

Reducing Plastic Consumption at the University of Nottingham

“Plastic is an incredibly versatile material that forms a key component of many products we use today. As a packaging material, it is safe, secure, hygienic and cheap. It is tough and long lasting, which is why it is a disaster for the environment.”

A Green Future: Our 25 Year Plan to Improve the Environment, HM Government (2018).

Proposals

We are looking for ideas from Ingenuity18 participants on how we can effectively change behaviours around single-use plastics. The best proposals will incorporate an understanding of the waste hierarchy (diagram below), and set performance targets (e.g. % reduction in bottle use).

Your idea might address:

- **How can we promote responsible behaviours and decreased consumption of single-use plastics?**
- **How can we incentivise people to have a more considered use of single-use plastics?**
- **How can we effectively communicate to students and staff around issues on plastics so that they make informed choices?**
- **What other unnecessary plastic should we target and how?**

The University wants to reduce our use of single-use plastic items and disposable coffee cups. We are considering making physical changes (e.g. installing more water fountains), removing or changing certain items (e.g. plastic straws to paper) and running a behaviour change campaign encouraging students to challenge their own behaviour (e.g. avoiding bottled water and using a sports bottle).

- We are looking for solutions to reduce the amount of single-use plastic we use as a University
- Our initial focus is to decrease bottles used for water and to reduce the consumption of one-use hot drinks cups in all retail outlets.
- We want to combine this with a proactive approach to encouraging our students and staff to drink tap water as a healthy, affordable alternative to bottled water.
- We are considering other plastics and how we can work to reduce these in the longer term

Scale and trends at UoN

Plastic bottles

Sale of drinks in plastic bottles is very popular. Re-sealable lightweight bottles work well for consumers –and their appeal far outweighs cans. A significant proportion of bottles sold are water, offering the best opportunity to reduce consumption, shifting consumers from bottled water to water in to refillable bottles.

Coffee cups

Disposable coffee cups remain the most popular option for hot drinks sold across the University. Many understand the cups to be recyclable, but a thin plastic lining means materials cannot be recovered from the cups.

Other plastic items:

- Plastic cutlery, plastic straws, plastic bags and lids of coffee cups
- Takeaway boxes and plastic wrapped items
- Plastics for laboratory applications
- Microbeads in personal care products (toothpaste and face scrubs)



An estimated **800,000 plastic bottles** were sold last year between the University and SU



Data from the SU shop shows an estimated **132% increase in sales of bottled drinks** since March 2017



Water made up 25% of bottled drinks purchases between 2015-2017 in SU shop



Over 98% of bottled water purchased by the University is plastic



We used at least **1 million hot drinks cups** last year across campuses

Current disposal

The EU Waste Framework Directive sets out a hierarchy of waste disposal (right): this prioritises prevention or reduction in waste consumption; then re-use of the item; then recycling; then recovery; then disposal.

Currently plastic items are disposed of through recycling or general waste, and subsequently sorted by our waste contractor. Recyclable items are removed for reprocessing and non-recyclable items are used for energy from waste.



UK context

Plastic bottles	Coffee cups
<ul style="list-style-type: none"> -The UK's recycling rates for plastic bottles are flat lining at 57%, while other European nations are recording recycling rates for bottles at 98% -Plastic bottles make up a third of all marine plastic litter -The average person uses 150 plastic drinks bottles a year 	<ul style="list-style-type: none"> - Across the UK, over 7 million coffee cups are disposed of a day - The construction of the cup, which includes a plastic lining, makes it practically difficult to recycle- only 0.02% of all cups in the UK are recycled.

The Government has recently made a number of statements and commitments to reduce plastic consumption and minimise the pollution of our rivers and seas. This is, in part, a consequence of the highly successful BBC production of Blue Planet II which made the issue accessible to millions of viewers through the autumn of 2017.

There has been a commitment from government to achieve zero avoidable plastic waste by 2042 and it has already made a number of commitments for the near future:

- **Offering new water refill points** for people to top up water bottles for free in every major city and town in England
- **Extending the uptake of the 5p plastic bag charge** – extending highly successful charge to include small and independent retailers
- **Introducing plastic free supermarket aisles** in which all of the food is loose.
- **25p “latte levy” being considered**– following a recommendation from the Environmental Audit committee, a charge for single use cups.

What has already been implemented to reduce plastic consumption:

- Plastic bag tax – 5p for businesses with 250 or more employees
- Microbead ban – ban on *producing* personal care products with rinse-off microbeads. Commonly found in face scrubs and some toothpaste. Many retailers phasing out entirely.

Other nations have implemented a bottle deposit scheme, where a tax is charged on plastic bottles is returned to the consumer once the bottle is returned. This has seen recycling rates of around 96%.