



Briefing for the Public Petitions Committee

Petition Number: [PE1636](#)

Main Petitioner: Michael Traill

Subject: Single use drinks cups

Calls on the Parliament to urge the Scottish Government to introduce legislation requiring that all single use drinks cups (including all sleeves, labels & lids) be 100% biodegradable.

Background

In the background information the petitioner states:

“Every year the UK gets through billions of single use drinks cups, the type used by coffee chains and takeaway outlets. Not all are recyclable.

Every day single use drinks cups are sent to landfill in their hundreds of thousands, only around 1 in every 400 is recycled. Many such cups end up littering our parks & greenspaces. By requiring that all single use drinks cups, as well as their lids, labels & sleeves are 100% biodegradable we can ensure that their negative impact upon our planet is reduced. Recycling only works when people actually do it. Requiring packaging such as this to be 100% biodegradable will make a tangible difference to the environment in Scotland where discarded single use drinks cups can be seen littering our country.”

Single use drink cups - disposal in Scotland

According to Zero Waste Scotland, 208 million disposable coffee cups are thrown away each year in Scotland (Zero Waste Scotland [website](#)).

Recycling rate of disposable drink cups

Although some paper cups are recyclable – recent studies have suggested that only a small percentage of the disposable cups used are recycled. One of the constraints to recycling disposable cups includes the mixture of materials that are used to make the cups.

The sustainability charity organisation [Bioregional](#) highlights that:

“Both paper (a biological material) and plastic (a technical material) are used in the production of the cups. The paper element of the cup could be easily recycled because it is non-toxic and biodegradable, if it could easily be separated. Unfortunately, we need the plastic coating on the inside of the cup to make it waterproof, and the combination of these materials mean recycling is no longer straightforward.

There’s currently only one centre in the UK that can recycle coffee cups – **Simply Cups**. This Kent-based company currently recycles less than 1 in every 400 cups we dispose of.”

The [Recycle for Scotland](#) website developed by Zero Waste Scotland advises on how to recycle and provides the following advice on paper cups:

“Paper coffee cups are not normally accepted in household recycling schemes, and should be placed in your waste bin unless specifically asked for by your local authority.

Recycling technology is developing in this area and there are some facilities which can recycle paper cups. However, unless your council use these facilities, the paper cups cause problems within the traditional paper and card recycling process.”

Approaches adopted to date to address this challenge

Several initiatives have been developed to address the challenges associated with the volume of disposable paper cups used. These include:

- Programmes that support the collection of the cups for recycling e.g. a campaign co-ordinated by sustainability organisation [Hubbub](#) to trial coffee cup collection and recycling in Manchester:

“By collecting the cups separately in these bins, the process of cleaning and shredding them is made much more simple and solves the contamination problem. Working with Simply Cups they will then transform the used cups into flowerpot holders by mixing the waste coffee cups with other recycled plastics.”

- Disposable cups that can be composted e.g. [Vegware](#), an Edinburgh based company, has developed compostable food and drink packaging.
- Initiatives to reduce the use of disposable cups in favour of encouraging reusable cups. eg a campaign by the [Environmental Paper Network](#).

Biodegradable and compostable cups

The terms 'biodegradable' and 'compostable' are sometimes used interchangeably but do not necessarily have the same meaning. The [Association for Organics Recycling](#) have suggested that:

“The level of industry and public confusion is often compounded by the fact that certain products are being incorrectly marketed without any certified evidence to substantiate their claims.”

They suggest the following definitions:

Compostable: 'Materials which biodegrade in a composting process through the action of naturally occurring microorganisms and do so to a high extent within a specified timeframe. The associated biological processes during composting will yield CO₂, water, inorganic compounds and biomass which leaves no visible contaminants or toxic residue/substances.'

Biodegradable: 'Materials which can be completely biodegraded (bio-assimilated) by microorganisms such as bacteria, fungi and algae. On its own, the term is to a degree obsolete as most materials will biodegrade within a given time. There are no defined time limits for the term 'biodegradable''

A number of European standards have been developed to assess whether a packaging product or material is compostable. These include:

- EN 13432 - requirements for packaging recoverable through composting and biodegradation
- EN 14995 - plastics: evaluation of compostability

Currently, the EN 13432 standard defines what characteristics a material must have in order to be defined as 'compostable'. These properties include:

- **Biodegradability:** the ability to break down into carbon dioxide, water or biomass at the same rate as cellulose (paper)
- **Disintegrability:** the material is indistinguishable in the compost, is not visible and does not need to be screened out
- **No heavy metal content:** there is a limit value for the content in compostable plastics, and
- **Eco-toxicity:** the material produced from compostable plastics has no negative effects on composting.

Recycling vs biodegradable/composting cup

The paper cup recycling service, Simply Cups, suggests that simply making a cup from a biodegradable or compostable material does not necessarily mean that the cups would be disposed of in a way that would facilitate that

happening:

“Like all other cups today, the biodegradable cup is limited to disposal in general waste bins – unless dealt with through Simply Cups, of course – which will result in either landfill or incineration. Neither outcome is ideal, but if there is an absence of oxygen in landfill then the products will not biodegrade and so the role of the biodegradable cup becomes futile.”

Some research also highlights that making a cup biodegradable or compostable doesn't necessarily address the energy and resource impacts associated with making the cup in the first place ([BIO Intelligence Service report for the European Commission](#) 2012)

Biodegradable cups and litter

In the report for the European Commission, BIO Intelligence Services suggest that making a produce from biodegradable packaging could actually have a detrimental impact on littering:

“Consumers are more likely to litter biodegradable packaging, presumably based on a mistaken belief that such products will disappear quickly in the natural environment... This situation, where littering is induced by a misunderstanding or misuse of the term “biodegradable”, could worsen the littering problem. In many cases, biodegradable materials are only technically biodegradable and not naturally biodegradable..., resulting in the littered packaging persisting in the environment for a long period.”

Alternative approaches – encourage reuse

In their report [A Clean Sweep](#), waste consultants Eunomia have suggested that a tax on disposable coffee cups should be introduced as part of a package of measures to tackle litter

“The most effective way to incentivise a switch to reusable mugs, thereby bringing about significant prevention of waste and litter, would be an obligatory charge on single-use cups.”

As part of their funding to support litter prevention Zero Waste Scotland ([2014](#)) the Zero Waste Product and Service Development Fund states that it will encourage, “...product or service changes, such as:....purchase reusable coffee cups for a group of businesses in a local area to reduce the number of disposable cups.”

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