PE2164/B: Ban all non-essential single-use plastics

Petitioner written submission, 8 September 2025

This petition was created with seventeen years of experience of coastal pollution, living and working within a Scottish island community and discussing the issue with its inhabitants. It demands new legislation to ban the use of all non-essential and non-biodegradable single-use plastic items, which would comply with the UK's 25 Year Environment Plan (Chapter 4: Increasing resource efficiency and reducing pollution and waste) and the responsible consumption and production area of the Circular Economy and Waste Route Map.

In the last two decades, global plastic production has doubled¹, with the UK at the forefront, producing the second highest amount of plastic waste per capita². Single-use plastics are responsible for large amounts of this waste, and common items can take up to 500 years to biodegrade. Plastics cause significant harm to wildlife due to ingestion or entanglement: since 1986, the average abundance of Scottish seabirds has declined by 49%³, largely to do with plastic pollution. Additionally, over time macroplastics will break up into micro or nano plastics which can become airborne, seep into drinking water, and contaminate human food sources, creating potential links to cardiovascular diseases⁴, digestive problems, and endocrine disorders⁵.

Already, some legislation exists which acknowledges the impact of single-use plastic waste: the Environmental Protection (Cotton buds) (Scotland) Regulations 2019, the Environmental Protection (Single-use Plastic Products) Scotland 2021, and the single-use disposable vape ban that came into effect as of 1st June 2025. The issue that arises from these pieces of legislation is that working on a product-by-product basis does not acknowledge the sheer volume of single-use plastics that exist or are created daily, which all have the potential to become harmful pollutants. In the time taken to categorise and outlaw every individual existing single-use plastic item manufactured globally, further significant and potentially irreversible environmental damage would have occurred. The existing legislations also only apply to commonly littered plastic items, discounting the harm caused by single-use plastics that enter or escape from landfill, or produce unnecessary methane when incinerated (in 2022, the waste sector represented 30% of total UK methane emissions⁶, significantly contributing to climate change via the greenhouse gas effect).

¹ Geyer et al. (2017); OECD (2022) – with major processing by Our World in Data

² Jambeck, J. R., Geyer, R., Wilcox, C., Siegler, T. R., Perryman, M., Andrady, A., ... & Law, K. L. (2015). Plastic waste inputs from land into the ocean. Science. – processed by Our World in Data. "Per capita plastic waste" [dataset]. Jambeck, J. R., Geyer, R., Wilcox, C., Siegler, T. R., Perryman, M., Andrady, A., ... & Law, K. L. (2015). Plastic waste inputs from land into the ocean. Science. [original data].

³ https://web.archive.org/web/20240525020834/https://www.nature.scot/doc/scottish-biodiversity-indicator-numbers-and-breeding-success-seabirds-1986-2019 It is worth noting that these results predate the current outbreak of Highly Pathogenic Avian Influenza.

⁴ Kadac-Czapska K, Ośko J, Knez E, Grembecka M. Microplastics and Oxidative Stress-Current Problems and Prospects. Antioxidants (Basel). 2024 May 8;13(5):579. doi: 10.3390/antiox13050579. PMID: 38790684; PMCID: PMC11117644.

⁵ Lee Y, Cho J, Sohn J, Kim C. Health Effects of Microplastic Exposures: Current Issues and Perspectives in South Korea. Yonsei Med J. 2023 May;64(5):301-308. doi: 10.3349/ymj.2023.0048. PMID: 37114632; PMCID: PMC10151227.

⁶ Department for Energy Security and Net Zero, 'Final UK greenhouse gas emissions national statistics: 1990 to 2022' (6 February 2024): https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2022

However, these pieces of legislation do prove the demands of this petition are viable. If a total ban on single-use plastics were to be put in place, it suggests similar guidelines would likely be followed: enforcement would be the responsibility of local authorities and failure to comply with the regulations would carry a fine, following the Extended Producer Responsibility (EPR) schemes polluter-pays principle. As with the existing legislation, it will only apply to products manufactured in or imported directly into Scotland.

The proposed ban would exclude any single-use plastic products defined as essential, such as those required by disabled people or hospitals for hygiene or accessibility – for example medical packaging, incontinence or period products, syringes, IV bags, tubing, catheters, surgical gloves, face masks and shields, and disposable gowns. It should also take into account whether more sustainable alternatives are available. Furthermore, the new legislation should only target single-use items, which are defined by The Waste and Resources Action Programme (WRAP) as an item that is made wholly or partly from plastic and that is not conceived, designed or placed on the market to accomplish, within its life span, multiple trips or rotations by being returned to a producer for refill or re-used for the same purpose for which it was conceived. Some examples of the included items are sileage wrapping, most plastic food packaging, cigarette butts, single-use water bottles or other drinks bottles, wet wipes, and many cosmetic products.

It is acknowledged that this petition raises complex issues, as explored in the Scottish Government's 2022 call for evidence on tackling consumption of single-use food containers and other commonly littered or problematic single-use items. Further consultation and impact assessments would be required before the ban could be put in place. Adequate preparation time and support would also have to be given to businesses to allow them to alter their products or change suppliers.