



Spotlight

Cup Box: a single-use cup recycling pilot

March 2025



Less than 4% of the 200,000 single-use cups used annually in Scotland are recycled, due to insufficient infrastructure, with most ending up in landfill or as litter. Misconceptions about recyclability can also lead to contamination and compostable cups, though marketed as eco-friendly, rarely reach the required industrial facilities, causing many to still go to landfill. Expanding infrastructure, raising awareness, and promoting reusables are crucial to tackling this issue.

Introduction

As part of the Highland Community Waste Partnership, Keep Scotland Beautiful set out to investigate cup recycling infrastructure in the Highlands, building on our experience with similar initiatives in other parts of Scotland. While our primary focus continued to be on promoting refill and reuse, we acknowledge the need to provide effective recycling for those still using single-use cups.

The Cup Box is a convenient solution from the National Cup Recycling Scheme (NCRS), designed to collect and recycle standard plastic-lined paper cups (i.e. not PLA-lined compostables) separately from other waste streams. Given the unique challenges of the Highlands, including its geography and dispersed communities, we wanted to test whether and how the Cup Box could be best rolled out in this region.

The pilot

Together with the NCRS we developed a pilot to test the appetite and feasibility for boxes with suitable operators in the Highlands, supporting their effective use through an engagement and behaviour change campaign, and evaluating the overall success of the model. The trial focused on key settings, including high-footfall public spaces, coffee retailers, and workplaces, where predictable consumption patterns offer opportunities for targeted interventions.



Caol Youth Centre using their Cup Box.

Participants received two funded recycling boxes, along with guidance and engagement support from Keep Scotland Beautiful (KSB), in exchange for a commitment to behaviour change efforts and data sharing. The logistics were managed by NCRS and their courier partners, handling box distribution and collection, while KSB ensured participant engagement and campaign support. Data collected from the pilot has been used to assess impact and inform future scalability of the model.



Consumer campaign

We designed an accompanying consumer campaign to support behaviour change. Forming new habits requires clear, engaging messaging, so we developed a range of assets include eye-catching posters, information leaflets and social media content to reinforce key messages, make it easy for individuals and businesses to get involved and to ensure clear guidance at the moment of disposal. Together, these materials form a cohesive campaign designed to drive awareness, engagement, and long-term behaviour change.

Impact

The pilot saw a total of **23 cup recycling boxes** rolled out across **18 locations**, expected to divert around **10,000 single-use cups** from landfill. By the end of the pilot, six of the boxes had been filled and collected, with **3,958** cups confirmed to have been recycled.

On average, it took five months for participants to fill a box, though contamination was a significant issue at at least two locations. The scheme covered a mix of workplaces (4), community hubs (4), retail spaces (4), and hospitality venues (6) with boxes regularly checked by staff, and with close proximity to a sink, performing best.

The National Cup Recycling Scheme will be continuing to offer this service to the Highlands on request.



Fortrose Library

Learning & discussion

Across this project we've successfully tested cup recycling, through on-site boxes, at a range of different premises and organisation types, providing us with valuable learning we can take forward to support others to integrate cup recycling as part of their waste management. Some key areas of learning include:

Confusion around compostables

The variety of materials used in single-use cups today creates both contamination in waste streams and significant confusion for businesses and customers. In particular, the prevalence of compostable cups in the Highlands posted a significant challenge to this pilot.

45% of the businesses that expressed an interest in the pilot were unable to take part, due to their use of compostable cups. These are not suitable for recycling with standard, fossil-plastic lined paper cups in the Cup Box, and must furthermore be collected for composting separately themselves (which they are often not). A further **16%** of businesses were simply unsure of what type of cup they were using.

This confusion also extends to consumers, as was highlighted by a quiz we ran with attendees at Belladrum festival, where individuals struggled to correctly sort cups into the right waste streams. See the results of this quiz below.



- **90% of people incorrectly believe [paper] compostables can go in an existing waste stream (paper, food waste or cup recycling).**
- 50% of people believe [paper] compostables can go in food waste bins.
- 45% of people think [paper or plastic] compostables can go in food waste bins.
- 34% know that plastic-lined paper cups can go into cup recycling infrastructure.
- **29% of people think plastic-lined paper cups have to go into landfill, even when specific cup recycling was an option available.**
- 100% of people know that plastic cups can go into [most] mixed dry recycling collections.

This was further highlighted by Cup Box bin audit, which showed persistent misplacement of cups, despite clear instructions on the box itself and supporting campaign materials.

- 28% plastic-lined cups from major chains (Costa, Nero, McDonald’s, Greggs)
- 43% plastic-lined cups from local independents
- **29% compostables from local independents**
- A plastic water bottle and McDonald’s food packaging

Although it was encouraging to see the boxes being used for cups from different sources, contamination with compostables and other items can render the contents un-recyclable, hindering efforts. More education, consistent terminology and improved signage, could help to address this, reducing contamination and improving recycling rates.

Caol Youth Centre

“People have been reluctant to save up their single use cups to recycle them at our facilities, or they simply forget, and just put them in their own recycling. **They are still unaware, or dont care, that they cannot be generally recycled amongst household recycling.** The public have also fed back that they need better recycling initiatives in their own properties and communities such food waste and glass collections as they feel **single use cup recycling is a drop in the ocean in comparison.**”

Intervention design

The campaign could have been made more effective by incorporating stronger behaviour change strategies to drive both business participation and customer engagement.

Bin placement was also key, positioning bins in high-footfall areas like workplaces, transport hubs, and community spaces (leisure centres etc) rather than inside the store where the cup was purchased, is potentially more appropriate for takeaway cups.



No.19 Cafe in Avoch

Logistics

As expected, the geography of the Highlands posed logistical difficulties, particularly around the reliability of courier services for ensuring the timely delivery and uplift of the Cup Boxes. This was also exacerbated by a lack of direct communication between pilot participants and the NCRS over the course of pilot; although this would not be an issue if the service were to be rolled out by them directly.

Impact Hub Inverness

“Being in such a central location, with many coffee shops, cafes and takeaway restaurants are nearby, our members often come in with takeaway cups - especially in the winter months. The cup box gives members the opportunity to recycle their cups and know they are being environmentally responsible.

People are making good use of the cup box- it's filling up a lot quicker than we expected! It's amazing to see what would have otherwise been going into the general waste, it's actually saved us a lot of bin space. That will come in even handier now that our bins are being collected less regularly!

However, there have been some downsides. Some people aren't fully understanding what can and can't go in the box, and a few people miss the bin altogether even though it's right next to the other bins.”

What's next?

As the pilot came to an end, a number of participants were still filling up their pilot boxes, with six having requested a second box and at least two indicating that they would continue with the scheme beyond the pilot. In other cases, the £63 cost of operating the scheme, combined with challenges with engagement, were cited as prohibitive to continuing:

Caol Youth Centre

“as it is new and not hugely understood that single use cups cannot be recycled in the same way as general recycling, it is only just being acknowledged and there is still a bit of reluctance to get onboard with the scheme due to cost and people think it is the responsibility of the larger companies who provide them to make the change in product and incur the cost and make something which can be widely and generally recycled along with other items and it is not the responsibility of individuals alone and that this will have minimal impact due to nature of the scheme and the cost to be involved.

Going forward, better education and engagement is needed around single-use cups, including better understanding of different cup materials, dispelling myths around compostables and increased awareness around the need for separate recycling streams and the role we must all play in addressing single-use waste, both through recycling and, ultimately through reuse.

See also: www.keepsotlandbeautiful.org/cup-movement/

To learn more about the Cup Box in the Highlands contact: CupRecycling@Valpak.co.uk

The Highland Community Waste Partnership (2022-2025)

Funded by The National Lottery Climate Action Fund, and coordinated by Keep Scotland Beautiful, the Highland Community Waste Partnership (HCWP) brought together eight community groups in the Highlands to reduce waste and promote more sustainable consumption.

Learn more here: www.keepsotlandbeautiful.org/highlandcommunitywaste/