# Uniform Recycling Trial for Sydney Councils

A case study | August 2024









## Summary

- SSROC coordinated a uniform recycling trial for eight Sydney councils that was funded by the NSW EPA.
- Over 2600kg of old uniforms were diverted from landfill and recycled over the 14-month trial.
- Old uniforms are securely shredded into a soft infill fibre that can be used in a range of products.
- Councils collected an average of 16-30kg of uniforms per month.
- Costs between \$500 \$1500 per year depending on the volume of uniforms.
- Benefits include secure destruction of uniforms, diversion from landfill, reduction of carbon emissions and positive staff engagement.
- Keys to success include having staff champions monitor the bin and redirect reusable uniforms into a second-hand uniform pool, regular staff reminders, and including a requirement to hand in uniforms on staff exit forms.

Pictured left: City of Sydney's uniform recycling collection bin. Photo by Cassandra Hannagan



## Introduction

- The <u>Textiles Action Plan for Sydney Councils</u> 2022-26 outlined focus areas and targets to work towards to reduce textile waste in council operations and community services.
- To help reduce textile waste in council operations, SSROC has coordinated a 14-month Uniform Recycling Trial for eight Sydney councils including City of Canterbury Bankstown, City of Canada Bay, City of Sydney, Hornsby Shire Council, Ku-ring-gai Council, Strathfield Council, Waverley Council and Woollahra Council.
- Each council had a collection bin (pictured left) in their depot or main administration building for staff to deposit clean, old uniforms. This bin is then collected monthly with uniforms weighed and sent for processing to <a href="Upparel">Upparel</a> in Melbourne. Upparel securely shreds the uniforms into a soft infill fibre that can be used in a range of products including in insulation, pet bedding, office and furniture products.
- From April 2023 until the end of June 2024 over 2600kg of uniforms have been collected and recycled in the trial.
- The objective of the trial was to determine the volumes, costs and benefits of recycling council uniforms. This case study captures those learnings.

Pictured left: Canterbury Bankstown's uniform recycling collection bin at their Administration building



## **Benefits**

- **Secure destruction:** Branded uniforms are collected, securely shredded and recycled to prevent misuse of old council uniforms. Having a uniform recycling collection bin helped councils in the trial establish a secure, ongoing process for unwanted uniform garments.
- Transparency and staff engagement: Staff can see there is a transparent process for end-of-life uniforms and liked seeing that their council is taking responsibility for its operational waste.
- **Diversion of uniforms from landfill:** End of life uniforms are recycled into soft infill fibre that can be used in the manufacture of other products. Uniforms are typically mixed natural and synthetic fibres that when placed in landfill won't breakdown easily and will contribute to CO<sup>2</sup> emissions.
- **Keeping usable uniforms in circulation:** Extending the life of new and barely used uniforms as well as reusable uniforms in good condition. The uniform recycling trial prompted staff to pull out new and good condition uniforms from collections, set up second-hand uniform clothing pools and educate staff about what to do with uniforms in good condition.
- **Strategic alignment:** Extending the life of council uniforms (through reuse and redistribution) and recycling old uniforms helps each council meet their strategic objectives to reduce carbon emissions and waste.

# **Key Learnings**

#### **Volumes**

16-30kg/per month depending on the size of council and number of staff wearing uniforms. Variations can also occur each month due to season changes, set uniform allowances or sudden increases due to uniform or staff changes.

# Small annual budget needed for uniform recycling

Annually councils could budget between \$500 – 1500 per year depending on the number of staff wearing uniforms. Some councils plan to fund it through their corporate sustainability budget, or facilities budget. One council has made providing a take back service as a requirement in their new uniform supply contract.



Pictured above: Hornsby Council's uniform recycling collection bin at their Depot

# Staff exit forms should have a requirement to hand in clean uniforms

Handing in uniforms can be part of an exit checklist that is signed off before a staff member leaves, much like handing in a work phone. A few councils had this in place to help ensure that branded uniforms are handed in, securely shredded and recycled to prevent potential misuse of uniforms.

We have added a requirement to the staff exit form to hand in clean uniforms which is working really well.

(Strathfield Council)

# **Key Learnings**

## Staff champions are needed

A staff champion at the Depot or near where the bin is located was important for many councils to help spread the word and ensure staff only put used and clean uniforms in the bin. They also helped monitor how full the bin is.

We have a sustainability champion at stores who regularly monitors the bins and pulls out any new or reusable items. They will then send out a staff email saying "we have 2 jackets in these sizes if anyone needs it"; that informal reuse of uniforms is working really well. (Hornsby Council)

We have a sustainability champion in the depot who regularly checks uniforms in the bin and if never worn or in good condition then he puts them straight into the new uniform pile that is at the same depot so that they can be reissued to another person.

(City of Canada Bay Council)

## **Troubleshooting**

Most councils reported finding some new uniforms with tags in the bin and needing to remove them and place them in the new uniform area. One council had an issue with unclean uniforms being placed in the bin. Both issues have been resolved by having a staff member regularly monitor the bin and reinforce the message about uniforms needing to be clean.



Pictured above: Waverley & Woollahra Councils shared uniform recycling collection bin

### **Engagement**

Councils reported that staff were engaged and liked working for an organisation trying to take responsibility for the uniforms it purchases.

Staff do like it, there is a positive sentiment around it. It's also been effective to email teams wearing a uniform a week before the collection is due to remind them a collection is coming.

(Woollahra Council)

We promoted it on the staff intranet with information on how to order uniforms, where to take them for recycling, and information about the second hand clothing pool for uniforms that can be reused.

(City of Canterbury Bankstown)

Our staff have really got behind it, and often say how pleased they are to have the opportunity to recycle uniforms

(City of Sydney Council)



Clockwise from above:
Buttons, zippers and logos
are removed and logos
shredded, garments are then
shredded into a soft infill
fibre which can be made into
a range of products including
bags.







## **Collections**

- All eight councils had a uniform collection bin usually located at the Depot where staff access new uniforms. Two councils also placed a collection bin in their main Council Administration building.
- During the trial period, staff placed uniforms in the 120 litre wheelie bin that has a cork flu cover, this bin is then collected monthly and swapped with an empty one. Like any new service, there were some issues initially with getting the collector to come on the scheduled day to the correct location which was resolved over time.
- From July 2024 onwards, Upparel's collection system changed to prepaid carboard boxes taking 20kg of uniforms each, once a box is full then a council staff member books a pickup with Upparel.

## **Processing**

- All collected uniforms are processed in Melbourne, Australia by Upparel, who shred all uniforms received to ensure a secure process for branded garments. The shredded uniforms are then processed into a soft infill fibre onsite. This fibre is then used by manufacturers in insulation, pet bedding and furniture products.
- Upparel also remanufacture some of the soft infill fibre to make their own products from 100% recycled textile waste in their <u>UPTex</u> range which includes bags (pictured), acoustic panels, office partition boards, indoor signage and desk mats.



## **Costs**

- Average costs for collection during the trial were \$720 per year for a monthly collection. Processing costs vary according to the volumes generated as the recycling cost is per kg. The cost range per month in this trial was on average between \$56 (smaller councils averaging 16kg a month) to \$105 (larger councils averaging 30kg per month).
- From July 2024 onwards, most councils are using Upparel's pre paid boxes which cost \$500 for ten 20kg boxes and this cost includes collection and processing. Ten 20kg boxes is likely to be sufficient for smaller councils, whereas larger councils who wish to have multiple collection points are expecting to need between 20-30 boxes per year to cover their collection needs and are budgeting between \$1000 1500.
- Taking responsibility for end-of-life uniforms is a small cost to councils
  yet some councils expressed concern that whilst most departments
  have an ongoing budget for uniform supplies, there isn't an existing
  budget for end-of-life costs and that this challenge arises with other
  materials such as dealing with old carpet, furniture and soft furnishings
  after facilities upgrades. Whilst some councils could integrate a uniform
  take back/recycling service into a new uniform contract, this can
  sometimes be complicated by many councils using multiple suppliers
  for all their uniform needs.

Pictured above: Waverley & Woollahra Councils shared uniform recycling collection bin at their shared Depot

Thank you to all participating councils and the NSW EPA for supporting the Uniform Recycling Trial