

Ditching Disposables

FINAL REPORT

SEPTEMBER 2022



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Executive Summary

In June 2022, the Environmental Protection (Single-use Plastic Products) (Scotland) Regulations came into force, banning many of the most problematic single-use plastics in Scotland. In recognition of this, Changeworks, in collaboration with Zero Waste Scotland, embarked on a one-year 'Ditching Disposables' project in Portobello and Joppa, a coastal suburb of Edinburgh. The trial aimed to engage and support food and drink businesses of varying size and service to reduce their reliance on single-use items, with the aim of testing various approaches in real-world settings. During project delivery, an additional aim was agreed, of creating business-to-business case studies that others can draw on in their own pursuit of ditching disposables.

Key findings

The project led to 16,273 single-use items being saved per month, with the following reductions per item:

- Sauce sachet use fell by 99%
- Takeaway cup use fell by 96%
- Straw use reduced by 92%
- Stirrer use reduced by 86%
- Napkin use fell by 64%
- Takeaway container use fell by 56%

The project also built an evidence case for a reusable cup loan scheme, showing this to be more impactful than offering a discount to customers bringing reusables.

Three key barriers to the success of ditching disposables were identified:

- **Time constraints:** time was often a key factor in whether an intervention was successfully implemented
- **Behaviour change:** the relative success of interventions relied on behaviour change from businesses, their staff, and customers
- **Practical barriers:** practical concerns such as sourcing appropriate reusables, credit card charges and third-party platforms presented a challenge to implementing changes within some businesses

To address these barriers several recommendations and best practices were identified to inform future activity:

- **Make engagement easy** - due to businesses being time poor, it is essential to make engagement simple and accessible. For example, face to face visits on poor weather days when businesses tended to be quieter were valued over email check-ins or visiting in good weather
- **Engage from the top-down** - interventions were implemented with greatest success when decisions were made by owners and cascaded to front of house staff.
- **Tailor messaging** - while it is acknowledged that one-to-one support is not possible on a large scale, advice can be tailored to specific segments of the food and drink sector.
- **Tackle common myths:** a critical step in supporting businesses to ditch disposables is to tackle common misconceptions around hygiene or the desire to “switch rather than ditch” single use items.
- **Speak to businesses’ competing demands:** business owners are extremely time-poor so effective engagement must highlight how tackling disposables is also a means to tackle existing resource constraints.
- **Shift how we communicate the challenge to businesses** - it is unlikely that single use items will be eradicated in their entirety. Instead, businesses must be encouraged to consider how they can *maximise* the proportion of sales that avoid the need for a disposable or utilise a reusable alternative.



“The recent ban on problematic single-use items by the Scottish Government is a very welcome step, but there isn’t enough guidance available to businesses on what is the most environmentally friendly alternative. I see this pilot as a worthwhile exercise and I’m sure it’ll be very welcome by my customers.” – Business owner, Malvarosa

1. Introduction

1.1 Context

In June 2022, the Environmental Protection (Single-use Plastic Products) (Scotland) Regulations came into force, banning many of the most problematic single-use plastics in Scotland. This made Scotland the first nation in the UK to implement such legislation. With 700 million single-use items previously being used in an average year, the regulations aim to encourage businesses to make the switch to reusable alternatives, helping to reduce litter and cut emissions¹.

In recognition of these changes, [Zero Waste Scotland](#) (ZWS) commissioned a series of 'Ditching Disposables' pilot projects to support a range of organisations to trial and implement sustainable alternatives to problematic single-use items. The pilots aimed to:

- Assist ZWS to counter rising misconceptions about disposables and educate communities on sustainable alternatives
- Pilot approaches that prevent and reduce the use of single-use items in communities across Scotland at events, in community spaces, and with organizations and businesses
- Develop and foster partnerships within the target communities to allow actions to be taken
- Contribute evidence, case studies and learnings to enable ZWS to provide clear guidance on tested solutions for a wide variety of ways to reduce the use of single-use items, along with practical advice on how to deliver them in engaging case studies.

Following an in-depth feasibility study in 2019, [Changeworks](#), in collaboration with ZWS, launched the 'Ditching Disposables' project in Portobello and Joppa in 2021 (delayed from March 2020 due to the pandemic).

¹ The regulations include exemptions i.e., for single-use plastic straws, to make sure that those who need them for independent living or medical purposes can still access.

1.2 The pilot

About

The one-year trial aimed to engage with, and support, food and drink businesses to reduce their reliance on single-use items.

A network of engaged businesses was established, with ten signing up to a 'Ditching Disposables Business Charter', committing them to reduce the number of disposables used within their business. In return, Changeworks staff and volunteers offered one-to-one tailored support. This included:

- Assisting the business to review their current use of disposables
- Supporting the business to select appropriate interventions to tackle one or more single use items
- Handholding and encouragement to support the implementation of interventions
- Advising on messaging to both customers and staff
- Monthly newsletters
- A resource pack with advice on matters from hygiene and bioplastics to legislation and reusable cup loan schemes
- Staff training and funding support

Businesses and interventions

Ten businesses² signed up to participate in the project and a brief overview of their involvement in the pilot is provided below. They varied in terms of size³ and service, with some primarily accommodating the takeaway market and others offering both sit in and takeaway services.

PORTOBELLO AND JOPPA

Portobello and Joppa are coastal suburbs of Edinburgh, three miles to the east of the city. The community has a distinct identity and pronounced community spirit with regular beach cleans, craft fairs, community-based initiatives, local events and a range of independent businesses.

A key factor in choosing the pilot site was the volume of litter found on Portobello beach, of which 31% is disposable items (MCS: 2018)

² A business engagement overview is provided in the methodology in appendix A

³ Average number of customers served in a typical week ranged from 150 to 2700.

Pilot businesses | High level overview

Cake & Candy Tearoom

Traditional tearoom largely serving sit-in customers

- Sauce sachets swapped for reusable bottles
- Straws on request only

Civerinos

Pizza chain with four branches across Edinburgh, largely serving takeaway orders with a small, seated area

- Replaced single-use sauce pot with redesigned paper fries container

Go Go Beets

Vegetarian café selling takeaway food and drinks

- Discount for customers bringing reusable cups and food containers

Malvarosa

Spanish restaurant seeing increased takeaway trade since the pandemic

- Reusable cup loan scheme for cups and containers
- Charge for disposable cups
- Napkins and straws on request only

Oscars Gelato

Ice cream shop serving both sit-in and takeaway customers

- Disposable bioplastic ice cream tubs replaced with edible alternative
- Discount for customers bringing reusable cups



Pilot businesses | High level overview

Miro's on the Prom

Sit in restaurant serving high volume takeaway orders

- Stirrers on request only

The Esplanade

Traditional pub serving drinks to takeaway customers

- Discount for customers bringing reusable cups

St Andrews Restaurant & Takeaway

Traditional fish and chip shop with adjoining restaurant

- Discount for customers bringing reusable cups and containers

Bross Bagels

Bagel deli/cafe with four branches across Edinburgh, serving a mix of sit-in and takeaway orders

- Stirrers on request only
- Discount for customers bringing reusable cups

ShrimpWreck

Street food stall largely serving to-go orders, with small, seated area

- Napkins on request only



1.3 Project aims

The aim of the project was not only to pilot a variety of approaches to reduce the use of disposables but also to contribute evidence, and practical advice on how to deliver such changes.

The key objectives of this report are to:

1. Evidence the interventions which had the greatest impact
2. Share the successes and challenges of the different interventions and implications for scalability
3. Highlight any wider impacts associated with the project

During project delivery, an additional aim was agreed, of creating business-to-business case studies that others can draw on in their own pursuit of ditching disposables.

2. Our impact

“WE ARE ONE OF THE BIGGER COMPANIES IN PORTOBELLO AND WE USE A LOT OF DISPOSABLES TO MEET DEMANDS. WE COULD HAVE A REALLY BIG IMPACT IF WE MAKE CHANGES TO REDUCE WASTE”

2.1 Interventions with the greatest impact

The pilot led to a **monthly saving of 266kg CO₂e and 16,273 single-use items⁴**. The intervention with the greatest impact was the removal of sauce sachets, an option that could be considered a ‘quick win’ or easy to adopt for businesses. However, those that required higher levels of engagement i.e., Reusable cup loan schemes also saw positive results. The total monthly savings for each intervention are outlined below.

⁴ Savings based on difference between baseline figures and most recent follow up figures



Civerinos and The Cake & Candy Tearoom reduced sauce sachet use by **99%**



Malvarosa reduced disposable cups by **96%**



Straw orders reduced by **92%** from The Cake & Candy Tearoom and Malvarosa



Bross Bagels reduced stirrers by **86%**



ShrimpWreck and Malvarosa cut napkins by **64%**



Malvarosa reduced food containers by **56%**

2.2 Successes and challenges per intervention

The following case studies provide an overview of the various interventions adopted by participants, including key successes and challenges associated with each, and advice for businesses who may want to implement a similar approach in their own settings.



Ditching Disposables Project Case Studies

- Disposable straws
- Sauce pots & sachets
- Stirrers
- Napkins
- Cups and containers
- Reusable cup loan schemes

Case Study: Disposable Straws

Straws are a common single-use item used by both sit-in and takeaway businesses. As part of the Ditching Disposables project, some businesses chose to reduce or eliminate their disposable straw usage.

The Cake & Candy Tearoom's simple switch

June's traditional tea room business 'The Cake & Candy Tearoom' had been keen to reduce waste and the cost of buying these items.

The tea room took a simple but effective approach – only giving out straws when customers asked for them. This meant customers who needed them for medical reasons could still access them, but any excess was avoided.

This could be immediately implemented and only required some short conversations with staff, that were helped by the owner's hands on approach to the business.



After one month the tea room had gone from using 500 straws a month to zero with just this simple approach.

The Boathouse's reusable switch

Businesses told us straws can be central to the look and experience of certain drinks. Switching from single-use straws doesn't need to take away from this. Food and drink business 'The Boathouse' looked to make the switch from disposable straws in their cocktails, to reusable metal straws.

The reusable alternative doesn't take away from the customer experience or drink presentation, but still tackles single-use straw usage.



Case Study: Disposable Straws

Plastic straws were included as part of the Single-Use Plastics Directive in 2022, meaning they were effectively banned with the exception of medical uses.

Don't switch, ditch!

Switching plastic straws for paper or cardboard alternatives still creates single-use waste. See the recommended steps below to reduce and eliminate disposable straws



Keeping straws behind the counter

Only giving straws when customers ask for them is a simple but effective way to reduce the number of straws used.

It can be implemented immediately and doesn't require anything additional being purchased. All it requires is staff to be aware and advised on how to implement in their role.



Purchasing reusable alternatives

For situations where straws are required as part of the customer experience or drink presentation. Reusable alternatives made from metal, durable plastic, or other materials can be an effective way to eliminate disposable straw use without compromising on experience or presentation.



Case Study: Sauce Pots & Sachets

Both sit in and takeaway businesses use disposable sauce sachets and sauce pots. As part of the Ditching Disposables project businesses tried new ways to reduce or avoid this waste.

Civerino's Convenient Cone

As a predominantly takeaway business, pizza restaurant Civerino's, relied heavily on single-use items. The business was looking to reduce the amount of disposable plastic sauce pots given out to customers.

The majority of sauce pots were given out with fries, so the team reworked their packaging ordering a new combined fries cones with a built-in sauce slot made from a small section of card.



Civerino's new packaging meant they went from using 1000 sauce pots a week, to just 20 pots a week

Tearoom's going back to basics

Traditional tearoom, The Cake & Candy Tearoom, had started using single-use sauce sachets in response to the COVID-19 pandemic.

June, the owner, made the switch back to reusable sauce bottles and was able to go from using 200 sachets a month to 0. The reusable bottles helped her reduce waste and also keep up the traditional aesthetic of the tearooms.



Case Study: Sauce Pots & Sachets

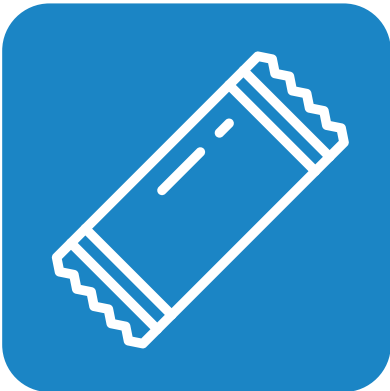
Sauces are a key part of the customer experience for many businesses. Below are ways to reduce single-use item usage without compromising on experience.



Use reusable sauce bottles

Both sit in and takeaway settings can replace disposable sachets and sauce pots with reusable sauce bottles. These can be refilled with sauces over and over again.

These can be placed on tables or on a counter for customers to help themselves.



Only give sachets on request

Many businesses place sauce sachets on counters for customers to help themselves.

Only offering sauce sachets when a customer asks is a great way to reduce the overall number of sachets used. It is quick to put in place and only needs staff to be aware of the change.



Use packaging to avoid pots or sachets

Particularly for takeaway businesses some packaging solutions can reduce the overall waste created.

Some chip cones can be purchased with slots to hold sauce. This means less overall single use items, even if it can't be avoided all together.



Case Study: Hot Drink Stirrers

Cafes and take away businesses that serve hot drinks often give out lots of single-use stirrers. During the course of the Ditching Disposables project some businesses tried different methods to reduce the amount of stirrers they used.

Bross Bagels reducing stirrers

Edinburgh based chain, Bross Bagels, serves a range of hot drinks alongside their bagel dishes and used a lot of disposable stirrers.

The business decided to take the simple but effective step of moving stirrers off tables, and only handing them out to customers when requested.

This was a simple method to implement and only required communication with staff to make them aware of the changes to processes. Bross Bagels saw a large reduction in the amount of stirrers used after just a short period of time.



Bross Bagels were using 350 stirrers a month. This simple step cut their stirrer use by two thirds.

What did customers think?

Customers at Bross Bagels were also on board with reducing the amount of stirrers used. They told us in the project survey:

“I think it is a great idea, as we would never use them! It means that they are only given to people that need them - and not handed out unnecessarily.”

“I think only giving out stirrers to those who need them is a great idea to help reduce waste.”

Case Study: Hot Drink Stirrers

Plastic stirrers were included as part of the Single-Use Plastics Directive in 2022, meaning they were effectively banned in businesses in Scotland.

Don't switch, ditch!

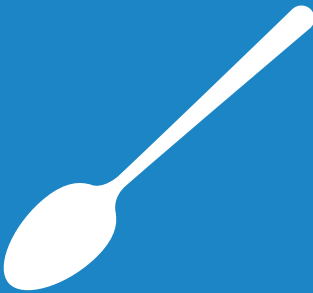
Switching plastic stirrers for wood or other materials still creates single-use waste. See the recommended steps below to reduce and eliminate disposable stirrers



Keeping stirrers behind the counter

Only giving stirrers when customers ask for them is a simple but effective way to reduce the number of stirrers used.

It can be implemented immediately and doesn't require anything additional being purchased. All it requires is staff be aware and advised on how to implement in their role.



Providing reusable spoons

Offering metal spoons can be a great way to eliminate single-use stirrers altogether. It can save businesses money as they no longer need to order disposable stirrers.

All you'll need is a space for people to get their hot drinks ready and stirred before they head out.



Case Study: Napkins

Napkins are an essential part of many food businesses, whether that is for take away or sit in orders. Businesses on the Ditching Disposables charter trialled a number of methods to reduce any unnecessary napkin waste.

ShrimpWreck ditches napkin waste

ShrimpWreck is a street food stand located right on the beach promenade. Their trade is almost entirely takeaway, so they rely entirely on single-use items for their orders.

The business decided to cut back on their napkin use to reduce waste, making the simple switch to only giving out napkins on request.

The business saw a huge reduction in the number of napkins they used. This helped them reduce the amount of waste while also cutting costs.

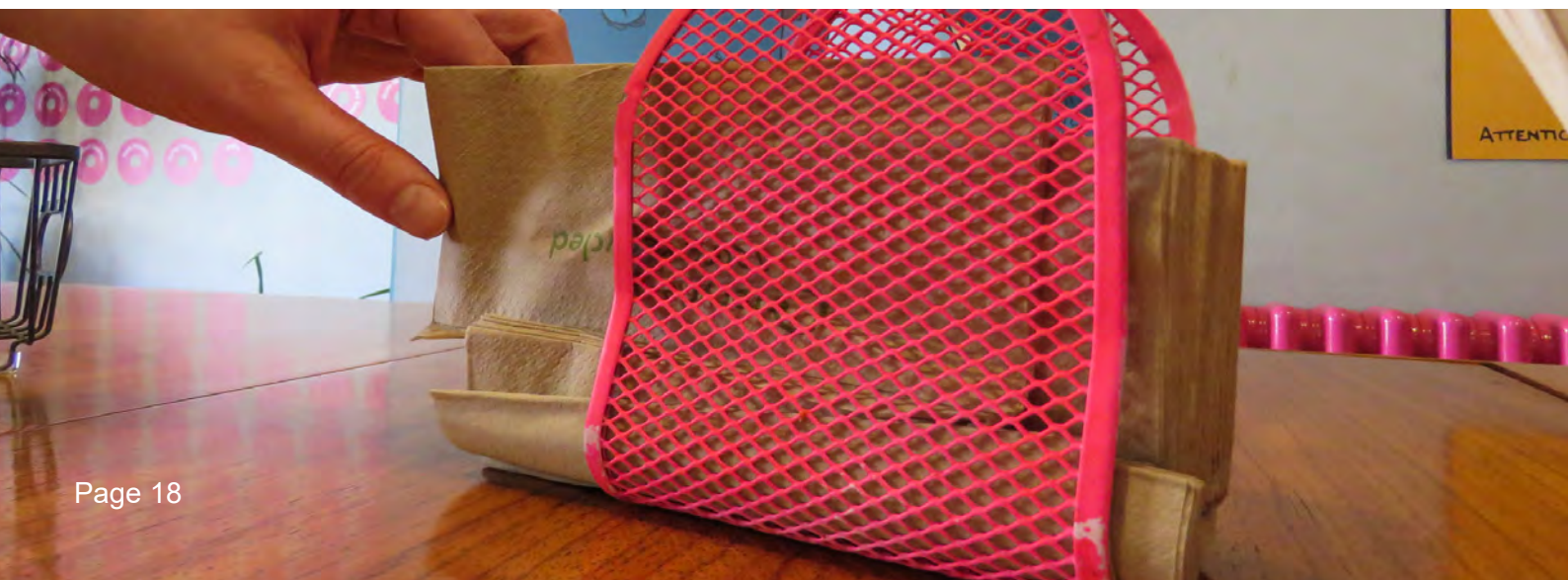


ShrimpWreck is using 74% fewer napkins by only offering on request or with their messiest dishes.

Bross Bagels dispenser solution

Bross Bagels is a popular chain of cafes, famous for their bagel selection. Their bagels are notoriously messy, which led customers to often take a handful of napkins at the counter.

By moving napkin dispenser off the counter and onto the tables, customers were seen to take only what they need, cutting the amount of disposable napkins used by the business.



Case Study: Napkins

Napkins are a stubborn single use item but there's still a lot we can do to reduce the amount of napkins we use. This not only helps the environment but also reduces costs.

Did you know that people use fewer napkins when they are placed in a napkin dispenser?



Placing napkins in dispensers

Customers tend to only take what they need when they have access to a napkin dispenser on their table. If placed on the counter, customers typically take more just in case they are needed.

It's relatively simple to put this in place. All you need is to order the dispensers and place on tables.



Only give napkins out on request

Particularly for takeaway businesses, napkins are routinely given out with every order, often providing more than customers need.

Only giving out napkins when a customer asks is an effective way to cut back on this unnecessary waste. It is quick to put in place and just needs staff to be aware of the change.

Case Study: Cups and Containers

In recent years many food and drink businesses have offered a discount when customers bring in their own reusable cup or container. This is often seen as a way to minimise disposables and drive reuse behaviour.

Considering a discount?

As part of the Ditching Disposables project, several businesses trialled this type of discount ranging from 20p to 5% off.

However, four of the five businesses trialling a discount found it wasn't effective at encouraging customers to use reusables. Despite two businesses running large campaigns on discount, there was no increase.



Data from businesses in Portobello showed discounts weren't effective at encouraging customers to switch from disposables to reusables

Malvarosa's cup charge

As an alternative, Spanish restaurant Malvarosa, introduced a charge alongside a reusable cup loan scheme. This gave customers the option to avoid the charge by accepting a reusable cup instead.

"20p more to have a disposable cup would motivate me more than 20p off if I brought a reusable one" - Member of the public



Case Study: Cups and Containers

For many businesses that rely on takeaway orders, reducing the number of disposables can seem impossible. Even if you can't get rid of these items entirely there are still ways to reduce the amount that customers use.

Considering a discount?

Considering a discount to reduce your disposable items? Discounts aren't effective at changing customer behaviour. Using a reusable cup loan scheme and/or a charge are far more effective methods.



Add a charge on disposables

Discounts are ineffective at driving reuse behaviour, while research shows disposable coffee cup charges can have real impact. Similar in nature to the Scottish Single Use Carrier Bag Charge, people are more sensitive to perceived losses than perceived gains when making decisions. Even a small charge can be effective at reducing the amount of disposables used.



Implement a reusable cup loan scheme

Another way to reduce disposable cup or container use is a reusable cup loan scheme, where customers pay a small deposit to borrow a reusable cup or container and return after use. This approach resulted in a much greater impact, cutting the use of disposable cups by more than 95%.



Case Study: Reusable cup loan schemes

Reusable cup loan schemes allow customers to pay a small deposit to receive their hot drink or food in a reusable cup or container. It is a system that will be familiar to many customers for hot drinks like Gluhwein at Christmas markets.

Malvarosa's Reusable Journey

Authentic Spanish restaurant, Malvarosa, had already been trialling returnable paella containers, but wanted to expand across their menu.

Owner, Alvaro, introduced his reusable cup loan scheme first with cups, and later with containers for takeaway food. Customers were charged a £1 deposit for a reusable cup or a £2 deposit for a reusable container, that would be refunded when the item was returned.

Alvaro found the scheme straightforward to organise and put into place. Customers were also onboard with the scheme and responded positively to it.



After six months Alvaro saw a 96% decrease in disposable cups and a 56% decrease in takeaway packaging

Customers may be apprehensive of change or need persuading to change their behaviour. To encourage customers to make a positive change, Alvaro also implemented a 20p charge to his disposable cups .

“When we give a choice to the customers, they feel in control of it” Alvaro, Owner at Malvarosa

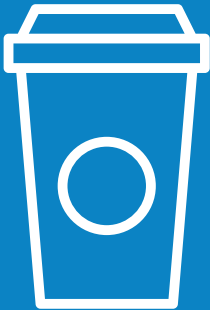


Case Study: Reusable cup loan schemes

Reusable cup loan schemes can be straightforward to implement. All you need is an order of reusable cups or containers to get you started, then to communicate with staff to make sure they are confident to explain the scheme to customers.

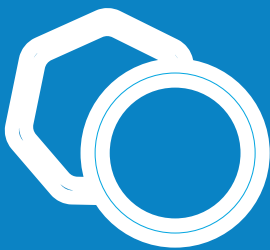
Charge or Discount?

Considering a discount to reduce your disposable items? Discounts aren't effective at changing customer behaviour. Using a reusable cup loan scheme and/or a charge are far more effective.



Start a reusable cup loan scheme

Once you have a stock of reusable items, simply charge a small deposit for these. This could be £1 for cups or £2 for containers but can be adjusted to avoid making a loss if items are not returned. A button on your till helps manage deposits and a pot of £1 coins avoids bank charges when returning deposits. Observations from other projects suggest charging a higher deposit can lead to a higher return rate, as can reusables with a plain design as customers are less inclined to keep these.



Add a charge on disposables

Giving customers the choice between a reusable and returnable item or a disposable is important to get them onboard.

Adding a charge to disposable items but offering a reusable cup loan scheme as an alternative can be very effective at helping customers make positive choices.



2.3 Wider impacts

The findings in this section relate to the wider impacts the project had on customers (and the Portobello/Joppa area more generally), staff who worked at the pilot businesses and the businesses themselves. An evidence case for reusable cup loan schemes is also presented. These findings are evidenced from data gathered through business, volunteer and customer surveys alongside direct quotes collected by Changeworks staff and volunteers from businesses and customers in Portobello and Joppa.

Building the evidence case for reusable cup loan schemes

Six businesses identified disposable cups as a priority single use item to tackle, presenting an opportunity to assess the impact of various approaches.

In light of previous research⁵ demonstrating that disposable cup charges are more effective than discounts at increasing reusable cup use, project staff and volunteers went to great lengths to dissuade businesses from offering discounts and instead promoted charges. Despite this, five businesses still chose to trial a discount, highlighting a propensity to adopt an approach with minimal “hassle factor” for customers. Two businesses ran a concerted communications campaign to promote the discount. However, as anticipated, **discounts proved ineffective at driving reuse behaviour** (at four of the five⁶ businesses who offered this).

“20P MORE TO HAVE A DISPOSABLE CUP WOULD MOTIVATE ME MORE THAN 20P OFF IF I BROUGHT A REUSABLE ONE” – MEMBER OF THE PUBLIC

The remaining business, Malvarosa, elected to trial a reusable cup loan schemes , where customers pay a small deposit to borrow a reusable cup and return after use (see case study below). Zero Waste Scotland offered 100 cups free of charge to trial the scheme. **This approach resulted in a much greater impact, cutting the use of disposable cups by more than 95%**. Customers were made aware of the scheme in person, through engagement with members of staff, and were supportive of the offer:

⁵ A field trial and evidence review of disposable cup charged carried out by Zero Waste Scotland.

⁶ One business saw some uptake but reported that the offer resonated only with their most regular customers.

"THAT WOULD MAKE IT MUCH EASIER TO PICK A REUSABLE CUP AS I OFTEN FORGET MINE OR DON'T WANT TO CARRY IT"

The owner of Malvarosa found the scheme easy to implement and it continues to run after project close.

Malvarosa also started charging for single use cups and containers. The owner reported feeling comfortable doing so as they were able to offer the reusable loan scheme as a means for customers to avoid the charge. He shared that without this alternative, he would not have started charging for disposables:

"WHEN WE GIVE A CHOICE TO THE CUSTOMERS, THEY FEEL IN CONTROL OF IT"

These examples add to the existing evidence base showing that reusable loan schemes lead to greater impact in comparison to offering a discount to customers bringing their own reusables.

Reusable Cup Loan Schemes | Case Study

About

Malvarosa is an authentic Spanish restaurant offering both in-person dining as well as a takeaway service for hot drinks, churros and their main menu tapas items. Malvarosa relied on single-use bioplastic cups and foil containers for their takeaway business.

- Customers received their food in a reusable container for a £2 deposit or their drink in a reusable cup for a £1 deposit.
- Returnable cups, manufactured by Corretto, are both reusable and ultimately recyclable.
- Promoted directly to customers through engagement with front of house staff



Impact

Month 1
90% drop in
disposable
cup use

Month 6
96% drop in
disposable
cup use

Continue to
offer reusable
cups and
introduced a
charge for
disposables

Learnings

- The number of customers opting for disposables increased in the tourist season and visitors were less likely to return the reusable cups as they were not passing the business again. This barrier could be overcome if cups could be returned to other businesses in the area.
- The owner decided not to offer the reusables for orders placed through third party platforms such as Just Eat and Deliveroo. Commission would be taken from the deposit, leaving the owner out of pocket.
- The processing of deposits refunded via card payments led to a 50p charge on a £1 deposit. To overcome this the owner kept a stock of £1 coins for refunding returned reusable items. Customers were happy with this option.
- Staff were initially reluctant to implement the charge for disposables. Training was provided, with focus placed on the waste hierarchy and limitations of recycling bioplastics cups. This increased staff confidence and led to an increase in charges applied for disposables.
- Many food and drink businesses are not familiar with the concept of a reusable cup loan scheme, needing guidance and reassurance on how it can be applied to their setting. To encourage wider adoption of such schemes, a comms campaign is needed to raise awareness of the concept, clarify how it can be implemented by business owners, with detail around practicalities to consider.
- Businesses better understand the favourable carbon impact of a reusable cup loan scheme, as opposed to customers buying their own reusable, when the potential for the latter to end up un-used in a customer's cupboard is communicated.

Impacts on customers, staff and businesses

The majority of businesses recognised the role of the pilot in driving forward the various interventions with most of the businesses (5 of 7) finding the pilot to be 'extremely' or 'very' influential on their ability to implement their interventions.

No business experienced financial drawbacks and both Civerinos and Malvarosa reported financial benefits. Additionally, most businesses (5 of 7) plan to, or have already, **implemented additional changes** as a result of the project:

“CONSIDERING A REUSABLE LOAN SCHEME ON REUSABLE CONTAINERS THAT KEEPS THE FOOD AS HIGH A QUALITY AS SINGLE-USE CONTAINERS”

“I THINK IT'S RAISED MORE AWARENESS OF THE PROBLEM OF WASTE, IT'S ALSO PUT PORTOBELLO ON THE MAP AS A PLACE WHERE WE ARE LEADING THE WAY IN TACKLING THIS PROBLEM”

“THE PROJECT HAS MADE US AWARE OF THE ISSUES WITH DISPOSING BIODEGRADABLE PRODUCTS - WE WILL LOOK INTO THIS MORE TO SEE WHAT SOLUTIONS WE CAN FIND”

The remaining businesses (2 of 7) reported they would not make additional changes but would continue with those they had already implemented.

The impacts of the project were noticed by passers-by with over half (55%) of residents and approximately a quarter of visitors (26%) surveyed having seen changes to single use items in the area. More specifically, a quarter (24%) had noticed businesses offering more reusable alternatives and around one in five were using less disposable packaging (18%).

One business specifically reflected on customer engagement:

“THE ONES THAT HAVE GOT INVOLVED SO FAR THINK IT'S BEEN FANTASTIC [...] THEY CAN SEE THAT WE'RE TRYING TO DO SOMETHING REALLY PROGRESSIVE HERE, SO GENERALLY THEIR RESPONSE HAS BEEN REALLY GOOD”.

The project also led to an increase in the number of businesses who felt that their staff were supportive of a reduction in single-use plastics. Some businesses did not see a change in staff attitudes; a result of their employees already being “*very passionate*” about such issues

prior to the project. However, for other businesses, the project changed employee attitudes whereby reducing single-use items was previously not on staff's "*radar*" or of "*particular interest*".

Similarly, although the majority of businesses (5 of 7) had not changed their attitudes to single use plastics, due to existing high levels of engagement, two businesses reported that their attitudes had changed for the better as a result of the project.

3. Key learnings

The following section reflects on the main learnings from the project including the time and energy required from businesses, how they felt about this, and the support they considered most valuable; the motivations, barriers (and solutions) to adopting interventions; best practices from across the pilot; and learnings and recommendations for the future.

3.1 Time and support

The level of engagement varied from business to business. On average, businesses spent seventeen hours (median 10 hours) between project launch in January and evaluation in July. Malvarosa, who tackled four single use items, estimated that 40 hours of their time was required over the seven-month period. The majority of time invested by businesses was spent on meeting project staff /volunteers for monitoring and evaluation purposes, so is specific to their participation in a pilot project rather than a reflection of the time spent implementing interventions.

Businesses were also asked how useful they had found the different types of support⁷ provided to them throughout the project (figure 1). 'Encouragement' and 'marketing opportunities' were viewed as the most useful types of support.

“REGULAR CONTACT WITH VOLUNTEERS HELPED MAINTAIN IMPETUS”

These findings were reflected by the volunteer feedback where they also identified marketing opportunities and encouragement as the most helpful types of support for businesses:

⁷ See methodology in appendix A for full details of support provided

“PROMOTION OPPORTUNITIES FOR THE BUSINESS VIA INVOLVEMENT IN THE PROJECT WAS A BIG PLUS”

Interestingly, funding was viewed as the least useful type of support. This was seen in practice when a small grant of £150 was offered to all participating businesses but accepted by only one. Project staff also reported that finance was not a barrier to tackling disposables, with other barriers presenting more significant challenges (see section 3.2).

While all businesses found factsheets useful, project staff reported that businesses found it difficult to consume information in this format due to time constraints. To increase engagement by this audience, it is critical that information is presented in a short and sharp format, catering to individuals who are extremely time poor.

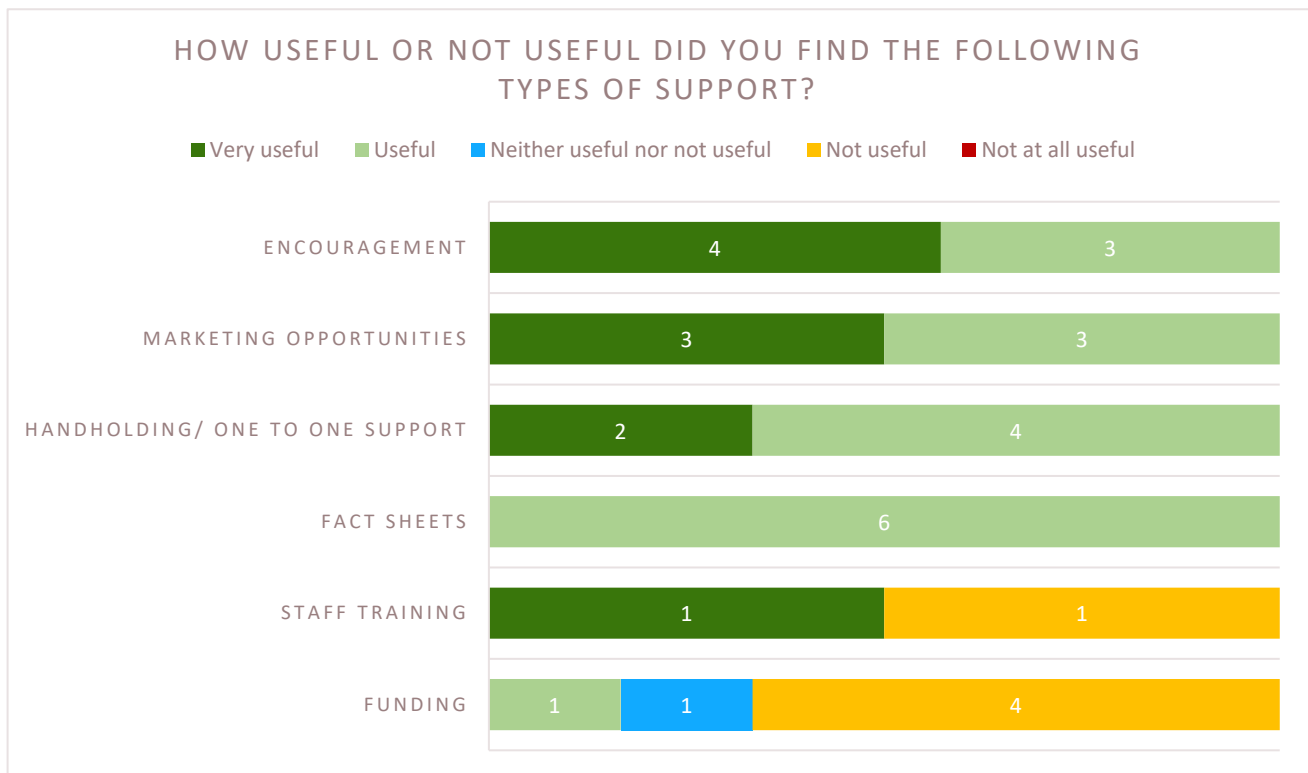


Figure 1: Perceived usefulness of various types of support provided to businesses (from top to bottom n=7,6,6,6,2,6)

3.2 Motivations and barriers

3.2.1 Motivations

It was anticipated that the main motivation for businesses participating in the pilot would be the forthcoming SUPD. However, no business was aware of this. In reality, businesses were primarily motivated to sign up to the pilot for environmental and ethical reasons. This was reflected in both the open survey responses and quantitative results (figure 2):

“We joined from moral reasons - we’d like to make a difference as we’re growing fast so this means that we’re producing more waste than ever, and we want to find ways to reduce this.”

“We’re always trying to be on the forefront really, we are situated right beside the sea so it’s immediately apparent to us effect that our businesses can have on the marine environment. I think as a society we’re all very aware at the moment of the effect that each of us are having with our carbon footprint, with cop (COP26) last year and everything, so we are trying to be as proactive as we can.”

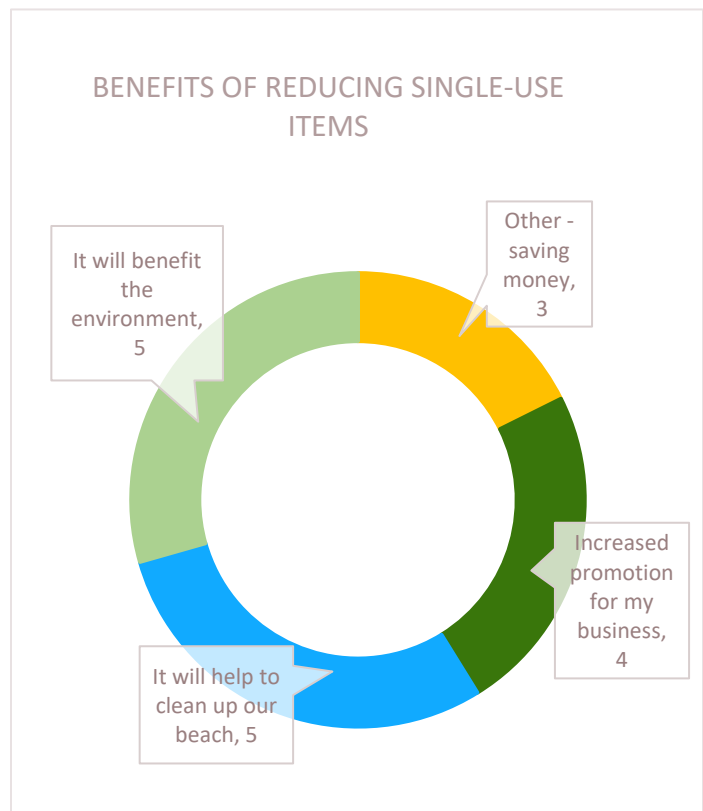


Figure 2: perceived benefits of reducing single use items (n=7)

3.2.2 Barriers

Three key barriers were identified as hindering the relative success of an intervention; time constraints, behaviour change and practical barriers. Each are discussed in turn below, along with potential solutions gleaned from the project.

Time pressure

Time pressure was the key barrier identified by the pilot, hindering the ability of businesses to 1) engage with project staff, leading to difficulties in communication and 2) consistently apply their interventions:

“I WAS SO BUSY, OFTEN DOING PRACTICAL TASKS, THAT IT WAS HARD TO FIND THE TIME TO MEET WITH THE TEAM”

“MANGERS/OWNERS ARE FAR BUSIER THAN ANTICIPATED – THEY ARE DOING 17-HOUR DAYS TO GIVE SKELETON STAFF TIME OFF”

To overcome these challenges, staff and volunteers adapted their approach to engagement to suit various businesses, dropping in for face-to-face visits, visiting on days of poor weather and at quieter times of the week. Newsletters were shared earlier in the week when businesses were more likely to be focusing on admin tasks.

Behaviour change

One of the main themes identified as a barrier to tackling single use plastics is the culture change required, for both businesses and customers:

“IT’S A CULTURE SHOCK FOR CUSTOMERS TO REMEMBER TO BRING THEIR OWN REUSABLE CONTAINER FOR FISH AND CHIPS”

It was also identified that a behaviour change *within* businesses is required. It was reported by project staff that recycling was still being viewed as the most valuable action amongst less engaged businesses and many businesses pointed to their use of bioplastic single-use items with pride.

Third party delivery platforms

The project also highlighted that behaviour change is required across the supply chain. There was a lack of engagement by online delivery platforms such as Just Eat/Deliveroo to support businesses ditching disposables. For example, commission was taken from the loan scheme deposit leaving businesses out of pocket when providing refunds for returned items.

“I think it's raised more awareness of the problem of waste, it's also put Portobello on the map as a place where we are leading the way in tackling this problem”



“BROSS IS NOT PRIMARILY AN ENVIRONMENTAL ORGANISATION AND SOME STAFF DO NOT REALISE THE IMPACT OF KEEPING THE STIRRERS BEHIND THE TILL, AND SOMETIMES THEY PUT THEM ON THE TABLES AS THIS IS WHAT HAS BEEN DONE FOR A LONG TIME.”

It has become clear that simple interventions need to be driven by a top-down approach. Interestingly, even managers did not have the power to instil a culture change of this type without the owner's buy-in. Interventions were more likely to be implemented when changes were driven by owners.

Practical considerations

There were several practical barriers identified that made aspects of the project challenging.

Hygiene: due to covid there were concerns around accepting/bringing reusables to participating businesses. This was addressed by sharing the “contactless coffee” concept, a [campaign](#) by City to Sea. The customer places their reusable cup on a tray, the staff member then handles the tray rather than the cup. This may help overcome the decline of reusable cup acceptance that has resulted from the pandemic.

Suitable containers: it was highlighted by both businesses and project staff that it was challenging to find suitable containers for all items i.e., containers that keep food crispy or those made of materials that can be ultimately recycled. This was overcome by conducting desk-based research into reusable container suppliers and was well received by businesses as they have minimal time to carry out research themselves.

Credit card charges: as many businesses move towards cashless operations, one practical barrier identified with the reusable cup loan scheme model was the processing of refunds via card payments. In the case of Malvarosa this meant a 50p charge on a one-pound deposit. To overcome this the owner kept a stock of £1 coins for refunding returned items and customers were happy with this arrangement.



Third Party Delivery Platforms: in addition to the ten pilot businesses, the project team also engaged a burger takeaway. Ninety percent of their turnover was through third party delivery platforms, meaning the business had no contact with the majority of their customers. The owner was eager to participate in the project, after hearing that polystyrene food containers were to be banned through the SUPD. The business used 600 units per month but reported that delivery platforms do not cater for the incorporation of reusables with orders placed on the platforms. It was decided that supporting this business was not within the scope of the pilot, given their desire to switch to an alternative single use item rather than drive reuse behaviour. However, it is recommended that ZWS engage with delivery platforms in future projects to explore how they can support their business customers to ditch disposables whilst still catering for the remote delivery market.

3.3 Recommendations

Although initial interest and motivation are needed from businesses, some best practices and recommendations were identified by the project team as critical to empowering businesses to ditch disposables.

Make engagement easy: due to businesses being time poor, it is essential to make engagement simple and easily accessible. For example:

- Businesses were more likely to commit to making changes if they could do it ‘there and then’. Project staff nudged businesses to sign the Charter at the initial engagement visit, as opposed to relying on businesses to follow up afterwards. Suggest quick wins that businesses can implement immediately, for example relocating stirrers behind the till, out of customers’ reach
- Facilitate unscheduled face to face visits rather than investing desk-based time to pre-arrange appointments
- Winter was a good time for initial engagement due to reduced availability of businesses in summer months. This was also true for check-ins with good weather limiting business ability to engage. Project staff highlighted the need to be flexible with planning engagement and visiting on poor weather days.
- Businesses can be asked to state their preferred time to engage with the project team. Businesses have better availability on weekday mornings and afternoons rather than evenings and weekends.

Engage from the top-down: Interventions were implemented successfully when decisions were made by owners and cascaded to front of house staff. Decisions and communication led by managers did not appear to have the same impact, so it is suggested that future campaigns target the food and drink sector at the level of business owners.

Tailor messaging: businesses reported “encouragement” and “marketing opportunities” as being of most value and this should be considered when designing future business engagement. The involvement of trained volunteers and an assigned point of contact per business allowed support to be tailored to suit the needs of each business. While it is acknowledged one-to-one support is not possible on a large scale, advice can be tailored to specific segments of the food and drink sector. For example, cost savings are likely to resonate with takeaways serving disposables at high-volume, while campaigns around marketing opportunities may have more impact with smaller businesses.

Tackle common myths: a critical step in supporting businesses to ditch disposables is to tackle common misconceptions. During the first point of engagement with all businesses, it was necessary to address either hygiene concerns or the desire to “switch rather than ditch” single use items. Misconceptions were often strongly held but easily overcome by presenting simple, factual information and fostering positive, open conversations. By sharing fact sheets and facilitating role play of myth busting conversations, volunteers and staff had the resources and confidence to tackle common myths:

“THINK HARD ABOUT WHAT INTERVENTIONS TO INVEST TIME AND ENERGY INTO. THE PROJECT HAS BEEN GOOD AT PROVIDING INFORMATION ABOUT BEST PRACTICE, AS A LOT OF BUSINESSES TRY TO DO THEIR BIT USING BIODEGRADABLE SINGLE USE PRODUCTS, BUT THESE OFTEN END UP IN LANDFILL - SO THE EFFORT A BUSINESS HAS MADE IS NOT HAVING THE IMPACT THEY HOPE.”

Speak to businesses’ competing demands: business owners are extremely time-poor so effective engagement must highlight how tackling disposables is also a means to tackle resource constraints. For example, communicating that ditching disposables can “take something off your to-do list” or “minimise your exposure to rising costs” is likely to land well with owners facing ever increasing pressures.

Build on learnings from the reusable cup loan scheme trial: this pilot presents evidence that reusable loan schemes for cups are more impactful than discounts at driving reuse behaviour. Learnings gathered here can inform future research, for example, how a community-wide loan scheme with multiple collection and drop-off points would increase uptake by day visitors, or how third-party platforms can be engaged to widen the scope.

**WHAT ADVICE WOULD YOU GIVE TO OTHER BUSINESSES LOOKING TO
DITCH DISPOSABLES?**

“TAKE TIME TO THINK ABOUT YOUR IMPACTS AND DECIDE TO ACT.

I WILL TELL OTHER BUSINESSES TO THINK OUTSIDE THE BOX, AND NOT
SEE IT AS A CHALLENGE BUT TO LOOK FOR THE POSITIVES

IT CAN SAVE MONEY IN THE LONG TERM

IT’S EASIER THAN IT SOUNDS!

MAKE SMALL STEPS AND WORK FROM THERE”



4. Summary

This one-year trial achieved its aims of engaging with, and supporting, ten food and drink businesses of varying size and service to reduce their reliance on single-use items, providing real world examples and case studies that can support other businesses in the future.

The project led to **16,273 single-use items being saved per month**, with the following reductions per item:

- Sauce sachet use fell by 99%
- Takeaway cup orders fell by 96%
- Straw orders reduced by 92%
- Stirrer orders reduced by 86%
- Napkin use fell by 64%
- Takeaway container use fell by 56%

Although this is an extremely positive result, it is unlikely that single use items will be eradicated in their entirety. Instead, the focus must be on supporting businesses to maximise the proportion of sales that avoid the need for a disposable or utilise a reusable alternative.

A key impact of this pilot has been the development of the business-to-business case studies - something not set out in the original proposal - which will allow other food and drink settings to go some way to better understand the new legislation and implement similar initiatives in the future.

Appendix

Appendix A: methodology

For similar projects to be conducted in the future, both the methodology for evaluating the impact of the project as well as the method for project implementation have been outlined below.

Project Evaluation

Although the project scope changed to some extent - with more emphasis placed on understanding the operational aspects of a business adopting particular interventions - the evaluation methodology remained the same and comprised of surveys, waste audits and project learnings.

Surveys

A business, volunteer and customer survey were drafted and shared with relevant stakeholders involved in the project. The online business and volunteer surveys were shared via a link in June and were open for five weeks, receiving response rates of 80% of businesses (8 of 10) and 100% of our key volunteers (4 of 4).

The customer survey was conducted on the High Street and Promenade in the summer months by Changeworks project staff and volunteers. This survey was also promoted by businesses with their customers, using QR codes, in total 87 responses were received. All three surveys were analysed to evaluate the experiences of different stakeholders.

Waste audits

Businesses were asked to self-report the number of single-use items they used in a typical month before and after they implemented their interventions. Due to project delays, baselines were carried out in October and November 2021 (typically a quieter period for hospitality) which meant that final outcomes were challenging to measure. The waste audit information was analysed by Changeworks to calculate the carbon savings and waste reduction resulting from each measure and the project overall.

Project learnings

Project staff maintained and updated a learning log and risk matrix in real time to document any lessons or learnings experiences throughout the project, these also fed into monthly reports that were provided to ZWS for the duration of the project.

Project implementation

Phase 1 feasibility work⁸ was conducted in late October – December 2019 and involved engaging with 211 people (including businesses, customers and local influencers and community leaders) to document current practices and behaviours in relation to single-use plastics as well as identifying community aspirations, issues, barriers and opportunities for ditching disposables. With feasibility work complete, a Phase two application was developed and submitted to ZWS with the aim of implementing a ditching disposables pilot project in Portobello and Joppa. Following a successful application, Changeworks began the pilot project in October 2021 (table 1 & 2).

Table 1: Pilot project phases

<u>Quarter 1 (Oct – Dec 2021)</u>	<u>Quarter 2 (Jan - March 2022)</u>	<u>Quarter 3 (Apr - Jun 2022)</u>
<p>Key project resources such as the Charter, guidance documents, promotional and support materials designed and produced. 'Keep Porty Tidy' branding included to link in with a well-known local campaign.</p> <p>Volunteers recruited and trained.</p> <p>Revisited businesses engaged during phase 1 (table 2), starting with those who were most interested or engaged – the 'priority 1 businesses'. Only one "priority 1" business was recruited to participate.</p> <p>Businesses informed that funding had been awarded and that the project was progressing to delivery phase.</p> <p>The Charter was explained, and businesses were informed of what would be required from them during implementation, namely: signing the Ditching Disposables Charter, consenting to, and supporting the delivery of single use item audits and signing up to specific intervention actions</p> <p>Businesses provided ongoing (every two months) information on KPIs and issues e.g., procurement of single use items, number of customers using the new services, barriers / challenges, possible solutions / improvements.</p>	<p>The project was launched in December through a shared press release with ZWS and was designed to be an excellent promotional opportunity for early adopters. BBC Reporting Scotland, STV News and others engaged with the release.</p> <p>The project coordinator and volunteers worked directly with signatories to help them implement their actions, overcome barriers, and develop solutions or improvements.</p> <p>Assistance was tailored to the needs of each organisation, with all signatories receiving initial support to conduct a waste audit.</p> <p>Regular visits from Changeworks staff or volunteers continued monthly (with the first visit booked in at the point of signup). During the visits, businesses provided their monitoring data and any feedback.</p> <p>An ongoing promotional campaign (through partnership work with key local stakeholders, community groups and their social media platforms) was also delivered by Changeworks which aimed to increase: the number of participating businesses, public awareness, and uptake of the new services.</p>	<p>Volunteer check-ins used to share learnings between businesses.</p> <p>Trial continuation: businesses supported and promotion/awareness of ditching disposables activity in Portobello and Joppa continued.</p> <p><u>Quarter 4 (July - Sept 2022)</u></p> <p>Trial closing: support provided to businesses to continue interventions themselves without support.</p> <p>Follow-up waste audit for each participating business.</p> <p>Business, volunteer, and staff surveys developed and completed.</p> <p>Evaluation results compiled and shared in final report.</p>

⁸ Previously shared with ZWS

Waste data gathered from each business to help establish a robust baseline to measure against.		
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Table 2: Overview of phase 2 engagement with businesses in Portobello and Joppa

Total businesses approached	50
Business signed up	14
Business declined	8
Unable to reach business	28

A resource pack was also provided to businesses to ensure they felt confident delivering the project (table3).

Table 1: Resources provided to businesses

Resource	Description
Reusable cup loan scheme leaflet	Information leaflet for businesses to help them implement a reusable loan schemes for cups and containers.
Hygiene & Reusables Leaflet	Information leaflet to help businesses overcome stigma around reusables and hygiene post covid, with tips for using them without contact.
Financial Support Leaflet	Information leaflet to help explain financial support available through the ditching disposables project.
Frequently Asked Questions	Information leaflet with answers to most common questions raised by businesses, to help encourage engagement with project.
Guide to Loyalty Card	Information leaflet with guide to introducing loyalty card to encourage customers to use reusables.
Guide to Inputting Data	Information leaflet on how to use our systems to upload monthly data collection.
Guide to Interventions	Information leaflet with overview of interventions suggested.
Key Messages for Customers	Information leaflet with key points to communicate to customers to help engage them with the project.
Myth busting Bioplastics	Information leaflet with clear information on the issues with bioplastic to highlight the need to reduce waste, rather than focus on low carbon alternatives.
Overview of Legislation	Information leaflet on the impact of the single use item ban and how businesses could prepare.

Appendix B: Data tables

Table 4: Impact of interventions Items and Carbon costs from Business Waste Audits - baseline and latest follow up data⁹

		Napkins			Sauce sachets			Stirrers			Straws			Takeaway drink cups			Takeaway food containers		
		Baseline	Latest Follow Up	Saving	Baseline	Latest Follow Up	Saving	Baseline	Latest Follow Up	Saving	Baseline	Latest Follow Up	Saving	Baseline	Latest Follow Up	Saving	Baseline	Latest Follow Up	Saving
St Andrews	Item Count												200	200	0	10800	10800	0	
	Carbon Cost												1118	1118	0	192480	192480	0	
Bross bagels	Item Count					350	50	300					700	500	200				
	Carbon Cost					3618	517	3101					3912	2795	1118				
The cake & candy tearoom	Item Count				200	0	200				500	0	500						
	Carbon Cost				3842	0	3842				316	0	316						
Civerinos	Item Count				13333	160	13173												
	Carbon Cost				256120	3074	253046												
The Esplanade	Item Count																		
	Carbon Cost																		
Go Go Beets	Item Count												400	361	39	70	190	-120	
	Carbon Cost												2236	2018	218	1248	3386	-2139	

⁹ Carbon cost calculated as gC02e

Figures shown in Orange are not included in intervention percentage savings as shown on Page 10

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Malvarosa	Item Count	1000	500	500			125	50	75	100	4	96	160	70	90
	Carbon Cost	1341	670	670			79	32	47	559	22	537	2852	1248	1604
Miro's On The Prom	Item Count				10000	10000	0			10000	10000	0			
	Carbon Cost				103370	103370	0			55893	55893	0			
Oscar's Gelato	Item Count									700	700	0	7000	7000	0
	Carbon Cost									3912	3912	0	124755	124755	0
ShrimpWr eck	Item Count	1500	400	1100											
	Carbon Cost	2011	536	1475											

Table 5: Total monthly savings¹⁰

	Total items/month	Total carbon/month (gCo2e)
Baseline	57068	758412.52
Follow up	40795	492438.99
Savings	16,273	265,973.53

¹⁰ Carbon cost calculated as gC02e

Figures shown in Orange are not included in intervention percentage savings as shown on Page 10



Changeworks has been leading the way in delivering high impact solutions for low-carbon living for over 35 years.

Get in touch with the team to discuss how we could help you.

Contact us

Changeworks
36 Newhaven Road
Edinburgh EH6 5PY

Call 0131 555 4010

Email

Visit www.changeworks.org.uk

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Registered office: 36
Newhaven Road, Edinburgh EH6 5PY