



# MEASURING REUSE ACTIVITY AND IMPACTS IN NSW

Executive Report - 17 June 2024





## **This project is an initiative of Charitable Reuse Australia and NSW Environment Protection Authority. This report was prepared by Rawtec.**

K Heinrich, L De Garis, and M Rawson (2024), Measuring Reuse Activity and Impacts in NSW: Executive Report, Charitable Reuse Australia and NSW Environment Protection Authority, 17 June 2024.

### **Acknowledgment of Country**

We acknowledge the Traditional Owners and Custodians of Country through Australia and their spiritual relationship with Sea and Country. We pay our respects to them, their cultures, and Elders past and present.

### **Recognition and thanks to project contributors**

We extend our sincere gratitude to the individuals and organisations who contributed to this study, as listed in the Introduction section of this report. Your support has helped make this significant project possible.

#### **Important notes**

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# Foreword

Omer Soker, CEO, Charitable Reuse Australia

A Circular Economy is essential for the sustainability of our environment, our society, and our economy. However, no one can create it alone, because the road to circularity is founded in collective collaboration, courage and creative actions that are framed by the Waste Hierarchy.

The *NSW Reuse Data Study* embodies all these values of circularity in action, for a world-leading Australian-first initiative to accelerate the transition to a Circular Economy through higher order priorities.

*Charitable Reuse Australia* commends the NSW Environment Protection Authority for its Circular Economy vision and insight to fund this critical data study to quantify the triple bottom line impact of reuse (and repair). It is the first Australian government agency to step up and embrace the challenge and opportunity of accelerating reuse at the top of the Waste Hierarchy. It is also the first government to genuinely collaborate in full partnership with the sector. This is Circular Economy leadership in action, and a role model for other Australian governments to follow.

The foundations to today's groundbreaking *NSW Reuse Data Study* began a long time ago. The charitable reuse sector has been living true to Circular Economy principals for over 140 years since the first charity shop in Australia began extending the life of products through reuse, to benefit our environment, society, and economy.

More recently, Matt Allen of the *Zero Waste Network* began advocating for reuse to be measured because (as management guru Peter Drucker once said) 'What gets measured, gets managed'. However, it wasn't until *Zero Waste Network* merged with *Charitable Reuse Australia* in 2019 that we were able to submit a successful ARC Grant application with Monash University to 'Measure the Benefits of Reuse in a Circular Economy' and develop the *National Reuse Measurement Guidelines* that define a standardised approach to collecting, interpreting, and reporting on reuse impact data.

This is an example of collaboration, courage and creative actions coming together from a group of key stakeholders all committed to working together to advance the Circular Economy.

The datasets from the *NSW Reuse Data Study* outlined in this report are as inspiring as they are powerful. Used effectively, they can inform the development of Circular Economy policy in Australia. They also provide a credible evidence base demonstrating the importance of higher order interventions like reuse. In short, they prove what the Waste Hierarchy has known all along – that the most effective interventions are prioritised at the top.



# Foreword

**Tony Chappel, CEO, NSW EPA**

The NSW Government is committed to creating a sustainable NSW by transitioning to a circular economy. It will require a collective shift in thinking and behaviour away from the 'take, make, dispose' model for materials and instead to embrace circular business models where resources are 'reused, repaired, repurposed and recycled'. While the transition to a circular economy presents challenges, it also offers immense economic opportunities. To reach this circular future will require innovation and collaboration among sectors and value chains as we remake current practices to find sustainable solutions.

The *NSW Environment Protection Authority (EPA)* is dedicated to environmental stewardship by establishing the regulatory framework needed to facilitate this transition. We are actively collaborating with stakeholders, government, industry, businesses and the community to change policies, introduce new regulations and co-design programs that will transform our approach to waste and resource recovery. To achieve circularity, we need to expand our thinking beyond just recycling and include reuse, repair and repurposing which are part of the upper levels of the waste hierarchy. At the heart of circularity is valuing materials from the design stages all the way to end-of-life. For instance, reuse involves shifting our perspective from products being viewed as 'waste' and instead recognising them as a valuable resource.

The *EPA* has welcomed *Charitable Reuse Australia* as one of our Sustainability

Partners, recognising their commitment to educating the public on the value of circular economy principles, which is clearly demonstrated in the research conducted for this report.

The report provides the first comprehensive, robust and quantitative findings on the benefits that the reuse sector brings to the NSW community. These benefits are both social – job creation, consumer savings and charity fundraising – and material – reducing resource consumption and carbon emissions.

The results are striking and definitive. Without the data presented in this report, how many policymakers would predict that reuse generates 25 times more jobs than recycling, per tonne of material processed?

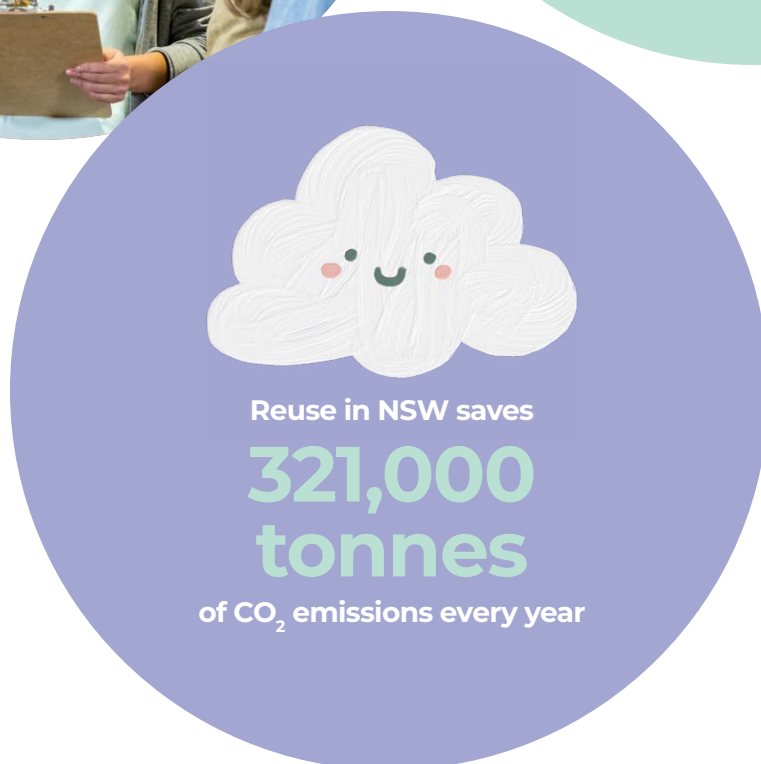
These findings will help government, industry and the community make better, more informed decisions and will help businesses and community partners discover innovative pathways for products and materials.

*Charitable Reuse Australia* is developing a suite of policies and projects to help the reuse sector measure its activities and impact. They are also seeking opportunities to accelerate progress towards our circular economy targets through 'highest and best-use' interventions, such as reuse, repair and repurposing. This work complements the *EPA's* own purpose and directions, and we are delighted to partner with *Charitable Reuse Australia* on this report.

# Executive Summary

## About the Project

The NSW reuse sector is a vibrant ecosystem rehoming millions of secondhand goods annually. In an Australian first, this project adopted the National Reuse Measurement Guidelines from Monash University to quantify this reuse activity and associated impacts. The project is an initiative of Charitable Reuse Australia in partnership with, and funding from, NSW EPA. Rawtec was engaged to conduct the research, supported by expert advisors, a survey support team, and a Project Working Group comprised of representatives from several reuse organisations across NSW. The study demonstrates the benefits delivered by the sector, including job creation, consumer savings, charitable funding, and carbon emissions reductions.



# Executive Summary

## Key Findings

The study covered reuse activity across charity shops, social enterprises, secondhand clothing stores, rent-a-racks, reclaimed timber shops, and reuse collectors/commercial exporters. In 2022-23, these organisations had the following impact in NSW:

**Volume of Reuse**  
Reused an estimated  
**107.7 million**  
secondhand items.



**Economic Value**  
Sold or donated secondhand goods that are reused valued at approximately  
**\$243 million**  
in 2022-23.



### Contributions to Social and Environmental Purposes

Raised an estimated  
**\$51 million**  
in funds that was reinvested into social and community programs and initiatives.

**Cost of Living Relief**  
Saved the NSW community an estimated  
**\$432 million**  
through selling and providing secondhand goods, compared to buying new items.



## Employment Impact

**Paid Employment**  
Generated approximately  
**1,535 full-time**  
equivalents (FTEs), including 348 FTEs for individuals facing barriers to employment.

**Paid Employment Compared to Recycling**  
Generated  
**25 times more jobs**  
than recycling (on a per tonne basis).

**Volunteers**  
Employed  
**3,306**  
full-time equivalent (FTE) volunteers across NSW.



# Executive Summary



## Training and Skill Development

Provided an estimated

**158,000 hours**

of training to their paid staff and volunteers.



## Repair

Reuse organisations repaired an estimated

**3,900 tonnes**

of items for reuse, accounting for up to 8% (by weight) of all items reused.

## Community Engagement

Facilitated an estimated

**16 million**

transactions between the public and reuse shops.



## Environmental Impact



### Waste Diversion

Diverted an estimated

**49,900 tonnes**

of products from landfill to reuse.



### CO<sub>2</sub>-e Emissions

Saved an estimated

**321,000 tonnes**

of CO<sub>2</sub>-e, equivalent to removing **134,000** passenger vehicles from the road.



### Water Savings

Saved approximately

**51,000 megalitres**

(ML) of water, equivalent to the volume of **21,000** Olympic-sized swimming pools.



### Land Use

Saved about

**80,000 hectares**

of land, equivalent to the size of **75,000** soccer pitches.

### Virgin Materials

Avoided the direct consumption of an estimated

**29,900 tonnes**

of virgin materials contained in displaced products.<sup>1</sup>



<sup>1</sup> Secondhand products do not displace new products on a one for one basis. This estimate accounts for displacement rates, and only includes the avoided virgin materials in the displaced end products. Additional volumes of virgin materials are avoided upstream (e.g. offcuts from producing textiles) but were not quantified in this study.

# Executive Summary

## Challenges

NSW reuse organisations face several key challenges. The quality and quantity of donations have declined due to the effects of fast fashion and competition from online marketplaces. Rising labour, energy, and land costs are putting financial pressure on reuse organisations. Not-for-profit reuse organisations face volunteer shortages. The administrative burden of managing waste levy exemptions and complex government grants is significant. There are high costs with placing donation bins at retail locations. Additionally, there are issues with illegal dumping and scavenging of public donation bins. There is a critical need for increased support in managing the lifecycle of products through effective product stewardship.

## Conclusion

The reuse sector in NSW significantly contributes to sustainable development by generating economic value, creating jobs, supporting community programs, and achieving considerable environmental benefits. These findings underscore the importance of supporting and expanding reuse activities to enhance their positive impacts on society and the environment. The findings can be used to guide the development of future policies on reuse, thereby accelerating NSW's transition to a circular economy.





# Introduction

## About the Project

The NSW reuse sector is a vibrant ecosystem rehoming millions of secondhand goods annually. This study estimates reuse activity and impacts in NSW in 2022-23. The project demonstrates the immense benefits that the sector delivers, including employment, consumer savings, raising funds for charitable programs, carbon emissions reductions and more.

## Who is behind this study?

This project is an initiative of Charitable Reuse Australia in partnership with the NSW EPA. Rawtec was engaged to lead research for the project with support from the Project Working Group, Expert Advisors and Survey Support Team, and input from reuse organisations (listed below).

|  |  |
|--|--|
| <b>Project Partners</b>                            | Charitable Reuse Australia and NSW EPA   |
| <b>Lead Researcher</b>                             | Rawtec   |
| <b>Project Working Group</b>                       | Omer Soker (Charitable Reuse Australia), Alejandra Laclette, Mitchell Jones, Marcelle Psaila, and Sarah Le (NSW EPA), Kirsten Junor (Reverse Garbage), Martin Nordstrom (Salvos Stores), Tony Rallis, Katie Revie, and Alex Dimou (UTURN), Kat Heinrich and Mark Rawson (Rawtec), Annie Walker (SSROC), Yolanda Saiz and Phil Coyte (Vinnies).   |
| <b>Project Expert Advisors</b>                     | Assoc. Prof Ruth Lane (Monash University), Prof. Tommy Weidmann (University of New South Wales), Tim Grant (Lifecycles), and Dr Joe Pickin (Blue Environment).   |
| <b>Survey Support Team</b>                         | Carrie Hamilton, Susan Goldie, and Salma Ghoraba   |
| <b>Organisations that Participated in Research</b> | 1 World Charity Shops, ADRA Australia, Agape Outreach, Among the Trees, Anglicare (NSW), Australian Red Cross, Bega Valley Shire Council, Bower Reuse & Repair Centre, Cancer Wellness Support, Circle Paints, Dumped and Ditched, Fairhaven, Garage Sale Trail, Green Connect, Lifeline Broken Hill Country to Coast, Lifeline Direct, Lifeline Harbour to Hawkesbury Sydney, Lifeline Macarthur Western Sydney, Lifeline Mid Coast, Lifeline Northern Beaches, Lifeline South Coast, One Ten Enterprises, Pambula Imlay House Op Shop, Pottsville Beach Neighbourhood Centre, Resource Recovery Australia (trading as Reviva), Reverse Garbage, Salamander Bay Recycling, Sap Impex, Save the Children, SCR Group, St Vincent de Paul Society (NSW), St Vincent de Paul Society (Canberra/ Goulburn), Statewide, Ted Noffs Foundation, The Hope Community Social Venture, The Reconnect Project, The Salvation Army, The Social Outfit, The Uniform Exchange, The Wayside Chapel, Thread Together, UTURN (King Cotton Australia), Venla Fashion, Willing and Able Foundation, and Zara's House (Refugee Women and Children's Centre) |

## How was data collected and reported?

The project adopted the National Reuse Measurement Guidelines (Monash University) to quantify reuse activity across NSW and triple bottom line impacts. Data on reuse volumes was collected via a survey with reuse organisations using point of sales data where available, and extrapolated to estimate reuse activity in NSW.

## What reuse activity is covered in this report?

This project estimates reuse activity across NSW reuse organisation types listed in Table 1. This includes charity reuse/op shops, other not-for-profit (NFP) reuse organisations<sup>2</sup>, commercial secondhand clothing shops, commercial reuse collectors/ exporters, rent-a-racks, and reclaimed timber shops.

Reuse activities not captured in this study include pawnshops, salvage yards, commercial secondhand furniture shops and council reuse shops. The project survey could be expanded in future years to capture these additional volumes of reuse activity.

Pre-consumer items are new items sold/donated from retailers and manufacturers to organisations for resale. These items were excluded from the project analysis because they have not previously been worn or used, and therefore are not technically counted as 'reuse'.

Table 1: Reuse organisation types included, separately reported, and not captured in study

| Reuse Organisation Types Included  | Separately Reported   | Not Captured  |
|--|---|---|
| <ul style="list-style-type: none"><li>● Charity reuse / op shops</li><li>● Other NFP reuse organisations</li><li>● Secondhand clothing shops (commercial)</li><li>● Commercial reuse collectors/ exporters</li><li>● Rent-a-racks</li><li>● Reclaimed timber shops</li></ul> | <ul style="list-style-type: none"><li>● Online marketplaces</li></ul> | <ul style="list-style-type: none"><li>● Pawnshops</li><li>● Commercial secondhand furniture shops and salvage yards</li><li>● Council reuse shops<sup>3</sup></li></ul> |

<sup>2</sup> includes other not-for-profit reuse organisations that don't identify as traditional charities, with their focus on enterprise to help society.

<sup>3</sup> unless run by charities which is captured.



# Items Reused

In 2022-23, an estimated 107.7 million secondhand items were rehomed through NSW charity reuse/op shops, other NFP reuse organisations, commercial secondhand clothing shops, commercial reuse collectors/ exporters, rent-a-racks, and reclaimed timber shops. Of these items, 36.8 million were resold locally. Additionally, 3.4 million were donated to welfare recipients. The remaining 67.5 million items were reused overseas (Table 2).

Table 2: Estimated number of items reused by reuse organisations in NSW, 2022-23. Subtotals may not sum due to rounding.

|                                   | Items (#/yr)       | Weight (t/yr) |
|-----------------------------------|--------------------|---------------|
| Resold Locally                    | 36,830,000         | 28,700        |
| Donated to NSW Welfare Recipients | 3,410,000          | 1,100         |
| Exported Overseas and Reused      | 67,470,000         | 20,000        |
| <b>Total</b>                      | <b>107,710,000</b> | <b>49,900</b> |

These 107.7 million items included:

- **81.5 million** items (or 21,100 t) of clothing
- **7.1 million** items (or 5,100 t) of other textiles
- **370,000** items (or 6,000 t) of furniture and large appliances
- **15.8 million** items (or 5,000 t) of smaller household and homeware items, toys, and games, and
- **2.9 million** items (or 12,600 t) of other reuse items (such as wood and timber products)

Table 3 provides a further breakdown of items reused by product category.

## Box 1 - Quantifying reuse across online marketplaces

Large volumes of secondhand items are exchanged via online marketplaces, such as eBay, Gumtree, and Facebook Marketplace operating primarily in the consumer-to-consumer space (C2C). We sought to collect data from these online marketplaces via the survey, however, these organisations did not provide data for this project. To fill this data gap, we did a high-level analysis of publicly available data on the value and type of items exchanged. We estimate that a further 16 million items are rehomed in NSW through online marketplaces (across the same product categories listed in Table 3). These findings are presented separately from other data in this report due to the limited confidence in the accuracy of estimates for online marketplaces. Consequently, estimates for online marketplaces are omitted from the remainder of the report to maintain data integrity. Further research is needed to refine this estimate.



Table 3: Further breakdown of data from Table 2 showing the estimated number of items reused and weight (tonnes) per product category, 2022-23. Subtotals may not sum due to rounding.

|   | <b>Items reused<br/>(#/yr)</b> | <b>Weight reused<br/>(t/yr)</b> |
|---|--------------------------------|---------------------------------|
| <b>Clothing &amp; Textiles</b>                                    | 88,640,000                     | 26,200                          |
| Clothing  | 81,510,000                     | 21,100                          |
| Clothing (Knitwear)   | 830,000                        | 300                             |
| Clothing (other than knitwear)                                    | 7,580,000                      | 1,900                           |
| Clothing (not specified)  | 70,150,000                     | 17,500                          |
| Footwear  | 2,950,000                      | 1,300                           |
| Textiles  | 7,130,000                      | 5,100                           |
| Textiles: Raw textiles and fabrics                                | 130,000                        | <100                            |
| Textiles: Products and carpet                                     | 4,330,000                      | 4,300                           |
| Textiles: Handbags and suitcases                                  | 1,950,000                      | 600                             |
| Textiles (not specified)  | 720,000                        | 200                             |
| <b>Households and Homewares, Toys and Games</b>                   | 16,170,000                     | 11,000                          |
| Furniture & Large Appliances                                      | 370,000                        | 6,000                           |
| Indoor Furniture  | 350,000                        | 5,200                           |
| Whitegoods and large appliances                                   | 20,000                         | 700                             |
| Smaller Items   | 15,800,000                     | 5,000                           |
| Cushions and Furnishings  | 500,000                        | 200                             |
| Glassware   | 1,020,000                      | 300                             |
| Ceramics and Pottery  | 970,000                        | 400                             |
| Metal homewares, cutlery & cookware                               | 1,000,000                      | 300                             |
| Toys, sports (including bikes), games, art supplies & bric a brac | 3,010,000                      | 800                             |
| Books, magazines, software and video games                        | 3,160,000                      | 800                             |
| Music and Videos  | 1,850,000                      | 300                             |
| Computers, peripherals and home electronics                       | 400,000                        | 100                             |
| Homewares/ Bric a brac / Electronics (not specified)              | 3,890,000                      | 2,000                           |
| <b>Other Reuse Items</b>  | 2,890,000                      | 12,600                          |
| Wood and timber products  | 80,000                         | 1,000                           |
| Plastic products  | 270,000                        | 100                             |
| Rubber Products   | <1,000                         | <100                            |
| Ferrous metal   | 430,000                        | 400                             |
| Non-ferrous metal   | 30,000                         | <100                            |
| Metal tools and hardware  | 70,000                         | 100                             |
| Outdoor tools and machinery                                       | 10,000                         | 100                             |
| Other (not specified)   | 2,000,000                      | 11,000                          |
| <b>TOTAL</b>  | <b>107,710,000</b>             | <b>49,900</b>                   |

# Economic Impact

## Employment

Reuse organisations generated paid employment for an estimated **1,535 full time equivalents (FTEs)** in 2022-23. This includes **348 FTEs facing barriers to employment**, such as people with a disability and the long-term unemployed. Further, an estimated **3,306 FTEs volunteer** their time across reuse organisations.

Reuse generates more jobs on a per tonne basis than recycling and landfill:

- The estimated direct FTE employment per 10,000 tonnes of waste is 9.2 for recycling and 2.8 for landfill disposal.<sup>4</sup>
- This compares to 228 paid FTEs per 10,000 tonnes of material handled for reuse (Table 4).

### In other words:



Reuse generates  
**25 times**  
more jobs than recycling  
(on a per tonne basis).

Table 4: Estimated employment by reuse organisations in NSW, 2022-23.

|  | <b>Paid (FTEs)</b> | <b>Volunteer (FTEs)</b> | <b>Total (FTEs)</b> |
|--|--------------------|-------------------------|---------------------|
| Open employment                        | 1,187              | 2,575                   | 3,762               |
| Barriers to employment                 | 348                | 731                     | 1,079               |
| <b>Total</b>                           | <b>1,535</b>       | <b>3,306</b>            | <b>4,841</b>        |
| <b>FTEs per 10,000 tonnes handled*</b> | <b>228</b>         | <b>491</b>              | <b>719</b>          |

\* denominator used accounts for the fact that material is handled twice in some instances across multiple organisations. E.g. material donated to a charity may be sent to a commercial reuse collector/exporter. Total tonnes handled for reuse = 67,300 t/yr, whereas total tonnes reused = 49,900 t/yr. Total tonnes handled for reuse is defined as the sum of all items handled by reuse organisations, excluding items sent to landfills in Australia.

<sup>4</sup> Access Economics (2009), Employment in waste management and recycling.

## Value of secondhand items sold or donated

Secondhand items sold or donated were valued at an estimated at **\$243 million** in 2022-23. This includes:

- \$213 million of items resold in NSW (e.g. through secondhand and op shops)
- \$14 million of items donated to welfare recipients, and
- \$16 million of items exported overseas and reused (Table 5).

Table 5: Estimated value of secondhand items sold or donated by NSW reuse organisations and are reused, 2022-23. Subtotals may not sum due to rounding.

|                                    | Value (\$)           |
|------------------------------------|----------------------|
| Resold in NSW                      | \$213,000,000        |
| Donated to NSW welfare recipients  | \$14,000,000         |
| Sold for overseas export and reuse | \$16,000,000         |
| <b>TOTAL</b>                       | <b>\$243,000,000</b> |



# Social Impact

## Cost-of-living relief

Australia is facing a cost-of-living crisis. Reuse organisations provided an estimated **\$432 million** in community savings in 2022-23. This represents the savings to the community from buying or receiving secondhand goods compared to buying new.



Reuse organisations help to relieve cost of living pressures, saving NSW residents **\$432 million**

## Reinvestment of surplus into social and community programs and initiatives

Reuse shops provide an important source of revenue to help fund social and community programs and initiatives. In NSW, an estimated **\$51 million** was reinvested by reuse organisations into social and community programs and initiatives in 2022-23. This includes support for people facing homelessness, people with a disability, youth, elderly people, families, and other social and community support.



Reuse organisations reinvested **\$51 million** in social and community programs and initiatives.

## Hours of training provided per year

Reuse organisations generated an estimated **158,000 hours** of training to their paid staff and volunteers in NSW in 2022-23. This included work-readiness training, life skills, case management support and professional development (Table 6).

Table 6: Training provided to paid staff and volunteers across NSW reuse organisations (estimated hrs/year), 2022-23. Subtotals may not sum due to rounding.

|  | Total Training Provided (hrs/yr) |
|--|----------------------------------|
| Formal work-readiness training                               | 38,000                           |
| Informal work-readiness training                             | 109,000                          |
| Life skills (e.g. personal presentation, communication, etc) | 4,000                            |
| Case-management support                                      | 3,000                            |
| Professional development (including training)                | 5,000                            |
| <b>TOTAL</b>   | <b>158,000</b>                   |

## Community Engagement

Reuse shops provide opportunities for the public to participate in reuse activities. The public undertook an estimated **16 million transactions** across NSW in 2022-23.

# Environmental Savings

## Landfill diverted

Reuse organisations diverted an estimated **49,900 tonnes** of products from landfill to reuse in 2022-23.

## Avoided consumption of virgin materials

Buying secondhand reduces the need for consumers to buy new products. This, in turn, avoids consumption of virgin materials that would otherwise have been used to make the new products. The direct consumption of an estimated **29,900 tonnes** of virgin materials was avoided through reuse activity by NSW reuse organisations.<sup>5</sup>



**Reuse activities in NSW provides substantial savings of greenhouse gas emissions, water, and land.**

## Carbon, water, and land savings

Extracting virgin materials and manufacturing them into them into new products generates greenhouse gas emissions, uses land, and consumes water. Using secondhand products avoids environmental impacts of making new products. Reuse activity saved an estimated:

- **321,000 tonnes of Carbon dioxide equivalent (CO<sub>2</sub>-e)**, equivalent to taking 134,000 passenger vehicles off the road
- **51,000 megalitres (ML) of water**, equivalent to the water volume of 21,000 Olympic-sized swimming pools, and
- **80,000 hectares (ha) of land**, equivalent to the size of 75,000 soccer pitches (Table 7).

These are high-level estimates based on available environmental conversion factors.

Table 7: Estimated environmental savings of reuse activity through NSW reuse organisations, 2022-23.

|  |         |
|--|---------|
| Landfill diversion (tonnes)                                  | 49,900  |
| Avoided consumption of virgin materials (tonnes)             | 29,900  |
| Carbon emission savings (tonnes CO <sub>2</sub> -e)          | 321,000 |
| > equivalent number of passenger vehicles taken off the road | 134,000 |
| Water savings (ML)   | 51,000  |
| > equivalent number of Olympic size swimming pools           | 21,000  |
| Land savings (ha)  | 80,000  |
| > equivalent number of soccer pitches                        | 75,000  |

<sup>5</sup>Secondhand products do not displace new products on a one for one basis. This estimate considers rates at which consumers displace new items for new, assumed at 65% for Clothing and Textiles, 70% for furniture, and 50% for all other reuse items. This estimate only includes avoided virgin materials in the displaced end products. Additional volumes of virgin material are avoided upstream (e.g. offcuts from producing textiles) but were not quantified in this study.



# Repair

Reuse organisations repair up to **8% of all items reused**. Most repair occurs offshore. Of items that are exported from Australia, an estimated 3,700 tonnes are repaired internationally. Locally, an estimated 200 tonnes of items are repaired.

Table 8: Estimated number of items repaired locally and internationally prior to reuse. Subtotals may not sum due to rounding.

|                                      | <b>Locally Repaired (t/yr)</b> | <b>Internationally Repaired (t/yr)</b> | <b>Total (t/yr)</b> |
|--------------------------------------|--------------------------------|--|---------------------|
| Clothing and textiles                | <100                           | 3,700                                  | 3,800               |
| Toys, games, household and homewares | 100                            | - <sup>6</sup>                         | 100                 |
| Other reuse items                    | -                              | -                                      | -                   |
| <b>TOTAL</b>                         | <b>200</b>                     | <b>3,700</b>                           | <b>3,900</b>        |
| <b>% OF TOTAL REUSE</b>              |                                |  | <b>8%</b>           |



<sup>6</sup> A small volume of data was reported, but was insufficient to extrapolate.

# Challenges

NSW reuse organisations face several challenges, including:

- **Decline in Quality Donations:** The quantity of higher quality donations is decreasing due to lower quality of items resulting from fast fashion, and heightened competition from online marketplaces.
- **Volunteer Recruitment and Retention:** There has been a long-term decline in the proportion of the Australian population who undertake formal volunteering. As a result, attracting and retaining volunteers, who are crucial to supporting not-for-profit reuse operations, is becoming increasingly difficult.
- **Cost Pressures:** Rising labour and energy costs are adding financial pressure to reuse organisations.
- **Administrative Burden:** The administration required for waste levy exemptions is onerous.
- **Grant Issues:** Government grants often involve large administrative work, making them less attractive to smaller reuse organisations.
- **Onshore Costs:** High labour, energy, and land costs make onshore repair prohibitive in many cases. The same is true for sorting lower-grade textiles prior to export for offshore reuse.
- **Illegal Dumping and Scavenging:** Waste dumped by the public at reuse drop-off locations and bin scavenging are adding costs to reuse operations.
- **Bin Placement Costs:** Housing donation bins at locations such as shopping centres incur costs. Reuse organisations argue that it should be free since they are helping retailers address waste issues.
- **Need for Product Stewardship Support:** Greater support for product stewardship is essential to support reuse activities.

## Closing Remarks

In conclusion, this project marks a groundbreaking effort in quantifying the immense impact of the reuse sector in NSW, using the National Reuse Measurement Guidelines from Monash University for the first time. The findings illustrate the pivotal role of reuse activities in fostering sustainable development, as evidenced by the sector's contributions to job creation, consumer savings, charitable funding, and reduced environmental pressures. The collaboration between Charitable Reuse Australia, NSW EPA, and Rawtec, supported by expert advisors and a dedicated Project Working Group, exemplifies the collective commitment to advancing the understanding and promotion of reuse initiatives.

Despite the sector's achievements, significant challenges persist, including volunteer shortages, financial pressures, and administrative burdens. Addressing these challenges demands collaborative efforts from policymakers, industry stakeholders, and the community to ensure the continued success and resilience of the reuse sector.

