







Final Report

3Rs: Reuse, Repair, Refurbishment and Resale Report on Cricket Gear

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Disclaimer

This open-access research has been conducted by the author to raise awareness of sustainability issues relating to cricket gear which may impact the sport. It should not be used for any other purpose.

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Executive Summary

This document is a final report for the 3R'S Cricket project undertaken by The Centre for Sustainable Design ® (CfSD)¹. Using the 10R's Framework² the authors selected 3 of the most relevant strategies to analyse cricket gear. These will be referred to as the 3Rs in this report. The report investigates the reuse, repair, and refurbishment of cricket gear within England and Wales (E&W), including resale of cricket gear that facilitates reuse.

The research will also make preliminary investigations into possible links between environmental (diverting products from landfill and extending their useful life), social (social benefits of providing access to sport, e.g improved mental health, community) and economic sustainability (reducing barriers to cricket for players) as illustrated in 'The Golden Triangle' below.



Golden Triangle Charter and Czutkowna, 2023

This report focuses on cricket gear, defined as cricket pads, gloves, shoes and helmets but will exclude bats³, balls and clothing. The report will focus on the impact within England and Wales.

Reuse, Repair and Refurbishment is the focus of the document, along with Resale which facilitates Reuse. These shall be referred to within this document as the 3Rs. The other circular economy strategies within the 10Rs hierarchy (see Table below) are out of the scope of this report.

The report focuses on the use phase of cricket gear and on those strategies most applicable to keeping them in use for as long as possible through Reuse, Repair and Refurbishment. Appendix 3 contains more details regarding the 10Rs.

¹ The Centre for Sustainable Design ® was established in 1995 and is within based Research & Innovation Department and aligned to the Business School for the Creative Industries at the University for the Creative Arts

² See Appendix 3

³ There are established repair services provided by cricket bat manufacturers within the E&W and due to their high retail value (and in some cases high emotional value) the cost of repair is often viewed as an investment to extend the life of a bat that the player really values (both recreational/professional).

The 10Rs Framework

The 10Rs is a framework (Cramer, 2017) and hierarchy based on 10 circular economy strategies.

Rs	Description	
Refuse	Prevent the use of raw materials	
Reduce	Prevent the use of raw materials	
Redesign	Decrease the use of raw materials	
Reuse	Use product again (as second-hand)	
Repair	Maintain and repair product	
Refurbish	Revive product	
Remanufacture	Make new from second-hand product	
Repurpose	Reuse product but with another function	
Recycle	Salvage material streams with the highest possible value	
Recover	Incinerate waste with energy recovery	

Figure 1 List of descriptions of 10Rs hierarchy framework (Cramer, 2017)

Findings

Overall

- There are a limited number of cricket gear reuse organisations, Lord Taverners Sports Kit Recycling is the largest.
- There have been no examples identified of large-scale repair or refurbishment of cricket gear within E&W.
- Resale tends to focus on children and junior cricket gear through large resale websites.
- Technical and safety concerns can create a barrier to the reuse, repair and resale of cricket gear.
- Growth in world participation will increase demand for cricket gear.
- Economic factors such as the cost of gear⁴ given the current cost of living crisis in E&W are impacting the ability of players to buy new gear.
- The link between social, environmental and economic sustainability facilitated by cricket gear needs further research.

Reuse

- There are a limited number of formalised reuse organisations, Lord Taverners Sports Kit Recycling is the largest.
- Other organisations include:
 - Cricket Kindness: is a reuse organisation which sends donations overseas that has recently partnered with No Boundaries Cricket Club to continue the organisation's work in E&W due to the founder relocating to Australia.
 - Bat for a Chance is a reuse organisation continues to accept cricket gear donations.
 - Regional initiative Cric-Kit run by Yorkshire Cricket Foundation collects donated goods and redistributes them within the local community.

⁴ Age-group cricket pricing out talented children, says former England wicketkeeper Matt Prior - BBC Sport

- Cricket Asylum Foundation Kit Library collects donated items and offers players a lending library service for cricket gear.
- Zero Waste Leeds runs a project called Together for Sport and hosts a Facebook page which facilitates access to good quality second-hand goods by allowing its members to exchange sports gear that is no longer needed and ask for sports gear required. It covers all sports, including cricket. Products tend to stay within the local area.
- Play It Again Sport in Wales combines equipment reuse (and resale) with access to sport by offering sports activities. The products are resold for a nominal value and mainly reused in the local area. It covers all sports including cricket.
- Donations to reuse schemes are a mix of excess stock⁵ of cricket gear from brands and also clothing that players (recreational/professional) have used and are now finished with.
- The condition of the gear donated can vary, with some being heavily soiled/used. This can affect reuse opportunities in E&W as indications are players prefer nearly new clothing.
- Donations may be incomplete, for example, single gloves rather than pairs donated.
- Processing equipment for reuse can be time and labour-intensive.
- There appears to be limited reuse of excess stock or end-of (1st) life cricket clothing in E&W, with a lot of items being sent overseas (further research is needed to quantify this).
- There are potential barriers to reuse within E&W, these include:
 - o brands prohibiting the reuse of equipment within E&W as it may cause brand damage or impact new sales.
 - players in E&W may not want to use preowned and used equipment, preferring new.
- Informal hand-me-down sharing exists; however, this is difficult to quantify.
- The "shared kit bag" is still in use in some recreational cricket clubs but maybe less prevalent
 and used compared to previous decades, as individual ownership of cricket gear has
 increased. Further research is needed to investigate the reasons for the move towards
 individual ownership and if having centralised access to kit at clubs would increase utilisation
 of kit.
- Safety concerns for protective equipment such as helmets create a barrier to reuse.

Repair

• No large-scale coordinated repair service for cricket gear (outside of bats) has been identified.

- Two services offering refacing for wicketkeeper gloves have been identified.
- During a field trip to Lords Taverners Sports Kit Recycling warehouse, the main reasons for repair (or product failure/degradation) were identified:
 - Gloves: staining, holes at seams, holes in palms, loss of elastic at cuffs, aged Velcro at cuffs.
 - Pads: cracking of leather/Polyurethane (PU), holes in the top layer of fabric revealing the padding underneath, staining.
 - Helmets: missing face guards, chin straps
 - Shoes: missing spikes, holes cut into the toe (though this is not deemed a repair as the cuts were deliberate)

⁵ Excess stock is usually unsold inventory that has never been worn. It may still have all packaging and labelling intact.

- Further research is needed to understand if the skills to repair cricket gear exist and how commercially viable repair is in E&W compared to replacing it with a new product. There may be opportunities for repair café style operations dedicated to cricket gear that are run on a voluntary and/or charity basis.
- There is little guidance on how to care for, extend use, and repair cricket gear. This information would benefit recreational both players and consumers (e.g. parents may buy for or with children).

Refurbishment

- Limited examples have been found (excluding bats) of refurbishment by manufacturers of cricket gear. One example for helmets, one example for wicketkeeper gloves was identified.
- Limited data has been found on the reasons for refurbishment.
- Brands cite safety concerns as a barrier to refurbishment.
- Product design inhibits refurbishment due to the way the products are assembled making it difficult to dissemble for refurbishment.
- The refurbishment business model for cricket gear is yet to be proven, brands have raised concerns this may cannibalise sales of new cricket gear which potentially may erode profitability. Further research is needed to validate this and if so to what degree would profitability be impacted.

Resale

- Resale opportunities for cricket gear do exist, these tend to operate via larger resale
 platforms such as eBay, Facebook Marketplace and Vinted. Smaller resale networks are
 emerging, especially focused on children's equipment.
- Informal networks of resale, especially for children are thought to exist on a local level and often enabled through word of mouth, and as such, are difficult to quantify.
- The resale of protective gear such as helmets needs further research, there may be safety concerns depending on if the gear has ever incurred any damage. Accessibility and participation

The report investigates preliminary relationships between social, environmental and economic connections facilitated by the 3Rs. The report begins to contextualise the challenges and barriers to participation in cricket and investigates if removing barriers such as the cost and availability of gear would make the sport more accessible by enabling more people to play the sport. This is illustrated in Figure 15 by the Golden Triangle (Charter and Czutkowna 2023) which examines the interdependencies between social, economic and environmental benefits of the 3Rs.

Social

- The cost-of-living crisis is having a detrimental effect on participation in sports. 27% of those surveyed for a London Sports report said they would cut back on physical activity due to rising costs. This may be the cost of equipment but also the cost to access and play sports.
- Reuse schemes which provide opportunities to play cricket, e.g through coaching programmes, or community groups have strong social benefits.
- Lords Taverners run a programme called Wicketz aimed at young people aged 8-19 in areas of high levels of poverty, contributing to social sustainability.

⁶ <u>Ten years on from London 2012 nearly half of Londoners forced to cut back on exercise as cost of living crisis</u> bites | London Sport Media Centre

- The impact of Covid 19 discouraged sharing kits between players during that time, which may have meant players needed to buy their own kit or not play.
- Cricket gear such as batting pads and gloves are now being defined as Personal Protective Equipment (PPE)⁷ due to legislative change and will face 3rd party testing.

Environmental

- The majority of cricket gear has not been designed with environmental considerations in mind.
- The 'end of life' of cricket gear does not seem to have been researched and it is assumed that much of it remains as 'stored waste' for many years, ends up in landfill after garage clear-outs and a proportion is re-used (primarily in overseas markets). Further research is needed.

Economic

- Based on a survey conducted by the CfSD in April 2023, players expressed interest in cricket gear repair services. The main motivation for considering repair services for cricket gear is due to the potential cost savings compared to buying new.⁸ 52%⁹ of those surveyed for a London Sport report agreed the rising cost of living had limited their ability to afford both sports and leisure equipment.
- Reducing cost barriers to purchasing cricket gear would support young players transitioning from the soft to the hardball game.

Conclusions

- Over 300 million people estimated to play cricket worldwide and 300,000 in E&W ¹⁰
- Cricket is one of the most gear intensive sports and a significant volume of products are supplied, used and disposed of annually. There is a responsibility for the game to identify ways in which products can be repaired or reused.
- Growth in the professional game particularly T20 leagues may well increase growth in participation and ownership of cricket gear in E&W, and elsewhere around the globe.
- There is very limited reuse infrastructure for cricket gear (outside of bats) and from the handful of organisations that are operating, do so with very few people and financial resources.
- It appears that reuse of cricket gear is primarily overseas, with limited reuse within E&W.
- The percentage of cricket that is reused in E&W, and elsewhere has not been documented due to a lack of data.
- Lords Taverners Sports Kit Recycling have a vital role in the reuse of cricket gear globally.
- Repair within E&W is limited and could be categorised as craftsmanship due to the specialist skills needed.

Recommendations

 Conduct additional research into gaps identified within this report, to increase understanding and develop deeper insights into opportunities identified. Specifically investigate:

⁷ Cricket PPE | BSIF

⁸ https://cfsd.org.uk/projects/ccg/research/

⁹ <u>Ten years on from London 2012 nearly half of Londoners forced to cut back on exercise as cost-of-living crisis bites | London Sport Media Centre</u>

¹⁰ Sustainability, cricket gear, clothing and apparel: components, materials and innovation opportunities (July 2022) – see https://cfsd.org.uk/projects/cricket/research/

- o If any tax barriers exist to reuse excess stock both in the UK and overseas.
- o If brand embargos are placed on products by brands or retailers.
- Skills required for the repair of cricket gear in the UK, and costs involved.
- Demand from players for repair and refurbishment in the UK.
- Track and record the main reasons for repair or product failure of cricket gear to enable product development and innovation.
- Explore new design of cricket gear, and components and materials development to enable products to be repaired and refurbished more easily.
- Standardise components across brands e.g. on cricket helmet bolts so that items can be repaired more easily.
- Work with manufacturers to source components that could be used repair of cricket gear which could be completed through repair cafés, reuse and/or social enterprise networks.
- Publish guidelines for cricket clubs on how to encourage the reuse of cricket gear locally.
- Develop alternative ways to show sponsorship on cricket gear so it can be reused in E&W.
- Strengthen links between cricket reuse organisations and community or cricket coaching organisations who have high levels of need for gear.

Section 1 Background

1.1 Introduction

Cricket is a gear-intensive sport, with the cost of gear being substantial. This report examines how gear could be utilised for longer through reuse, repair and refurbishment schemes and the associated sustainability benefits of these schemes. The report builds on previous research by Charter and Czutkowna from The Centre for Sustainable design® (CfSD) and considers how reuse, repair and refurbishment (3R's) and resale of cricket gear might enable extend product life extension within E&W. The report examines current reuse, repair, refurbishment and resale organisations and methods, and begins to establish links to social, environmental and economic factors which influence participation and accessibility to cricket linked to the 3Rs.

1.2 This document

This document will specifically focus on cricket gear, defined as gloves, pads, helmets and shoes. Bats (which have an established repair network in place), balls and clothing are excluded from the analysis. The document will focus on England and Wales.

1.3 Report structure

The report consists of the following sections:

- Section 1 provides the background, purpose, definitions, and scope of the overall report.
- Section 2 covers the findings related to reuse.
- Section 3 covers the findings related to repair and refurbishment.
- Section 4 covers the findings related to resale.
- Section 5 examines how the 3Rs can support accessibility and participation in cricket.
- Section 6 concludes the report, identifies opportunities, and highlights recommendations.

Further details are provided in the Appendixes.

1.4 Background

Initial research by The Centre for Sustainable design® (CfSD) at UCA has found that there is increasing recognition of the potential impacts of climate change and other sustainability issues related to cricket

gear. A recent report highlighted that cricket is likely to be the sport most affected by climate change ¹¹. However, much of the sustainability focus has been on venues and playing conditions. There has been little consideration of sustainability issues relating to cricket gear.

Previous reports by CfSD - which can be accessed via the PASIC platform¹² - explored sustainability issues related to cricket gear and clothing and provide a background overview of this area¹³. This report specifically examines reuse, repair, refurbishment and resale in-depth, along with potential opportunities as to how the reuse of gear can support accessibility and participation in the game.

1.5 Purpose

The objectives of the research are to:

- Investigate reuse, repair and refurbishment and resale initiatives related to cricket gear in the amateur game.
- Understand barriers and opportunities to the 3Rs.
- Consider the opportunities the 3Rs may have for accessibility and participation within the game.

1.6 Definitions

Gear/Equipment/Kit are used interchangeably throughout this report and are defined as pads, gloves, helmets and shoes.

Amateur: refers to people who play the game on a recreational basis.

Reuse: prolonging the use of products, or parts of products (Bakker et al., 2014).

Repair: returning a faulty or broken product, component or material back to a usable state

(BS8001:2017)

Refurbishment: aesthetic improvement of a product, component or material, which might involve making it look like new, with no or limited functionality improvements (BS8001:2017)

Resale: is the act of selling something again (Cambridge dictionary¹⁴)

Note: reuse organisations such as the Lords Taverners Sports Kit Recycling use the term recycling in their communication, however, the function they provide is reuse, rather than recycling as goods are processed and sent for reuse. With many reuse organisations, there is a lack of clarity over terminology especially when considered in relation to the 10Rs Framework.

1.7 Scope

The scope of this report covers cricket gear as defined above and the opportunities for reuse, repair, refurbishment and resale. The focus is on E&W. It does not cover clothing or bats, despite these also being witnessed on-site visits to reuse organisations. It focuses on 3 key areas within the 10Rs framework, Reuse, Repair and Refurbishment; and also explores Resale which is a strategy which supports reuse.

These key areas will be referred to in the document as the 3Rs. Although the 3Rs sit within a larger 10Rs hierarchy as detailed below, the scope of this report is limited to the 3Rs identified above.

¹¹ https://basis.org.uk/resource/hit-for-six/

¹² Cricket - The Centre for Sustainable Design (cfsd.org.uk)

¹³ The authors recommend reading the previous reports to provide context and background.

¹⁴ RESALE | English meaning - Cambridge Dictionary

The 10Rs is a framework (Cramer, 2017) and hierarchy based on 10 circular economy strategies.

Rs	Description
Refuse	Prevent the use of raw materials
Reduce	Prevent the use of raw materials
Redesign	Decrease the use of raw materials
Reuse	Use product again (as second-hand)
Repair	Maintain and repair product
Refurbish	Revive product
Remanufacture	Make new from second-hand product
Repurpose	Reuse product but with another function
Recycle	Salvage material streams with the highest possible value
Recover	Incinerate waste with energy recovery

Figure 1 List of descriptions of 10Rs hierarchy framework (Cramer, 2017)

While social, environmental and economic issues begin to be explored, there is more research needed to understand how each of these areas influence accessibility and participation in cricket.

1.8 Methodology

This research on cricket gear has been conducted building on previous reports published by CfSD using published and unpublished sources, primary interviews and site visits. There is little published research on cricket gear repair, refurbishment and resale in the public domain, so expert interviews have been conducted to gain insight and a deeper understanding of the issues, opportunities, challenges and barriers.

1.9 Confidentiality

During this research, a series of interviews were held with people within the cricket sector. Due to confidentiality, most information has been anonymised.

The authors would like to thank all contributors who shared information during online interviews and site visits.

Section 2 Reuse

2.1 Introduction

There are a limited number of reuse organisations which exist within E&W that specifically focus on cricket gear. Lords Taverners Sports Kit Recycling Scheme (LTSKR) is the largest and most established nationally. A small number of informal reuse networks do exist but tend to be localised. Donated cricket kit appears to be primarily sent overseas due to barriers to reuse within the E&W. There is a need to complete further research into both reuse destinations and potential barriers.

2.2 Reuse Schemes

The reuse schemes identified for cricket gear to date are:

Lord's Taverners Sports Kit Recycling Scheme

- The Cricket Kindness Project which has been incorporated into the No Boundaries cricket club
- Bat for a Chance
- Cric-Kit
- Cricket Asylum Foundation Kit Library
- Together for sport (accepts all sportswear, not specific to cricket)
- Play it Again Sport (accepts all sportswear, not specific to cricket)

2.2.1 Lord's Taverners Sports Kit Recycling Programme (LTSKR)

LTSKR is an established organisation known for accepting cricket gear for reuse. LTSKR is part of Lords Taverners, a charity which runs multiple programmes to help empower young people through cricket. Their goal is to enable access to cricket for any player who wants to play, this also reduces usable items going to landfill.

In 2019, 10 tonnes (10,000 kg) of kit was donated to LTSKR and 25,000 people benefited from the donations (including clothing and equipment). Almost 18 tonnes have been saved from landfill in the last 3 years¹⁵. LTSKR accepts applications for donated items from those in need of cricket gear, all applicants (potential users of cricket gear) are asked to provide comprehensive information about what kit is needed and for what purpose. Applications are then reviewed and after receipt of donated gear successful applicants are asked to submit case studies to demonstrate the impact receiving the kit has had on their players.

2.2.2 Cricket Kindness/No Boundaries

Tamara Lowe originally founded the Cricket Kindness (CK) project in Australia in 2016. In 2019 she relocated to the UK and continued her work from England. In 2022, Tamara's relocated back to Australia and CK was incorporated into the No Boundaries cricket club. Going forward the project will have a greater focus on a local level, working with schools and clubs to promote their work and collecting equipment supporting disadvantages communities in England.

A new focus for the project is to offer the opportunity for people to purchase donated equipment with proceeds going towards funding the shipping logistics of sending donations overseas, as well as donating to refugees and those who want to participate in cricket but cannot afford the gear. The impact of the scheme overseas has been significant. In Antigua, the programme has made donations to every primary and secondary school, and in Barbados, donations have been made to 100% of secondary schools and 85% of primary schools.

2.2.3 Bat for a Chance

Bat for a Chance was set up to support underprivileged children who want to play cricket. Their website states they have donated over 1000 items across ten deliveries to overseas countries including Lebanon, Sri Lanka, Trinidad, Uganda and Bosnia. The organisation also donates within E&W, partnering with England Deaf and the MCC Foundation and has 25 collection points, with 12 donation hubs in the South-East and 1 in Trinidad and Tobago. The charity was set up by Will Gaffney and his mother. Further research into this organisation has proved to be too difficult.

2.2.4 Cric-Kit

Cric-Kit is run by Yorkshire Cricket Foundation (YCF) (initially with the support of Zero Waste Leeds (ZWL) and has organised collections of donations. Cric-Kit with the support of ZWL distributed 1,100 items of cricket equipment and garments, with an estimated value of £18,700 during a one day launch

¹⁵ https://www.lordstaverners.org/how-we-help/charitable-programmes/sports-kit-recycling/case-study-brazil/

event in September 2022. Using a carbon calculated developed by ZWL, they estimate 10,406kg of CO2 emissions have been saved, diverting almost half a tonne (484 kg) of potential textile waste from landfill¹⁶. Cric-Kit is now independently managed by YCF and has set up collection and donation points in 2 cricket clubs where players can donate kit or pick up kit for free. The products are reused within the local area. The programme aims to create awareness and a culture across Yorkshire whereby donating, reusing and recycling sports clothing is undertaken more frequently to help break down barriers to participation in communities. There is a goal to disseminate learnings more widely within the UK to enable others to set up similar reuse models within their localities.

2.2.5 Cricket Asylum Foundation Kit Library

The Cricket Asylum Foundation Kit Library (CAFKL) is part of the Cricket Asylum Foundation (CAF) which provides opportunities for disadvantaged groups to participate in cricket. The Kit Library is an initiative where new players and players with restricted financial support can access good quality used or new cricket equipment such as bats, pads and gloves, either free of charge or for a small donation. Players can take the items they need allowing them to update existing gear or giving them first access to kit. CAF saw a need for the reuse of kit more locally, to enable access and for sustainability reasons.

2.2.6 Together for Sport

Zero Waste Leeds (ZWL) - who supported Cric-Kit in setting up their programme - runs a series of projects focused on reducing waste. One of their projects 'Together for Sport' (TFS) enables people in Leeds to access good quality second-hand sports equipment. ZWL have established a Facebook page as a destination for the community to exchange and ask for the kit they make need. There are also donation bins within multiple leisure centres in Leeds where equipment can be dropped off. TFS was set up to make it as easy as possible for people across Leeds to share good quality second-hand sports kit and equipment.

2.2.7 Play it Again Sport

Play it Again Sport (PIAS), based in Wales, reuse sports items donated within their local area and focus on supporting communities which may be unable to access sports equipment due to affordability. As PIAS accept all sports equipment with cricket gear being a relatively small area of activity and quantity depending on what items get donated. PIAS also provides access to play sports, from putting on sports activities to driving people to sports activities in their electric car. This removes barriers to sports both financially and practically. They aim to remove financial barriers to sport and provide access to sport and fitness, whilst simultaneously reducing the volume of items being sent to landfill.

2.3 Issues with reuse

Due to the national scale of LTSKR, interviews and site visits were held with them to gain a greater understanding of the issues they face related to reuse. Information from other organisations has been collected through interviews. LTSKR are one of the most established reuse schemes and have significant experience. LTSKR shared that there are many logistical factors when establishing a reuse scheme such as the location and convenience of donation points, the condition of items received and sorting issues.

2.3.1 Donation points

A key aspect in facilitating successful reuse initiatives is establishing convenient networks of drop-off points for donations. Donations then may be sent to a centralised warehouse for sorting or reused within the local area for open community access.

¹⁶ Yorkshire Cricket Foundation and Zero Waste Leeds offer free cricket kit to families | Yorkshire Post

2.3.1.1 LTSKR



Figure 2 The white pins indicate collection hubs for LTSKR

The map above shows the collection hubs for LTSKR in E&W. While over 50 collection points exist, they can be concentrated in particular areas, resulting in some geographical locations having multiple convenient drop-off points such as in the South of England, while others may have none. Players in the North of England for example, may need to travel over 60 minutes to a drop-off point while players in the South may be surrounded by clusters of collection points which can be accessed locally. Collection hubs are voluntary so rely on the willingness of clubs and volunteers to set them up. Collection hubs may have a drop-off point or collection bin allowing players to drop off gear at their convenience, while others may have certain times or dates when they will only accept donations. Once the gear is donated at these points, some gear may be reused locally and the rest sent to a centralised warehouse in Ipswich. In Ipswich, donations are categorised and organised.

2.3.1.2 Cricket Kindness/No Boundaries

Cricket Kindness has one collection hub in Surrey and are looking for partners such as cricket clubs to act as part of a wider collection network. I Organisations that are interested to in acting as donation points are asked to get in touch via email.

2.3.1.3 Bat for a Chance

Bat for a Chance enables donations through 12 collection hubs in the South East, which include cricket clubs and schools. It also encourages people to contact them via their online contact form if they have items they want to donate but cannot take them to a collection hub. They will advise if they can help facilitate a collection or accept items which are posted.

2.3.1.4 Cric-Kit

As of April 2023, Cric-Kit accepts donations via two cricket club locations, with a third set to open soon. They The organisation places metal donation cages in the locations for people to drop off items. These cages allow players to see what items are available and take any kit they may need.



Figure 3 Image of Cric-Kit cage at Caribbean Sports Club Sheffield March 2023

2.3.1.5 Cricket Asylum Foundation Kit Library (CAFKL)

CAFKL have 7 donation points¹⁷, primarily in the North of England. They partner with self-nominated cricket club hubs who collect the kit and send it to the Kit Library Central hub in Sowerby Bridge, West Yorkshire. The initial Kit Library Hub was set up in West Yorkshire, but CAFKL have the ambition to expand nationwide so there are opportunities for Hubs and Drop Off Centres across the country. Donations are accepted at the donation drop-off points or they can be posted directly to the Kit Library Hub.

2.3.1.6 Together for Sport

Together for Sport (TFS), list specific collection dates on their website, they currently have 5 collection bin points which are based in the reception of leisure centres around Leeds which are listed to accept donations in June¹⁸. TFS has particularly asked for donations of trainers, football boots, shin pads, hoodies and socks, in either adult or children's sizes. Given that they accept all

¹⁷ Kit Library - The Cricket Asylum Foundation (tcafoundation.org)

¹⁸ Together for sport - donation campaign - Zero Waste Leeds

equipment for all sports categories, cricket may be a relatively small proportion of their reuse activity and the quantity collected depends on donations received. TFS also have a Facebook group which facilitates donating, swapping and exchanging of kit¹⁹.

2.3.1.7 Play it Again Sport

Play it Again Sport (PIAS) have 13 donation bin locations, the majority of which are leisure centres and also have a map on their website showing the location of all the drop-off locations²⁰. Given that they support all sports equipment categories, cricket may be a relatively small proportion of their reuse activity and is dependent on donations received.

2.3.2 Donation points

Having drop-off locations which are convenient and accessible is key to reuse schemes. Most have been set up to enable kit to be donated when visiting local cricket clubs or leisure centres. Having donation points which are easy to access, with opening times which allow flexible drop-offs aids the convenience. 'Buy-in' from local councils was necessary for organizations such as PIAS which placed donation bins in public venues such as leisure centres. While willingness and volunteers from cricket clubs were key for others who needed donations to be packed and sent to a central collection hub or warehouse. Having access to numerous points where players can quickly drop off gear is fundamental to the success of all these schemes.

2.3.3 Condition

The condition of donated items can vary greatly e.g. during site visits to LTSKR new items in their packaging and heavily soiled items were both seen. Despite most of the reuse organisations specifying they will only accept new or good condition gear, donations of heavily used, dirty or incomplete (e.g. one glove rather than a pair) have been received.

2.3.3.1 LTSKR

The condition of items donated varies greatly. LTSKR ask all donors to ensure that all items are properly cleaned and usable, however, some items received, such as shoes, are covered in mud. These need to be cleaned, as previous shipments overseas had been confiscated due to the shoes being too muddy. This can affect reuse opportunities, as it requires time and resources to do this and also some players may have a preference for a kit that looks new or nearly new. LTSKR have a collection standards document on their website detailing what they will take and in what condition. Collection hubs have the right to refuse any donation on LTSKR's behalf if this document is not followed. Despite clear guidelines, LTSKR receives items in various conditions, evident during a site visit conducted in November 2022. If the gear is in a usable condition when they receive it at the warehouse, they will reuse it. During a site visit, on 30th November 2022 used and new stock was seen. At the time of writing, LTSKR suggested that around 95% of the cricket gear received could be reused. This high figure is due to the dedication of the staff members and shared values of not letting any usable items go to waste.

¹⁹ Leeds Together for Sport | Facebook

²⁰ Donations – Play It Again Sport



www.lordstaverners.org/sportskitrecycling
Figure 4 LTSKR Collection standards document.



Figure 5 LTSKR donated items which can be reused in E&W

2.3.3.2 Cricket Kindness

Cricket Kindness has been now incorporated into the No Boundaries Cricket club and asks for all equipment that is donated to be in good condition. Guidelines relating to the condition of donation previously were listed online, such as no holes in gloves or pads and no broken helmets or bats.

Common issues with the state of donated cricket gear received were

- Staining
- Incomplete or missing items e.g single gloves, not pairs
- Other items donated e.g, not cricket or sports gear but fashion items
- Items donated directly after playing which had dirt/sweat marks

There was also a suggestion that there can be a tendency for people to think that if they donate an item it's better than throwing it away even if the item is not usable or has low reuse potential.

2.3.3.3 Bat for a Chance

Bat for a Chance accepts new and high-quality second-hand cricket kit.

2.3.3.4 Cric-Kit

Cric-Kit accepts new and second-hand cricket kits.

2.3.3.5 Cricket Asylum Foundation Kit Library (CAFKL)

CAFKL accepts good quality and clean kits and state clearly on their website

"We are not looking to help you clear your attic of the 20-year-old moth eaten kit bag! Instead, we are after good quality, clean used kit, equipment, shoes and clothing. Items that have been outgrown rather than used to death!²¹"



Figure 6 Image of donated cricket gear at CAFKL

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²¹ <u>Kit Library - The Cricket Asylum Foundation (tcafoundation.org)</u>



Figure 7 Image of donated kit received by CAFKL

2.3.3.6 Together for Sport

Together for Sport ask that all donations are washed, and all footwear is cleaned and bagged before putting donations in the collection bins.

2.3.3.7 Play it Again Sport

Play it Again Sport accepts all types of used sports equipment and clothing.

2.3.3.8 Summary: Condition

Most reuse schemes specify that they accept kit in good condition, that has been washed or cleaned before donating. Some reuse schemes shared that the condition of the kit received can vary, from new and bagged items to items which may need to be cleaned such as muddy cricket shoes.

There was a feeling from multiple schemes that donation could be a method of shifting responsibility, as many of the items received may not be able to be used again due to their condition and donating them made disposal someone else's task and responsibility.

Some schemes spoke of donations being offered with caveats. Such as private schools offering donations but stating they would only send cricket gear if the reuse organisation took their unwanted uniforms too. This puts reuse organisations in a difficult position, grateful for the sports gear but having to accept items for which they have no reuse opportunity.

2.3.4 Sorting

Once gear is donated, most schemes undergo some aspect of sorting or organising. This can be a highly labour-intensive job, depending on how the scheme is structured and if data is recorded e.g. how many and what types of items are donated. Sometimes a single item (which should belong to a pair, for example, pads, shoes, or gloves) is donated, leaving schemes to either throw them away or hold onto these in the hope they can make a pair in the future. It is the time-intensive task of going through boxes of individual items to find possible pairs at regular intervals. Depending on the volume of gear donated and how often it is sorted, schemes may require a specific location large enough to store and sort the items.

2.3.5 Donations vs demand

Reuse schemes rely on demand for used gear to ensure items get to those who need them. Reuse organisations often do not have the space or facilities to hold large volumes of items and should be considered as facilitators within a reuse process rather than a destination for reuse items to be held for long lengths of time. It is important that reuse organisations do not become long-term storage facilities for goods, and that as much as possible, the donations received can be sent out or delivered to those in need. It is also important to note that the items donated may not fit the current need in a particular area, for example, there may be a high volume of donations of adult gear which may have been kept after a player retired from cricket, yet what may be needed is junior items. This is particularly evident for women's kits, with few women's kits being donated but the demand for gear being high.

2.4 Purpose-driven

All the reuse schemes are committed to ensuring that as little cricket gear as possible goes to waste. The common theme among all schemes was that they are all purpose driven. All interviewees involved in reuse schemes went above and beyond any job description and were all driven to add social value to do good and support others. This means that the reuse system for cricket gear in E&W is fragile, as it depends on a small number of organisations and people whose knowledge, connections and willingness cannot easily be replaced. Since these schemes have taken a voluntary responsibility to create reuse infrastructure it is important these organizations are supported with the necessary resources.

2.5 Barriers to reuse in E&W

Due to the strong demand for cricket gear from other countries, a significant amount of equipment is donated overseas. It is unclear how much gear is reused in the E&W, but there has been a shift towards reuse in E&W, driven by financial need worsened by the cost of living crisis. Cric-Kit, CAFKL, Play it Again Sport and Together for Sport all reuse donations within their locality. In addition, a very small proportion of cricket gear donated to the LTSKR scheme is reused at the collection points before arriving at Ipswich. However, issues such as brand policies can create barriers for the reuse of donated new items.

2.5.1 Brand barriers

Reuse organisations receive both new and used cricket gear donations. The new donations can be excess stock from brands or past season's goods which have limited value to the brand. New gear may also be donated as a gesture of goodwill or as part of charity commitments.

It has been suggested in some interviews that when branded excess stock is donated, it may come with conditions such as restrictions on reuse within E&W. This is often due to potential brand damage or devaluation. More research is needed to understand if these restrictions impact on reuse. The suggestion is that excess stock being reused could harm full-price new stock sales or have a detrimental effect on brand image. These restrictions can affect how and where gear is reused. There needs to be further research into whether reuse organisations need written consent from both the brand (e.g. Nike) and the retailer (e.g. Cricket World Direct) to reuse the gear. The retailer may donate it but then the brand may have contracts preventing any reuse of goods outside their authorised resellers. Cricket brands may impose contractual agreements prohibiting resale or reuse in E&W to protect brand image. In this case, reuse organisations may decide to send all excess stock/new branded goods abroad unless they are confident they can be legally reused in E&W. Clarity on this is needed from brands and retailers, however, this sort of information is often not in the public domain and detailed only in contractual agreements that are usually confidential.

2.5.2 Regional barriers

Although clothing is out of scope of this report, it is important to note that sponsorship and club branding can create a major barrier to reuse, this is mainly an issue on cricket clothing, especially cricket shirts. If gear is branded with a particular club and/or sponsor logo it becomes difficult to reuse, e.g. if the kit is donated from Edgworth cricket club (a club in Bolton), reuse organisations need to be careful which clubs they send the gear to be reused, they may need to send the gear outside of that geographical area to ensure that the club who receives the gear for reuse, does not end up playing the club who originally donated the kit as this can cause confusion. The reuse of branded clothing is less likely to be an issue in overseas markets. Whilst this is more of an issue with clothing there still implications if any part of the gear has been branded with the club name or has sponsorship branding on it.

2.5.3 Funding

The success of the cricket gear reuse initiatives has been driven by a small number of schemes. To ensure these schemes have the resources they need to continue, often internal and external financing has to be sought, either within a larger organisation or using external funding sources for example the National Lottery. Some funding is often timebound and needs to be re-applied for yearly, the lack of reliable funding over the long term to support the continuity and growth of these schemes is a challenge. Some schemes are self-funded by the founders, raising questions over the role of individuals, local-level policy and global brands.

2.5.4. Uneven Donations

Excess inventory which is donated may be excess stock due to inaccurate inventory ordering by cricket gear sellers and distributors. An example of this is left-handed pads or thigh guards, LTSKR has boxes of left-handed batting pads as these were generally less popular, leaving inventory which was no longer needed by brands.



Figure 8 Left-handed batting pads at LTSKR

2.5.5 Need and Bias

Although difficult to quantify, it can be assumed most players will want to have gear that looks in reasonable condition. Especially given most kit is white, having dirty pads and gear is likely to be

seen as unacceptable. There may also be unconscious and/or privileged bias towards new or nearly new goods within E&W that appears to play a part in reuse, with many players preferring gear that looks new or in very good condition rather than used or heavily used gear which may still be functional. It can also be product dependent with players happier to use, used batting pads and bats but not necessarily wanting to use heavily worn gloves or helmets.

It is important to identify if and specifically where and what need there is for gear in the E&W which could be filled by reusing kit (e.g E&W recreational clubs may have other ways to secure kit such as holding fundraising events/sponsorship and prefer to buy a new kit that way.) The feedback from some reuse schemes has been that players in clubs in E&W do not want to use or be seen to be using visibly used gear. Instead, they prefer new or nearly new, which may contribute to a lot of gear being sent overseas for reuse rather than being reused in the UK.

2.6 Opportunities for reuse in E&W

There appears to be an opportunity to increase the reuse of cricket gear in E&W. Local programmes such as Cric-kit, CAFKL and Sports Together show that creating localised platforms and providing easy ways to access kit by making it convenient is important to encourage reuse. Localised reuse tends to be on a peer-to-peer informal level and as such some of the considerations, for example, brand barriers are less of a challenge as much of the reuse is informal and unrecorded and is more likely to be used gear rather than excess stock from retailers or distributors. For national organisations such as LTSKR which may be subject to more scrutiny and also need to maintain strong relationships with donation partners, ensuring brand rules are respected and new 'excess stock' goods are only reused in countries which the brand allows is vital.

2.7 Summary

A high percentage of cricket gear can be potentially reused e.g. it is still functional and can be used to play. The condition of gear can vary and feedback has been players in E&W have a preference for new or nearly new gear compared to visibly used gear. Brand barriers may potentially provide barriers for the reuse of new gear, and more research is needed to gain greater clarity on this issue. Given the increasing impacts on household finances and growing sustainability awareness, there is a significant opportunity to reuse gear within E&W.

Section 3 Repair and Refurbishment

3.1 Introduction

Repair and refurbishment of cricket gear such as gloves, pads and helmets has been limited in E&W due to the lack of available and affordable services.

3.2 Repair

No data and/or research has been found on whether players would take the time and expense to repair their cricket gear. Players may lack the skills to repair, be unwilling to pay for a repair or believe replacing rather than repairing their gear is more practical. The majority of cricket gear has not been designed for easy repair and repairing items can be complex and costly.

3.2.1 Glove Repair

In E&W no repair services for batting gloves have been identified, only repairs for wicketkeeper gloves. Glove repair has been identified at affordable rates in other countries such as India.

3.2.1.1 Wicketkeeper Glove Repair

Wicketkeeper glove repair has been identified as being offered by 2 companies in England. Beckenham cricket specialists²² - owned by John Copus²³ - sell cricket and other sports equipment, and offer repairs including glove refacing. John has sixty years of experience and makes repairs from his workshop at home, he is one of the only E&W independent businesses offering this service. Gloves can be refaced from £36. Another glove repair company is called 'Classic keeper' it is a family-run business based in Solihull with thirty years of experience in providing bespoke custom gloves made to order, glove repair and glove refurbishment. The company offers a consultation service which suggests improvements which could be made through repair, as well as, refacing, stitching, new webs and replacement finger stalls²⁴.



Figure 9 Before picture of wicketkeepers gloves, used without permission from www.classickeeper.com



 $Figure\ 10\ After\ picture\ of\ wicketkeepers\ gloves,\ used\ without\ permission\ from\ www.classickeeper.com$

Both businesses have a long experience and a focus on craftsmanship. With new wicketkeeper gloves ranging from £40 to £120, there is a debate if repair and refurbishment is commercially viable

²² <u>Bat Knocking-in, Re-Handle, Weight Reduction, Repairs, Grips, Glove Refacing (beckenhamcricketspec.com)</u>

²³ johncopussports

²⁴ Glove Repair – Classic Keeper

compared to investing in new gloves. Much of this will depend on the preference of the player, how the current gloves perform and planned usage for the future.

3.2.1.2 Batting glove repair - India

No examples of batting glove repair have been identified in E&W. There are multiple examples of cricket glove repair services on Youtube²⁵ which appeared to be primarily based in India. A glove repairer from Mumbai was interviewed²⁶ for Cricketgraph - a cricket website - who shared details on the time and cost of repairs in India. On average it takes 2 hours to repair a pair of gloves with 4 pairs completed per day. The main reason for deterioration can be usage and sweat "the more you use it, the faster the rate of deterioration²⁷". Once repaired, batting gloves should last another 6-12 months dependant on usage. In 2016 the cost of repair was 280Rs (£2.80) per pair. A repairer can make 100Rs (£1.00) profit per repair earning approximately £4.00 per day. All stitching is hand done and is conducted sitting on the ground with limited equipment. Repairs on shoes, pads, arm guards and helmets are also available in India It is evident that the cost of repair in India and elsewhere is significantly lower than in E&W.

3.2.2 Cricket pad repair

No cricket pad repair has been identified in E&W.

3.2.3 Cricket helmet repair

No independent cricket helmet repair has been identified in E&W, however, LTSKR were able to replace some grills on donated helmets.

3.2.4 Cricket shoe repair

LTSKR replace missing spikes on donated cricket shoes using spikes from shoes that have been donated but may not be usable. Replacement cricket spikes can be purchased for around £5.00-£9.99, depending on the brand and if the spikes were 'universal fitting' or specific to a branded shoe.

3.3 Issues with repair

Despite many players wanting to repair their gear due to sustainability concerns many face issues with the cost and access to repair services.

3.3.1 Skills

Leather glove making was classed as an endangered craft in E&W in 2021²⁸ by the Crafts Council with less than fewer than 20 professionals identified as cutting gloves and less than 100 making them. The main reasons for endangerment are

- An ageing workforce
- Lack of apprentices willing to train
- Competition from low-cost countries
- Lack of local raw materials
- Limited local maintenance for machinery

The Crafts Council does not individually specify leather cricket gloves but redirects to a link listing known leather glove manufacturers in E&W²⁹ these include other sports gloves such as motorcycle

²⁵ <u>cricket glove repair - YouTube</u>

²⁶ Stitching it my way-a unique glove man from Mumbai to repair all the cricket accessories | CricketGraph

²⁷ Stitching it my way-a unique glove man from Mumbai to repair all the cricket accessories | CricketGraph

²⁸ Glove making | Heritage Crafts

²⁹ <u>British Made Gloves – Gloves Made in the E&W | E&Wmade – E&W Made Products – BRITISH MADE (wordpress.com)</u>

and snowboarding gloves but do not specifically list cricket gloves. It is highly likely no cricket glove manufacture remains in the UK, given the lower cost of manufacture overseas.

3.3.2 Customer Communication on Product Maintenance

There is limited information on repair for cricket gear, but research showed some advice on retailer's websites about product care to keep it in the best condition. The majority of brands do not have product care guides for cricket gear (though some had guides for bats). The main advice was on the prevention of glove deterioration, especially concerning sweat and moisture. More visible and detailed care information would be beneficial for players.

Guidance on batting pads care³⁰ included:

- Placing pads in a shady area to dry with the straps open directly after batting.
- Never place batting pads in the sun or directly in bags to dry out after batting. (The sun will
 cause the padding at the back to dry out and harden, a bag will keep the padded area moist
 which leads to wear and smell.)
- When buying batting pads place them in a bag with the straps done up, and pull the straps as tight as possible, this will get the pads used to the shape of the leg more quickly.

Care for gloves included³¹

- Wear inner gloves inside of batting gloves to keep sweat from absorbing into the gloves. It will keep them in better shape and last much longer.
- Velcro straps can quickly become filled with dirt, to keep them looking their best, keep stray dirt out by keeping them folded back on themselves.
- If you play cricket often or have sweaty hands, purchase an extra pair of gloves. This allows you to switch them out after several innings so they can have a chance to dry out.

3.3.3 Safety concerns and liability

It is unclear if helmets are taken into any organisations for repair and if the organisation repairing them holds any responsibility over the future safety of the helmet. As cricket equipment such as batting pads is now classed as personal protective equipment (PPE) this also raises questions over the safety implications of repaired goods. All PPE cricket gear now is required by law to be 3rd party tested³² and BSI is in the early stages of committee development related to revising standards related to cricket gloves, pads and other PPE. For example, if a customer approaches a repairer to replace gloves perhaps this is an agreement between the customer and supplier, but if PPE cricket gear is repaired or refurbished and placed back onto the market with a price, items might have to be retested. This is an area that needs further research.

3.3.4 Cost

The potential cost of repair of cricket gear was difficult to quantify as no repair services were found for batting pads or batting gloves. A supplier of repair services for wicketkeeper gloves charged £39, but given the cost of labour and overheads the cost of repair is likely to be significantly higher compared to other countries and players may feel it is a better investment to buy new rather than repair in E&W unless there is perceived financial or emotional value in the existing cricket gear.

3.4 Refurbishment

No refurbishment services were offered by the major cricket brands or retailers for gloves, pads or helmets in E&W. Bat refurbishment is now widely offered by manufacturers.

³⁰ Cricket Batting Pads - Greg Chappell Cricket Centre

³¹ How to clean batting gloves & pads | Kookaburra Sport E&W

³² Cricket PPE | BSIF

3.4.1 Helmets

Arytek cricket makes helmets and offers helmet refurbishment ³³ for £50 but only on its own range of Premier, Elite and Raw helmets. The service offers colour change and refurbishment like new. Arytek helmets have been developed with The Sports Technology Institute at Loughborough University with a focus on components and materials to enable disassembly for repair and refurbishment. Given the process of design was based on a component level this has offered Arytek the opportunity to design with refurbishment in mind and ensure the helmets can be dismantled to access repairs and replace any damaged components. Helmets should always be replaced if they have been hit, as the internal structural integrity of the helmet could have been damaged. With items such as helmets having a suggested 3-year life span, refurbishment may not be a viable option for helmets with a recommended short lifetime.

3.5 Issues with refurbishment

3.5.1 Safety concerns and liability

It is unclear if cricket gear (other than bats) are returned to the manufacturer for refurbishment, and what level of warranty or safety liability the company (e.g. refurbisher) accepts. This may pose strong financial and safety concerns to retailers, brands and manufacturers. Cricket gear is predominantly manufactured outside E&W, so any items for refurbishment would most likely need to be shipped back to the original production country bringing with negative environmental impacts due to the carbon emissions involved in transportation. Establishing localised refurbishment units for major cricket gear suppliers is an option but may not be commercially feasible unless it is factored into customer service. There may be an opportunity for localised independent refurbishment companies to offer this service.

3.6 Barriers to repair and refurbishment within E&W

3.6.1 Commercial viability

Repair and refurbishment of cricket gear within E&W may not be a commercially viable service for brands based in the UK, as new refurbishment teams would need to be built for cricket gear given all production is now done abroad. The traditional cricket gear model relies on players purchasing new gear, which is often manufactured abroad and sold through retailers or online in E&W.

Repair may be possible for example by patching a hole in the thumb or palm on a glove, however, refurbishment may require the whole palm to be replaced for it to resemble the condition of the glove when it was first bought. For refurbishment to be viable within E&W, significant changes would need to occur in the design stage.

- Products would need to be designed for refurbishment, with components designed with disassembly and replacement in mind.
- Components would need to be standardised across different ranges and a stock of them kept within E&W so the correct fitting, size and colour of a component are available as needed.
- Business models would need to adapt to ensure refurbishment could provide a profitable alternative to new sales.
- Specific machinery may be needed to enable repair or refurbishment of cricket gear within E&W, depending on the reason for refurbishment.
- Reverse logistics, in terms of accepting items back for refurbishment, would need to be set up so there was the infrastructure, staff and processes in place to process them.
- Knowledge and skills to refurbish items would need to be in place within E&W.

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³³ Helmet Refurbishment – Ayrtek Cricket

3.7 Opportunities to grow repair and refurbishment within E&W

With infrastructure not being in place within E&W for refurbishment, there is likely to be limited appetite by brands to support this unless driven by corporate social responsibility targets or to grow customer loyalty or attract new customers through using this as a marketing tool. However, there is space for charities and social enterprise models to support, especially those which offer opportunities to those re-entering the work force³⁴. Brands could support players to make products last longer through advice on maintenance and care.

3.7.1 E&W production

Brands could develop refurbishment centres within E&W to refurbish items based on the most commonly occurring faults such as replacing worn-out glove palms and broken batting pad straps. Covid 19 has resulted in production returning to E&W and Europe for other sectors such as clothing, which offers some potential for skills growth and refurbishment centres to be trialled.

3.7.2 Blockchain to support care

Using blockchain or similar tools which can connect products and users to repair and refurbishment services could be developed to enable players access to product care instructions and local repair services.

3.7.3 Repair cafes

Repair cafes³⁵ could play a role for those who want to repair their equipment but do not have the skills. Repair cafes encourage repair rather than replacement and enable product life extension. If held within cricket club venues, repair cafes could help both the extension of the life of gear and add social value by bringing communities together, with the cricket club as the destination. However, the types of repairs needed for cricket equipment may require different skills, repair cafes rely on volunteers who may not have the skills or tools needed for specific cricket equipment repair. Repair cafes would need to call out to communities for additional skills required for cricket gloves and pads e.g. leather working. There is also an opportunity to explore opportunities within larger reuse networks³⁶ within E&W.

3.8 Summary

At present, there are limited repair and refurbishment opportunities for cricket gear in E&W. There is limited pressure on specialist cricket brands to adopt repair and refurbishment business models (except in the case of bats). The cricket sector is very price sensitive, and the cost of repair and refurbishment needs to be balanced against buying new and without external drivers (e.g. policy) it may be slow to change behaviour. There is an opportunity for non-profit or charity organisations to support, for example, repair cafes.

Section 4 Resale

4.1 Introduction

No published data was found on what happens to cricket gear at the end of its first life but it could be assumed that the majority of good quality used gear may be sold on resale platforms, or potentially donated to clubs or sent to charity shops or recycling centres.

³⁴ repair-and-reuse-toolkit.pdf (cfsd.org.uk)

³⁵ "Repair Cafés are free 'community-centred workshops' for people to bring consumer products in need of repair, where they can work together with volunteer fixers to repair and maintain their broken or faulty products. In addition to repair, many Repair Cafés provide assistance with product modification, particularly to clothing to improve fit and appearance." Charter & Keiller, 2016

³⁶ For example https://reuse-network.org.uk/

4.2 External motivators

With global events such as the war in Ukraine and the legacy of Covid 19 having an impact on inflation, supply chains and the rising cost of living, consumers have increased demands on their income and high uncertainty and financial insecurity. Climate change and increased awareness of sustainability issues along with more convenient and accessible ways to resell goods are all contributing to a viable business model of resale for cricket gear. Other sports such as climbing have dedicated resale sites for gear such as Geartrade.com³⁷ which could offer an example for other sports such as cricket.

4.2.1 Cost of living crisis

Due to the cost-of-living crisis, many households are struggling with high expenditures on energy, for example, meaning that there is less money to spend on items such as sporting goods. An eBay marketplace report which surveyed 1,000 UK respondents found a fifth were buying more second-hand items to save³⁸ money. 52%³⁹ of those surveyed for a London Sport report agreed the rising cost of living had limited their ability to afford both sports and leisure equipment. People are looking at where they can find extra finances and resale has become a convenient way to make money out of goods which are no longer needed. With children growing out of gear quickly and some trying but not maintaining the sport, the resale of junior gear seems to be growing.

4.2.2 Sustainability Awareness

Increasing awareness of sustainability issues among consumers is slowly influencing behaviour with people generally taking more consideration over what they do with their items once they have finished with them. It is important to note that it may be another person other than the player who is the decision-maker in terms of buying cricket gear. For example, a parent may purchase for their child. This may be particularly evident in the youth game where parents may be the purchaser and therefore consider sustainability and buying second-hand more or less highly than the intended user. Younger players may have more interest in buying more sustainably and may be more familiar with resale sites; however, the parent may make the purchase and may have different priorities, such as budget and ease of purchase.

4.2.3 Covid 19

Covid 19 has been a factor in the reduction of sharing items between friends and informal networks. Communal kit bags belonging to the club, which contained equipment players would share, were not accessible during Covid 19. Although Covid 19 regulations have now largely been lifted, players may have purchased cricket gear that they now have grown out of (youths and junior) or they may have developed a preference for new gear rather than used gear given the legacy of not sharing, especially with items such as gloves.

4.3 Resale

Resale opportunities for cricket gear are mainly focused on the youth market and are often done by parents of players who have outgrown their equipment or no longer play cricket.

4.3.1 Discounting and outlets

Due to economic constraints brand outlets and discounting stores may be a destination for players. Although some of these models may not strictly constitute resale, they do provide an avenue to sell

³⁷ Buy & Sell Used Climbing Gear (geartrade.com)

³⁸ Cost-of-living crisis causing surge in second-hand shopping, according to Ebay (fashionunited.uk)

³⁹ Ten years on from London 2012 nearly half of Londoners forced to cut back on exercise as cost of living crisis bites | London Sport Media Centre

past seasons overstock either within the brands own outlet or through a third party. Third parties may buy left over stock at a low price to sell at a discount within their stores.

Cricket outlets such as www.discountcricketoutlet.com offer an opportunity to buy new branded stock at cheaper prices, Discount Cricket has a range of offers depending on the time of year with up to 80% off clearance stock. Discount Cricket was incorporated in 2012 and as a result of it being only online and not having the overheads of a physical retail store can offer on average a 5% saving compared to other retailers. Discounting of new or excess stock gear can be seen as a good offer for some players who have financial constraints but still want to be seen as having new gear.



Figure 11 Cricket outlet warehouse image, used without permission from www.discountcricket.com

Brands such as Gray Nicholls may offer discounting through other methods, e.g. save 10% when signing up for their newsletter. However, even with discounting and outlets the price of cricket gear can remain prohibitively high for many players, especially if they are new to the sport and just want to try it out.

4.3.2 Position in E&W

There is an opportunity for the resale of second-hand gear. Sites like eBay, Facebook marketplace and Vinted offer consumer-to-consumer sales platforms.

4.3.3 eBay

eBay has 22 million active users in E&W, 80% of goods sold on eBay are new with 86% sold at a fixed price rather than at auction⁴⁰. On 09.01.23 (pre-cricket season) eBay UK returned 95 results for cricket gear, these were mainly bundles of mixed items such as bats, gloves and pads. Over 2300 items were showing as listed for sale for cricket gloves, and only 178 items were listed with the condition used. 116 used cricket helmets were returned in the search, and 224 used cricket pads. On 20.05.23 (during cricket season) eBay UK returned 93 results for cricket gear, mainly mixed bundles. Over 2500 items were shown listed for cricket gloves with 228 listed as in used condition. 96 used cricket helmets were listed for sale and 272 used cricket pads.

4.3.4 Vinted

In 2008 Vinted launched to enable people to buy second-hand goods easily. The company has grown rapidly and is now seen as one of the main destinations for second-hand goods, especially clothing.

⁴⁰ Marketplace details | eBay | Selling online overseas (great.gov.E&W)

They have 65 million users with the ambition to 'make second-hand first choice'. A search was conducted on Vinted using several search terms, see Figure 12, these were then filtered by condition and prices recorded. The search terms returned a majority of accurate results however there were some miscellaneous items, especially in categories such as 'cricket shoes' (this was due to shoes being listed from a store called Cricket.) Many of the results returned were junior or youth sizes. Although the results were not 100% accurate Vinted offered a viable and affordable way to buy used cricket gear.

Search term	Cricket pads	Cricket gloves	Cricket Helmets	Cricket Shoes
Total number of results returned	79	103	53	289
Price range	£1.00-£70	£1.00-£100	£2.00-£200	£1.00-£90
Number of results 'new with/without tags	16	20	10	41
Price range for new	£9.99-£49.99	£2-£35	£14.99-£200	£10-£89.99
Number of results for good/very good condition	57	68	42	232
Price range for Good	£3.00-£70	£1-£100	£5.99-£35	£2-£45
Number of results for satisfactory condition	6	15	1	16
Price range for satisfactory condition	£1.00-£40	£1-£45	£101	£1-£16

Figure 12 Chart showing search results on Vinted.com

From the data collected, it is clear that new and used cricket kit is available at affordable prices. The condition is not directly related to the price paid, and it is important to note that these prices do not include postage costs.

4.3.5 Facebook Marketplace

Facebook Marketplace was originally launched in 2007 but was relaunched in 2016 with a greater focus on classified ads and local resale. Facebook Marketplace is easily accessible and also enables users to join more focused localised groups which may have their own Facebook resale pages. The benefit of Facebook Marketplace is that it allows people to search by location and filter results based on distance. Goods may often have to be collected from the seller rather than posted. This offers an opportunity to buy used cricket gear locally. When Facebook Marketplace was searched on 21.05.23 using the term 'Cricket gear' 23 items were returned, the majority of results were for bats, with 2 listings for helmets and 2 listings for batting pads available within 6 km of the postcode entered.

4.3.6 Others

Other resale sites exist, some offer a generalised model such as Gumtree which lists all types of products while others are more specialist and focus on children's equipment such as Kiddr. The top 5 resale sites for second-hand cricket gear as returned by Google on 20.05.23 .23 were:

eBay Cricket Equipment for sale | eBay

Gumtree Used Cricket Bats, Balls & Equipment for Sale | Gumtree

Preloved Second Hand Cricket Kit and Equipment, Buy and Sell | Preloved

Second-Hand Second-Hand Cricket Bats For Sale | Second Hand

Facebook Cricket Bats and Equipment for sell. | Facebook

Charity online shops such as Oxfam allow customers to filter by keywords and search by terms such as cricket equipment. When Oxfam's online shop was searched on 03.01.23 (pre-cricket season) with the search term 'Cricket equipment' 3 results were returned, 2 cricket bats and 1 set of youths cricket pads⁴¹. When the search term 'cricket gear' was used no results were found. When the Oxfam online shop was searched again on 20.05.23 (in the cricket season) the term 'cricket equipment' returned 0 results, when the term Cricket was searched 445 results were returned, which were all cricket books or almanack.

4.4 Issues with resale

Resale offers a good pathway to enable the reuse of cricket gear, while also allowing the player to recoup some money from their goods. However, when selling goods via resale sites there are some issues to consider.

4.4.1 Subjective condition

The condition of items is decided by the seller when advertised, they usually have to write the condition in the description or choose from a range of tick boxes (new/nearly new, very good, good, fair, used). With items such as cricket gloves which can be stained easily, a seller may consider these nearly new or in very good condition but others may consider these 'used' as they are marked. The condition of goods can only be seen through photos and it is up to the discretion of the seller to list any faults or marks. When selling helmets for example it would be impossible to know if the helmet had been struck previously or if it is over 3 years old unless the seller puts that in the description. Cricket gloves also returned results with just one glove for example.



Figure 13 Image from Vinted.co.uk categorised as satisfactory condition priced at £1.00 09.01.23 "Large boys cricket shoes and pads. Shoes are adult size 8. Condition is well worn with imperfections but still functional."

⁴¹ Oxfam Shop | Buy Second-hand & Ethically Sourced Products



Figure 14 Figure Pads and gloves £15 from Vinted 09.01.23 categorised as very good condition junior "used three times"



Figure 15 from Vinted 09.01.23 categorised as new with tags £15 "Kookaburra Batting Pads Kahuna 5.2- Youths Brand new in packaging – unopened - unwanted gift (don't play cricket!)"

4.4.2 Inaccurate search results

The benefit of online research sites enables access to thousands of results based on the search terms entered. However, some search terms can return a percentage of miscellaneous results. There appeared to be a high number of irrelevant results when 'cricket shoes' was searched on Vinted for example. As items like gloves and pads are not always listed by age or size, it may take some time to go through the search results and find results that most fit the need of the buyer. More specific resale sites are appearing which are focused on children's sports equipment for example Kiddr⁴².

⁴² Buy, Sell & Swap | Sports, Music & Tech Equipment (kidd3r.com)

Making searching easy and able to return accurate results is important for ease of use, as if sites are difficult to interact with buyers may not invest the time to buy resale and instead order new from other sites or buy from physical stores where they can ask for help.

4.4.3 Subjective pricing

Pricing on resale sites is decided primarily by the seller (with some sites taking a commission when the item is listed or sold). This can mean pricing is variable and 'new with tags' equipment can be priced at a similar cost as equipment that has been heavily used. Pricing can depend on how quickly the seller wants to sell the item and also the value they place on the item (this could be determined by how much they paid for the item when they first purchased it new).

Some websites offer a buy-it-now price or a standard price which allows people to buy an item for a set price, while others run on an auction basis where buyers can bid for items. The item condition can only be viewed through photographs listed by the seller so the condition of the inside of a cricket glove would not be visible. Many items do not include shipping, packing or postage costs which are often added on at the end. Sites like Vinted and eBay allow goods to be posted nationally, while sites such as Facebook marketplace often tend to be more localised with many descriptions stating collection only. Facebook marketplace also allows you to filter results by distance from a postcode, so items can be searched within 6 km of a home postcode for example, which allows goods to be used and remain within the local area.

4.4.4 Bundling

Some items were sold as bundles which included other items such as bats, balls or clothing. Creating a bundle theoretically offered better value than potentially buying the items individually. This allows people to purchase cricket kits in bulk, however, it also means that buyers may purchase items as part of the bundle that they do not need e.g. clothing and these may end up as waste as they were not needed.

4.4.5 Sizing

Many of the items for sale on the resale websites were junior or youth sizes, this may be due to parents selling their children's kit once they have grown out of it. It is important to note it may not always be the player who is the person who lists items for sale, but instead a relative or carer. The condition of some of these items was almost new, indicating that children may have tried the sport and not continued it or that they had outgrown their cricket gear and it still had the potential for multiple uses by others. For cricket equipment, it was difficult to search by size as many of the resale websites filtered by age category e.g. 9 years or by size e.g. 129-134cm which does not correspond to the descriptions of many of the listings such as 'junior cricket glove'.

4.4.6 Time

Listing goods on resale sites is relatively easy if you are I.T literate and have an account with the reseller platform, however, it does require time to photograph, upload and write descriptions, as well as respond to any queries. Once sold it also requires time to pack, post (and track) the item. Some resale sites also take a commission of the sale value and require feedback and ratings to be left which also requires time. For those who do not need the income or do not have the time, they may find it quicker and easier to either donate or dispose of the cricket gear even if it has use left in it.

4.5 Stored waste

While there is an active and accessible market for resale via online sites, there remains a substantial amount of kit which is stored in garages, wardrobes and clubs as 'stored waste'. This is generally kit which is no longer likely to be used by the present owner but that they continue to keep or store as

there is no driver for them to donate, resell or reuse it. Many players may keep kit for sentimental or emotional reasons, some may wish to play again, but in reality will not, while others will keep it as they are not sure what else to do with it. The issue of stored waste is potentially a large one, although no data exists to quantify the figures involved, it is believed a high volume of kit could be stored. It is often during a large house cleaning or decluttering, that items will only be donated or resold and this may be done by someone who isn't the player e.g. a partner of the player who encourages them to donate or sell their kit.

4.6 Summary

The reuse market for cricket gear appears to be largest for the junior and youth sector, due to players outgrowing their gear or due to players trying the sport but then not maintaining it. The growth in online resale sites has created platforms for players to resell their gear easily. The condition of gear can vary substantially, generally, the condition of gear is good and appears to have multiple wears left in its lifespan. A limited amount of heavily used gear is listed for resale, this may be due to players believing it is too heavily used to be resold and instead donating it free of charge of recycling/disposing of it. It is unclear what happens to the majority of adult playing gear at the end of its life, if it is stored as waste or if it is so heavily used it is not suitable for resale.

Section 5

5.1 Introduction

This section begins to make connections between social, environmental, and economic sustainability and how these pillars can impact participation and accessibility when facilitated by the 3Rs.

Figure 15 makes the connection between the 3 sustainability pillars, environmental, economic and social. Reusing cricket gear enables products to have an extended lifespan and this reduces the amount of waste going to landfill. Reducing barriers to accessing cricket gear by making it more available allows more people to try out cricket and play regularly. By reducing the cost of equipment through resale or by making it available free or at a lower cost through reuse, repair and refurbishment, players can afford to continue to engage in cricket, especially at junior and youth levels where they would need to have access to the different-sized kits as they grow.



Figure 16 Golden Triangle (Charter and Czutkowna 2023)

5.2 Social value

Many of the reuse schemes feature examples on their websites of how the accessibility of the kit has supported increasing the self-esteem of the person who received it. Providing access to cricket gear and sports activities such as training programmes, coaching opportunities or supporting players to find future employment has provided social value. Freddie Flintoff recently highlighted the social value that participation in cricket can bring in a deprived area in Lancashire, England in a BBC documentary

'Freddie Flintoff's Field of Dreams'⁴³. Making the sport accessible (especially in areas of high deprivation) by providing gear at the grassroots level enables a greater level of player diversity to access the game and opens up opportunities to new players.

In 2019, LTSKR doubled the number of kits distributed, supporting groups in need such as refugees and asylum seekers, minority groups, and those living in deprivation or without access to team sports. In the same year, LTSKR supported the provision of cricket gear to the Wicketz programme in E&W (another initiative by Lords Taverners supporting young players).

Some reuse schemes such Cric-Kit which is a project within the larger organisation of Yorkshire Cricket Foundation form part of a series of programmes connected around community and social value activities which are aimed at increasing participation and adding social benefits through accessibility to cricket.

Cricket Asylum aims to improve the mental and physical wellbeing of disadvantaged and vulnerable individuals through cricket and related sporting activities, by bringing cricket to areas where young people may not have access to the sport and contributing to increasing community cohesion. It has several activities based around adding social value, for example:

- Free summer cricket camps, providing hundreds of free breakfasts, lunches, drinks and snacks, whilst also educating them about healthy food preparation. This also built confidence, and social skills and maintained physical and mental well-being in children who would have otherwise been very limited in what they would have access to.
- Cricket sessions for refugees and asylum seekers, and vulnerable individuals including young
 people within the foster care system. Giving them respite from the traumatic and adverse
 events they are dealing with, either by trying a new sport or playing one they love.
- Sessions and scholarships for individuals with mental health problems, such as autism, and young carers to improve their confidence, levels of physical activity, and well-being, whilst building personal and physical skills. This included talks on improving their self-esteem.
- Scholarships for underprivileged talented players who would not have financial means to
 access coaching, facilitating one player to progress to join the Lancashire County Cricket Club
 Elite Player Pathway and become the Lancashire U14 Player of the Year, Lancashire U13s,
 and another to West Yorkshire U15s.
- Free cricket coaching for primary schools across Calderdale and Lancashire to improve access for children to cricket.
- Developing cricket within central Halifax where there had not been a club for 25 years and where there is a significant South Asian population with an appetite for cricket but no club.
- Supporting the creation of local children's teams following a large open day with the newly formed team winning the Halifax Junior Cricket League U11 Development Cup.
- Imminently launching walking cricket sessions, reaching out to a new demographic of the community. This initiative aims to get older adults socialising and help their mobility and mental health.

It is clear that increasing access to cricket gear potentially reduces barriers to playing cricket. Reuse schemes are most effective when done in partnership with other initiatives focused on encouraging people to try/play the sport. Playing sports has been linked to better mental health and well-being and provides many positive benefits such as building community and self-confidence. Cricket foundations and clubs often have a charity or social welfare arm which offers accessibility to the sport through games, programmes and events, some of these use a shared kit bag with gear that is in good

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⁴³ https://www.bbc.co.uk/programmes/m00190pb

condition. Many of these may support the youth game and are aimed at getting young people into cricket, some provide equipment where there may be less need for protective equipment if softball versions of the game are being played. However, in E&W there appears a bias towards new kits and it is unclear if the reuse of heavily used items would be most beneficial in this country.

By providing equipment to those in need, reuse schemes have a substantial social impact. There are various case studies on reuse websites demonstrating how making cricket gear accessible and removing barriers to participation in sports can improve self-esteem and engage communities. Key impacts include increased opportunities for young people to join teams, access to coaching, and enabling players to regularly play team sports and compete. This has improved health and fitness benefits and builds confidence and self-respect. Providing support to marginalised and economically disadvantaged groups allows access to cricket that previously would not have been possible. It also allows players to progress from the softball version of the game to the hard ball, as it is at this stage that protective cricket equipment is most needed.

5.3 Economic

The economic benefit of reusing cricket equipment is clear for players but less clear for suppliers.. The 3Rs generally offer a lower-cost alternative to buying gear new, especially in a cost-of-living crisis, which could be seen to reduce barriers to the sport - see 4.2.1. However, the economic benefits for cricket brands are still in selling new gear. Business models of repair, refurbishment and resale are not yet established or commercially viable to offer economic benefits to them. Without any legal pressure to embrace and invest in building these models, it's likely brands will be slow to adopt them unless it is from a marketing or corporate social responsibility angle.

Some players would rather play sports that have lower entry costs and do not need so much equipment or would not use second-hand goods due to peer pressure in what can be seen as an elitist sport. Attitudes to second-hand goods are changing as sustainability awareness increases, however, some players still favour new goods due to performance but also due to how this may be perceived by other players.

5.3.1 Extended producer responsibility

Another aspect to consider - for those who put the products on the market - is the concept of Extended Producer Responsibility (EPR). EPR for textiles has been implemented in France and is due to come into force in Sweden and Netherlands in 2023 and should be a serious consideration for brands wanting to future-proof their business strategy. The focus is on clothing and textiles, and it is unclear whether sports equipment e.g. cricket gloves and pads might come into scope. In the UK, DEFRA is presently considering the post-BREXIT policy options for clothing and textiles including EPR and ecodesign and more clarity is needed to understand how this would impact cricket gear. The EU Strategy for Sustainable and Circular Textiles⁴⁴ sets out a framework and key actions to transition towards a more circular economy. While not yet adopted by the UK, if cricket equipment such as gloves and pads are categorised as in the scope of proposed legislation it will have an impact long term.

While not yet mandatory there is an opportunity for brands to think proactively regarding future policy and investigate possible services or business models needed in the entire life cycle of gear, such as repair, refurbishment, rental and resale models. Other sectors have embraced these opportunities as future commercial business strategies.

⁴⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022DC0141

5.4 Environmental

The environmental impact of cricket gear is substantial. As a growing global sport, cricket produces a significant amount of gear and waste appears to be high but undocumented. Most cricket gear is made from multiple components often a mix of plastic-based polymers, fabrics, and metals. Some of these materials are bonded together and cannot be separated for recycling. Most cricket gear has no viable disposal opportunities at the 'end of life' that do not harm the environment. In, addition there is very little known about the 'end of life' destination of cricket gear. It is likely cricket gear ends up in a landfill at the end of its life. Extending the life of cricket equipment and enabling the full use of the equipment is important to slow the amount of waste produced. A previous report published on the PASIC platform estimates the size of the cricket gear market and thus indicates the potential environmental impact⁴⁵. With a high percentage of kit being reused overseas the carbon emissions linked to transporting the goods needs to be considered against the social benefits of reducing barriers to entering the sport and enabling participation and the associated benefits that brings.

5.5 Summary

There is a relationship between the social, environmental and economic sustainability pillars and the 3Rs. Social aspects are strongest when offered in conjunction with opportunities to play the sport, especially within a team or within communities. Economically, there is substantial pressure on household finances and reuse schemes can play a part in reducing costs to access kit. Environmentally, it is unclear what happens to cricket equipment when players no longer need it, it can be assumed that a significant percentage ends up in landfill. Reuse schemes have a role in diverting kit from landfill and enabling multiple users to access kit.

Section 6 Conclusions and Recommendations

This report is part of a broader investigation by The Centre for Sustainable Design ® (CfSD) into sustainability and circularity of cricket gear⁴⁶.

6.1 Research Gaps

From the research conducted to date, multiple gaps exist. Limited data is available in the public domain on the size of the new and used cricket gear market, the reasons for repair, and if repair and refurbishment skills are available in E&W. Greater depth of research is needed to explore how the 3Rs can contribute to accessibility and participation.

6.2 Overall Findings

- Growth in world participation will increase demand for cricket gear.
- There are a limited number of reuse organisations, Lord Taverners Sports Kit Recycling is the largest.
- There have been no examples identified of large-scale repair or refurbishment of cricket gear within E&W, isolated examples have been found for helmets and wicketkeeper gloves.
- Resale tends to be focused on children and junior gear through large resale websites.
- Technical and safety concerns can create a barrier to the reuse, repair, refurbishment and resale of cricket gear.
- The link between social, environmental and economic sustainability facilitated by the reuse
 of cricket gear needs further research, with current economic factors such as cost of living
 impacting the ability of players to buy new gear.

⁴⁶ Research - The Centre for Sustainable Design (cfsd.org.uk)

6.2.1 3Rs

Reuse

- There are a limited number of formalised reuse organisations, Lord Taverners Sports Kit Recycling is the largest.
- Other organisations exist-
 - Cricket Kindness a reuse organisation which sends donations overseas has partnered with No Boundaries Cricket Club to continue the organisation's work in E&W due to the founder relocating to Australia.
 - Bat for a Chance is a reuse organisation that continues to accept cricket gear donations and distribute within the UK and overseas.
 - Regional initiative Cric-Kit run by Yorkshire Cricket Foundation collects donated goods and redistributes them within the local community in Yorkshire.
 - Cricket Asylum Foundation Kit Library collects donated items and offers players a lending library service for cricket gear, players are invited to contact them if they need kit and they will check the stock they have available.
 - Zero Waste Leeds runs a project called Together for Sport, it hosts a Facebook page which facilitates access to good quality second-hand goods by allowing its members to exchange sports gear that is no longer needed and allows people to put out requests for any sports gear required. It covers all sports including cricket, products tend to stay within the local area.
 - Play It Again Sport in Wales combines equipment reuse (and resale) with access to sport by offering sports activities. The products are resold for a nominal value and mainly reused in the local area. It covers all sports including cricket.
- Donations to cricket gear reuse schemes are a mix of excess stock⁴⁷ from brands and also clothing that players have used and are now finished with.
- The condition of gear donated can vary, with some being heavily used. This can affect reuse opportunities, especially as there are indications that players in E&W have a preference for nearly new clothing.
- Donations may be incomplete, for example, single gloves rather than pairs donated.
- Processing equipment for reuse can be time and labour-intensive.
- There appears to be limited reuse of excess stock or end-of (1st) life cricket clothing in E&W, with a lot of items being sent overseas.
- There are barriers to reuse within E&W, these include
 - A potential issue with brands prohibiting the reuse of equipment within E&W as it may cause brand damage or impact new sales. More research is needed to clarify this and understand the scale of the impact.
 - E&W players not wanting to use preowned and used equipment, preferring new.
- Informal hand-me-down sharing exists; however, this is difficult to quantify.
- Larger community reuse networks and charity shops also accept donations which may include cricket gear, but it is unknown to what scale cricket gear is donated to these organisations.
- Safety concerns for protective equipment such as helmets create a barrier to reuse.

Repair and Refurbishment

No large-scale coordinated repair service(s) for cricket gear have been identified.

⁴⁷ Excess stock is usually unsold inventory that has never been worn. It may still have all packaging and labelling intact.

- Two services offering refacing for wicketkeeper gloves have been identified.
- During a field trip to LTSKR central warehouse, the main reasons for repair (or product failure/degradation) were:
 - Gloves: staining, holes at seams, holes in palms, loss of elastic at cuffs, aged Velcro at cuffs.
 - Pads: cracking of leather/PU, holes in the top layer of fabric revealing the padding underneath, staining.
 - Helmets: missing face guards, chin straps
 - Shoes: missing spikes, holes cut into the toe (though this is not deemed a repair as the cuts were deliberate)
- Further research is needed to understand if the skills to repair cricket gear exist at a level
 which makes repair commercially viable in E&W compared to replacing it with a new
 product.
- There is little guidance on how to care for, extend use, and repair cricket gear. This information would benefit recreational players and parents of young players.
- Limited examples have been found (excluding bats) of refurbishment by manufacturers of cricket gear. One example for helmets, one example for wicketkeeper gloves.
- Limited data has been found on the impacts in the use phase of cricket gear and reasons for refurbishment.
- Brands cite safety concerns as a barrier to refurbishment.
- Product design inhibits refurbishment due to the way the products are assembled making it difficult to dissemble for refurbishment.
- The refurbishment business model for cricket gear is yet to be proven, brands have raised concerns this may affect sales of new products which potentially may be more profitable.

Resale

- Resale opportunities for cricket gear do exist, these tend to take the form of larger resale
 platforms such as eBay, Facebook Marketplace and Vinted. Smaller resale networks are
 emerging especially focused on children's equipment.
- Informal networks of resale, especially for children are thought to exist, these happen on a local level and often through word of mouth, and as such are difficult to quantify.
- Reuse organisations are increasingly considering the resale of donations, especially those
 from professional players which can be signed and resold/auctioned, or high-value items
 such as bats as these can provide an income to the organisation to facilitate its work.
- The resale of protective gear such as helmets needs further research, as any previous damage incurred to the helmet is unknown and the material structural integrity cannot be validated.

6.2.2 Social, Economic and Environmental

Social

• The cost of living crisis is having a detrimental effect on participation in sports, 27% ⁴⁸ of those surveyed for a London Sports report said they would cut back on physical activity due to rising costs.

⁴⁸ Ten years on from London 2012 nearly half of Londoners forced to cut back on exercise as cost of living crisis bites | London Sport Media Centre

• Multiple organisations connect reuse activities to community organisations to facilitate access to sports activities.

Environmental

• The majority of cricket gear does not decompose and has not been designed with environmental considerations in mind.

Economic

• 52%⁴⁹ of those surveyed for a London Sport report agreed the rising cost of living had limited their ability to afford both sports and leisure equipment

6.3 Conclusions

- With over 300 million people estimated to play cricket worldwide and 300,000 in E&W ⁵⁰, cricket is responsible for a significant volume of products which are required to play the game. There is a responsibility for the game to identify ways in which products can be repaired or reused.
- Reuse for used gear appears to be primarily overseas, with limited reuse within E&W.
- Lords Taverners Sports Kit Recycling have a vital role in the reuse of cricket gear globally
- Repair within E&W is limited and could be categorised as craftsmanship due to the specialist skills needed.

6.4 Recommendations

- Conduct additional research into gaps identified within this report, to increase understanding and develop deeper insights into opportunities identified. Specifically investigate:
 - If any tax barriers exist to reuse excess stock both in the UK and overseas.
 - o If brand embargos are placed on products by brands or retailers.
 - Skills for the repair of cricket gear in the UK, and costs involved.
 - o Demand from players for repair and refurbishment in the UK.
- Track and record the main reasons for repair or product failure of cricket gear to enable product development and innovation.
- Explore new design of cricket gear, and components and materials development to enable products to be repaired and refurbished more easily.
- Standardise components across brands e.g. on cricket helmet bolts so that items can be repaired more easily.
- Work with manufacturers to source components to enable repairs that might completed through repair cafés, reuse and/or social enterprise networks.
- Publish guidelines for cricket clubs on how to encourage the reuse of cricket gear locally.
- Develop alternative ways to show sponsorship on cricket gear so it can be reused in E&W.
- Strengthen links between cricket reuse organisations and community or cricket coaching organisations who have high levels of need for gear.

⁴⁹ Ten years on from London 2012 nearly half of Londoners forced to cut back on exercise as cost of living crisis bites | London Sport Media Centre

⁵⁰ Sustainability, cricket gear, clothing and apparel: components, materials and innovation opportunities (July 2022) – see https://cfsd.org.uk/projects/cricket/research/

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<u>Ten years on from London 2012 nearly half of Londoners forced to cut back on exercise as cost of living crisis bites | London Sport Media Centre</u>

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Appendix 1: Images - Various

Images showing used glove condition during a visit to LTSKR



Images showing pad condition during a visit to LTSKR



Appendix 2: PASIC (Platform for Accelerating Sustainable Innovation Cricket)

In 2021, The Centre for Sustainable Design ® (CfSD)⁵¹ at the University of Creative Arts (UCA) in collaboration with the British Association for Sustainable Sport⁵² (BASIS) launched PASIC (Platform for Accelerating Sustainable Innovation in Cricket)⁵³ as an online platform that aims to stimulate discussions, facilitate connections and networking and, complete R&D projects related to sustainable innovation in cricket equipment, clothing and apparel. PASIC is a neutral, research-based platform that focuses specifically on cricket.

CfSD is based at the University of Creative Arts (UCA)⁵⁴, Business School for the Creative Industries (BSCI)⁵⁵ and was established in 1995. CfSD focuses on research and knowledge transfer related to sustainable innovation and product circularity and completes research, training, and consultancy projects worldwide. The Centre has organised over a thousand conferences, workshops and webinars for businesses, policymakers and academia and participated in numerous UK and European-funded projects. Further details of research, projects and events can be found on the Research and Projects pages of the CfSD website www.cfsd.org.uk.

⁵¹ www.cfsd.org.uk

⁵² BASIS | The British Association for Sustainable Sport

⁵³ www.cfsd.org.uk/projects/cricket

⁵⁴ www.uca.ac.uk

⁵⁵ www.uca.ac.uk/business-school

Appendix 3: The 10 Rs Framework (J.Cramer)⁵⁶

The 10Rs is a framework and hierarchy of circular economy strategies.

Refuse: prevent the use of raw materials **Reduce:** decrease the use of raw materials

Redesign: renew product with a view to circularity principles

Reuse: use product again (as second-hand) **Repair:** maintain and repair product

Refurbish: revive product

Remanufacture: make new from second-hand product **Re-purpose:** reuse product but with another function

Recycle: salvage material streams with the highest possible value

Recover: incinerate waste with energy recovery

Refuse

Refuse to accept or prevent the use of raw materials.

Reduce

- Direct reduction of the quantity of materials used for products and services.
- This could be addressed in product (eco)design and development through for example by: Dematerialisation, defined by BSI (2017) as "delivery of a function with no or reduced requirement for materials, often by a move from a physical to a digital alternative"; reducing materials use; Avoidance of over-specifications; light-weighting (Source: BS8001:2017)

Redesign

To change the way something looks, is made, or works⁵⁷

Reuse

 Process/operation by which a product, component or material can be used again without requiring any reprocessing or treatment (Source: BS8001:2017)

Repair

 Process of returning a faulty product to a condition where it can fulfil its intended use (Source: BS8001:2017)

Refurbish

 Aesthetic improvement of a product, component or material, which might involve making it look like new, with no or limited functionality improvements (Source: BS8001:2017)

 $^{^{56}}$ Cramer, J. 2017. The Raw Materials Transition in the Amsterdam Metropolitan Area: Added Value for the Economy, Well-Being and the Environment, Environment. 59, 3: 14-21

⁵⁷ https://dictionary.cambridge.org/dictionary/english/redesign

Remanufacture

Process by which a used product is returned to at least its original performance with a
warranty that is equivalent to or better than that of the newly manufactured product
(Source: BS8001:2017)

Repurpose

• Using a product, its components or materials in a role that they were not originally designed to perform (Source: BS8001:2017)

Recycling

• Action of processing a discarded or used product, component or material for use in a future product, component or material (Source: BS8001:2017)

Recover

• Recover(y) is the process of using incineration to extract energy from waste by burning.

Notes

Upcycling and Resale do not fall under the 10Rs but should be considered as an option for life extension of cricket gear, materials and components

Resale

Resale is the sale of a thing previously bought.

Upcycling

 Process of converting secondary raw materials/by-products into new materials, components or products of better quality, improved functionality and/or a higher value (Source: BS8001:2017)