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Department of the Environment, Climate and Communications PRI Unit Newtown Road Wexford Y35AP90

E: PRI@decc.gov.ie

26 July 2023

Re: Public Consultation on Disposable Vaping Devices

Dear Sir/Madam,

Thank you for the opportunity to participate in the <u>Consultation on</u> <u>Disposable Vaping Devices</u>.

This communication is from the Institute of Public Health (IPH) and provides additional context to our online survey submission. IPH is jointly funded by the Departments of Health in Ireland and Northern Ireland. The Institute informs public policy to promote health equity and reduce health inequalities on the island of Ireland. We work with a variety of stakeholders at local and national level to ensure that public health policies are equitable and based on the best available evidence. IPH supports a total ban of the sale of disposable vaping devices, from both an environmental and health perspective. The use of disposable vapes contributes to environmental degradation with both direct and indirect effects on health and wellbeing.

In 2022, IPH provided evidence to the Oireachtas Joint Committee on Health on pre-legislative scrutiny of the Public Health (Tobacco and Nicotine Inhaling Products) Bill 2019. Our opening statement can be accessed on our website: <u>Opening Statement – Tobacco & Nicotine.pdf</u>.

IPH supports a prohibition on the sale of all nicotine inhaling products to under 18s and highlights the importance of considering further measures to minimise the appeal and accessibility of these products to children. It is our view that a prohibition on disposable vaping devices will contribute to the government's commitment to reduce use by children.

Included below is the evidence relating to our position. We hope that this will support the Department of Environment, Climate and Communications in responding to opposition arguments and tobacco industry interference.

Position statement

IPH supports a complete prohibition on single-use disposable vaping devices in order to protect the environment.

On the basis of:

(1)Evidence of environmental harm associated with disposable vapes

Disposable vapes are often littered. Disposal generally results in toxic compounds leaching into the environment, such as heavy metals including mercury, lead and bromides¹, as well as battery acid, lithium and nicotine. Some e-cigarettes also contain enough toxic chemicals to qualify as hazardous waste.² Disposable vapes are also a source of single-use plastics, which are contributing to marine and land pollution and undermining efforts to mitigate climate change. Improperly discarded vape batteries have been

¹ Matthew Chapman. Rise of single-use vapes sending tonnes of lithium to landfill. July 2022. The Bureau of Investigative Journalism. https://www.thebureauinvestigates.com/stories/2022-07-15/rise-of-single-use-vapes-sending-tonnes-oflithium-to-landfill

² Krause MJ, Townsend TG. Hazardous waste status of discarded electronic cigarettes. Waste Manag. 2015;39:57–62

associated with explosions and fires.³ There are also substantial greenhouse gas emissions associated with the packaging, component parts and supply chain of disposable vapes.⁴

(2)Evidence of poor compliance with regulations, and limited regulatory frameworks, on contents in disposable vapes

The HSE has, on several occasions, needed to take market surveillance action on disposable e-cigarettes due to products exceeding the permitted amount of nicotine (20mg/ml or 2%), with levels up to 50.4mg/ml detected.⁵ Current regulatory measures do not provide for, and are not resourced to, adequately monitor the contents of all e-cigarette products on the Irish market.

(3) Disposable vapes are not licenced as supports to stop smoking and do not form part of Departmental clinical guidelines for statutory support to stop smoking in Ireland

The Department of Health's National Clinical Guidelines state that no e-cigarettes have been authorised for use for smoking cessation in Ireland. These guidelines recognise that people who want to stop smoking can be supported to do so with the dual approach of behavioural support from qualified stop smoking advisors and evidence-based pharmaceutical supports.⁶ Compared to nicotine replacement therapy (NRT) and prescription treatments, e-cigarettes are not considered a safe or effective method for smoking cessation.⁷

Please do not hesitate to contact us if you have any questions.

Kind regards,

³ Pourchez, J. From smoking to vaping: a new environmental threat? The Lancet Respiratory Medicine. 2022 ²HYPERLINK "https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(22)00187-4/fulltext"<u>From</u> <u>smoking to vaping: a new environmental threat? - The Lancet Respiratory Medicine</u>

⁴ Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single use e-cigarettes. Dr Dominic Hogg, Equanimator Ltd and Zero Waste Scotland. June 2023 <u>mf-thteewjk-1688050310d (zerowastescotland.org.uk)</u>

⁵ HSE Environmental Health Service issues a RAPEX safety alert notice relating to disposable electronic cigarettes - HSE.ie

<u>HSE Environmental Health Service takes market surveillance action against certain disposable e-cigarettes -</u> <u>HSE.ie</u>

⁶ Stop Smoking. National Clinical Guideline No. 28. Department of Health, January 2022 <u>95fe179c-b59b-4891-819b-0b1d42e1117d.pdf (www.gov.ie)</u>

⁷ Vaping (using e-cigarettes) - HSE.ie

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Dr Helen McAvoy Director of Policy Institute of Public Health helen.mcavoy@publichealth.ie

Appendix 1: Evidence to counter arguments against a complete prohibition of disposable e-cigarettes in Ireland

| Argument against a ban | Evidence |
|---|---|
| 1. Disposable vapes do have environmental impacts but these can be very well addressed by better recycling and | Evidence for the effectiveness of recycling and mitigation measures is limited. Disposable vapes contain many components and should be discarded with electrical waste. However, the design of most products makes it difficult to take them apart ⁸ , which means they are unlikely to be appropriately recycled. |
| mitigation measures – a ban is over the top | UK-based research found that 50% of single- use vapes are thrown away. In the UK, this equates to 1.3 million single-use vapes per week, which in one year is enough to cover 22 football pitches. ⁹ |
| 2. There are no negative health impacts from using disposable vapes, for children or adults – why ban a harmless product? | The World Health Organization (WHO) states that e-cigarettes are harmful to health. ¹⁰ The safest approach is not to consume tobacco products or e-cigarettes, and to keep these products away from children. |
| | As disposable vapes are relatively new products, there will be a latency period before long-term health effects are established. However, current research has already identified several health risks. |
| | Firstly, evidence is mounting to support an association between e-cigarettes and initiation of cigarette smoking amongst non-smokers. Most e-cigarettes contain nicotine which is highly addictive, and exposure of children and adolescents to nicotine can lead to long-term negative impacts on brain development, as well as addiction. ¹¹ |

⁸ Disposable vapes – a challenge to the recycling sector - IEMA

⁹ <u>One million single use vapes thrown away every week contributing to the growing e-waste challenge in the UK - Material Focus</u>

¹⁰ E-cigarettes are harmful to health (who.int)

¹¹ Tobacco: E-cigarettes (who.int)

| The Health Research Board (HRB) conducted an evidence review exploring the relationship between e-cigarette use and tobacco cigarette smoking initiation to inform the Department of Health's policy position. This review found that adolescents who had ever used an e-cigarette were between three and five times more likely to start smoking compared to those who never used e-cigarettes. ¹² |
|--|
| Research across the UK, Europe and North America has demonstrated a similar association: |
| A large study of almost 17,000 adolescents across Europe and North America found that adolescents who had ever used e-cigarettes were approximately four times more likely to commence tobacco cigarette smoking. When comparing adolescents in Europe to those in America, European adolescents were six times more likely to initiate cigarette smoking¹³; In the UK, a large study of adolescents who used e-cigarettes found that they were over 3.5 times more likely to initiate smoking cigarettes¹⁴; International studies, mainly set in the USA, have shown a similar association, with children or adolescents who smoked e-cigarettes being around three |

¹² Electronic cigarette use and tobacco cigarette smoking initiation in adolescents: An evidence review. Health Research Board. May 2020 <u>Electronic cigarette use and smoking initiation in adolescents (hrb.ie)</u>

¹³ O'Brien D, Long J, Quigley J, Lee C, McCarthy A, Kavanagh P. Association between electronic cigarette use and tobacco cigarette smoking initiation in adolescents: a systematic review and meta-analysis. BMC Public Health. 2021 Jun 3;21(1):954. doi: 10.1186/s12889-021-10935-1. PMID: 34078351; PMCID: PMC8173887.

¹⁴ Aladeokin A, Haighton C. Is adolescent e-cigarette use associated with smoking in the United Kingdom?: A systematic review with meta-analysis. Tob Prev Cessat. 2019 Apr 22;5:15. doi: 10.18332/tpc/108553. Erratum in: Tob Prev Cessat. 2019 Nov 06;5:38. PMID: 32411879; PMCID: PMC7205081.

| times more likely to start smoking tobacco cigarettes in the future. ^{15 16 17} |
|---|
| Secondly, evidence shows that aerosols in most electronic nicotine delivery systems (ENDS) contain toxic chemicals and cancer- causing substances. They are associated with increased risk of cardiovascular diseases, lung disorders and adverse effects on foetal development. ¹⁸ An HRB report of harms and benefits of e-cigarettes and heat-not-burn tobacco products found that harms include poisonings (including fatalities), burns (some leading to long term disability), fractures, lung injury, exacerbations of asthma and damage to cardiovascular and respiratory tissue mainly from metals and volatile organic compounds. Carcinogens for lung, oral, oesophageal and bladder cancers were found. ¹⁹ |
| Thirdly, systematic review level evidence has demonstrated an association between use of e-cigarettes in children and adolescents and |

¹⁸ <u>Tobacco: E-cigarettes (who.int)</u>

¹⁵ Khouja JN, Suddell SF, Peters SE, Taylor AE, Munafò MR. Is e-cigarette use in non-smoking young adults associated with later smoking? A systematic review and meta-analysis. Tob Control. 2020 Mar 10;30(1):8–15. doi: 10.1136/tobaccocontrol-2019-055433. Epub ahead of print. PMID: 32156694; PMCID: PMC7803902.

¹⁶ Chan GCK, Stjepanović D, Lim C, Sun T, Shanmuga Anandan A, Connor JP, Gartner C, Hall WD, Leung J. Gateway or common liability? A systematic review and meta-analysis of studies of adolescent e-cigarette use and future smoking initiation. Addiction. 2021 Apr;116(4):743-756. doi: 10.1111/add.15246. Epub 2020 Oct 5. PMID: 32888234.

¹⁷ Yoong SL, Hall A, Turon H, Stockings E, Leonard A, Grady A, Tzelepis F, Wiggers J, Gouda H, Fayokun R, Commar A, Prasad VM, Wolfenden L. Association between electronic nicotine delivery systems and electronic non-nicotine delivery systems with initiation of tobacco use in individuals aged < 20 years. A systematic review and meta-analysis. PLoS One. 2021 Sep 8;16(9):e0256044. doi: 10.1371/journal.pone.0256044. PMID: 34495974; PMCID: PMC8425526.

¹⁹ Harms and benefits of e-cigarettes and heat-not-burn tobacco products. A literature map. Health Research Board. June 2020. <u>Harms and benefits of e-cigarettes and heat-not-</u> <u>burn tobacco products Literature map.pdf (hrb.ie)</u>

| | other health problems including asthma ^{20 21} , mental health problems ²² , cough ²³ , alcohol use ²⁴ and marijuana use ²⁵ . |
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| 3. Disposable vapes are an effective way of stopping smoking. A ban would hamper people stopping smoking and harm health in the long- term | Disposable vapes are not licensed stop smoking medicines in Ireland. The Department of Health's National Clinical Guidelines state that no e-cigarettes have been authorised for use for smoking cessation in Ireland. It advises that people who want to stop smoking can be supported to do so with the dual approach of behavioural support from qualified stop smoking advisors and evidence-based pharmaceutical supports. ²⁶ Compared to nicotine replacement therapy (NRT) and prescription treatments, e-cigarettes are not considered a safe or effective method for smoking cessation. ²⁷ Systematic review level evidence has not found disposable vapes to |

²³ Bourke M, Sharif N, Narayan O. Association between electronic cigarette use in children and adolescents and coughing a systematic review. Pediatr Pulmonol. 2021 Oct;56(10):3402-3409

²⁴ Ava N. Rothrock, Halle Andris, Sarah B. Swetland, Valeria Chavez, Shira Isaak, Maria Pagane, Jake Romney & Steven G. Rothrock (2020) Association of E-cigarettes with adolescent alcohol use and binge drinking-drunkenness: A systematic review and meta-analysis, The American Journal of Drug and Alcohol Abuse, 46:6, 684-698, DOI: 10.1080/00952990.2020.1771723

²⁰ Wills TA, Soneji SS, Choi K, Jaspers I, Tam EK. E-cigarette use and respiratory disorders: an integrative review of converging evidence from epidemiological and laboratory studies. Eur Respir J. 2021 Jan 21;57(1):1901815.

²¹ Li X, Zhang Y, Zhang R, Chen F, Shao L, Zhang L. Association Between E-Cigarettes and Asthma in Adolescents: A Systematic Review and Meta-Analysis. Am J Prev Med. 2022 Jun;62(6):953-960.

²² Becker, Tim & Arnold, Melanie & Ro, Vicky & Martin, Lily & Rice, Timothy. (2020). Systematic Review of Electronic Cigarette Use (Vaping) and Mental Health Comorbidity Among Adolescents and Young Adults. Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco. 23. 10.1093/ntr/ntaa171.

²⁵ Chadi N, Schroeder R, Jensen JW, Levy S. Association Between Electronic Cigarette Use and Marijuana Use Among Adolescents and Young Adults: A Systematic Review and Meta-analysis. JAMA Pediatr. 2019 Oct 1;173(10):e192574.

²⁶ Stop Smoking. National Clinical Guideline No. 28. Department of Health, January 2022 <u>95fe179c-b59b-4891-819b-0b1d42e1117d.pdf (www.gov.ie)</u>

²⁷ Vaping (using e-cigarettes) - HSE.ie

| | be any more effective than licensed stop smoking medications. ²⁸ |
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| | There is no evidence that disposable vapes make it easier for people to switch from tobacco to e-cigarettes. In England, research has shown that people using cartridges/pods or tanks were more likely to report vaping to quit smoking than those using disposable vapes. ²⁹ There is also no long-term evidence available to determine whether e-cigarettes are better for health than cigarettes in the long-term. ³⁰ |
| 4. Disposable vapes are an adult product. They are not used by children so we should not restrict their use as a product that adults enjoy. This is just nanny state. | E-cigarettes, including disposable vapes, are used by and marketed to children and adolescents. Data on e-cigarette use in Ireland does not break this down to product type i.e. disposable vapes. However, evidence does show that children and adolescents are more likely to use e-cigarettes than traditional cigarettes: |
| | E-cigarette use in Ireland is highest among those aged under 25, with 11% in this age group currently using them either daily or occasionally³¹; The Irish Health Behaviour in School- aged Children 2018 Study of 12-17 year olds found that e-cigarette use is about twice as common as smoking traditional cigarettes³²; |

²⁸ Quigley J, Kennelly H, Lee C, O'Brien D, Williams M, McCarthy A, Long J. Electronic cigarettes and smoking cessation: An evidence review. Dublin: Health Research Board. 2020 Jun.

³¹ Healthy Ireland Survey 2022 Summary Report <u>e31b2aaa-a8d7-411d-8b62-02cca079c741.pdf (www.gov.ie)</u>

²⁹ Gravely S, Yong HH, Reid JL, East KA, Liber AC, Cummings KM, Quah AC, Fong GT, Hammond D. An examination of quitting smoking as a reason for vaping by the type of nicotine vaping device used most often among adults who smoke and vape: Findings from the Canada, England and the United States 2020 ITC Smoking and Vaping Survey. Preventive Medicine Reports. 2023 Jun 1;33:102201.

³⁰ Stein JH, Korcarz CE. E-cigarettes versus nicotine-replacement therapy for smoking cessation. The New England journal of medicine. 2019 May 1;380(20):1973-4.

³² Irish Health Behaviour in School-aged Children 2018 Study <u>7fa9176e0c5440b0a39fad54911a6872.pdf</u> (www.gov.ie)

| The 2019 European Schools Project for |
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| Alcohol and Other Drugs (ESPAD) report found that, in Ireland, 37% of 16-year- olds had tried vaping and 15% reported current use. ³³ This report also found that the prevalence of current smoking in Ireland had been decreasing since 1995, however between the 2015 and 2019 waves this downward trend had stalled. |
| A Scottish study found that children aged 11– 16 years described disposable e-cigarettes as 'cool', 'fashionable' and enticing, and viewed these products as a modern lifestyle 'accessory'. Tank models were perceived as being used by older adults. Participants perceived e-cigarettes to be less harmful compared with combustible cigarettes but noted the uncertainty of ingredients in disposable e-cigarettes. ³⁴ |
| In 2022 in Great Britain, the most popular type of e-cigarette amongst 11-17 year olds were disposable e-cigarettes, with 52.0% of respondents favouring this device. ³⁵ This was more than a 7-fold increase between 2020 and 2022. A further study found that among 18-24 year olds, almost half of current e-cigarettes users (48%) use disposables as their main type in 2022, an increase from 2.8% in 2021. ³⁶ |

³³ ESPAD Report 2019. Results from the European School Survey Project on Alcohol and Other Drugs. ESPAD report 2019. Results from the European School Survey Project on Alcohol and Other Drugs

³⁴ Smith MJ, MacKintosh AM, Ford A, Hilton S. Youth's engagement and perceptions of disposable e-cigarettes: a UK focus group study. BMJ open. 2023 Mar 1;13(3):e068466.

³⁵ Use of e-cigarettes (vapes) among young people in Great Britain. 2022. <u>https://ash.org.uk/uploads/Use-of-e-cigarettes-among-young-people-in-Great-Britain-2022.pdf</u> <u>https://ash.org.uk/uploads/Use-of-e-cigarettes-vapes-among-adults-in-Great-Britain-2022.pdf?v=1661865959</u>

³⁶ Use of e-cigarettes (vapes) among adults in Great Britain. 2022. <u>https://ash.org.uk/uploads/Use-of-e-cigarettes-vapes-among-adults-in-Great-Britain-</u> <u>2022.pdf?v=1661865959</u>.

| | Lastly, another study from Great Britain found that the growth in use of disposable e- cigarettes was most pronounced in younger adults. The percentage of 18-year-old vapers using disposables rose from 0.4 to 54.8%; a much steeper increase that that seen among 45-year-old vapers (2.1 to 10.0%). ³⁷ |
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| 5. Disposable vapes are cheaper and more widely available than other vaping products – any ban will disadvantage poor vapers who are trying to stay off tobacco and will make it too | Upstream measures, such as a ban, aim to reduce the availability of harmful products at a population level. These measures are often more equitable overall, as it those who are most socioeconomically disadvantaged who tend to experience worse health and could be most negatively impacted by the health harms of these products. |
| hard for people to get vapes | Disposable vapes are not always cheaper products overall. A disposable vape can be purchased for as little as $\pounds 2.99^{38}$, which is of concern as this may increase the accessibility of this product to children. However, a study set in England also found that disposable e- cigarettes ($\pounds 5$ –7) have a higher average cost compared with e-liquid refills (~ $\pounds 2.95$ for a 10 ml bottle) and that e-cigarette users who mainly used disposable devices spent around 40% more per week than those who used refillable devices ($\pounds 8.41$ vs. $\pounds 5.93$). ³⁹ |
| 6. There are strict controls on the contents and quality of disposable vapes | E-cigarettes are not licensed medicines and are only subject to consumer product regulations. In contrast, licensed stop smoking medicines go through quality and safety |

³⁷ Tattan-Birch H, Jackson SE, Kock L, Dockrell M, Brown J. Rapid growth in disposable e-cigarette vaping among young adults in Great Britain from 2021 to 2022: a repeat cross-sectional survey. Addiction. 2023 Feb;118(2):382-6.

³⁸ Mahase, E. Paediatricians call for ban on disposable e-cigarettes as child vaping rises. BMJ 2023;381:p1266 http://dx.doi.org/10.1136/bmj.p1266

³⁹ Jackson SE, Tattan-Birch H, Shahab L, Brown J. How has expenditure on nicotine products changed in a fastevolving marketplace? A representative population survey in England, 2018-2022. Nicotine Tob Res. 2023 May 25:ntad074. doi: 10.1093/ntr/ntad074. Epub ahead of print. PMID: 37226851.

| so we can be really very confident that we know all the potential environmental and health impacts | checks before they can be placed on the market or prescribed. ⁴⁰ The Health Service Executive (HSE) is responsible for implementing and enforcing provisions under the European Union (Manufacture, Presentation and Sale of Tobacco and Related Products) (Amendment) Regulations 2017. The HSE's National Tobacco Control Office have submitted several RAPEX alert notifications to Safety Gate (the EU rapid alert system for dangerous non-food products) after discovering that a range of disposable vape products contain more than the permitted amount of nicotine (20mg/ml or 2%), with levels up to 50.4mg/ml detected ⁴¹ . |
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| | These are not isolated incidents, with many international examples of concern. In 2022, the US Food and Drug Administration (FDA) issued marketing denial orders prohibiting the sale and distribution of JUUL Labs Inc. products in the USA as the company did not provide sufficient evidence of the toxicological profile of the products. This led to concerns that the products were not appropriate for the protection of public health. ⁴² The FDA also issued fines to four companies for selling unapproved vapes. ⁴³ In Australia, some e- cigarettes labelled 'nicotine free' have still been found to contain nicotine. ⁴⁴ There is also a major problem with illegal vapes entering the market. In the UK, over 2.5 million illicit e- cigarettes across 125 local authorities were |

⁴⁰ Health Service Executive (HSE). Vaping (using e-cigarettes). Vaping (using e-cigarettes) - HSE.ie

⁴¹ HSE Environmental Health Service takes market surveillance action against certain disposable e-cigarettes -HSE.ie

 ⁴² <u>FDA Denies Authorization to Market JUUL Products | FDA</u>
 ⁴³ <u>E-cigarettes: FDA issues fines to four companies for selling unapproved vapes | The BMJ</u>
 ⁴⁴ <u>About e-cigarettes | Australian Government Department of Health and Aged Care</u>

| | seized by trading standards. ⁴⁵ These products are often non-compliant with UK regulations, contain excessive nicotine concentrations and |
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| 7. The environmental | other illegal substances. The environmental impact of e-cigarettes is |
| impact of vapes is a fraction of that of tobacco products – | substantial, and there is particular concern regarding the waste generated by disposable vapes. |
| we should target them instead! | Cigarette-related litter makes up around 50% of litter pollution in Ireland. ⁴⁶ Littering of disposable vapes is a substantial problem. While data on this is not available in Ireland, Scottish research estimates that between 43.3-46.7% may be discarded in the residual bin and 3.5-10.6% littered. Costs associated with littering are estimated to be between £0.85- 6.61 million, with a projected increase to £2.06- 16.09 million by 2027. ⁴⁷ |
| | Vaping devices comprise three types of waste: plastic, electronic and hazardous chemical waste. ⁴⁸ Disposable vapes also contain single- use plastics, which contribute to land and marine pollution, adverse effects on human and animal health and climate change. ⁴⁹ |
| | E-cigarettes contain circuit boards and lithium- ion batteries, which release toxic compounds into the environment as they degrade. Batteries are also associated with explosion |

⁴⁵ https://www.theguardian.com/society/2023/jun/23/millions-of-vapes-seized-in-uk-in-three-years-data-shows

⁴⁶ gov.ie - Minister of State Smyth announces the publication of National Litter Pollution Monitoring System results (www.gov.ie)

⁴⁷ Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single use e-cigarettes. Dr Dominic Hogg, Equanimator Ltd and Zero Waste Scotland. June 2023 <u>mf-thteewik-1688050310d (zerowastescotland.org.uk)</u>

⁴⁸ Pourchez, J. From smoking to vaping: a new environmental threat? The Lancet Respiratory Medicine. 2022 DHYPERLINK "https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(22)00187-4/fulltext"<u>From</u> <u>smoking to vaping: a new environmental threat? - The Lancet Respiratory Medicine</u>

⁴⁹ Maquart et al. Plastic pollution and infectious diseases. The Lancet Planetary Health. October 2022.

| and fire risk. ⁵⁰ When improperly discarded, e- cigarettes leach heavy metals, such as mercury, lead and bromides ⁵¹ , as well as battery acid, lithium and nicotine into the environment. Some e-cigarettes contain enough toxic chemicals to qualify as hazardous waste. ⁵² |
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| Lithium is a precious metal and an important component of electric car batteries. ⁵³ UK research on discarded disposable vapes found that approximately 10 tonnes of lithium is wasted per year, which is the equivalent to the batteries of 1,200 electric vehicles. ⁵⁴ Lithium mining also leads to substantial environmental impacts, including land and water use, pollution and carbon emissions. ⁵⁵ |
| Substantial greenhouse gas emissions are associated with the production of disposable vapes. Scottish research estimates that the total emissions associated with packaging and component parts of single-use vapes is approximately 4,000-5,000 tonnes CO ₂ e per year. This figure does not include emissions associated with vaped liquids, residues in discarded vapes or the manufacturing |

⁵⁰ Pourchez, J. From smoking to vaping: a new environmental threat? The Lancet Respiratory Medicine. 2022 DHYPERLINK "https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(22)00187-4/fulltext"<u>From</u> <u>smoking to vaping: a new environmental threat? - The Lancet Respiratory Medicine</u>

⁵¹ Matthew Chapman. Rise of single-use vapes sending tonnes of lithium to landfill. July 2022. The Bureau of Investigative Journalism. https://www.thebureauinvestigates.com/stories/2022-07-15/rise-of-single-use-vapes-sending-tonnes-oflithium-to-landfill

 ⁵² Krause MJ, Townsend TG. Hazardous waste status of discarded electronic cigarettes. Waste Manag.
 2015;39:57–62

⁵³ Briefing on e-cigarette waste. ASH Scotland. November 2022 **2**HYPERLINK

[&]quot;https://www.ashscotland.org.uk/media/877422/e-cigarette-waste-briefing_nov2022.pdf"<u>Microsoft Word - E-cigarette waste briefing_Nov2022 (ashscotland.org.uk)</u>

⁵⁴ One million single use vapes thrown away every week contributing to the growing e-waste challenge in the UK - Material Focus

⁵⁵ The Environmental Impacts of Lithium and Cobalt Mining | Earth.Org

| | process. ⁵⁶ Many disposable vaping devices are also imported into Ireland from China, and so there is a substantial carbon footprint associated with the supply chain. ⁵⁷ |
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| 8. The decision on regulating these products should be based solely on responses from the consultation and the | The consultation in its current format is open to manipulation by commercial interests as the methods used in the online survey could bias results. Consultation processes are regularly manipulated by the tobacco and e-cigarette industry through organised campaigns. |
| views of people who vape | We would therefore encourage the Department to take a decision based on the best-available evidence on harms to both the environment and health, and not on a simple count of 'yes' or 'no' responses to the consultation. |
| 9. It's entirely appropriate for public officials to engage directly with tobacco companies that own disposable vape products in coming to a decision on appropriate regulation | We would like to bring to the Department's attention that the Irish government is a signatory to World Health Organization Framework Convention on Tobacco Control. This requires government officials to refrain from engagement with the tobacco industry and its affiliates in the development of public policy. |
| | Polluting industries, such as the tobacco industry, are known to engage in greenwashing - the deliberate dissemination of disinformation to present an environmentally responsible image of an organisation. Evidence shows that the tobacco industry has increased greenwashing activities over the past decade. Public officials should be live to the risks associated with engaging with |

⁵⁶ Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single use e-cigarettes. Dr Dominic Hogg, Equanimator Ltd and Zero Waste Scotland. June 2023 <u>mf-thteewjk-1688050310d (zerowastescotland.org.uk)</u>

⁵⁷ 'It's the biggest spread of addiction this country has ever seen': Regulatory noose tightens on vaping – <u>The Irish Times</u>

| | tobacco and vaping companies, who have serious conflicts of interests. |
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| 10. People will just go over the border to buy their vapes in Northern Ireland and Ireland will pick up the tab for the environmental impact, so a ban simply won't work | A ban is likely to support the Department of Health's position to reduce the proportion of children and adults using e-cigarettes and disposable vaping devices in Ireland. Any impact of cross-border illicit trade is likely to be small in comparison to the overall impact of a ban on both the environment and population health. It will however be important to ensure that cross-border movement and re-selling is deterred through legislative and regulatory measures. |

| | Many countries are proposing a ban on single- |
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| 11. Ireland will be the first government to prohibit sales of disposable e- cigarettes – it is out of touch with international policy | use disposable vapes. |
| | There is substantial momentum towards banning disposable vapes in the UK. In July 2023, the Local Government Association representing councils in England and Wales called for the Government to ban the sale and manufacture of single use vapes by 2024. ⁵⁸ The Scottish government are also considering a ban due to concerns regarding environmental harms. ⁵⁹ |
| | Last year, 18 environmental and health bodies, including the Royal Society for the Prevention of Cruelty to Animals (RSPCA), Royal College of Paediatrics and Child Health (RCPCH), and Centre for Sustainable Healthcare, signed a joint letter to the UK government to ask for a ban of disposable vapes. ⁶⁰ The RCPCH have called for a ban due to concerns regarding health consequences for children, as well as negative environmental impacts. This position has been supported by the British Paediatric Respiratory Society. ⁶¹ |
| | In Europe, a ban has been proposed for 2026. ⁶² Germany is considering introducing a ban ⁶³ and France has taken the decision to proceed with a ban by the end of this year. ⁶⁴ |

⁵⁸ Councils call for ban of disposable vapes | Local Government Association

⁵⁹ Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single use e-cigarettes. Dr Dominic Hogg, Equanimator Ltd and Zero Waste Scotland. June 2023 <u>mf-thteewjk-1688050310d (zerowastescotland.org.uk)</u>

⁶⁰ <u>Letter-to-ministers-on-disposable-vapes.pdf (green-alliance.org.uk)</u> 61

⁶² Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single use e-cigarettes. Dr Dominic Hogg, Equanimator Ltd and Zero Waste Scotland. June 2023 <u>mf-thteewik-1688050310d (zerowastescotland.org.uk)</u>

⁶³ Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single use e-cigarettes. Dr Dominic Hogg, Equanimator Ltd and Zero Waste Scotland. June 2023 <u>mf-thteewik-1688050310d (zerowastescotland.org.uk)</u>

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| The Australian government has announced a ban on all single-use disposable vapes and non-prescription vapes ⁶⁵ , and New Zealand is also introducing a ban of disposable vapes later this year. ⁶⁶ |
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| It will be important to consider that, as bans are rolled out in other countries, this may increase the flow of products into Ireland and further exacerbate environmental and health harms if Ireland does not take the same approach. |
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 ⁶⁵ Taking action on smoking and vaping | Health Portfolio Ministers and Aged Care
 ⁶⁶ https://medicalxpress.com/news/2023-06-zealand-disposable-vapes.html