

Scottish Parliamentary Briefing by the Marine Conservation Society, ASH Scotland, Keep Scotland Beautiful, Laura Young and Elliott Welch

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Tackling the environmental and health impacts of e-cigarettes

We call on the Scottish Government to take action to reduce the impact of disposable and refillable vapes by:

- ✔ **Banning the manufacture and sale of disposable vapes in Scotland by 2024.**
- ✔ **Increase awareness and enforcement of existing WEEE Regulations and the Waste Batteries Regulations for producers, distributors and retailers of vapes including disposal and recycling.**
- ✔ **Requiring businesses to report on the number of vapes (as a percentage sold) that are returned for recycling under WEEE.** Increased enforcement of businesses and increased awareness of both business and the public should result in significant improvement over time, otherwise additional steps should be proposed.

Background

Vapes, including disposable vapes, can be categorised under the umbrella of electronic cigarettes but are commonly known as e-cigarettes or vapes. They are a diverse group of battery-powered devices that convert a liquid into an aerosol for inhalation.¹ Vapes were invented in China in 2003² where they are still produced for export, however the Chinese Government itself banned “fruity” vapes from sale in their domestic market last year (2022) due to health concerns with underage vaping.³ Most disposable e-cigarettes on the UK market are produced in China⁴.

Compared to re-useable vapes, which are rechargeable and refillable, disposable vapes come ready to go and only last for around 600 puffs, at which point they become obsolete and require complete replacement.⁵ Consequently, disposable vapes are discarded and purchased repetitively, undermining the principles of a circular economy.

Between January 2021 and April 2022, there has been an 18-fold increase in the use of disposable vapes in the UK among those who use vaping products rising from 1.2% to 22.2%, with the trend being particularly significant among younger adults.⁶ This has occurred alongside a concerning rise in e-cigarette use among children and young people.⁷ It is reported that half a billion are sold each year in the UK with 1.3 million disposable vapes being thrown away every week.⁸



Environmental and health impacts

The rapid increase in vaping, especially by young people, is concerning the health charity ASH Scotland, as these are products that harm the health of children, young people and non-smokers that are age-restricted for good reason.⁹ Nicotine is highly addictive, and many vapes include toxic chemicals that have not been safety tested for inhalation. The long-term effect of these products remains unknown.

The littering of these items also contributes to the ongoing decline in local environmental quality in communities and neighbourhoods across Scotland. Indeed, Keep Scotland Beautiful's recent report highlighted significant public concern about litter and littering behaviour.¹⁰ In addition, there is a worrying downward trend in use of the original reusable options¹¹ at a time when the Scottish government has highlighted the need for more re-use and recycling under Circular Economy goals.¹² Disposable vapes are increasingly found discarded in Scotland's environment¹³ contributing to an increase in plastic pollution and leakage of toxic chemicals.¹⁴ Microplastics have been found in the stomachs of seabirds, turtles, cetaceans, plankton and fish, including seafood for human consumption.¹⁵

Vapes are considered e-waste under the WEEE Regulations.¹⁶ All retailers selling e-cigarettes must provide a free in-store take-back service or set up an alternative free take-back service for environmentally sound disposal.¹⁷ Under these regulations similar responsibilities exist for producers and distributors. However, many disposable vapes are binned in general waste or littered, increasing the environmental impacts and resulting in the loss of precious finite materials such as lithium.¹⁸

Recycling disposable vapes is not simple as their toxicity makes disassembling the product complex and costly to waste managers.¹⁹ Each vape consists of glass, plastic and metal, and a heating coil and lithium-ion battery which require the product to be handled in compliance with the WEEE Regulations. In addition, the vape itself as well as the e-liquid contain a variety of harmful chemicals such as flame retardants and nicotine²⁰ which present further environmental and health concerns.

We therefore call on the Scottish Government to ban disposable vapes to help move Scotland toward a sustainable circular economy and protect children and young people from risks to their long-term health.

For further information or to set up a meeting please contact: Calum Duncan, Head of Conservation Scotland on calum.duncan@mcsuk.org

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