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OUR SEAS OUR FUTURE
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Submission: Proposals for a Smokefree Aotearoa 2025 Action Plan

General Introduction

1. Our Seas Our Future ("OSOF") is a not-for-profit organisation that aims to protect New Zealand's coastal and marine ecosystems through advocacy, education, and environmental stewardship, ensuring that they are managed sustainably and protected for future generations.

2. OSOF supports the Government's proposed Smokefree Aotearoa 2025 Action Plan, particularly in regards to harm caused to Aotearoa's marine and coastal environments by cigarette production, used cigarette filters and other cigarette waste products.

3. OSOF welcomes the opportunity to comment on the Ministry of Health's proposed Smokefree Aotearoa 2025 Action Plan.

Our Submission

Focus area 1: Strengthen the tobacco control system

a). What would effective Māori governance of the tobacco control system look like? Please give reasons.

The overarching principles of Te Tiriti o Waitangi are protection, participation and partnership. The government has obligations under Te Tiriti o Waitangi to meet these principles, while also ensuring that Māori, iwi and hapū are protected and supported in making decisions that will benefit their health and mauri.

As part of this, it is essential that Māori are able to exercise rangatiratanga of their taonga - self determination is recognised in Te Tiriti, and has also been recognised by the United Nations[1]. This would look like Māori communities making the decisions that affect them, while also being able to empower and support other Māori and whānau throughout that process. This would involve the Ministry of Health listening to and centering the voices, aspirations, opinions and perspectives of Māori, iwi and hapū.

Focus area 2: Make smoked tobacco products less available

d). Do you support introducing a smokefree generation policy? Yes/~~No~~. Please give reasons:

YES, OSOF supports the introduction of a smokefree generation policy because a phase out of the manufacture and consumption of tobacco products would significantly reduce current ongoing and accumulating harm of these processes to the natural ecosystems on which we rely for our own well-being and survival.

Harm is generated to natural ecosystems throughout the phases of tobacco use; including planting, processing, consumption and littering[2]. In 2011, around 4.2 million hectares of land was devoted to tobacco growing, with increases still being seen in a number of low to middle income countries. Deforestation for tobacco growing can have and contribute to devastating effects on the environment, including loss of biodiversity, soil erosion, soil degradation, water pollution and increased carbon dioxide emission[3]. A substantial amount of pesticides, fertilisers and growth regulators are often used in tobacco crops, and soil nutrients are depleted by the increased amount of nitrogen, phosphorus and potassium required compared to many other crop types[4]. Research estimates that tobacco factories

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[1] United Nations. (2021). *United Nations Declaration on the Rights of Indigenous Peoples.* Retrieved from https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html

[2] Araujo, M. C. B. & Costa, M. F. (2019). A critical review of the issue of cigarette butt pollution in coastal environments. *Environmental Research, 172,* 137-149.

[3] Novotny, T. E., Bialous, S. A., Burt, L., Curtis, C., da Costa, V. L., Iqtidar, S. U., Liu, Y., Pujari, S., & d'Espaignet, E. T. (2015). The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption. *Bulletin of the World Health Organisation, 93*, 877-880.

[4] Novotny, T. E., Bialous, S. A., Burt, L., Curtis, C., da Costa, V. L., Iqtidar, S. U., Liu, Y., Pujari, S., & d'Espaignet, E. T. (2015). The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption. *Bulletin of the World Health Organisation, 93*, 877-880.

will have deposited in excess of 45 million tonnes of solid waste, six million tonnes of nicotine-containing waste, and four million tonnes of chemical waste over the last two decades. In addition, a further two million tonnes or more is contributed post-consumption by way of packaging and distribution[5]. Estimates of carbon dioxide emission for the global manufacture of cigarettes are around five million tonnes per year[6].

e). Are you a small business that sells smoked tobacco products?

No.

Focus area 3: Make smoked tobacco products less addictive and less appealing

b). Do you support prohibiting filters in smoked tobacco products? Yes~~/No~~. Please give reasons:

YES, OSOF strongly supports a proposal to prohibit filters in smoked tobacco products, as included in the proposed Smokefree Aotearoa 2025 Action Plan[7]. As well as reducing the appeal and addictiveness of tobacco for individual and population health benefits, prohibition of filters would help prevent ongoing environmental harm from this pervasive form of plastic pollution.

Casual littering of used cigarette filters, commonly referred to as butts, is commonplace and is not socially subjected to the same taboo as other forms of littering. Cigarette butts were the most prevalent litter item collected during clean up events in Aotearoa New Zealand in 2019, with approximately 39 butts collected for every 1000 square metres of ground cleared [8]. They continue to be a very common litter item found during community clean-up events across New Zealand, including those organised by OSOF[9].

Cigarette butts are made of a plastic, cellulose acetate[10], and are, by design, produced to absorb toxic constituents from cigarette smoke[11]. As a cigarette is burned, new compounds are created from the many chemicals present within the cigarette or tobacco leaf, with the most toxic of these being concentrated within the filter or butt[12]. As they break apart, discarded butts can leach nicotine, heavy metals, pesticides and microplastics into

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[5] Novotny, T. E., Bialous, S. A., Burt, L., Curtis, C., da Costa, V. L., Iqtidar, S. U., Liu, Y., Pujari, S., & d'Espaignet, E. T. (2015). The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption. *Bulletin of the World Health Organisation, 93*, 877-880.

[6] Novotny, T. E., Bialous, S. A., Burt, L., Curtis, C., da Costa, V. L., Iqtidar, S. U., Liu, Y., Pujari, S., & d'Espaignet, E. T. (2015). The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption. *Bulletin of the World Health Organisation, 93*, 877-880.

[7] Our Seas Our Future. (2012). *Our Seas Our Future supports governments proposed ban on cigarette filters.* Retreived from https://www.scoop.co.nz/stories/AK2104/S00325/our-seas-our-future-supports-governments-proposed-ban-on-cigarette-filters.htm.

[8] Keep New Zealand Beautiful. (2019). *National Litter Audit 2019*. Retreived from https://www.knzb.org.nz/resources/research/national-litter-audit/

[9] Our Seas Our Future. (2021). *No Butts.* Retrieved from https://www.osof.org/index.php/portfolio/no-butts/

[10] Kadir, A. A., & Sarani, N. A. (2015). Cigarette butts pollution and environmental impact - a review. *Applied Mechanics and Materials, 773-774,* 1106-1110.

[11] Novotny, T. E., & Slaughter, E. (2014). Tobacco product waste: An environmental approach to reduce tobacco consumption. *Current Environmental Health Report, 1,* 208-216.

[12] Araujo, M. C. B. & Costa, M. F. (2019). A critical review of the issue of cigarette butt pollution in coastal environments. *Environmental Research, 172*, 137-149.

surrounding ecosystems, sometimes within the bodies of marine animals after they are consumed[13]. Ingestion by animals can cause convulsions, respiratory failure and even death [14]. The World Health Organisation has highlighted concerns that tobacco product waste may be a "significant environmental contaminant and potential human health hazard through bioaccumulation in the food-chain"[15].

Although small in size, cigarette butts are littered in very large quantities and can take years to degrade[16] [17]. Plastic particles from degrading filters, and the toxicants they contain, may continue leaching chemicals for up to 10 years and may never completely disappear from water or soil[18]. Annually, over 5.5 trillion cigarettes are produced worldwide, and it is estimated that 4.5 trillion cigarette butts are still being littered throughout the world[19]. Considering this in terms of weight, one study estimated the volume of discarded butts from the United States in 2011 alone would weigh approximately 49.8 million kg[20].

Community clean-ups can only have a minimal impact on the quantities of cigarette butts being littered across Aotearoa annually as more butts are littered than can be collected by local government and charity organisations[21].

c). Do you support allowing the Government to prohibit tobacco product innovations through regulations? Yes~~/No~~. Please give reasons:

YES, OSOF supports allowing the Government to prohibit tobacco product innovations through regulations. Research has noted, for example, that the tobacco industry is supportive of replacing current filters by ones which are biodegradable, but in terms of environmental harm, there would be no benefit to this. Examples of innovation such as this would not prevent the transfer of toxic substances into animals and ecosystems, as

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[13] Root, T. (2019). *Cigarette butts are toxic plastic pollution. Should they be banned?* Retrieved from https://www.nationalgeographic.com/environment/article/cigarettes-story-of-plastic

[14] Novotny, T. E., Hardin, S. N., Hovda, L. R., Novotny, D. J., McLean, M. K., & Khan, S. (2011). Tobacco and cigarette butt consumption in humans and animals. *Tobacco Control, 20(Suppl 1), i17-i20.*

[15] Novotny, T. E., Bialous, S. A., Burt, L., Curtis, C., da Costa, V. L., Iqtidar, S. U., Liu, Y., Pujari, S., & d'Espaignet, E. T. (2015). The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption. *Bulletin of the World Health Organisation, 93*, 877-880. Retreived from https://www.who.int/bulletin/volumes/93/12/15-152744/en/

[16] Araujo, M. C. B. & Costa, M. F. (2019). A critical review of the issue of cigarette butt pollution in coastal environments. Environmental Research, 172, 137-149.

[17] Kadir, A. A., & Sarani, N. A. (2015). Cigarette butts pollution and environmental impact - a review. *Applied Mechanics and Materials, 773-774,* 1106-1110.

[18] Novotny, T. E., & Slaughter, E. (2014). Tobacco product waste: An environmental approach to reduce tobacco consumption. *Current Environmental Health Report, 1*, 208-216.

[19] Torkashvand, J., & Farzadkia, M. (2019). A systematic review on cigarette butt management as a hazardous waste and prevalent litter: Control and recycling. *Environmental Science and Pollution Research Institute, 26*(12), 11618-11630. Retrieved from https://pubmed.ncbi.nlm.nih.gov/30859444/

[20] Novotny, T. E., & Slaughter, E. (2014). Tobacco product waste: An environmental approach to reduce tobacco consumption. *Current Environmental Health Report, 1,* 208-216.

[21] Araujo, M. C. B. & Costa, M. F. (2019). A critical review of the issue of cigarette butt pollution in coastal environments. *Environmental Research, 172*, 137-149.

biodegradable filters may in fact work to speed up this process and make littering more likely as a smoker's sense of guilt in disposal is reduced[22].

Focus area 4: Make tobacco products less affordable

Final questions

b). Do you have any other comments on this discussion document?

This action plan does not address the waste products from vapes and e-cigarette products. As vaping and e-cigarettes become more popular, the waste created from these products will increase and this is a significant concern which also needs to be considered. Waste from vape products includes the vapes themselves, the cartridges or single-use pods, packaging, batteries and by-products. There is no sustainable way to dispose of these product and process elements[23].

This plan also does not address the potential to introduce a national plan or strategy for Smokefree Outdoor Spaces. Banning smoking in public open spaces results in a significant reduction of cigarette related litter. Having smoke free public outdoor spaces helps to denormalise the littering of cigarette butts[24], while also discouraging smoking, particularly for children and young adults[25]. This is something that could be implemented from a central government level, rather than requiring regional and city councils to implement smoke free spaces[26].

With acknowledgement to mātauranga Māori and Te Ao Māori, it is recognised that we are interconnected with our natural environment, and there is no separation between humans and nature. This is reflected in the Māori whakataukī; ka ora te whenua, ka ora te tangata *(when the land is well, the people are well)*. Our unique ecosystems and environments are central to our mental and physical health, cultural identity and economy. This means we must be addressing our health issues alongside our environmental issues, and adopting an entirely integrated and holistic management approach, rather than separating these issues and attempting to address them individually.

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[22] Araujo, M. C. B. & Costa, M. F. (2019). A critical review of the issue of cigarette butt pollution in coastal environments. *Environmental Research, 172,* 137-149.

[23] Paul, K. (2019, May). Vapings other problem: Are e-cigarettes creating a recycling disaster? *The Guardian.* Retrieved from https://www.theguardian.com/society/2019/aug/26/vapings-other-problem-are-e-cigarettes-creating-a-recycling-disaster

[24] Araujo, M. C. B. & Costa, M. F. (2019). A critical review of the issue of cigarette butt pollution in coastal environments. *Environmental Research, 172,* 137-149.

[25] Kelly, B. C., Vuolo, M., Frizzell, L. C., et al. (2018). Denormalization, smoke-free air policy, and tobacco use among young adults. *Social Science & Medicine, 211*:70-77.

[26] Marsh, L., Robertson, L. A., Kimber, H., & Witt, M. (2014). Smokefree outdoor areas in New Zealand: how far have we come? *New Zealand Medical Journal, 127*(1389): 51-66.