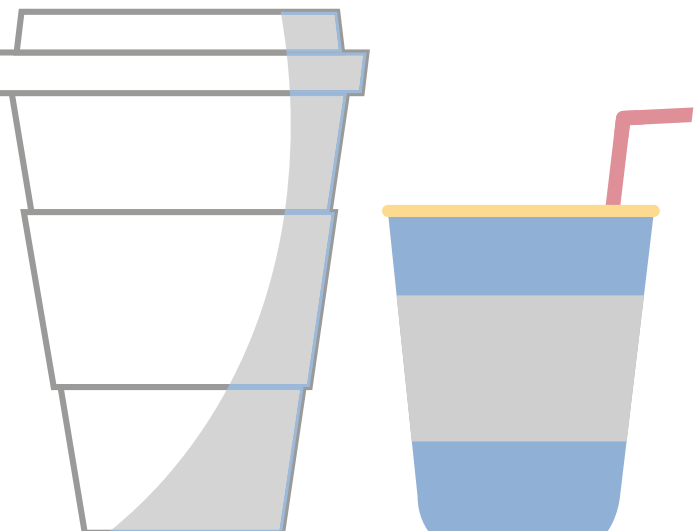


# Sorting through the "Single-Use" Problem:

An Overview of Initiatives to Prevent and Reduce Single-Use Items in Further and Higher Education Institutions



# Acknowledgements

**Sorting through the 'Single-Use' Problem** has been authored and designed by Sonya Peres with support from EAUC-Scotland.

The work has been made possible through funding from the University of Edinburgh and the University of Strathclyde.

Thank you to participating institutions and individuals who looked over drafts of the resource to provide valuable feedback.



# Summary

The following report highlights initiatives to reduce and prevent single-use plastics and disposable items taking place on university and college campuses in the United Kingdom, Canada and Ireland. The report is structured around five themes: institution-specific opportunities and challenges, incentives and encouragement, partnerships, community and monitoring and evaluation.

The purpose of the report is to provide concise and collated information on initiatives to help inform future projects with the wider goal of realising circular economies.

# Contents

<b>Definitions and Abbreviations</b>	4
<b>Purpose of the Report</b>	5
<b>Methods</b>	6
<b>Institutions</b>	
Aberystwyth University	9
Concordia University	11
University College Cork	13
Dundee and Angus College	16
University of Edinburgh	18
Guelph University	21
Simon Fraser University	24
University of St Andrews	27
University of the West of England Students' Union	30
<b>Broader Themes and Questions</b>	33

# Definitions

**Circular Economy:** an economic model that strives to maximise resource efficiency and productivity, reduce waste and mitigate the environmental impacts of production and consumption. The circular economy can benefit businesses, individuals and the environment.

**Single-use items, disposables:** items which are designed to be used once and are then thrown away.

# Abbreviations

<b>FHEIs</b>	Further and Higher Education Institutions
<b>SFU</b>	Simon Fraser University
<b>SRS</b>	Department for Social Responsibility and Sustainability at the University of Edinburgh
<b>SU</b>	Students' Union
<b>UCC</b>	University College Cork
<b>UWE</b>	University of the West of England

# Purpose of the Report

The purpose of the report is to facilitate knowledge sharing of how to address single-use items, or disposable items, in the FHE sector. By sharing details of initiatives, institutions can mirror or adapt existing ideas to their own initiatives.

## Why the FHE sector? Why single-use items?

It is crucial to address the use of single-use items, including plastics, in the FHE sector, as they play a critical role in influencing society and operate on scales large enough to cause environmental damage through irresponsible practices.

Single-use plastics and items cause significant damage to the environment by polluting rivers and soils which affects marine and terrestrial ecosystems and wildlife. Single-use plastics are broken-down into microplastics, which are tiny pieces of plastics that are smaller than 5mm in length. These plastics have been [found](#) in marine animals and food systems; researchers are yet to understand their impact on human and animal health.

Additionally, disposable items, like plastics, are made from fossil fuels (including petroleum resin); nearly every stage of the plastics lifecycle [emits](#) greenhouse gases, including during extraction of resources, manufacturing of the product and incineration. Plastic production is expanding and by 2050, it is [estimated](#) that the lifecycle of plastics production will account for around 13% of our remaining Global Carbon Budget.

Lastly, single-use plastics and products encourage overconsumption of materials and resources by advancing the idea that disposable items are necessary, convenient and normal. Instead of making products to last, companies and marketing campaigns have [encouraged](#) the use of disposable items as it advances consumerism and capitalism. It is important to reflect on our participation in throwaway culture and to begin valuing our resources. The [circular economy](#) is an economic model that aims to drastically reduce waste, keep materials and products in use for as long as possible and to restore natural systems. The model is in line with a move away from disposable culture and toward resource efficiency and environmental protection.



This report supports Sustainable Development Goal 12: Responsible Production and Consumption by sharing information to address unsustainable consumption through using resources more efficiently and reducing waste.

# Method

Through a review of online content, over 15 FHEIs, which have developed varying initiatives to tackle disposables within their institutions, were emailed to ask if they were willing to be interviewed for the report. Semi-structured interviews were conducted with 9 FHEIs that responded to requests to participate. Interviews took place between November 2019 and March 2020 on Zoom (7), over the phone (1) and in-person (1). Interviews lasted 30 to 45 minutes.

Semi-structured interviews were chosen as the primary method of data collection as they are **useful** in capturing qualitative data. The flexibility of semi-structured interviews allows for interviewees to shape conversations and share information they deem important, while also maintaining structure and relevancy to the aims of the research.

Questions for the semi-structured interviews were chosen to provide insight into the challenges and opportunities of implementing initiatives to reduce and/or prevent the use of disposable items across a range of circumstances within the FHE sector. Questions were identified via literature reviews, informal discussions with individuals in the FHE sector and reviews of online resources.

## Questions \*

## Rationale

1

**Does your institution present any unique challenges or opportunities to preventing and/or reducing single-use items?**

Initiatives to advance sustainability are not one size fits all. Highlighting areas where institutions have to implement initiatives without examples of best practice can provide interesting insight to the single-use problem in its varying forms.

2

**How do you incentivise staff and students to reduce their consumption of single-use items?**

Research on environmental behaviour change **concludes** that often campaigns to change behaviour need more than just knowledge-sharing and awareness-raising. This question seeks to understand how initiatives look to incentivise students and staff to change behaviours

3

**What are some benefits/challenges to partnerships?**

Partnerships are **crucial** to advancing sustainability and realising the Sustainable Development Goals. Partnerships and collaboration make initiatives more holistic, innovative and longterm. None of the featured initiatives worked independently, all maintained partnerships of some variety. This question seeks to provide insight into working collaboratively to tackle consumption of single-use items.

4

**Do you consider your institutions' relationship to the community in planning and executing your initiative?**

FHEIs often work to improve society through research and development. Additionally institutions **influence** the culture of local communities, provide jobs (directly and indirectly) and support local development in other forms. By asking this question, we can understand how initiatives to reduce single-use plastics and items affect/include local communities in the institution's area.

5

**How do you measure/evaluate impact? Do you at all focus on collecting qualitative data?**

Evaluation allows us to **understand** whether our initiatives are making a difference to the overconsumption of single-use plastics and items and learn more about what works and what does not work so that our efforts can have maximum impact. Methods of evaluation are everywhere and can look different to traditional ideas of evaluation. Asking this question can provide insight into forms of evaluation that readers had not previously considered.

Data collected from semi-structured interviews, alongside data collected from analysing online resources, including institutions' reports and presentations were collated and categorised by the pre-identified questions. Drafts of the report were given to key contacts from the participating institutions for approval and changes were implemented based on feedback. Lastly, broader themes and related questions were identified to facilitate communication of the initiatives and advance work on reducing single-use items on university and college campuses.

\*Questions changed slightly depending on the interview to improve relevancy to the initiative.



The report is structured around the themes the questions represent: institution-specific circumstances, incentivisation, partnerships, community and monitoring and evaluation.

Sources are embedded in the document. Simply hover over blue/bolded words.

## Limitations

The report acknowledges that it is geographically and culturally limited in scope. This is due to lack of capacity and language barriers. Further reports should highlight work being done in non-Western countries and in colleges to tackle single-use culture.

Please note that the information provided is not necessarily a cohesive overview of the initiatives, but rather an overview of information that aligns with the interview question themes.

Aberystwyth University became the [first](#) university in the world to be certified Plastic Free Institution by Surfer's Against Sewage in August 2018. The certification was awarded in collaboration with different levels of the university, including Hospitality and Sustainability teams, as well as senior management. To become certified, the institution needed to achieve certain criteria including:

- involve businesses located in Aberystwyth in efforts and support 3 improvements regarding single-use plastic items in each business
- create a Plastic Free Working Group to lead on phasing out single-use plastics
- hold Plastic Free events (Annual Plastic-Free Days)

Plastic Free days include a free screening of [A Plastic Ocean](#), guided litter pick-ups around campus, a special offer on purchasing reusable cups, a restriction on selling some single-use plastic items on campus and an information stand about single-use items.

During the Annual [Plastic Free Day](#) in 2019, the University announced it has pledged to carry on reducing single-use plastics by continuing to host Plastic Free days, maintaining a single-use plastics working group, nominating individuals from departments to act as champions and key contacts for the initiative by identifying single-use plastics issues in their departments and publishing an annual report on progress made in reducing and preventing single-use plastics.

## Unique Opportunities/Challenges

The town of Aberystwyth was working on achieving [Plastic Free Town](#) status through the Surfers against Sewage Plastics Free Coastlines initiative. There was already work to become plastic free ongoing in other Welsh towns, including Bangor and Carmarthen. This setting inspired the institution to look into schemes that were similar and also provided them with a supportive local community as the town was eager to engage the University given their significant presence and influence in the town of Aberystwyth.

## **Incentivisation/Encouragement**

Aberystwyth University introduced a Coffee Cup Tax in 2018 ensuring individuals buying coffee with disposable cups must pay a 20 p tax- the tax was later raised. They also introduced a loyalty card for individuals using reusable cups, rewarding them with free coffee after a set amount of purchases. And lastly, they gave away reusable metal bottles to incentivise no longer using single-use plastic bottles. However, leaders on the initiative prioritise reducing the need for disposable items rather than provide alternatives or incentives.

## **Partnerships/Collaboration**

Aberystwyth University partnered with the town and local businesses to host "The Big Plastic Debate – Problem or Opportunity?" in October 2019. The debate was an opportunity to share solutions and ideas about how to advance single-use plastic free lifestyles in the town from different angles and perspectives .

When creating a Plastic Free Working Group as part of the Plastic Free Status criteria, membership was open-invitation. However, organisers found that although it was an opportunity to incorporate many perspectives and skills, it became a "talk shop" as there were many ideas, but not much capacity to make improvements. Organisers changed the structure of the working group and instead invited key stakeholders, and one "champion" from each department to streamline efforts and make the collaboration more impactful.

## **Community/Local Engagement**

Aberystwyth University is uniquely position as an influential university in a town that has already undergone efforts to reduce consumption of single-use plastics, having acheived Plastic Free Town status in 2017- one year before the University . The town's Plastic Free community recognised the University's impact and reached out to get them on board in creating a cohesive and supportive community tackling single-use plastics together.

## **Monitoring and Evaluation**

Aberystwyth University has data of its purchasing figures, but have difficulty in using it to monitor its reduction of single-use plastics as many items are bought in bulk. Although, from these figures, Hospitality Services learned that they purchased 37% less cups since 2013, or 66,734 less cups. They also learned that introducing glass cups in the Student Union bar reduced the use of around 6,500 plastic cups.

The Hospitality and Sustainability teams do not actively monitor the initiative, although they have not received much negative feedback from emails, through social media, in-person etc. They have, however, come across individuals who believe the certification scheme should not be called "plastic free" as it does not mean plastic free, but rather, means making improvements to become single-use plastic free.



The department for Facilities Management at Concordia University has implemented and supports initiatives under the banner, [Zero Waste Concordia](#), which challenges disposable culture at the University.

## 1. [Zero Waste Week](#)

- runs the Zero Waste Challenge, where participants commit to examining the waste they make everyday, and why.
- runs a donation drive where participants in the challenge can pick donated items to create a Zero Waste Kit (ie. donated reusable mugs, reusable bags)
- runs workshops teaching participants how to make items to reuse, including shopping bags, as well as information sessions exploring the psychology and culture of single-use.

## 2. [The Dish Project](#)

- a student-run, University-funded initiative to provide free reusable dishes for university and/or local events.
- provides a large array of reusable dishes, including plates, cups, wine glasses, percolators, cake domes, etc.
- focuses on social justice and has defined the term "waste justice" to emphasise its political and ethical issues, including waste management practices that disproportionately harm marginalised communities.

## 3. [Concordia University's Centre for Creative Re-Use](#)

- offers a diverse range of materials, including plastics, wood, fibers etc. to the general community free of cost
- provides an accessible space to create items from the materials and repair materials

## **Institution-specific Opportunities/Challenges**

Concordia University have access to diverse used materials because of the wide range of courses offered at the university, from fine arts to hard sciences. Utilising these used materials is an opportunity to move away from single-use culture in creative ways.

## **Incentivisation/Encouragement**

The Concordia University Centre for Creative Reuse incentivises reducing waste and single-use plastics and items by offering free materials to its 2,300 members. The centre has saved members around £96,291 since its opening in 2017.

Also, contracted food services provider, Aramark are required to give students discounts for using their own mugs under the Love YourMug programme.

## **Partnerships/Collaboration**

Initiatives to discourage disposable culture and single-use items, including Zero Waste Concordia, the Concordia University Centre for Creative Re-Use and the Dish Project all work under the same banner to support the realisation of a circular economy at Concordia University, or a Zero Waste Campus, through sharing space, facilities, resources, waste auditing training and inadvertently, a volunteer base. Any departments, faculties, student associations, student clubs, and community groups are welcome to apply to become a partner in to Zero Waste Concordia. This is a benefit as it creates a community striving for similar goals with a stronger capacity while also allowing initiatives to work independently and focus on more specific aims (ie. the Dish Project and waste justice).

However, the challenge in working under an umbrella, especially when there is a shared volunteer base, is making sure each initiative is bringing in different people to the mission, instead of all three initiatives speaking to the same audience. Meetings are ongoing to discuss and plan how to reach other parts of the Concordia University population.

## **Community/Local Engagement**

The Dish Project offers their inventory of reusable items to the entire Montreal community to make both local and university events more sustainable, to discourage disposable culture to the wider public and to facilitate participation in shared and circular economies. The Dish Project's emphasis on waste justice vocalises solidarity with local communities impacted by environmental destruction caused by poor waste management practices.

Additionally, Zero Waste Concordia runs open consultations with stakeholders to gauge Concordia University's and local communities' priorities regarding waste. However, not many members of the community are active in these consultations.

University College Cork's [Green Campus Programme](#) works to advance sustainability across many areas of the institution and through collaboration with a variety of individuals in the University- the programme sees students to the highest-level university management working on the same footing. The Green Campus has helped UCC rank first globally for SDG 12: Responsible Consumption and Production on the Times Higher Education's Impact Rankings. They are responsible for many initiatives addressing the use of disposables and single-use plastics working under the banner [Ditch the Disposables!](#).

## 1. The Green Library

- complete ban on disposable coffee cups in the library
- in 2018, offering every incoming student a free reusable mug
- selling 5 pound reusable bamboo mugs at the Library Desk Services
- increased number of water fountains in the library to encourage reduced use of disposable water bottles

## 2. Plastic-Free Biocafé

- Ireland's first single-use plastics-free café at the Biosciences Institute in collaboration with KSG (appointed campus caterer)
- drinks served in bottles and cans instead of plastic
- vegetables delivered from university farm and local farm, Waterfall Farms, without packaging
- drinks fountains with built-in washing facilities in place to reduce plastic bottle use
- compostable takeaway containers and cups available for less than 40p and 10p respectively
- snacks, including chocolates, available in paper wrapping

## 3. Delivering on student-led Plastic Free [petition](#) asking their institution to eliminate certain single-use plastic items by 2023

- working with catering and campus services to become plastic free
- expand water fountain provision and improve existing fountains

## **Incentivisation/Encouragement**

When trying to reduce and prevent disposable coffee mugs, UCC began offering a 15 cent discount to customers using a reusable cup. Later, the discount was changed to a levy. However, it has been three years since the levy was introduced and organisers now believe that it has become expected that staff and students use a reusable cup.

The campaign is now focused on extending water fountain services and promoting clean, free water from these fountains when speaking to groups at orientations and other events. Organisers are also considerate of international students from countries where it is safer, and culturally-expected to only consume bottled water and are working on ways to promote water fountains and encourage their use. They are also focused on ensuring the fountains look nice and are well looked after to incentivise use and reduce purchasing of plastic water bottles.

The Green Campus programme is also conscious about how much responsibility is placed on the campus community and believes there is a fine line between "pushing initiatives on the campus community, and supporting them," hoping for change to come from the community and not solely from an extensive push from the Green Campus programme.

## **Partnerships/Collaboration**

The Green Campus programme collaborates with different groups within the University, KSG Catering and Cork City Council. A main challenge to partnerships and collaboration is when working across organisations, timelines can be impacted; initiatives may take longer due to differing timelines and capacities.

The Green Campus programme also supports students in leading this initiatives, offering expertise and support for infrastructure change to realise students' ideas. One challenge with this collaboration is the differing capacities of the students involved in the programme. For example, some students may be very busy with schoolwork. For others, initiatives to tackle single-use items may not be their priority as they may be struggling with poverty. Of course these varying challenges are not the fault of students and work has to be done to alleviate these issues for them.

Also, the University's partnership with the City Council involved funding from the City, enabling the Green Campus programme to provide free reusable bamboo mugs to new students in 2018. However, the funding was limited and introduced a challenge in thinking more longterm.

## Community/Local Engagement

Due to the University's presence in Cork, businesses and community groups have been inspired to begin tackling single-use plastics and items. For example, after the University began efforts to reduce and prevent disposable coffee cups, the Cork City Council followed suite.

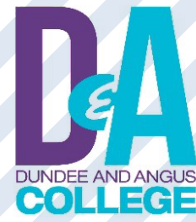
## Monitoring and Evaluation

The impact of the initiatives are understood by calculating how many single-use items are diverted from landfill. At the Plastic-Free Biocafé, 33, 183 disposable cups, 9,661 disposable knives and forks and 24, 342 single-use plates were [saved](#) in 2018/2019.

The programme also monitors initiatives qualitatively through the [Living Laboratory Research Seed Fund](#). The fund supports postgraduate projects that look at real-life issues (ie. infrastructure, practices etc.) at UCC. Aoife Hughes has been awarded funding to work on a project titled **Plastics Free UCC** beginning September 2019. The work will map and understand progress toward a plastics-free campus for 2023. The findings will be used to monitor and evaluate initiatives.



# Dundee and Angus College



Dundee and Angus College have created the "Project Plastic" initiative. The initiative has involved creating a video about the impact of single-use plastic on local, national and global scales to raise awareness of the issue.

The college have also developed the [Planet Before Profit](#) campaign which has:

- removed plastic bottles of water on campus, including from vending machines
- removed disposable coffee cups from catering services (which are institution-owned) and replaced cups with porcelain mugs
- installed of water stations to encourage the use of reusable bottles

Prior to the initiative, sustainability managers conducted a survey to gauge whether students approved of removing single-use plastics on campus- the survey received 600 signatures of support in just 2 days.

The college's work to reduce and prevent single-use plastics and items has received multiple [awards](#) including the Green Gown Awards for Campus Health, Food and Drink and the Sustainability Award from the College Development Network Awards.

## **Incentivisation/Encouragement**

Through incentivisation and encouragement, the College want to change the "culture of convenience" that influence staff and students to unnecessarily use single-use plastics and items and emphasise the benefits of reusable items.

Since installing water fountains, Dundee and Angus College try to emphasise the financial benefits to buying a reusable water bottle and using water fountains instead of regularly buying bottled water.

Organisers also screened Blue Planet which educated staff and students about plastic pollution. Lastly, they screened a Greenpeace [video](#) following a ship surveying Scottish coastlines and the amount of plastic pollution they noticed. The Greenpeace video, because it was Scottish-oriented, helped to bring the issue of plastic pollution closer to home and better engage staff and students.

## **Partnerships/Collaboration**

Dundee and Angus College partner with student associations and the Learner Engagement team, a team responsible for enhancing the student experience. These collaborations allow them to really engage with students, which is crucial in trying to reduce and prevent single-use plastics. For example, student associations share the initiative to tackle single-use items with class representatives, who then spread the message to classmates in their respective courses, increasing the amount of students on board with the project.

However, sometimes there are difficulties in getting all stakeholders and partners on board. For example, despite a focus on engaging students, not all the vendors at the Fresher's orientation followed suggestions to not use single-use items. However, organisers believe the initiative is a work in progress and that it is important to take notice of challenges and move forward.

## **Community/Local Engagement**

Although single-use reduction initiatives are focused on the college-community, Dundee and Angus College is very community-based. Campuses have salons, restaurants and event spaces for hire that facilitate engagement with the local community. The initiatives consider local traffic and their presence in the area and how the message of these initiatives will be disseminated to local communities.

## **Monitoring and Evaluation**

Measuring quantitatively, Dundee and Angus College have found that they have saved 150,000 cups and 20,000 bottles per year from the waste streams.

The college also provides space for students to pass on inquiries or complaints about student life through surveys, and the initiative has yet to receive any negative feedback.

# The University of Edinburgh



The University of Edinburgh own spaces that are regularly used as venues for the Edinburgh Fringe Festival and the Festival's largest landlord. The University, through the Department for Social Responsibility and Sustainability (SRS), ensures a presence at the festival to support venues and attendees in reducing their environmental impact through different measures:

## 1. [Festival Sustainability Hub](#)

- in 2019, SRS ran a sustainability hub during the Fringe Festival featuring workshops, support and experiences. Examples include providing festival-goers with zero-waste shopping experiences in collaboration with the Eco Larder, a zero-waste shop, amongst others.
- the Hub also provided advice on how to ensure sustainability through festival shows through the Greenhouse, a zero-waste performance space.
- other Hub elements included allowing attendees to shape a new re-usable cup scheme and workshops on upcycling to avoid waste and emphasise a culture moving away from single-use.

## 2. [Sustainability Statement and Protocol](#)

- The University of Edinburgh has asked tenants of the Fringe Festival to adhere to the same social responsibility and sustainability standards the University follows.
- SRS published a sustainability statement within their standard operating procedure, highlighting their commitment to reaching sustainability targets including being carbon zero by 2040 and eliminating disposable plastics by 2030. In the statement, they emphasise that tenants are expected to adhere to these principles and ensure their operations are sustainable.
- the Sustainability Protocol, which is linked to the University's Standard Operating Procedure is informed by the University's Climate, Community Engagement, Human Resources and Waste strategies as well as their Good Food Policy. It covers topics pertaining to single-use items including sustainable resource use, sustainable and ethical procurement and the circular economy.

The protocol encourages tenants:

- to accept reusable drink and food containers by patrons wherever possible
- to charge a levy for the purchase of single-use cups
- to consider more sustainable forms of flyering (handing out flyers to promote shows)

## **Institution-specific Opportunities/Challenges**

Venues owned by the University of Edinburgh are rented by theatre companies and vendor operators participating in the Edinburgh Fringe Festival. This is both a challenge and an opportunity as the University must strive to embed sustainability in an open-access festival with no central/top-down management yet it is also an opportunity to influence the festival and work on the university's reputation to the wider public. The improvised and informal nature of much of the Fringe means that there are no limits to where shows can be performed as part of the Festival and thus, it is difficult to look for guidance from other festivals with more limits and top-down management, making this area very unique.

## **Incentivisation/Encouragement**

SRS promote free water points on campus grounds to encourage festival-goers to use reusable water bottles and avoid buying bottled water.

Also, SRS are working on tackling "flyering." During the Festival, shows promote themselves by passing out countless flyers to passersby. With over 3,500 shows at the Fringe, flyers pose a problem in moving away from disposable culture. SRS will work on providing support to performers to develop more creative forms of flyering by encouraging them to be as creative as possible in their promotion and thus, hone and practice their art while also supporting the move to a circular economy. Currently, SRS is supporting [Staging Change](#) and [The Greenhouse](#) where they can, to advance sustainable flyering.

SRS also tries to promote practices by tenants who are operating with sustainable measures during the fringe through their online presence.

## **Partnerships/Collaboration**

Collaborating with stakeholders is the most important element of ensuring a sustainable Fringe Festival as there are many shows, vendors and organisations involved in the festival. One challenge in these partnerships is gauging what the University can reasonably ask of tenants and partners regarding making changes to shows, services etc. and the benefits of nurturing a partnership by more slowly becoming sustainable versus more urgent action.

## **Community/Local Engagement**

The Sustainability Hub featured stalls from local sustainable businesses and organisations that encourage a move toward a circular economy including SHRUB Coop and Eco Larder. A session led by the Community Engagement team at SRS highlights work being done by the University and the local community.

## **Monitoring and Evaluation**

There have been various waste and energy audits to monitor the environmental impact of University of Edinburgh's festival tenants and initiatives to reduce their consumption of single-use items. Qualitatively, project coordinators have noticed an increase in engagement with social media regarding single-use plastics and items at the Fringe as well as more individuals asking the team about reducing their consumption of these items.

First proposed in 2014 by [Dr. Shoshanah Jacobs](#) and [Dr. Daniel Gillis](#), [ICON](#) is a interdisciplinary course offered to students at the University of Guelph from all levels and disciplines. The course partners students with businesses and/or community groups in Guelph to find solutions to real-world problems, including finding meaningful solutions to reducing single-use plastics. The course was well-received amongst groups at the University, with support from both administration and students.

The ICON course is a fascinating example of an initiative to reduce and prevent single-use items and plastics that benefits students as well as the environment and other stakeholders.

Some semesters, students were asked to find solutions to accessibly reduce, replace, or eliminate single-use plastics and items on campus. Projects included:

1. Reusable Coffee Stamp Cards

Using the campaign hashtag [#iamreusable](#), the students, collaborating with the University's hospitality services, created a stamp system working across campus, in which customers are rewarded for using reusable coffee cups with stamps. For every 9 stamps, customers receive one free coffee.

2. Scullery Systems

Students audited two campus cafeterias, one that uses a scullery system, and another which does not. A scullery system is station that facilitates the use of reusable plates, cutlery etc. by providing washing, storage and waste sorting facilities.

After finding that the cafeteria without the system was disposing of 100 times more plastic cutlery and 25 times more PP#5 plastics than the cafeteria with a scullery station, the University implemented a scullery station in both cafeterias.

The Fall 2019 course were assigned the question, "What is being done on campus on the specific issue of reducing single use plastics and what can be done as a model for the rest of the city?"

1. The class developed a Green Procurement Guide for the City of Guelph in Ontario, Canada, after noticing the city did not have specific procurement plan and is solely following bylaws when purchasing goods and services.

In the Green Procurement Guide, students revisit the roles and responsibilities of government departments to adhere to green procurement, emphasise the importance of a circular economy and specify qualities that are suitable for green procurement including environmentally-friendly packaging and reusable items.

2. The class also analysed initiatives to reduce single-use plastics underway at the University of Guelph to gauge which initiatives could be expanded on to implement within the City of Guelph. Final reports recommending, and providing information to support the implementation of these initiatives in the City were drafted. Examples include:

- implementing scullery systems in cafeterias in the city
- city-wide reusable cups stamp card

## **Institution-specific Opportunities/Challenges**

The ICON programme is an opportunity to reduce and prevent single-use plastics and items through embedding these ideas in curricula and offering students, from all disciplines and levels, a chance to gain knowledge and skills while also tangibly tackling environmental issues. The course leaders shared that other schools were not as receptive to this programme, making its existence unique to the University of Guelph. Two challenges to the programme are the allocation of resources to keep the programme running and skepticism. Firstly, the programme has been given resources by the University for only a short period of time, with remaining semesters run by lecturers volunteering their time. The programme is currently undergoing review by the Board of Governors.

Also, the programme has received a few skeptics who undermine the capability of the programme and its participants to make real change although organisers perceive this as "old school" resistance to change and do not see it as a real barrier.

## **Partnerships/Collaboration**

The programme partners with the Hospitality Services and the Sustainability Office at the University of Guelph, as well as procurement and waste management teams to find solutions to reducing and preventing single-use plastics. More recent semesters have also partnered with the City of Guelph after receiving a Tweet from the City's mayor, Cam Guthrie, looking to collaborate. Students in ICON have reviewed systems in the city to reduce and prevent single-use plastics and items alongside other municipal systems and initiatives at the University and have provided guidance on how to scale initiatives to properly implement these approaches on a City-scale.

Course organisers say that a huge benefit to these collaborations is that partners are not seeking advice from one expert at the University, who may only understand issues in theoretical terms not grounded in reality (something they have experienced). Instead, they are having discussions and working alongside groups of students from multi-disciplinary backgrounds with the aims to provide tangible solutions to real life problems, in a mutually-beneficial partnership.

## **Community/Local Engagement**

Students looked at collaborating with local environmental non-governmental organisations (ENGOS) to reduce and prevent single-use plastics and items in the City but found that there were not any ENGOS in the city tackling these issues. Instead, they spoke with other community groups to better understand how to build on existing relationships between the University and the community in their work.

Course organisers believe that the ICON class "is a model for opening up the University to the City." One project provides guidance on how to scale up University initiatives to the City scale, directly considering how expertise from the University can help the City.

## **Monitoring and Evaluation**

Course organisers monitor and evaluate the course by surveying students during the course and evaluating their outputs. The course does not evaluate the initiatives themselves but invites partners (ie. the mayor, community groups) to sit in on final presentations.



In September 2019, Simon Fraser University in British Columbia launched the [Re-Use for Good](#) Initiative to reduce single-use plastics and products on campus. The initiative is a collaboration between students, staff and other stakeholders and led by the SFU Sustainability Office and Ancillary Services.

The project involves 4 different components to reduce and prevent single-use items:

1. Improve infrastructure (more water fountains and dishwashers)
2. Provide alternatives (reusable takeout boxes, reusable cutlery etc.)
3. Raising Awareness (engagement events)
4. Reduce unnecessary single-use plastics and disposables on campus

As of now, the University are in phase 2 of the initiative. Existing work includes:

- Developing a task force of change makers across the institution and an advisory group to oversee the initiative
- Offering reusable water bottles in vending machines
- [GoGreen Container Scheme](#)

A scheme that offers staff and students and individuals on campus reusable takeaway containers to be returned within 5 days, free of cost.

- [Tumblershare](#)

A scheme where one can pay £8.70 to become a member, show your membership to participating locations to receive a disposable tumbler for your coffee. Return the tumbler within 14 days. Earn a free coffee with every 10 purchases.

- [Zero-Waste Catering](#)

Meeting and Conferences Services to provide reusable dish-ware and compostable products.

Re-Use for Good has also hired a Accessibility Liaison to represent and consult with constituency groups, including the SFU Disability and Neurodiversity Alliance, the Centre for Accessible Learning and Disability Alliance BC. Please see the partnerships/collaboration section for more information.

## **Institution-specific Opportunities/Challenges**

SFU has an extremely diverse student population with international students comprising 20% of the total student body. As Re-Use for Good is planning for a complete phase out of plastic water bottles by August 2020, consideration for students from countries where it is unsafe to drink tap water or non-bottled water is imperative. The initiative is planning specific campaigns to engage with the international student community and share information in a culturally-sensitive manner about the safety of British Columbia water and the benefits of not drinking bottled water.

## **Incentivisation/Encouragement**

There are many ways the initiative incentivises and encourages reducing or preventing consumption of single-use plastics and items.

The scheme provides metal water bottles in vending machines for only 25 Canadian cents more than bottled water. These prices allow students to save money by providing them with good quality reusable water bottles for nearly the same price as a single-use plastic bottle.

Additionally, the Tumblersshare programme offers a free coffee after nine purchases using a provided tumbler, incentivising partaking in the initiative.

## **Partnerships/Collaboration**

The Sustainability Office and Ancillary services have hired an Accessibility Liaison to consult with, and represent students with disabilities to ensure their inclusion in the programme. The Accessibility Liaison is a member of the disabled community.

This collaboration with the initiative and constituency groups began due to students' voicing concerns over inclusivity in sustainability initiatives, (particularly a concern over the removal of plastic straws) and recommending hiring a student to ensure "no one is left behind" in the initiative.

The collaboration has seen plastic straws made available to students who need them by request, a move that continues to spread the message of a circular economy without shaming or excluding individuals in the movement. Additionally, free reusable

products have been made available in certain areas of the campus for those who might not be able to otherwise access the products. Lastly, Re-Use for Good is working to strengthen communication to make programme aims as accessible as possible. This initiative includes careful consideration of language as well as proper explanation of eco-labels, or the identification of environmentally-friendly food and products. Overall, the collaboration is important as it includes a wider range of individuals and also emphasises that it is important to consider capabilities and capacity in implementing certain sustainable behaviours.

## **Community/Local Engagement**

The City of Vancouver has a Single-Use Item Reduction [Strategy](#) that SFU works to align with; however, SFU cannot completely align with the city as they make amendments to better include individuals with disabilities.

Additionally, Re-Use for Good runs public consultations and accepts online feedback from both the SFU and local community. The programme also uses the Vancouver's public consultation on initiatives to reduce single-use items (like plastic bags) to inform their work, indicating the influence of the city and local community in the scheme.

## **Monitoring and Evaluation**

The initiative is able to measure how many disposable coffee cups and takeaway containers are diverted from landfill by how many reusable alternatives have been provided through the GoGreen and Tumblersshare programmes. Based on numbers provided in Fall 2019, 300 coffee cups and 1237 single-use containers have been diverted.

In terms of qualitative data, the scheme allows individuals to provide feedback online. Additionally, there have been various tabling exercises during Welcome Week and other events where organisers have been able to gauge what SFU and the local community might need to help them reduce and prevent consumption of single-use plastics and items.

Next steps include conducting a waste audit and conducting surveys to measure impact.



In July 2019, the University of St Andrews [partnered](#) with BRITA, a water filtering and dispensing company, to install self-service still and sparkling water stations to support the reduction of plastic bottles with a removal of an estimated 40,000 bottles from the local community.

The University has also addressed historic student traditions, like [Raisin Mondays](#), that can encourage a lot of waste and consumption of single-use items. Since 2012, The Environment Team, with collaboration from the Estates Team, run the [Green Raisin](#), a competition to reward sustainable engagement with the tradition that can reduce single-use items and waste.

Alongside the St Andrews Environmental Network and Transition St Andrews, the University is also a part of the Plastic Free St Andrews Project which provides information and guides to help residents and businesses in St Andrews move toward a single-use plastic free lifestyle.

## **Institution-specific Opportunities/Challenges**

The University of St Andrews is the third oldest university in the English-speaking world and consequently follows many historical traditions. Many of these traditions may encourage waste and the consumption of single-use plastics and items.

For example, freshers and their academic parents (senior students) participate in Raisin Mondays. It is where academic parents gift freshers receipts, or something embarrassing that they must carry. They also dress-up in creative and/or embarrassing costumes and have a foam fight on Lower College Lawn.

In 2012, the University of St Andrews Environment Team recognised the unique opportunity to embed sustainability and encourage a circular economy in a historic tradition that is integral to student life at the University.

They engaged the rest of the Estates team, who run the events, and created a "Green Raisin competition." The competition asks academic families (freshers and seniors) to consider the environment and throwaway culture when choosing receipts and designing costumes. The Environment Team provides advice on avoiding plastics and minimising waste. Winning families are gifted prizes which in the past have included a meal at a restaurant or a land yachting experience.

However, during certain years, the idea of changing tradition has not appealed to the Student Union executives, who play a large role in engaging students during the event. Although, in more recent years, the executive teams have prioritised sustainability. In 2019, the event was the most successful it has even been, with the Environment Team reporting in 2019-2020 that the event accrued very little waste.

Regardless of the support, the Environment Team emphasise to the University community that Green Raisin is not about changing tradition, but rather "updating it to the 21st century."

Also, most retail spaces on campus are owned by the University. This created an opportunity as it was easier to come to an agreement to partner with BRITA and phase out bottled water and accept that some profit may be lost in this scheme.

## **Incentivisation/Encouragement**

The University of St Andrews partnered with BRITA to offer free, unlimited sparkling water to students. This initiative is meant to "upsell" the offer to reduce and prevent plastic use and to allow students and staff to feel as though they are gaining (sparkling water), rather than losing (bottled water).

## **Partnerships/Collaboration**

The University partners with the St Andrews Environmental Network and Transition St Andrews to reduce the use of single-use plastics in the town. This partnership gives the campaign to reduce and prevent single-use plastics and items a louder voice. The partnership also strengthens all the institutions involved against criticism and backlash: as the Environmental Network supported the University when they received criticism about cardboard accrued during students' move-in days by emphasising the need for Fife Council to increase waste and recycling collection days for these events.

## **Community/Local Engagement**

The University empathises with local residents who regularly experience mass movement as students move in and out of the city and the off-campus waste that accompanies this movement. Initially, to address this waste problem, the University provided skips for students to dispose of unwanted items. However, the Environment Team is challenging this solution as it advances and normalises disposable culture. Instead, they are beginning a collaboration with the British Heart Foundation to introduce an end-of-the-year scheme where students can drop off their unwanted items at donation banks. This initiative closes the loop on waste, benefits local residents who may be affected by waste from moving days and benefits charity, as well.

## **Monitoring and Evaluation**

The University focuses on quantitative measurements to evaluate the impact of their initiatives. They anticipate the BRITA partnership will divert over 40,000 plastic bottles from landfill. Additionally, Green Raisin

In September 2019, 1,200 staff and students protested on a beach in St Andrews, calling for climate action; only 600 strikers were expected. Staff at the Environment Team see this as visual evidence of engagement in green initiatives at the University.

# University of the West of England's Student Union



In 2016/2017, the Students' Union at UWE launched their [#PlasticDetox](#) initiative to reduce the consumption of single-use plastics. The initiative was launched by The SU's Sustainability Committee, a group of students advising The SU on its sustainability agenda and running student engagement campaigns.

Since the launch, the initiative has engaged with UWE's staff and students through

- Running a charity stall in collaboration with the Malaysian society selling reusable straws and bottles for the locally-based City to Sea, raising nearly £250
- a Marine themed club night featuring party bags promoting plastic free living
- Plastic-themed quiz highlighting the issue with a plastic free hamper bag
- a [pledge](#) to reduce single-use plastics and to mandate UWE and The SU to do so as well, signed by over 200 students
- [Period poverty campaign](#), increasing awareness of and access to reusable and plastic free menstrual products
- [Greener Futures Accreditation](#), a competition rewarding sports clubs and societies for participating in sustainable challenges, many of which include reducing and preventing single-use plastics and items.
- banning plastic cups from the union bar, and plastic bags from the shops and events, as well as opened a [zero-waste](#) section in one of the Student Union shops
- engaging with 2016 Freshers by giving out reusable water bottles and also banned the use of plastic bags at the Fresher's fair.

In response to the initiative, UWE Bristol has set up a Task and Finish group to draft a [plastics statement](#) highlighting its progress on plastics thus far as well as next steps.

## Institution-specific Opportunities/Challenges

Some Student Union outlets are a part of the National Union of Students' (NUS) National Purchasing Consortium; meaning, contracts are narrowly defined and instead of choosing their own providers to reduce and prevent single-use plastics, they must first encourage NUS to include these providers. Also, Bristol is a forward-thinking city that is a good platform for sustainable initiatives, contributing to interest in reducing and preventing single-use plastics and added support.

UWE Bristol and The Students' Union have worked together to create a sustainable events statement and guide for colleagues and students. This helps a wide range of people consider how to make their events and activities more environmentally friendly.

## **Incentivisation/Encouragement**

A screening of Blue Planet 2 increased interest in addressing single-use plastics amongst students, making it a priority at UWE Bristol and the Student Union.

Other ways staff and students were encouraged to use less disposable items was through a 20p levy on purchasing coffee with a single-use cup and a 25p discount on coffee if you bring use your own reusable mug under the Own Mug Discount Scheme.

The Greener Futures competition offers rewards to student groups a chance to compete to win a prize of £300 their club by completing point-based challenges that encourage sustainable behaviours. These challenges include reducing consumption of single-use items, like going plastic-free for a day or consistently using reusable water bottles. Completing these challenges allows groups to accumulate "Green Futures Points." At the end of the year, they may win a prize depending on how many points they obtain.

Additionally, at certain events, The SU at UWE Bristol gives away metal straws, coffee mugs and water bottles to encourage a move from single-use to reusable.

## **Partnerships/Collaboration**

The SU work alongside university departments. This is a benefit as The SU brings passion to the mission, alongside student engagement, while the university provides expertise. Working with the university allows The SU to have calculated responses to plastics problems. For example, The SU at UWE Bristol initially thought Vegware, plant-based, compostable food packaging, was a great pathway to preventing and reducing single use plastics. However, through collaboration with the University, they learned that using Vegware is only beneficial if waste is managed properly (separated and treated correctly). Through this experience, The SU also learned that encouraging the use of reusable items instead of alternatives to single-use behaviour is always best.

However, through collaboration with the University, they learned that using Vegware is only beneficial if waste is managed properly (separated and treated correctly). Through this experience, The SU also learned that encouraging the use of reusable items instead of alternatives to single-use behaviour is always best.



## **Community/Local Engagement**

The SU at UWE tries to promote and support local businesses that also aim to reduce single-use plastics and items by occasionally giving away vouchers at their engagement events, or including products in prizes and gift hampers.

When The SU shop at UWE's Frenchay Campus began work to open a zero-waste section, they consulted with Zero Green Bristol, a local business selling food and other products without packaging, on what to do- incorporating expertise from the local community into the initiative.

The SU also collaborates with locally-based charity City to Sea who has a longstanding relationship to the institution through project and curriculum-based collaboration. Aside from fundraising for the charity, the SU also uses its awareness-raising and knowledge sharing materials to spread the message of the harmful impacts of single-use plastics and items in preparation for the #PlasticDetox campaign.

Although The SU believes it has not yet done a lot of work on engaging the local community to share the goal of reducing single-use plastics and items, they are conscious of the knowledge and behavioural spillover that occurs when students move into private accommodation in the city of Bristol.

## **Monitoring and Evaluation**

The SU measure impact through the NUS Responsible Futures Accreditation and NUS Green Impact Awards, collecting both qualitative and quantitative data although there is a focus on quantitative data as they are easier to evaluate. Through the NUS Green Impact Awards, The SU conducts plastic audits to gauge the consumption of unnecessary plastics, including single-use, and some multi-use plastics, within the union. These audits include a recording of the number of plastics used by clubs participating in the Greener Futures Accreditation. Through these audits, The SU have figures on how much they are reducing plastics through their programmes and in their operations. For example, by removing single-use cups in The SU bars, the union has saved 22,000 single-use cups from going in the landfill.

Additionally, there are other less official measures of impact, including feedback from Zero-Waste shop as well as purchasing figures of stock and how often they are replenished in the Zero-Waste shop to gauge use of the shop.

# Broader Themes

## Internal vs. External

Challenges or opportunities that are specific to institutions are often either internally or externally imposed. For example, the University of St Andrews faces institution-specific challenges and opportunities to addressing single-use items from historic traditions, like Raisin Mondays, whereas the University of Edinburgh's institution-specific challenge and opportunity is the Fringe Festival, an international, city-based festival. It is important to question from where do these opportunities and/or challenges arise? Are there differences between an internal and external opportunity or challenge to tackling single-use items? Perhaps here we may see differing levels of "control" and "power" in these initiatives and a need to adjust timelines for projects and communications with partners based on external or internal circumstances.

The theme of external and internal forces also applies to partnerships. Most initiatives have some sort of internal partnership, including collaboration between student associations and institution departments as seen with UWE's #PlasticDetox campaign and UCC's Ditch the Disposables!. Some institutions also form external partnerships to share resources, expertises and develop a stronger sphere of influence.

Are internal partnerships more crucial than external partnerships? Or vice versa? Do the benefits of these partnerships differ? Does the management of these partnerships differ? Do we alter expectations for collaboration depending on whether our partnerships are institution-based, local or even global?

## Active vs. Passive Engagement/Consideration

Certain institutions actively engage with local communities to inform their work by seeking local expertise, asking for feedback and by sharing their strategies so that the benefits of the initiatives can be widely felt. In the highlighted initiatives, active engagement is realised through public consultations, partnering with local shops or charities for advice, promoting local businesses, providing local governments guidance and advice etc.

Alternatively, some initiatives also consider more passive, or indirect forms of engagement like level of influence in the city/town and/or amongst local communities and how this influence reaches communities. For example, some programmes consider knowledge spillover from students who may engage in initiatives to tackle single-use items and later move from institutions' accommodations to private accommodation and carry their knowledge and practices with them. Also, services provided to the community at institutions (like salons and restaurants) are spaces where residents can witness initiatives to reduce single-use items firsthand and thus where institutions may indirectly engage communities.

What are some other considerations to passively, or indirectly engaging local communities on tackling single-use items? Is effective indirect engagement dependent on the level of influence the institution has on the local community? Is it dependent on the size of the city/town versus the size of the institution?

What are the benefits of direct or indirect engagement with local communities and do they differ? What are the differences in measuring direct versus indirect engagement to better understand the impacts of initiatives?

## **Financial vs. non-Financial Encouragement**

Most of the highlighted initiatives encourage reduction in single-use plastics and items by offering or promoting a financial incentive to staff and students. For example, many schemes to reduce disposable coffee cups have introduced either a fee levy if using a disposable cup to purchase coffee, or a discount if using a reusable cup. Other financial incentives include a stamp card for a free coffee after using a reusable mug for coffee purchases a certain amount of times, highlighting how much money an individual will save from disengaging with disposable culture, or offering a cash prize in a competition to reduce disposables.

Alongside financial incentives, certain initiatives employ non-financial incentives to further encourage engagement in the initiative. For example, Dundee and Angus College showed Greenpeace's short film about plastic on Scottish coastlines to drive the importance of circular economies closer to home. The University of Edinburgh tries to promote practices by tenants that reduce single-use plastics and items, thereby providing some sort of public recognition.

What are the barriers to reducing consumption of disposable items and do financial and non-financial incentives differ in eliminating those barriers? How exactly do financial and non-financial incentives work together? What happens if one incentive is removed?

This draft has been prepared by



With support and funding from

