reuse




**Reuse of large appliances through AATFs follows an inverse trajectory to those reused through the Reuse Network.** This could suggest that growth in one reuse channel may absorb or divert volumes from another. Therefore, capturing data across a broad range of sources is essential for establishing an accurate national picture, as isolated case studies can easily obscure broader trends.

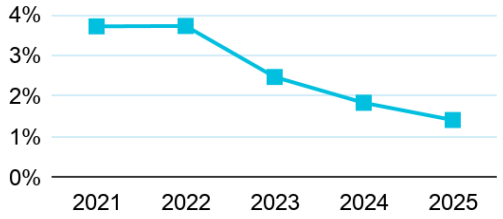
**Cooling appliances reuse has decreased each year since 2021.** Falling from 1.8% of all cooling appliances received at AATFs in 2021 to 1.2% in 2025, the proportion received for reuse saw an overall relative decline of 31%.

Fig 14. Proportion of cooling appliances received for reuse



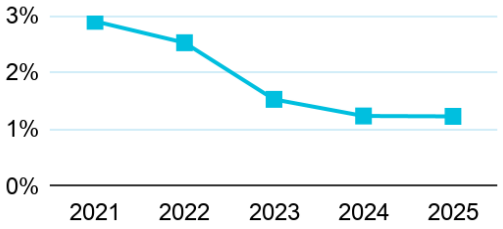

**Display equipment reuse has decreased each year since 2022.** The proportion of display equipment which was suitable for reuse decreased from 3.7% in 2021 and 2022 to 1.4% by 2025 - a relative decline of 62%.

Fig 15. Proportion of display equipment received for reuse




**Small electricals reuse has gone down each year since 2021 across most categories.** This is primarily caused by the consistent fall in IT and telecommunications reuse which saw a 59% relative decline in the proportion received for reuse between 2021 and 2025. Reuse of small household appliances, consumer equipment, electrical and electronic tools, and toys, leisure and sports equipment all increased marginally between 2024 and 2025.

Fig 16. Proportion of small electricals received for reuse



| Household electricals received at AATFs for reuse each year by category (tonnes) | | | | | |
|---|---|---|---|---|---|
| **Type** | **2021** | **2022** | **2023** | **2024** | **2025** |
| 01. Large household appliances | 7,421 | 5,248 | 6,072 | 5,712 | 4,914 |
| 02. Small household appliances | 408 | 393 | 180 | 159 | 189 |
| 03. IT and telecomms equipment | 2,826 | 2,549 | 1,647 | 1,357 | 1,236 |
| 04. Consumer equipment | 222 | 171 | 148 | 181 | 227 |
| 05. Lighting equipment | 7 | 2 | 1 | 1 | 0 |
| 06. Electrical and electronic tools | 78 | 13 | 15 | 10 | 15 |
| 07. Toys leisure and sports | 14 | 4 | 11 | 9 | 13 |
| 08. Medical devices | 0 | 0 | 0 | 0 | 0 |
| 09. Monitoring and control instruments | 0 | 0 | 0 | 0 | 0 |
| 10. Automatic dispensers | 0 | 0 | 0 | 0 | 0 |
| 11. Display equipment | 1,472 | 1,497 | 1,064 | 864 | 649 |
| 12. Cooling appliances | 2,535 | 2,202 | 2,167 | 1,820 | 1,719 |
| 13. GDL and LED light sources | 0 | 0 | 0 | 0 | 0 |
| 14. Photovoltaics | 0 | 0 | 0 | 0 | 0 |
| **Total** | **14,984** | **12,078** | **11,305** | **10,113** | **8,961** |

# 3.4. Electricals Recycling Fund

## About the fund

**Who are they?** Material Focus' Electricals Recycling Fund offers funding to support pilots that make it physically easier for more people to reuse and recycle old, broken and unwanted small household electricals. By providing almost £1.4 million to support reuse and repair pilots, the Electricals Recycling Fund has empowered communities across the UK to contribute to electricals reuse.

**Which electricals do they accept?** Funded pilots generally accept small household electricals only for reuse.

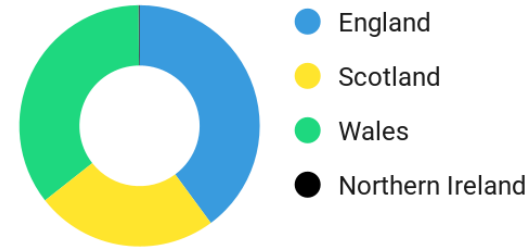
## Supporting reuse

- **Funded 26 reuse and repair focused initiatives across the UK**
  These funded pilots offer community drop off points and various collections services to make it easier for people to reuse and repair old electricals.



- **Helped 6 million households**
  These services were available to 6 million households across the UK.
- **Almost 29,000 electrical items reused through funded pilots**
  Pilots facilitated the reuse of 28,944 small electricals - approx. 58 tonnes.
- **Over 1,400 electricals repaired**
  Funding supported 126 repair cafes and workshops.
- **40% of the items reused were from pilots funded in England**
  Meanwhile, 35% were in Wales, 25% were in Scotland and less than 1% were in Northern Ireland.

Fig 17. Items reused by nation




## Highlighting reuse locations

Material Focus runs the UK wide behaviour change campaign, Recycle Your Electricals. With over 30,000 locations to choose from, our recycling postcode locator helps people find their nearest donation, repair or recycling point. Almost 3,500 locations include options to donate or repair old electricals.

| Donation and repair locations | |
|---|---|
| **Nation** | **Donate or repair locations** |
| England | 2,783 |
| Scotland | 314 |
| Wales | 301 |
| Northern Ireland | 53 |
| Ireland | 16 |
| Jersey | 3 |
| Isle of Man | 1 |
| **Total** | **3,471** |

# 4. Conclusions and next steps

## A fall in recorded reuse?

These case studies present a mixed picture of the electricals reuse sector in the UK since 2021. Recorded reuse through Freegle and AATFs has fallen steadily over the last 5 years. Analysis by Freegle shows that electrical items now account for a smaller share of their community reuse, falling relatively by 27% over the past 10 years.

These trends do not necessarily point to a reduction in public appetite for reuse or a shrinking overall market. However, they may indicate shifting consumer behaviours and economic pressures. They also highlight the limitations of the data currently available.

## Barriers to repair

Industry stakeholders have identified the declining quality of donated goods as a potential factor in falling electricals reuse. Rising costs of living may cause people to hold onto electrical items for longer and defer upgrades. As a result, donated items may be older or more likely to need repair.

We need to make repair easier and more trusted in order to keep electricals in use for longer. Recent Material Focus research with UCL found that 69% of washing machines sent for recycling are technically repairable. However, high repair costs, limited access to spare parts and a lack of trusted repair services can all make repair harder than replacement.

Not all electricals are equally repairable. The rise of online marketplaces means it's easier than ever to buy lower cost electricals, which are less durable and often unsuitable for repair. Material Focus research found that 12.2 million FastTech items (small, cheap electricals) were bought for £1 or less in the UK in 2025.

We need to make it easier to identify, donate and collect electricals suitable for reuse. Greater public awareness of how to donate old electricals and an increase in the number of available drop off points will also play an important role.

## Limited data skews results

This data captures only a small fraction of reuse activity in the UK - and the lack of widespread, standardised reporting makes it difficult to understand the true scale of electricals reuse.

Fewer electricals received at AATFs for reuse could reflect more products being diverted to alternative reuse channels, for example, rather than a decline in reuse across the board. ReLondon research found that 93% of electricals reuse in London in 2024 took place through second-hand marketplaces such as eBay, Gumtree and Olio.

This highlights the vast amount of reuse activity which we have not been able to capture in this phase of the report.

## Next steps

Expanding standardised data collection is critical to building a more comprehensive and robust picture. This will give us a stronger evidence base to demonstrate the scale and value of electricals reuse. We want to work with organisations across the UK involved in electricals reuse to fill these gaps.

If you or your organisation has relevant data, insights or case studies to contribute, please get in touch at data@materialfocus.org.uk.

# 5. Methodology

## Electrical product types

To analyse reuse patterns, we categorised products using standard waste electricals streams: large appliances, cooling equipment, display equipment, lamps, small mixed electricals, photovoltaics, and vapes.

- **Freegle classified listings into these core streams**
  Using an AI model, Freegle analysed item titles and descriptions to assign these product categories.
- **AATFs provide small electricals product breakdown**
  The Environment Agency reports AATF reuse across all 15 official WEEE categories. This provides a higher level of detail for small electricals.
- **Reuse Network includes breakdown for laptops, tablets and PCs**
  In addition to large appliances, cooling equipment and display equipment, the Reuse Network also provided a more granular breakdown for key IT equipment.
- **Electricals Recycling Fund generally all assumed to be small electricals**
  Funded pilots do not provide item or product specific breakdowns but generally only accept small electricals for reuse.

## Item count versus tonnes

Data sources vary in how they report reuse, either by number of items or overall tonnage. Except for reuse reported through AATFs, most sources provide data by item count rather than weight.

The Reuse Network converted item counts into tonnage using weight estimates for different electrical product categories. We applied these estimates to data from Freegle and the Electricals Recycling Fund, along with our own estimations for some product categories. We used the same weight assumptions to convert tonnage data from AATFs into estimated item counts.

For small electricals, Material Focus usually estimates an average weight of 0.5kg across different product types. However, we assume that small electricals viable for reuse will skew towards a heavier average weight since larger products within this stream are more commonly reused than very small, low-cost items which can be viewed as disposable. Therefore, we have used an average weight estimate of 2kg across all small electrical products. The exception is IT equipment reported by the Reuse Network, which uses specific weight estimates for laptops, tablets and PCs.

**Weight assumptions**

| Product type | Average estimated weight per item |
|---|---|
| Large appliances | 60kg |
| Cooling equipment | 42kg |
| Display equipment | 10kg |
| Small electricals | 2kg |
| Laptops | 2kg |
| Tablets | 0.5kg |
| PCs | 9.9kg |
| Lamps | 0.25kg |
| Solar panels | 20kg |
| Vapes | 0.08kg |

## Calculating impact

The Reuse Network estimated various impacts from their members' reuse, including number of households helped, household savings, and CO2 emissions saved. They calculated the estimated number of households helped by halving

the total number of electricals donated. Household savings use an average cost of £150 for any large appliance or fridge/freezer and £100 across all ICT items (including display equipment, laptops, tablets, and PCs).

The Reuse Network also calculated CO2 emissions saved by each member organisation based on their overall tonnes collected, using a coefficient of 0.6 for members which collect large appliances and fridges/freezers only, and a coefficient of 1.5 for members that also collect IT equipment.

If standardised reporting were introduced across the sector, we could develop a system for scaling these estimations up to broader reuse across several sources.

## Overlap between sources

Several Reuse Network members are also registered AATFs so we have taken steps to avoid their reuse volumes being counted twice in our totals. For our annual aggregated totals, we removed the reuse reported from these organisations by the Reuse Network from the AATF data totals for each year that they were a registered AATF.

As we gather additional reuse data in future iterations, we will need to be aware of other potential areas of overlap to avoid double counting.

Material Focus is an independent, not-for-profit organisation on a mission to stop valuable, critical and finite materials inside electricals from going to waste.

## Insights

We identify, produce and share insights to improve the UK e-waste system and inform policy decisions.

## Investments

We identify and fund projects that make it easier to reuse and recycle; or that encourage circular design.

## Inspiration

We inspire, educate and encourage the UK public to fix, donate, sell and recycle their unwanted electricals through our Recycle Your Electricals campaign.

**www.materialfocus.org.uk**