

Prohibition of the sale and supply of single-use vapes

Equality Impact Assessment - Results

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Title of Policy:

Prohibition of the sale and supply of single-use vapes

Summary of aims and desired outcomes of Policy:

The Scottish Government seeks to make regulations to prohibit the sale and supply of single-use vapes.

The policy objectives of the intervention are to:

- Accelerate a reduction in environmental harm by reducing the number of vapes being landfilled, incinerated, and littered, thereby increasing recycling and reuse rates;
- Stimulate businesses and consumers to reduce their use of single-use vapes and encourage replacing them with reusable alternatives, thereby supporting a switch to less environmentally harmful products.

Directorate: Environment and Forestry

Division: Producer Responsibility Division

Team: Product Stewardship

Executive summary

1. This Equalities Impact Assessment (EQIA) has been carried out to identify potential impacts resulting from the introduction of a prohibition on the sale and supply of single-use vapes (hereafter referred to as a ban on single-use vapes). This includes both nicotine and non-nicotine containing products since the environmental concerns exist for both types of products. Reusable vapes will be unaffected by this change.
2. The proposal may impact on some people with certain protected characteristics more than others. Initial analysis suggests that the proposal could have a more significant impact on those with a disability and on older individuals.
3. Other factors investigated in relation to other protected characteristics do not appear, at this stage, to raise significant equality-related issues. There is potential this may be due to a lack of available published information and the individual circumstances of those impacted. Direct engagement with equality groups and individuals may identify further impacts, and we will seek to do this ahead of and during the forthcoming consultation period. Initial contact was made with a number of representative organisations ahead of the consultation period.
4. It is important to note that the protected characteristics are not independent of each other, and some people may be affected by complex and interconnected issues related to disadvantage at any one time. It is also recognised that this intersectionality also

applies to those experiencing socio-economic disadvantage, as highlighted in the [Fairer Scotland Duty Assessment](#) and [those living in Island communities \(ICIA\)](#).

5. Given the importance of assessing the impact on each of the protected characteristics, the Scottish Government has considered the proposal against the needs of the general equality duty as set out in section 149 of the Equality Act 2010 and has considered whether the measure could constitute direct and/or indirect discrimination.
6. Specifically, the EQIA considers impacts on equalities groups based on the three tests it is required to address:
 - Does this policy eliminate discrimination for each of the 9 protected characteristics (PCs). If not is the discrimination justifiable? Can it be mitigated?
 - Does this policy advance equality of opportunity for PC groups?
 - Does this policy foster good community relations between people of PC groups.

Background

7. Vapes (also known as e-cigarettes) have increased in popularity in recent years, becoming more mainstream products.¹ In Scotland, the proportion of adults making use of nicotine vapour products (vapes) increased from 7% in 2019 to 10% in 2022.² This is also confirmed by data collected for the Smoking Toolkit Study which shows the proportion of adults using nicotine products increased from 7.3% in October 2020 vs 9.5% in October 2023.³ Specifically, the proportion of adults using single-use vapes has increased, growing from 0.1 % to 4.9 % between January 2021 to August 2023 across the UK.⁴
8. The rise in the use of single-use vapes has led to their increase in the waste stream. There has been growing concern over their environmental impact as they are typically littered or discarded as general waste in a bin rather than recycled. In 2023, it was estimated that almost 5 million single-use vapes were either littered or thrown away in general waste every week in the UK, almost four times as many as in the previous year.⁵
9. Single-use vapes which are thrown in a bin with general waste will either be landfilled or incinerated, and they also pose a fire risk for

¹ Use of e-cigarettes among adults in Great Britain, ASH, 2023

² The Scottish Health Survey 2022 – volume 1: main report. Scottish Government, 2023

³ Trends in electronic cigarette use in Scotland. Smoking in Scotland portal. Updated 18 January 2024.

⁴ Who would be affected by a ban on disposable vapes? A population study in Great Britain. Sarah E. Jackson, Harry Tattan-Birch, Lion Shahab, Melissa Oldham, Dimitra Kale, Leonie Brose, Jamie Brown 2024

⁵ Number of disposable single-use vapes thrown away have in a year quadrupled to 5 million per week. Material Focus, 2023

waste collection vehicles and waste transfer sites due to their lithium-ion batteries. Compaction during the collection process increases the chances of puncture and combustion, setting fire to dry and flammable waste or household recycling around them. This endangers the public and collection crews, as well as damaging public and private property. It is estimated that lithium-ion batteries are responsible for approximately 48% (over 200) of all waste fires occurring in the UK each year.⁶

10. When single-use vapes are littered, they introduce plastic, nicotine salts, heavy metals, lead, mercury, and flammable lithium-ion batteries into the natural environment.⁷ The chemicals can end up contaminating waterways and soil and can also be toxic and damaging to wildlife. When single-use vapes which have a plastic casing are littered, the plastic can grind down into harmful microplastics. Single-use vapes are primarily littered in public spaces and this generates clean-up costs to local authorities.⁸

11. Vapes, like other electricals, should not be placed in a general waste bin or littered, and should be recycled through specialist routes and facilities instead. Current estimates indicate that only 17% of vape users in the UK correctly dispose of their

⁶ Over 700 fires in bin lorries and recycling centres are caused by batteries many of which are hidden inside electricals. Material Focus, 2022

⁷ Youth vaping: call for evidence. Office for Health Improvement & Disparities, 2023

⁸ Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single-use e-cigarettes. Hogg, D., 2023

single-use vapes.⁹ To be recycled, they must be taken to a vape shop or participating retailer using dedicated bins, or to a local Household Waste and Recycling Centre using designated bins. In Scotland, an estimated 12.8% of single-use vapes are taken back to stores, and 8.3% to household waste recycling centres.¹⁰

12. Single-use vapes are difficult and expensive to recycle.¹¹ The only recycling process available in the UK is manual dismantling which is costly and time consuming as most single-use vapes are not designed to be taken apart easily.¹² They are designed as one unit and require specific tools to remove the lithium-ion battery for recycling and careful handling of components to avoid operator exposure to the remaining e-liquid. Of the single-use vapes that are returned to a shop or recycling centre across the UK, it is estimated that only 1% are then recycled due to limited recycling capacity.¹³ The remainder of vapes collected for recycling are likely to be sent to landfill given the Environment Agency's guidance (applicable across the UK) that single-use vapes should not be incinerated.¹⁴

13. Environmental impacts from manufacturing single-use vapes are also a concern. A typical single-use vape contains plastic,

⁹ Number of disposable single-use vapes thrown away have in a year quadrupled to 5 million per week. Material Focus, 2023

¹⁰ Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single-use e-cigarettes Hogg, D., 2023

¹¹ Dismantling a growing problem. Valpak, 2023,

¹² Disposable vapes – a challenge to the recycling sector. IEMA, 2022,

¹³ Analysis of the Market for Vapes, Eunomia, 2023

¹⁴ Agency sets out vapes recycling stance, WastePack, 2023

copper, cobalt, and a lithium battery. Lithium and cobalt are critical raw materials as noted in the UK's Critical Raw Materials Strategy¹⁵ which are essential to the production of electronic devices, batteries, and energy generation.¹⁶ The increased demand for single-use vapes leads to an increased demand for these critical raw materials. It is estimated that the total amount of single-use vapes purchased every year contain enough lithium to provide batteries for 5,000 electric vehicles.¹⁷ This is a waste of valuable resources in a product with a short lifespan, that is poorly recycled, and has a reusable alternative readily available. As well as a loss of resources, there are environmental impacts through raw material extraction, single-use vape production, and manufacturing. Most notably, this includes greenhouse gas emissions and water consumption generated in their manufacture.¹⁸

14. Vapes can be a helpful tool to support smokers to quit, though research into the safety and effectiveness of e-cigarettes is still relatively new¹⁹. They are considered less harmful than smoking when smokers completely switch to vaping products. As they usually still contain nicotine they are not risk-free, and the long-

¹⁵ Resilience for the Future: The UK's Critical Raw Materials Strategy

¹⁶ The Role of Critical Minerals in Clean Energy Transitions, World Energy Outlook. International Energy Agency, 2021,

¹⁷ Number of disposable single-use vapes thrown away have in a year quadrupled to 5 million per week Material Focus, 2023

¹⁸ Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single-use e-cigarettes. Hogg, D., 2023,

¹⁹ Vaping – Effectiveness as a cessation tool: evidence briefing. Scottish Government, 2024

term health impacts of vaping are unknown²⁰. A 2024 Scottish Government briefing also concluded that vaping can cause health harms in non-smokers to which they would not otherwise have been exposed to²¹. More research is required on dual use of both cigarettes and vapes. Data suggest this might pose the same of higher health risks than smoking cigarette alone.²²

15. An annual survey undertaken in 2023 by Action on Smoking and Health (ASH), looking at the smoking status and vaping behaviour amongst vapes users in Great Britain.²³ Findings from this research show that 56% of vape users are ex-smokers, 37% are current smokers and a smaller proportion are people who have never smoked. It also found that around two thirds of vape users' most popular main device was a reusable vape, with 31% mainly using a single-use vape.²⁴

16. Single-use-vapes are defined as products that are not rechargeable (they use a battery which cannot be recharged, or a coil which cannot be replaced, including a coil contained in a single-use cartridge which is not separately available), or are not refillable (once empty, the cartridge or pod cannot be refilled or

²⁰ Vaping – Health harms: evidence briefing. Scottish Government, 2024

²¹ *ibid*

²² *ibid*

²³ Use of e-cigarette (vapes) among adults in Great Britain. ASH, 2023

²⁴ 50% of users mainly used an 'electronic cigarette that is rechargeable and has a tank or reservoir that you fill with liquids' and 17% of users mainly used an 'electronic cigarette kit that is rechargeable with replaceable pre-filled cartridges'.

replaced),²⁵ or are not rechargeable and not refillable. In contrast, a reusable vape can both be recharged and fully refilled an unlimited number of times by the user, and will last for a longer period of time.

17. Single-use vapes tend to dominate the entry points of the market for those new to vaping. Generalist retailers, including convenience stores, primarily sell single-use products whilst specialist vape stores tend to sell more reusable vapes and refill products.²⁶ Single-use vapes account for around 50% of the UK vape market. It has been estimated that 60% turnover by the vapes industry is generated from single-use vapes, in comparison to 40% from reusable vapes, refill cartridges and e-liquid.

18. There has been an increase in popularity in single-use vapes in recent years, especially among young people. The proportion of adults using single-use vapes increased from 0.1 % to 4.9 % between January 2021 to August 2023 across the UK. Last year (2022) a survey by ASH²⁷ showed that for the first time the most popular type of e-cigarette amongst GB youth was disposable (single use) e-cigarettes, with their use growing more than a 7-fold between 2020 and 2022 from 7.7% to 52%. Growth has continued since last year and 69% of children this year said this was the

²⁵ Vapes that are rechargeable and not refillable or that are refillable and not rechargeable, are still considered disposable or 'single-use' even though the lifetime of the vape can be extended through refilling or recharging it.

²⁶ Analysis of the Market for Vapes, Eunomia 2023

²⁷ Use of e-cigarettes among young people in Great Britain. ASH, 2023,

device they used most frequently.

19. Vapes should not be used by children, young people or non-smokers. They carry an unknown long-term risk of future harm and can be very addictive²⁸. It is also an offence to sell vapes to anyone under the age of 18 in the UK. Despite the sale of vapes to those under the age of 18 being illegal, the recent Health Behaviour in School-Aged Children (Scotland) study²⁹ reports that 3% of 11-year-olds, 10% of 13-year-olds and 25% of 15-year-olds said they had used a vape in the past 30 days. Purchasing from shops is the most common source³⁰. The report also found that there have been increases in current vape use since 2018 for 13-year-old girls (2% to 13%) and larger increases for 15-year-olds (girls 6% to 30% and boys 8% to 20%).³¹ They have also increased in prevalence amongst young people³² and people who haven't traditionally smoked cigarettes³³.

Wider policy context

20. The Scottish Government is committed to moving towards a circular economy, where we move from a "take, make and dispose" model to one where we value materials and keep them in use. Reusable vapes are a readily available alternative to single-use vapes and have a much longer lifespan. They are made from

²⁸ Vaping addiction soon takes hold. NHS Inform campaign, access online 15 March 2024

²⁹ Health Behaviour In School-Aged Children Scotland Study, University Of Glasgow MRC/CSO Social And Public Health Sciences Unit, 2022

³⁰ Use of e-cigarettes among young people in Great Britain. ASH, 2023

³¹ Tobacco and Vaping Framework, Scottish Government, 2023

³² Use of e-cigarettes among young people in Great Britain, ASH, 2023

³³ Use of e-cigarette (vapes) among adults in Great Britain. ASH, 2023

more durable materials and are built to last longer. Although they are initially more expensive, reusable vapes are more cost-effective in the long term. Reusable vapes are considered to be less environmentally damaging, as the same vape can be used for an extended period of time compared to single-use vapes. This causes little change in consumer experience while reducing environmental impacts.

21. The Department of Health and Social Care published a call for evidence on youth vaping in April 2023³⁴ where the impact of vapes on the environment was a key theme of interest. A summary of responses to this call for evidence was published in October 2023, highlighting many of the key issues in relation to the damaging impact on the environment caused by single-use vapes.³⁵

22. There are measures already in place to ensure responsible production and disposal of vapes. The Waste Electrical and Electronic Equipment (WEEE) Regulations 2013³⁶ aim to encourage the reuse and recycling of these items by placing financial responsibilities on producers and distributors of electrical and electronic equipment (EEE) to pay for the collection and disposal schemes for end-of-life products. This means that all producers who place EEE on the UK market, including producers of single-use vapes, are responsible for financing the costs of the collection, treatment, recovery, and environmentally sound

³⁴ Youth vaping: call for evidence. Office for Health Improvement & Disparities, 2023

³⁵ Summary of responses and government response. Department for Environment, Food, & Rural Affairs, 2023

³⁶ The Waste Electrical and Electronic Equipment Regulations 2013. UK Government, 2013

disposal of WEEE.

23. Compliance with the current WEEE regulations by vape producers is estimated to be low. This includes low levels of awareness amongst store owners and distributors for takeback schemes, as well as low levels of customer participation reported.³⁷

24. Plans to reform the producer responsibility system for waste electrical and electronic equipment³⁸ have recently been consulted on. Proposals under review include the provision of collection infrastructure for household WEEE financed by producers of electrical and electronic equipment; reforms to the take-back obligations that currently apply to distributors; obligations on online marketplaces; and creating a new separate categorisation for vapes to ensure producers of vapes properly finance recycling costs when they become waste. The reported low awareness of producer obligations ought to be addressed by the implementation of these producer responsibility reforms.

25. To target the environmental issues associated with single-use vapes, the Scottish Government, the UK Government and the Welsh Government intend to introduce legislation to implement a ban on the sale and supply of disposable (single-use) vapes. This includes both nicotine and non-nicotine containing products since the environmental concerns exist for both types of products.

³⁷ Number of disposable single-use vapes thrown away have in a year quadrupled to 5 million per week. Material Focus, 2023

³⁸ Consultation on reforming the producer responsibility system for waste electrical and electronic equipment 2023. Department for Environment, Food, & Rural Affairs, 2023

Northern Ireland officials acknowledge the issues raised during the consultation and will consider potential legislation in future.

26. More information on the consultation, responses received, and the government response can be found at the UK Government website³⁹.

The Scope of the EQIA

27. Prior to consultation, a preliminary framing exercise was conducted by Zero Waste Scotland, involving officials in the Scottish Government's Product Stewardship team. After the initial exercise, a number of officials from Scottish Government's Mainstreaming Team were also consulted and provided advice and insight to the process. The exercise identified a limited number of potential impacts and so a proportional desk-based approach was taken to source existing data and evidence.
28. Additionally, the Scottish Government lead policy team sought advice from a number of Scottish Government directorates and wider organisations including, Directorate for Mental Health, Chief Social Policy Directorate, Directorate for Chief Medical Officer, Directorate for Population Health and the Scottish Prison

³⁹ Creating a smokefree generation and tackling youth vaping consultation: government response, Department of Health (Northern Ireland), Department of Health & Social Care, Scottish Government, and Welsh Government, 2024

Service.

29. Summary of activities:

- Framing exercise: Zero Waste Scotland and Scottish Government discussion, as noted above.
- Discussions with relevant directorates across Scottish Government and external organisations where appropriate.
- Evidence-gathering: quantitative and qualitative data and evidence were sourced, including evidence from existing large Scotland- and UK-level surveys and evidence from other relevant policy impact assessments.

30. This EQIA is not intended to be a definitive statement or a full assessment of impacts. It presents a preliminary assessment and indicative impacts that will require further consideration by the Scottish Government to inform the consultation and implementation of the proposed policy. In addition to the impacts considered, it is important to note that the protected characteristics considered within this interim EQIA are not independent of each other. Some people may have to deal with complex and interconnected issues.

31. Evidence available and gathered during the consultation will help inform this EQIA which will be updated following the consultation period.

32. All engagement will adhere to our commitments under the World Health Organisation Framework Convention on Tobacco

Control (FCTC) Article 5.3. This ensures our tobacco control policies are protected from commercial and other vested interests of the tobacco industry.

Key Findings

33. The proposal to prohibit the sale and supply of single use vapes is predominantly focused on reducing the environmental impacts of single-use vapes. However, it is acknowledged that the use of vapes has a public health rationale as a possible smoking cessation tool⁴⁰.
34. At this stage it is considered that the positive environmental impact that the proposal will deliver outweighs any identified impacts for protected characteristic groups.
35. Prohibiting the sale and supply of single-use vapes will impact all current users of single-use vapes and require current and future users to purchase alternative options.
36. At this stage, it has been identified there is potential for negative impacts for those with physical and mental health conditions, and for older people. This may be particularly relevant where vapes are being used as a smoking cessation tool.
37. Reusable vapes require chambers to be refilled or cartridges to be replaced which may impact those with limited dexterity and, or, visual impairments. There are currently several versions of reusable vapes, with some possibly easier for individuals suffering from dexterity or visual impairments. This includes devices such as

⁴⁰ E-cigarettes. Public Health Scotland website, accessed 10 March 2024.

pod kits, open tank devices, refill cartridges and closed pre-filled pods.⁴¹

38. However, at present the alternative to single-use vapes may not be suitable to allow for current levels of independence and dignity for all affected. This will be considered further during the consultation period.

39. For individuals with mental health conditions⁴², specifically those in institutional settings who currently use single-use vapes, a move to reusable devices is not currently thought to create any significant difficulties. Discussions with relevant Scottish Government departments suggests practical steps are already in place, or could be put in place, to ensure safe use of reusable vapes within facilities such as prisons and care settings.

40. With a sufficient lead-in period to the ban coming into force (minimum 6 months), there will be time for a gradual transition to reusable vapes, supported by facility staff where required to help with safe charging. For example, discussions with the Scottish Prison Service concluded that replacing single-use vapes with reusable vapes utilising prison staff support would be a practical step to ensure safe use of reusable vapes. It is reasonable to assume that with sufficient lead-in time to adapt to these changes, mental health and other care facilities could also allow for staff to

⁴¹ Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single-use e-cigarettes. Hogg, D., 2023

⁴² Use of electronic cigarettes by people with mental health problems. ASH UK, 2020

charge reusable vapes for patients to use where required. This aligns with the National Fire Chief's Council guidance note 'E-cigarette use in smokefree NHS settings'.⁴³

41. Given the increase in use of single-use vapes amongst young people⁴⁴ and a higher percentage of users in younger age brackets (including under 18s), they are likely to be impacted by the proposal. The recent Health Behaviour in School-Aged Children (Scotland) study⁴⁵ reports that 3% of 11-year-olds, 10% of 13-year-olds and 25% of 15-year-olds said they had used a vape in the past 30 days. The report also found that there have been increases in current vape use since 2018 for 13-year-old girls (2% to 13%) and larger increases for 15-year-olds (girls 6% to 30% and boys 8% to 20%).⁴⁶ However, as vapes are currently illegal for individuals under the age of 18, the proposal will also offer the potential of a significant positive impact on children and young persons' rights and wellbeing. This issue has also been considered further in the accompanying [children's rights and welfare impact assessment](#).

42. While there may be potential for the proposal to impact those where English is not a first language, it is expected the proportionality of this is low. However, accessible and inclusive communication will be central to ensure high levels of participation and understanding around the proposal.

⁴³ E-cigarette use in smokefree NHS settings. National Fire Chief's Council, 2018

⁴⁴ Use of e-cigarettes among young people in Great Britain. ASH UK, 2023.

43. There is a potential positive impact identified for reduced littering associated with single-use vapes. Whilst this will create a benefit for all age groups, it may be more significant for younger people (16-24) whose perceptions of their area are more likely to be negatively impacted by littering.⁴⁷
44. This EQIA has helped to highlight areas where there may potentially be impacts on certain protected characteristics. It can help us to design accessible communication and engagement during the consultation with those people potentially affected, along with relevant equality representative groups. This will help to ensure that there are no unintended consequences.
45. A [fairer Scotland duty assessment \(FSDA\)](#), an [island communities impact assessment \(ICIA\)](#) and a [Children's Rights and Welfare Impact Assessment \(CRWRIA\)](#), are also being conducted alongside this Equalities Impact Assessment (EQIA). The equality outcomes considered in this summary have links with the potential impacts identified in the FSDA and CRWIA, so this document should be read in conjunction with the other impact assessments.

Recommendations and Conclusion

46. The evidence collated indicates that the proposal is not likely to have significant adverse impacts on the majority of those with protected characteristics.

⁴⁷ 2023 Scottish Litter Survey, Keep Scotland Beautiful. 2023,

47. However, it has been identified that disabled and older individuals who currently use single-use vapes may be impacted more than others. Individuals from the groups who have dexterity or visual impairments in particular are more likely to experience negative impacts from the proposal.
48. At this time, following wider internal Scottish Government consultation and engagement with relevant external organisations, we do not believe there to be sufficient evidence to amend the proposal. Alternatives to single-use vapes are widely available, including reusable vapes as well as nicotine patches and gum for smoking cessation purposes. The latter options are available through prescription for current cigarette smokers who are trying to stop.
49. Individuals wishing to stop smoking will remain able to seek advice and support from existing organisations and support services. This includes Quit Your Way Scotland⁴⁸ and NHS services⁴⁹ such as local pharmacies. Local specialist ‘stop smoking services’ commonly help in hospitals, GP surgeries and local community centres.
50. It is considered there is a sufficient notice and transition period prior to the implementation of the regulations, due 1 April 2025, to allow those using single-use vapes to adjust to reusable

⁴⁸ Quit Your Way Scotland. NHS Inform website. Accessed 10 March 2024

⁴⁹ Local help to stop smoking. NHS Inform website. Accessed 10 March 2024

alternatives.

51. However, the Scottish Government will consider new evidence that the proposal could be discriminatory to those with protected characteristics through the consultation. Such evidence would help to further inform the implementation of the proposed policy.
52. This EQIA has been undertaken using the data and evidence available and gathered to date. However, as this is a preliminary and indicative assessment of the potential impacts, it will, in line with best practice be subject to further review and revision. It is our intention to use the upcoming consultation period to undertake additional evidence building and stakeholder engagement. This will help to further test our findings and better understand any impacts that may occur. The outcome from these discussions will be included in an updated assessment to be published with our response to the consultation.
53. There are several evidence gaps noted in the EQIA. The consultation period will be used to further engage with stakeholders on these areas. The consultation itself will also be used to gather additional evidence from stakeholders.
54. This EQIA will be updated following the public consultation to reflect any new evidence.



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