

## Vaping - An inquiry into reducing rates of e-cigarette use in Queensland

**Submission No:** 11  
**Submitted by:** No More Butts  
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**Submitter Comments:**



5<sup>th</sup> April 2023

**Committee Secretary**  
Health and Environment Committee  
Parliament House  
George Street  
Brisbane Qld 4000

By email: [HEC@parliament.qld.gov.au](mailto:HEC@parliament.qld.gov.au)

**RE:** No More Butts' submission to the Inquiry into reducing rates of e-cigarette use in Queensland

Dear Committee Secretary,

With more than 250 thousand Queenslanders estimated to be vaping, they are generating over 100 tonnes of a new form of electronic waste that Australia is not equipped to deal with. Batteries, circuitry, plastic and chemicals are being littered and landfilled without awareness or consideration of the environmental impacts.

No More Butts is a registered Australian environmental charity, formed in 2020 to tackle Australia's most littered item: cigarette butts. Having been entered onto the Register of Environmental Organisations in Australia, No More Butts' vision is for a 'butt free environment'.

For more than a year, we have been leading the conversation on the environmental impacts caused by the e-waste creation as a result of the increase in vaping and have been featured across many publications across Australian states.

We appreciate the opportunity to provide feedback to the Health & Environment Committee as part of the Inquiry into Reducing Rates of E-Cigarette Use in Queensland. No More Butts has also submitted responses to the Consultation Paper on reducing the negative effects of smoking in Queensland, as well as the recent e-Products consultation. We commend the action that the Queensland government is taking and hope that it is not too late.

As a subject matter expert on the environmental impacts of tobacco filters and vaping devices, we believe there should be further steps, or opportunities to introduce additional measures for the preservation and restoration of our environment.

Our response to the Terms of Reference follow and are supported by the attached briefing document prepared for Mr Michael Healy MP.

Please don't hesitate to contact me if you wish to discuss any of the comments in this letter, the attached documents, or have any further questions about our submission. We are available to give evidence, or provide further information. I write in my capacity as an authorised representative of the executive of a national organisation.

Yours faithfully,

Mr. Shannon Mead  
Founder & Executive Director  
**No More Butts Ltd**



## **Terms of Reference**

### ***The current status in Queensland relating to the prevalence of e-cigarette use, particularly amongst children and young people.***

In 2022, research showed that 14.5% of Queenslanders **[between the ages of 18 and 29]** now currently vape, an increase of 40% in the previous 4 years. Alarming, as far back as 2017, it was reported that 15.6% of Queensland school children (aged 12 - 17) had already used an e-cigarette<sup>1</sup>.

From a Roy Morgan Research survey<sup>2</sup> of 4,500 adults monthly nationwide from July 2021-June 2022, an estimated 1,159,000 adults were current vapers (had vaped at least once in the last month). The same survey found that 5.8% of all adult Australians vape and 12% of those people had a prescription for nicotine vaping.

In 2022, the Australian Bureau of Statistics reported<sup>3</sup> that 21.7% of 18-24 year olds had ever used an e-cigarette, or vaping device. This includes those that used to, or still smoke cigarettes. From 2016 to 2019 there was a doubling in 18–24-year-old Australians using e-cigarettes, and approximately 230,000 people aged 14 and older reporting daily e-cigarette use (2019).

An October 2022 Victorian study<sup>4</sup> noted that 3.5% of Victorian's vaped daily and weekly, another 1.2% vaped monthly and a further 1.4% vaped less than monthly.

Using Queensland's population data, it can be estimated that more than 250,000 Queenslanders are vaping regularly, which is consistent with the data from Victoria and Australian research.

### ***Consideration of waste management and environmental impacts of e-cigarette products.***

#### *Environmental impacts*

With accessibility and the resulting scale, comes an environmental issue that seemingly had not been considered. Often made with a plastic, or aluminum casing and containing batteries, when littered or dumped, vaping devices cause damage to our environment. Vape waste creates several environmental issues:

- Increase in batteries, predominantly lithium-ion batteries
- Increase in tech waste from circuitry
- Introducing hazardous and toxic chemicals (including nicotine) into the environment
- Increase in single-use plastics

There are two main categories of vaping – with and without nicotine. It is important to note that whilst nicotine may have a greater impact on the environment, non-nicotine vaping devices will still cause damage to the environment. It is also worth noting that even devices that do not list nicotine as an ingredient may actually contain nicotine and therefore all vaping devices should be considered to be as hazardous.

Although there are some regulations around the sale of nicotine and non-nicotine vaping devices and products in Australia, there has been limited consideration towards the consumption and disposal of batteries and how they fit into an existing e-waste stewardship programs.

The ACCC noted that they are concerned about the increasing number of reported incidents involving Li-ion batteries, some causing house fires resulting in serious injuries and property damage<sup>5</sup>.

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<sup>1</sup> <https://www.choreport.health.qld.gov.au/our-lifestyle/electronic-cigarettes>

<sup>2</sup> <https://aacs.org.au/wp-content/uploads/2022/08/Roy-Morgan-Vaping-Incidence.pdf>

<sup>3</sup> <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/smoking/latest-release>

<sup>4</sup> [https://www.cancervic.org.au/downloads/cbrc/R22\\_MB\\_E-cigarette%20use%20and%20purchasing%20behaviour%20among%20Victorian%20adults.pdf](https://www.cancervic.org.au/downloads/cbrc/R22_MB_E-cigarette%20use%20and%20purchasing%20behaviour%20among%20Victorian%20adults.pdf)

<sup>5</sup> <https://consultation.accc.gov.au/accc/lithium-ion-batteries-issues-paper/>

### *Waste management*

Based on estimated consumption and population statistics, it would be conservative to say that over 100 tonnes of e-waste is being created annually from disposable vapes in Queensland alone.

Altering variables such as weight, the percentage of people using disposable vapes, age groups and population assumptions, as well as frequency of vaping and volumetric contents of a vape all have a bearing on estimates. It is therefore conceivable that the amount of e-waste could be double this amount.

Due to the various types of vaping devices, there are also different kinds of batteries used that should be highlighted:

**Disposable:** Devices such as early generation 'cig-a-likes' and the bulk of the devices being promoted and readily available now have limited lifespans and are meant to be thrown away when the device is used up. They are not rechargeable.

**Integrated batteries:** These batteries are built into the device and are not meant to be replaced or removed. They have a finite number of rechargers after which the device needs to be disposed.

**Removable batteries:** These batteries can be recharged. When they no longer recharge, they can be replaced. Removable and rechargeable batteries are typically found in more advanced devices, including approved nicotine vaping devices.

The chemistry of Li-ion batteries makes them more volatile than traditional batteries. The most dangerous outcome associated with Li-ion batteries is the potential to rapidly overheat and cause fires that cannot be easily extinguished, leading to property damage, serious injury and/or fatality.

### *Vaping and littering*

Although the same littering (and smoking) laws apply to vaping in most Australian states, most litter databases still cater for reporting on vaping related litter, meaning a lack of data on the true impact to the environment.

Exhaustive searches do not offer data points for littering associated with e-cigarettes and other vaping items. It has been noted however by Clean Up Australia and Sea Shepherd Australia that there has been an increase in the number of vaping devices during their clean up efforts.

## **Recommendations**

### **1. Deploy a return scheme for vaping devices, funded by an increase in the retail sales price**

Similar to a container deposit / refund scheme, users of vaping devices should be able to return their devices to specific drop-off centres for recycling. Upon doing so, they should be eligible to receive a financial incentive.

The current price of a vape is attractive, as it is significantly cheaper than a cigarette. An increase in the sales price of a vaping device will:

- enable facilitation of a supply chain for vaping recycling
- cover overhead costs of a program, including awareness
- provide a rebate upon return to a designated drop off centre
- potentially act as a sales deterrent, due to increased price

### **2. Greater alignment of sales reporting for visibility into brand / sponsor volumes**

The lack of action on federal regulation of vaping devices has largely been due to the fact that there is limited data available.

Whilst the Queensland government may not be able to set guidelines for the importation, they can implement mandatory retailer licencing and sales reporting to provide a clearer picture on the amount of e-waste generated from sales of vaping devices in the state.

### **3. Introduce specific 'dangerous' littering fine at same rate of lit cigarette**

Currently, vaping devices are likely to be subjectively included in the general littering fines category from DES and attract a fine of \$287. No More Butts proposes that vapes are specifically included under Offence 103(1)(a) of the Waste Reduction and Recycling Act 2011 as dangerous littering.

The logo for 'NOMOREBUTTS' is displayed in a stylized, hand-drawn font. 'NOMORE' is in white and 'BUTTS' is in yellow, both on a black background.

## CONSIDERING VAPING DEVICES IN THE QLD E-PRODUCTS ACTION PLAN

### Key points

- Vaping devices pose at least three threats for our environment
- More than 250 thousand Queenslanders are vaping regularly
- More than 100 tonnes of e-waste is generated annually by Queensland vapers
- Dozens of tonnes of li-ion batteries end up in Queensland landfill each year
- Existing e-waste programs do not accept vaping devices
- **Action:** Introduce a disposal scheme for vaping devices
- **Action:** Harmonise vaping laws to be consistent with smoking
- **Action:** Increase fines for littering vapes, as a dangerous / hazardous item

### Executive Summary

Vaping is on the rise, with more than 250 thousand Queenslanders and 1.2 million Australians vaping regularly.

Vapes are generally lithium battery-powered devices that look like metallic wands, USBs or other hand-held devices. They use cartridges filled with liquids, or 'juice', which regularly contain nicotine (even if they aren't labelled as such), in addition to artificial flavourings and various chemicals.

This heating of the liquid occurs due to a heating element known as a 'coil' which consists of wire and cotton and sits inside the tank. The juice in the tank is absorbed by the cotton, and when the devices button is pressed, the wire coil heats up, turning the juice into a vapour which is inhaled into the user's lungs.

The range of vape and e-cigarette choices have evolved rapidly in recent years, with many models and liquid flavours. Some vaping devices are made to look like regular cigarettes, or cigars, or pipes. More recently, some resemble pens, USB sticks, and other everyday items.

There are two major categories of vaping – with and without nicotine. However, both vape 'categories' create environmental issues:

- Increase in tech waste from their parts, including lithium-ion batteries
- Introduction of hazardous and toxic chemicals like nicotine into the environment when discarded
- Increase in single-use plastics

Disposable vapes, or single-use vapes have limited lifespans and are meant to be thrown away when the device is used up. They are not rechargeable. Other vapes have integrated batteries built into the device that are not meant to be replaced or removed. They have a finite number of recharges after which the device needs to be disposed.

Some vapes have removable batteries, which can be recharged several times. When they no longer recharge, they can be replaced. Removable and rechargeable batteries are typically found in more advanced devices.



## Background

Waste from the vaping devices could be “a more serious environmental threat” than cigarettes, global anti-tobacco organisation, STOP, warned, as they contain batteries, circuitry, toxic chemicals in e-liquids, metal, as well as single-use plastic cartridges.

When pods & cartridges are discarded as litter, they can leach nicotine & other toxic chemicals into the environment. Discarded devices may leach lead, cobalt, and other substances into the environment in toxic amounts. Toxic chemicals from commercial tobacco product waste can accumulate in animals, soil, and aquatic ecosystems, leading to contaminated drinking water and foods and posing additional downstream risks to human health and the environment.

In the 12 months prior to June 2018, Queensland had an increase in adult vaping of more than 200% and this trend has continued on a national level in the past five years.

From the Roy Morgan Research survey of 4,500 adults monthly nationwide from July 2021-June 2022, an estimated 1,159,000 adults were current vapers (had vaped at least once in the last month). The survey found that 5.8% of all adult Australians vape and 12% had a prescription for nicotine vaping. In 2022, the Australian Bureau of Statistics reported that 21.7% of 18-24 year olds had ever used an e-cigarette, or vaping device. This includes those that used to, or still smoke cigarettes. From 2016 to 2019 there was a doubling in 18–24-year-old Australians using e-cigarettes, and approximately 230,000 people aged 14 and older reporting daily e-cigarette use (2019).

According to [Vaping Vibe](#), the average disposable vape generally lasts anywhere from 200 to 400 puffs and it is often noted that 400 puffs from a vape is the equivalent of 20 cigarettes. There is a big difference in weights from the smaller disposable ones, such as [Zaero](#) at ~15g to [IGET](#) at 78g.

Based on estimated consumption and population statistics, it would be conservative to say that over 100 tonnes of e-waste is being created annually from disposable vapes in Queensland. Variables such as weight, the percentage of people using disposable vapes, age groups and population assumptions, as well as frequency of vaping and volumetric contents of a vape all have a bearing on estimates. It is possible that the amount of e-waste could be double this amount.

Since October 2021, a [prescription](#) has been required in order to purchase nicotine-containing vape products in Australia. However, many over-the-counter nicotine-free products are actually found to contain nicotine when tested, and are being [sold illegally](#). Non-NVPs serve no constructive purpose, but their continued sale is being used to legitimise vaping as a practice, and to mask the sale of under the counter NVPs.

Removing e-cigarettes products from general retail sale could help limit the supply of illegal vape products, while also strengthening the prescription model for smokers using e-cigarettes to help quit smoking. A new [report](#) shows growing support for policy action to limit the availability and use of e-cigarettes, with almost nine in ten Australian adults (87%) supporting government action.

Although the same littering (and smoking) laws apply to vaping in most Australian states, most litter databases still don't have a taxonomy to cater for reporting on vaping related litter, meaning a lack of data on the true impact and e-waste calculations.



*Online vaping store, Puff Bar, actually suggests “throwing away” a vape after use.*

## Where there's smoke ...

The ACCC is concerned about the increasing number of reported incidents involving Li-ion batteries, some causing house fires resulting in serious injuries and property damage.

In Western Australia, there have already been reports of human injuries as a result of [exploding vapes](#).

Between 1 January 2017 and 31 December 2021, the Burns Registry of Australia and New Zealand (BRANZ) recorded 21 admissions for burns involved or related to Li-ion batteries, with the most common products involved being e-cigarettes and mobile phones, with the lower limbs and hands being the most common injury sites.

The chemistry of Li-ion batteries makes them more volatile than traditional batteries. The most dangerous outcome associated with Li-ion batteries is the potential to rapidly overheat and cause fires that cannot be easily extinguished, leading to property damage, serious injury and/or fatality.

Some key issues causing incidents with Li-ion batteries include:

- mechanical issues – damage caused to the casing of the Li-ion battery, including through puncturing, compressing/compacting, including during disposal, or impacting the Li-ion battery
- quality/manufacturing issues – faults within the Li-ion battery itself and the products that contain the Li-ion battery
- charging issues – using incompatible charging equipment or leaving devices on charge where the Li-ion battery does not protect against overcharging
- environment/external issues – exposure to heat or moisture

Damage to the casing of a Li-ion battery can cause air to enter the Li-ion battery and react with the electrolyte solution or break the separator between the two sides of the battery, initiating internal short-circuits. This can cause thermal runaway, overheating and fire.

Damage to the Li-ion battery shell casing can be caused by:

- puncturing
- compressing / crushing / compacting; or
- dropping / impacting.

Fire and emergency service authorities and industry groups/associations have indicated that the hazard of mechanical damage is particularly concerning during the disposal of Li-ion batteries in general waste because they can go undetected and be easily crushed in waste disposal trucks or facilities, causing fires. Some fire services internationally consider Li-ion batteries to be responsible for catastrophic fires breaking out in various recycling plants in the US, UK, France, Australia and China.

An industry association informed the ACCC that approximately 50% of people are disposing of Li-ion batteries in general waste and that a major waste collector had indicated that it was seeing 15 fires a month resulting from different types of batteries. Battery recycling bins can often be found in shopping centres, libraries, and other community buildings.



## Stewardship

Existing e-waste programs, including battery stewardship programs do not cater for vaping devices.

Last year, No More Butts [made a submission to a federal e-stewardship](#) consultation. Although there was positive feedback received from the department (DCCEEW), because there are no regulations to track importation, it was advised that there wasn't much that could be done.

Here is the current status of the key Australian stewardship programs:

- NTCRS – do not accept vapes – there is no funding allocated at a federal level (managed by DCCEEW Product Stewardship team)
- BCycle – do not accept vapes. We have spoken with their CEO and there are restrictions to importers opting in to the scheme with a financial contribution
- Mobile Muster – do not accept vapes. We have received a response saying that it isn't part of their plan
- Local councils, including [City of Sydney](#) advertise that they do accept vapes as part of their e-waste collections, however most councils exclude them, or are silent on the issue.

Because of the fact that even the non-nicotine vapes have been shown to contain [nicotine](#), it is unclear if companies interested in source separation of vaping devices are actually permitted to do so under their licence.

In summary, there is no clear, consistent and coordinated e-waste handling program for vapes across Australia, despite now being sold in more volume than mobile phones annually.

An overall co-regulated (or mandatory) Tobacco Product Waste Stewardship scheme should be implemented, encompassing vaping.

## International updates

[Scotland](#) is reportedly considering banning single-use vapes. The New York City State Senate currently has a [Bill](#) in the Senate Health Committee that also proposes to ban single-use vapes.

In Canada, TerraCycle, Tweed and Tokyo Smoke have partnered to create a national recycling program for any brand of cannabis packaging and for Canopy Growth produced vape products. This program accepts all Canopy Growth produced vape products.

New Zealand has a scheme set up with TerraCycle and vape brand [VAPO](#) to recycle vapes. In what is thought to be a world-first for nicotine vaping pod systems, the global recycling giant has developed a recycling program specifically for VAPO and alt. branded products, including bottles, devices and pods.



## Primary recommendations

### **1. Deploy a return scheme for vaping devices, funded by an increase in the retail sales price**

Similar to a container deposit / refund scheme, users of vaping devices should be able to return their devices to specific drop-off centres for recycling. Upon doing so, they should be eligible to receive a financial incentive.

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Whilst the Queensland government may not be able to set guidelines for the importation, they can implement mandatory retailer licencing and sales reporting to provide a clearer picture on the amount of e-waste generated from sales of vaping devices in the state.

### **3. Introduce specific 'dangerous' littering fine at same rate of lit cigarette**

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## Secondary recommendations

### **1. Implementation of recycle points at Vape resellers & Pharmacies**

### **2. Drive public awareness of e-waste drop-off centres**

### **3. Consideration of ensuring industry holds necessary licences to satisfy and cover both nicotine and e-waste requirements for handling vaping devices**

### **4. Consideration of a mandatory 'recycling' bag for overseas imported vaping devices and accessories**

## Next steps

1. Draft a Bill (or Bill Amendment) to introduce a deposit scheme for vaping devices
2. Update WRR Act Penalties to include vaping devices under the dangerous littering category

## Proponent

[No More Butts](#) is a subject matter expert on tobacco related waste and a registered Australian environmental charity, having been entered onto the Register of Environmental Organisations in Australia.

Formed in 2020 to tackle Australia's most littered item: cigarette butts, No More Butts' vision is for a 'butt free environment'. However, in recent years with the emerging trend of vaping slowly augmenting smoking behaviours, No More Butts has also initiated a national conversation about the environmental impacts of vaping.

Performing multiple functions from research and advocacy, we are engaged as a consultant on the topic by peak bodies, including NSW EPA, in addition to performing pro bono work with councils and other environmental organisations.

No More Butts has been an active participant in several recent State and Commonwealth consultations and focus groups, including the International Plastic Pollution Treaty and the National Plastic Pollution Portal. Additionally, No More Butts is a member of the UNEP Global Partnership on (Plastic Pollution and) Marine Litter. We have recently attended virtual meetings of the High Ambition Coalition before and after INC-1, as well as being a regular attendee at WHO FCTC events. In 2022, we presented on the impact of cigarette butt litter at six conferences, including a poster presentation at the 7<sup>th</sup> International Marine Debris Conference in Korea.

### About our founder

After an early work history spanning hospitality and entertainment, our founder and Executive Director - Shannon Mead, forged a successful corporate career over two decades with multi-national companies, including Nokia and Microsoft.

Most recently, Shannon led Commercial Operations & Go-to-market for a global consumer electronics company, where he was accountable for governance, analytics, training, and retail operations across 14 countries in the Asia Pacific region, reporting to the Global Chief Commercial Officer. During his tenure, Shannon held the role of General Manager for Philippines, Singapore, Indonesia and Pacific Islands, living in the three former countries, giving him a greater sense of worldwide impact and cultural understanding.

Prior to that role, Shannon led Sales Operations across Australasia for Microsoft Devices after being leading channel sales for Nokia Oceania, where he had worked for 13 years across sales, product management and training roles.

Shannon has presented across various conferences since the inception of No More Butts on the topic of cigarette butt litter, considerations for recycling and the importance of democratisation of data. More recently, he has spoken about the importance of e-waste programs to cater for the rise in vaping devices.

Along with a team of 10 others, Shannon works as a volunteer in the organisation, as a full-time focus and is an Executive Director. Shannon was presented with the Cairns Regional Council 2022 Australia Day Awards "Volunteer of the Year" for his efforts with No More Butts.

# NOMOREBUTTS

**VAPING DEVICES:**

**SUBMISSION FOR STEWARDSHIP**

**FOR CONSUMER AND OTHER**

**ELECTRICAL AND ELECTRONIC PRODUCTS.**

**February 2022**



## Disclaimer

The information contained in this document is the result of research conducted by No More Butts during the course of fulfilling their charitable purpose: the protection of the natural environment.

The information contained in this document should be used to consider if vaping devices should be being included as part of the Federal Government's future e-Waste stewardship initiatives.

This document is intended to surface and provide links to existing research and information relating to the emerging trend of vaping. It brings to light the potential environmental impacts of vaping and provides some suggested activities to mitigate these risks. It is not intended to be a scientific paper.

All care has been taken to include relevant links to web sites from which content has been sourced. Where available, images have been credited to the source(s) that they were obtained from. For any incorrect photography credits, please email No More Butts.

For enquiries about this document, please email [contact@nomorebutts.org](mailto:contact@nomorebutts.org).

*Cover photo: Image sourced from <https://tobaccofreeca.com>.*



*Image sourced from [www.iquitplastics.com](http://www.iquitplastics.com)*

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*Image sourced from [www.truthinitiative.org](http://www.truthinitiative.org)*



## Executive Summary

Vaping is on the rise in Australia. Based on increases in previous years, in 2022 it could reasonably be assumed that more than 5% of Australians vape. This includes those that used to, or still smoke cigarettes.

Alarming, in 2019, 18.7% of 14-25 year olds had already vaped, including those that had never smoked cigarettes. Based on trends and observations, this number is expected to have risen in the past few years.

Along with accessibility and scale, comes a potential environmental issue. There are two categories of vaping – with and without nicotine. Whether vaping devices contain nicotine or not, they pose a hazard to our natural environment. Made from plastic and containing batteries (e-waste), when littered or dumped, they cause damage to our environment. In addition to the presence of chemicals known to cause damage, nicotine can leach into our environment.

Whilst there are some regulations around the sale of nicotine and non-nicotine Vaping devices and products in Australia, there has been limited consideration towards the batteries and how that fits into an existing or new e-waste stewardship programs.



*Image sourced from [www.iquitplastics.com](http://www.iquitplastics.com)*

## Purpose of this Document

### Minister's List of Priority Products

*According to DAWE, "Each year the Minister for the Environment releases a product stewardship priority list. This annual list identifies products and materials for which industry is expected to take product stewardship action. Product stewardship plays an important role in helping individuals and companies take responsibility for reducing the environmental, social and health impacts of their manufactured goods and materials across the whole life cycle."*

*No More Butts notes that, "priority will be given to products and materials where there are clearly identifiable product stewardship actions that provide environmental, social and health benefits, where there is industry buy-in to change practices, and where these actions will contribute to domestic targets and international commitments."*

Whilst this paper is not a submission for the MPL, information and proposals in here support would support the inclusion to future nominations for the MPL.



# SECTION 1



## OVERVIEW OF VAPING DEVICES

**NOMOREBUTTS**

## What is Vaping?

Vaping is the act of smoking e-cigarettes, or ‘vapes’.

Vaping devices, such as vapes, e-cigarettes and e-cigars, are electronic devices used to heat vaping products for inhalation. We predominantly refer to the item that people use for both categories as “Vaping devices”.

Vaping is different to smoking, which burns tobacco leaf creating smoke. Both vaping and smoking deliver nicotine, but it is the burning of tobacco that causes most of the harm. Vaping, however, is not completely harmless.

Some nicotine vaping products are supplied in vaping devices (eg. prefilled, disposable nicotine e-cigarettes and pods). Other vaping devices are supplied separately to the vaping product(s) used with those devices.

The Department of Health says [“E-cigarettes are devices that make vapour for inhalation, simulating cigarette smoking.”](#)

Vapes are **lithium battery-powered** devices that look like metallic wands, USBs or other hand-held devices.

Vapes use cartridges filled with liquids, or ‘juice’, which typically contain nicotine, artificial flavourings and various chemicals. The liquid is heated into an aerosol, or vapour, and inhaled into the user’s lungs.

The Australian Government has documented [their definition of vaping:](#)

“Nicotine vaping products contain nicotine salt or base in solution and are heated using a vaping device to make aerosol for inhalation (‘vaping’),” the Department of Health Therapeutic Goods Administration (TGA) says.



## What are e-Cigarettes?

E-cigarettes are battery operated devices that heat a liquid (also known as e-liquid) to produce a vapour that users inhale. E-cigarettes are also called 'e-cigs' or 'vapes'.

E-cigarettes come in many shapes and sizes and can be made to look like everyday items including highlighters, pens or USB memory sticks. Vapour from e-cigarettes does not usually have a strong odour but they may have a sweet smell depending on the flavour.

[When using an e-cigarette, the user inhales and exhales the vapour from the heated e-liquid. E-liquid contains a range of chemicals and it may or may not contain nicotine.](#)

E-cigarettes may also be known as:

- electronic cigarettes
- e-cigs
- electronic nicotine delivery systems (ENDS)
- electronic non-nicotine delivery systems (ENNDS)
- alternative nicotine delivery systems (ANDS)
- personal vaporisers
- e-hookahs
- vape pens
- vapes

## What are the differing Vaping Devices?

[Vapes use two main delivery systems: Electronic Nicotine Delivery \(ENDS\) and Electronic Non-Nicotine Delivery \(ENNDS\).](#)

**Discreet pod or pen devices** are mouth-to-lung devices. Pod devices have a battery and a disposable e-liquid cartridge. Pen devices have a battery, a tank that refills with liquid, and a coil that heats the vapour.

More complex tank **devices** are direct-to-lung devices and are the ones that can make big clouds.

The range of vape and e-cigarette choices have evolved rapidly in recent years, with many models and liquid flavours.

They generally come in three main categories: minis, closed pods, and refillables.

Some e-cigarettes are made to look like regular cigarettes, cigars, or pipes. Some resemble pens, USB sticks, and other everyday items.



*Image sourced from CDC*



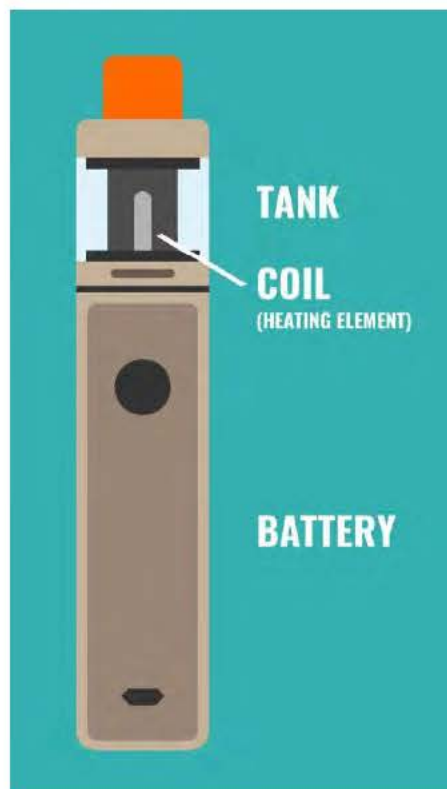
## What are the components?

[A vape \(or electronic cigarette\) is a device with two distinct parts that fit together.](#)

The first of these is a **rechargeable battery** which contains the power source for the vape as well as the controls.

The second of these is a **tank**, which is filled with **flavoured liquid**. This flavoured liquid is heated - by pressing a button on the battery - to produce the vapour cloud that is inhaled by the user.

This heating occurs due to a heating element known as a 'coil'. The coil consists of wire and cotton, and sits inside the tank. The juice in the tank is absorbed by the cotton, and when you press the button on the device the wire coil heats up, turning that juice into the vapour which you inhale.



*Image sourced from [www.thevapestore.com.au](http://www.thevapestore.com.au)*

## Types of batteries

[There are different kinds of batteries:](#)

**Disposable:** Early devices such as the cig-a-likes have limited lifespans and are meant to be thrown away when the device is used up. They are not rechargeable.

**Integrated batteries:** These batteries are built into the device and are not meant to be replaced or removed. They have a finite number of rechargers after which the device needs to be disposed.

**Removable batteries:** These batteries can be recharged. When they no longer recharge, they can be replaced. Removable and rechargeable batteries are typically found in more advanced devices.



*Image sourced from [www.fda.gov/tobacco-products](http://www.fda.gov/tobacco-products)*

## Vaping liquids

The vaping liquid (also called e-liquid) typically contains propylene glycol, vegetable glycerine, plus flavours and the option of nicotine.

Propylene glycol creates a throat sensation similar to smoking.

A higher ratio vegetable glycerine gives more vapour.

Different flavours are added for personal preference and flavours must be water-soluble.

Flavours other than tobacco extracts must meet food standards in the Australia New Zealand Food Standards Code 2002.

[Some vape liquids can contain nicotine. Nicotine is a poisonous and highly addictive chemical that some plants developed to stop animals and insects eating them. It was widely used as a natural insecticide to kill pests.](#)

There is also no way to verify what's in vape liquids purchased online from overseas. Many of them contain nicotine even if they're labelled 'nicotine-free'.

Most vape juices contain some of the following:

- propylene glycol – a common food additive
- vegetable glycerine or glycerol – also food additives
- in some cases, water
- other chemicals (including those used to create flavours).

The first three ingredients are usually harmless when eaten, but their effects when inhaled as an aerosol are currently unknown.



## Vaping liquids

It's worth highlighting that non-nicotine systems can be just as harmful due to the toxins they use. Though safe to ingest, these toxins may be very unsafe to inhale. These products lack proper testing, and often still contain nicotine even if they claim to be free of it.

Some chemicals in e-cigarette aerosols can also cause DNA damage ultra-small particles that can be inhaled deep into the lungs.

Additionally, when the vape juice is heated to turn it into an aerosol, more toxic chemicals are formed.

[Vapes - especially those bought online from overseas - also can contain unspecified and uncontrolled amounts of other substances, some of which are known to be really harmful, particularly when inhaled, such as:](#)

- diacetyl – used in popcorn flavourings for its buttery taste. It can cause 'Popcorn Lung' (bronchiolitis obliterans) if inhaled in large concentrations.
- diethylene glycol – a toxic chemical used in antifreeze that is linked to lung disease
- lead, tin, nickel - heavy metals
- cadmium - a toxic metal that causes breathing problems and disease
- acetaldehyde and formaldehyde - cancer-causing chemicals
- acrolein - a weed killer that can cause irreversible lung damage and cancer
- benzene – a volatile organic compound found in car exhausts that is cancer causing and causes harm to bone marrow, reducing red blood cell numbers and leading to anemia.

## Assessment of health impacts

The European Commission and its Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) [publish the final Opinion on electronic cigarettes](#).

Following a request from the European Commission, the Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) provided a Final Opinion on electronic cigarettes.

For users of e-cigarettes, the SCHEER has concluded that there is moderate weight of evidence for risks of local irritative damage to the respiratory tract and moderate, but a growing level of evidence from human data suggesting that electronic cigarettes have harmful health effects, especially but not limited to the cardiovascular system.

The SCHEER has also concluded that there is weak to moderate weight of evidence for several risks related to second-hand exposure.

Overall, there is moderate evidence that electronic cigarettes are a gateway to smoking for young people and strong evidence that flavours have a relevant contribution for attractiveness of use of electronic cigarette and initiation.

On the other hand, there is weak evidence for the support of electronic cigarettes' effectiveness in helping smokers to quit while the evidence on smoking reduction is assessed as weak to moderate.

E-cigarettes are not harm-free and may expose users and bystanders to chemicals that are harmful to health. [The Therapeutic Goods Administration has not approved e-cigarettes as an aid to help smokers to quit](#).

The Australian Chief Medical Officer and all state and territory Chief Health Officers have issued a statement outlining the emerging link between e-cigarette use and severe lung disease.

[NSW Health continues to carefully monitor the evidence to ensure the regulation of e-cigarettes is balanced and proportionate to the risks and benefits that they present](#).



## Who is Vaping?

Vaping use is on the rise in Australia. According to the Australian Institute of Health and Welfare, [e-cigarette use by Australians aged 14 or older has more than doubled](#) from 2016 to 2019 and is most common among smokers aged 18–24 at 18.7% (an increase from 6.8% in 2016).

In 2019, 2.5% of the population (aged 14+) or \*520,000 people were 'current' vapers (vaped at least once in the last year). In the previous survey in 2016, 1.2% of the population vaped and there were only 240,000 vapers. In 2019, the sales of electronic cigarettes in Australia amounted to approximately 125.14 million U.S. dollars. This represented an increase from 2018 and continued year on year growth.

More specifically, for those people aged 14 and over, in 2019:

- Almost 2 in 5 (39%) smokers had tried e-cigarettes in their lifetime, a significant increase since 2016 (31%).
- There was a significant increase in the proportion of non-smokers who had tried e-cigarettes in their lifetime (from 4.9% to 6.9%).
- There were significant increases in the lifetime use of e-cigarettes across most age groups between 2016 and 2019, in particular for those aged 18–24 (from 19.2% to 26%) and 25–29 (from 14.8% to 20%).

The 2019 NDSHS shows lifetime use of e-cigarettes increased significantly from 8.8% in 2016 to 11.3% in 2019.

Of those who had tried e-cigarettes, 18% used them at least monthly compared to 10% in 2016, and 9% used them daily compared to 6% in 2016.

8% of current smokers used e-cigarettes at least monthly.



## Vaping categories

[There are four key defined groups of vapers:](#)

### **Smokers**

The survey found that 54% of vapers are still smoking - "dual use" (280,000). Many vapers smoke in the early stages as they adjust to vaping and stop smoking when they are ready. Dual use causes less harm than smoking, but the greatest benefits are from quitting smoking completely.

### **Ex-smokers**

3.2% of ex-smokers (200,000) vape, in many cases to avoid relapsing to smoking. Vaping is not risk-free but it much safer than smoking.

### **Never-smokers**

0.7% of people who have never smoked also vape (43,000). 70% of these never-smokers vape infrequently (monthly or less) and this is of little public health importance. Only 30% vape daily.

Most never-smokers who try vaping (85.4%) do it out of curiosity and 93% of these do not continue long-term.

Vaping is not for non-smokers, but some of these never-smoking vapers would have smoked instead if vaping was not available.

### **Ex-smoker - ex-vaper**

Many people quit smoking by vaping and then quit vaping as well, but are not captured in the Survey.

## Who is Vaping?

[Those using e-cigarettes are three times more likely to smoke combustible tobacco than those who have not used e-cigarettes.](#)

3.2% of current smokers used e-cigarettes daily, a significant increase since 2016 (1.5%)

2.2% of ex-smokers used e-cigarettes daily, a significant increase since 2016 (0.8%)

Former smokers who use e-cigarettes are more likely to relapse to current smokers.

More than two-thirds (69%) of e-cigarette users were current smokers when they first tried an e-cigarette. Nearly 1 in 4 (23%) considered themselves to be a 'never smoker' at that time. Higher proportions of younger people reported being a 'never smoker' (65% of 14–17 year olds and 39% of 18–24 year olds compared with proportions lower than 10% for people in age categories for those 40 and over (AIHW 2020).

The most common reason for trying e-cigarettes was curiosity (54%), but people's reasons varied by age. People aged under 30 were more likely to nominate curiosity while people aged 50 or older were more likely to use e-cigarettes as a cessation device. Almost 1 in 4 (23%) used e-cigarettes because they thought they were less harmful than regular cigarettes (AIHW 2020).



## Federal Legislation on Tobacco

[From 1 October 2021, all nicotine vaping products, such as nicotine e-cigarettes, nicotine pods and liquid nicotine, are Schedule 4 \(prescription only\) medicines in the Poisons Standard.](#)

Consumers require a prescription for all purchases of nicotine vaping products. This includes purchases from Australian pharmacies and overseas. It remains illegal for other Australian retailers, such as tobacconists, 'vape' shops and convenience stores, to sell consumers nicotine vaping products.

Generally, prescription medicines must be approved by the Therapeutic Goods Administration (TGA) and registered in the Australian Register of Therapeutic Goods (ARTG) before they can be lawfully imported into, or supplied in, Australia.

There are currently no TGA approved nicotine vaping products registered in the ARTG. Medicines that are not in the ARTG are known as 'unapproved' medicines.

Nicotine vaping products contain nicotine salt or base in solution and are heated using a vaping device to make aerosol for inhalation ('vaping').

The products captured by the changes include:

- nicotine e-cigarettes
- nicotine pods
- liquid nicotine (also known as eJuice, vape juice, eLiquid).

Nicotine replacement therapies (NRTs) (including sprays, patches, lozenges, chews and gums) that do not require a prescription will continue to be available from pharmacies and some retail outlets.

## Federal Legislation on Tobacco

[There are two main ways to obtain nicotine vaping products if your doctor gives you a prescription:](#)

- filling your prescription at a pharmacy (either a physical community pharmacy or an Australian online pharmacy)
- importing from overseas websites using the Personal Importation Scheme.

Apart from pharmacies dispensing nicotine vaping to patients with a prescription, it is illegal for any other Australian retailers, including vape stores, to sell nicotine vaping products. Vape stores will still be able to sell flavours and non-nicotine vaping products, or, separately, devices.

The TGA has introduced a standard for unapproved and export only nicotine vaping products, known as the Therapeutic Goods (Standard for Nicotine Vaping Products (TGO 110) Order 2021 (TGO 110), that came into effect on 1 October 2021. It includes minimum safety and quality requirements for unapproved and export only nicotine vaping products.

It includes rules about:

- product labelling (including an over sticker or in an information sheet provided with the product)
- child-resistant packaging
- maximum nicotine concentration (although people will still only be able to access the nicotine concentration in their prescription)
- requiring actual nicotine concentration/content to reflect what the product's label says
- prohibited ingredients
- records that need to be kept by the Australian sponsor for the product.



## Federal Legislation on Tobacco

Recent regulatory changes allow unapproved nicotine vaping products to be imported into, or manufactured (by a GMP licensed manufacturer) in, Australia and wholesale supplied (e.g. to Australian pharmacies) through one or more intermediate suppliers.

The Australian sponsor, manufacturer or wholesale supplier undertaking the activity must have a reasonable expectation that the unapproved nicotine vaping product will ultimately be supplied to a consumer under the Authorised Prescriber (AP) scheme, the Special Access Scheme Category B (SAS B) or the Clinical Trial Approval (CTA) scheme. However, the sponsor does not need to maintain direct control over the unapproved nicotine vaping product throughout the supply chain.

[Vaping devices that are for use with unapproved nicotine vaping products can be imported into, manufactured and/or supplied \(including wholesale supplied\) in Australia without being included in the ARTG.](#) No AP or SAS approval, or clinical trial approval or notification, is required for these devices. However, if the vaping device contains or is supplied with an unapproved nicotine vaping product (e.g. prefilled nicotine e-cigarettes and nicotine pods), the import, manufacture and supply requirements for unapproved nicotine vaping products continue to apply to the nicotine vaping product (i.e. the nicotine vaping product might be supplied under an AP approval, but no separate AP, SAS or clinical trial approval is required for the vaping device).

## Legislation on Tobacco

From October 1<sup>st</sup> 2021, nicotine-based vaping requires a prescription from a Doctor.

The same littering and smoking laws apply to vaping.

Doctors can prescribe nicotine vaping products for dispensing at an Australian pharmacy through the Special Access Scheme for a single patient or by becoming an Authorised Prescriber. The federal government has created new telehealth smoking cessation Medicare Benefits Schedule items, which can include provision of a script for nicotine vaping products.

Doctors can also write a script for a patient to import the products themselves for up to 3 months through the Personal Importation Scheme. However, the RACGP has strongly cautioned against this pathway as products imported from overseas are less likely to meet Australian requirements, including child-resistant packaging and restrictions against certain known toxins.

As of 4 February 2022, the TGA had approved 620 [Authorised Prescriber](#) applications for unapproved nicotine vaping products.

This list should not be taken to be an endorsement of the particular prescribers listed, nor promotion of the supply of unapproved nicotine vaping products.

Doctors included in this list are under no obligation to provide you with a prescription for nicotine vaping products. The decision to prescribe any medicine, including nicotine vaping products, is a decision made at the discretion of the individual doctor, having considered the risks and benefits of particular circumstances.



## Environmental issues

### Vape waste creates three environmental issues:

- Increase in single-use plastics
- Increase in tech waste from their parts, including lithium-ion batteries
- Introduction of hazardous and toxic chemicals like nicotine into the environment when discarded

Waste from the vaping devices could be “a more serious environmental threat” than cigarettes, a global anti-tobacco organisation, (STOP) warned, as it “contains metal, circuitry, single-use plastic cartridges, batteries and toxic chemicals in e-liquids.”

Little is known so far regarding the environmental impact of e-cigarettes, and potential hazards relating to their manufacturing, use and disposal require further investigation. For example, the environmental impact of manufacturing will likely vary based on factory size and the nicotine extracting method used, [while disposal of nicotine residue-containing cartridges and battery-containing e-cigarettes represent further potential concerns for the environment.](#) There are currently no methods for proper disposal of e-cigarettes or their cartridges.



*Image sourced from [www.universityofcalifornia.edu](http://www.universityofcalifornia.edu)*

## E-waste

Vapes are e-waste since they contain lithium-ion batteries & a heating element. Disposing of e-waste is a considerable challenge due to the many different types of chemicals and materials in these products. Vapes present at least two problems, as their vaporizers contain a circuit board, which can contain plastics and heavy metals. They also use lithium-ion batteries. But many vape products and accessories are being thrown away in the garbage or worse – dumped as litter, as the [UCSF survey found](#).

There is no UNU Key or HS Code for Vaping devices.

In Australia, e-waste is also the fastest-growing component of the municipal solid waste stream. [Every year, 44.7 million tonnes of e-waste is generated around the world – containing up to US\\$ 65 billion worth of raw materials like gold, silver and platinum sent to landfill.](#) The amount of global e-waste is expected to increase by almost 17% to 52.2 million tonnes in 2021, or around 8% every year.

Yogi Hale Hendlin, an environmental philosopher at University of California, said that [e-cigarettes are similar to smartphones in that they have complex computer circuitry, hard plastics, heavy metals and lithium ion batteries. Since the pen has similar technology to a smartphone it needs to be disposed at an electronic waste facility.](#)

On the company website it is stated that Juul pen must be disposed at an e-waste facility, but based on surveys and pollution data, users cannot be bothered.

Judith Enck, a regional director of the Environmental Protection Agency told Earther ['Most communities do not have easy to access electronic waste return programs. I'm extremely concerned about the millions of tiny lithium ion batteries that are littered or sent to incinerators or landfills.'](#)



## Hazardous waste

Nicotine is a neurotoxin that has been used as a pesticide and has been considered acute hazardous waste by the Environmental Protection Agency (EPA) since 1980! Discarded devices may leach lead, cobalt, and other substances into the environment in toxic amounts. Toxic chemicals from commercial tobacco product waste can accumulate in animals, soil, and aquatic ecosystems, leading to contaminated drinking water and foods and posing additional downstream risks to human health and the environment.

[If pods & cartridges are discarded as litter, they may leach nicotine & other toxic chemicals into the environment or be eaten by wildlife or pets. Research has shown that even very small amounts of nicotine can be harmful or even lethal to animals.](#)

Both California state and federal laws list nicotine as hazardous waste. Nicotine, including nicotine salt, is listed by the US Environmental Protection Agency (EPA) as an acute hazardous waste. The Food & Drug Administration (FDA) banned flavors other than tobacco and menthol for pod or cartridge-based e-cigarettes.

[As batteries degrade, they can leach their chemicals into the environment. And if they are put in garbage or trash receptacles, they pose a fire risk in waste and recycling facilities if damaged or exposed to high heat, putting workers' safety at risk.](#)

E-cigarettes and their cartridges may qualify as both e-waste and biohazard waste. Neither policy nor product information currently gives consumers guidelines for disposing of e-cigarettes. E-cigarette and e-liquid waste should not be thrown in the regular trash or flushed down a sink. Instead, these items should be taken safely to a hazardous waste facility.



## Importation and reporting

There are multiple vaping brands and Australian 'sponsors' who import and re-sell them. Imports of vaping devices are recorded by border control.

[Australian sponsors are required to submit a 6 monthly report to the TGA listing the brand and nicotine concentration of each kind of unapproved nicotine vaping product the sponsor supplied in Australia in the relevant period. Reporting periods are 1 January - 30 June \(inclusive\) and 1 July - 31 December \(inclusive\). Reports must be submitted within 1 month of the end of the relevant reporting period.](#)

There is no requirement for sponsors to notify the TGA prior to importing unapproved nicotine vaping products.

Sponsors will, however, need to make an import declaration to the Australian Border Force (ABF). The type of declaration required will depend on the value of the goods being imported. Information about the ABF's requirements is available on the ABF's 'Declaration for imported goods' webpage.

The pathways through which unapproved nicotine vaping products can be imported, manufactured and supplied are outlined below.

- [Authorised Prescriber \(AP\) Scheme](#)
- [Special Access Scheme \(SAS\)](#)
- [Personal Importation Scheme](#)

If the person intends to fill their prescription at an Australian (physical or online) pharmacy, the GP will need to apply to the TGA for approval to supply the nicotine vaping product through the AP Scheme (medical practitioners only) or the SAS Category B (SAS B) before they provide a prescription.

## Data

Currently, there is no database, or identified taxonomy for reporting vaping related litter. Exhaustive searches do not offer data points for littering associated with e-cigarettes and other vaping items.

The EPA NSW - NSW Litter Report 2016-2020 report doesn't isolate e-cigarettes/vapes, however there is a noticeable increase in "Miscellaneous".

In the BLI, vaping units aren't included in "Cigarette accessories". The AMDI doesn't allow data collection for this litter stream.

The NLI codes litter into six broad categories: glass, metal, miscellaneous, plastic, paper/cardboard and cigarette butts. Within those broad categories, litter is classified into 83 separate types. For policy purposes, the NSW EPA splits the data into more relevant categories such as CDS materials, non-CDS eligible beverage containers, takeaway food and cigarette-related materials (butts, packaging, lighters etc). In the NSW NLI, results are presented in eight key litter categories defined by the EPA:

- CDS beverage container
- Non-CDS beverage container
- Industrial container
- Domestic container
- Cigarettes (including packaging)
- Print and advertising
- Takeaway container
- Miscellaneous



## The Importance of Product Stewardship for Tobacco in Australia

With a primary focus on cigarette butts, No More Butts has engaged with multiple local, State and Commonwealth Government departments, environmental organisations, individuals, businesses, research companies and the tobacco industry to understand the status of product stewardship for tobacco products. It was quickly identified that the well-meaning minor actions of some groups have been limited in their impact. Many often only dedicate a portion of their time to this issue, and are not scaled to have a national impact when addressing the issue of cigarette butts, let alone the emerging trend of vaping related litter.

A Product Stewardship Scheme would enable a greater focus on data and insights to be facilitated to help standardise national reporting. There is currently no adequate database for litter. These insights can assist in pushing for extended producer responsibility, along with requesting support from the Federal Government for redirection of taxes and planned price rises towards litter prevention and collection programs.

- In overseas markets, data has driven both governments and tobacco industry to action, leading to successful waste redirection and recycling initiatives.
- A Scheme could also pave the way for a stronger discussion on a State level to access funds from the Recycling Modernisation Fund, by defining cigarette butts as waste plastic.

With a new focus on remanufacturing, a product stewardship program could also aim to standardise Australian made butt bins to manufacture at volume, reducing cost impacts on local governments.

The implementation of a Product Stewardship Scheme will facilitate discussions across all stakeholders to drive the change required for a positive environmental impact.



# The History of Tobacco Product Stewardship in Australia

In 2003, tobacco companies in Australia came together to participate in a product stewardship scheme, led by British American Tobacco Australia. They reportedly generated \$5 million in funding and implemented a Butt Litter Trust. However, this made little impact into the issue. The funds seemingly focused on clean up events, rather than awareness and research. Whilst there was a recycling trial, the engagement was seemingly from environmental organisations, not businesses and retailers. This formal engagement and Trust appears to have ceased years ago.

## Battery Stewardship in Australia

The Australian battery stewardship program doesn't currently include Vaping devices, such as e-cigarettes.

Battery producers are charged based on imports at a rate of \$0.02 per 24g (equivalent to an AA battery).

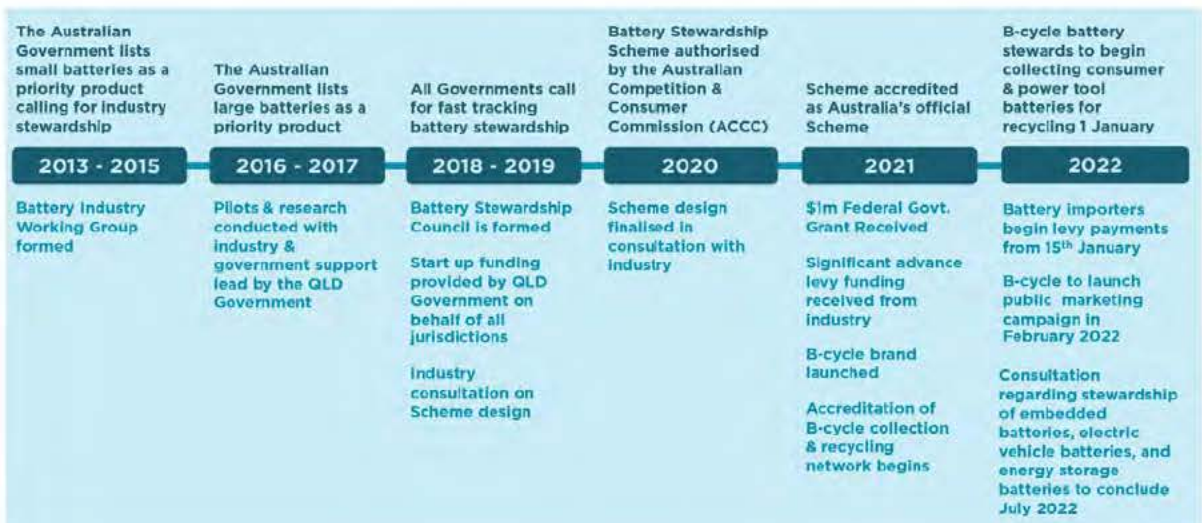


Image sourced from [www.bsc.org.au](http://www.bsc.org.au)

## Current programs

TerraCycle®, Tweed and Tokyo Smoke have partnered to create a national recycling program for any brand of cannabis packaging and for Canopy Growth produced vape products.

This program accepts all Canopy Growth produced vape products. This includes cartridges and batteries of the following brands:

- JUJU Power™ battery
- 510 cartridges in the following brands: Tweed, LBS, Twd.
- Tokyo Smoke™ Luma cartridges and battery

New Zealand has a scheme set up with TerraCycle and a vape brand to recycle vapes. In a world-first for nicotine vaping pod systems, VAPO has collaborated with the global recycling giant Terracycle to develop a recycling programme specifically for VAPO and alt. branded products, including bottles, devices and pods.





# SECTION 2



RECOMMENDATIONS

NOMOREBUTTS



## Need for Tobacco Industry Product Stewardship Scheme

As part of an overall umbrella scheme, No More Butts proposes an accredited co-regulated Product Stewardship program for Tobacco in Australia.

The products in scope should be identified and prioritised, but the following should be considered under a future Tobacco Industry Product Stewardship Scheme:

- **Vaping devices and products, including e-cigarettes**
- Filtered cigarettes
- Filters
- Papers
- Packaging
- Lighters

A cross-sectoral task force should be formed, with representation by major groups impacted by the topic. A carefully selected list of participants is critical to ensure productive outcomes. It is imperative that participants maintain an objective view and welcome collaboration from other participants.

Whilst the tobacco industry has the greatest ability to minimise adverse impacts on the environment, other stakeholders (such as retailers and consumers), also play a role. As such, we need a diverse representation. Engaging participants to represent groups where there is a higher index of smokers will assist in styling programs and deliverables that have a greater impact. It is critical that industry appoints the most relevant senior people who are accountable for actions agreed by the task force. Finding participants that have had experience in Product Stewardship programs and circular economy initiatives will be important.

In 2020, No More Butts engaged with representatives of two of the three major Australian tobacco companies to conduct an industry roundtable event to identify key issues and collaborate on initiatives.

## Recommendations

Outside of the implementation of a formal umbrella product stewardship scheme, No More Butts makes the following recommendations to the Federal Government when considering vaping devices to be included in e-Waste product stewardship discussions.

- Integration with B-Cycle (Battery Stewardship) and/or Mobile Muster
- Introduction of a Refund scheme
- Consideration of a mandatory 'recycling' bag for overseas imported vaping devices and accessories
- Implementation of recycle points at Vape resellers & Pharmacies
- Drive public awareness of e-waste drop-off centres
- Greater alignment of sales reporting for visibility into brand / sponsor volumes
- Introduce reporting of vaping devices and vaping accessories into NLI Reports
- Introduce specific 'dangerous' littering fine at same rate of lit cigarette



## Recommendations

Yogi Hale Hendlin, a research associate at the Environmental Health Initiative at the University of California, San Francisco, is quoted as saying:

*“It is the consensus of public health researchers working on the environmental costs of tobacco that e-cigarette manufacturers need to put a product deposit system into action,” he said.*

Heidi Sanborn, executive director of the National Stewardship Action Council, has been working on a bill in California to increase recycling rates of e-cigarettes.

Manufacturers do not include recycling or waste information for e-cigarettes and recycling company TerraCycle said that a recycling program targeting the products has been less than successful.

A spokesperson for popular e-cigarette Juul said the company is increasing their recycling and takeback programs and tells customers to dispose of cartridges properly.

# Recommendations

## Best Practices for Safe Disposal:

- Check with your state and local environmental agencies for rules and guidance about e-cigarette and e-liquid waste disposal.
- Turn off the device and remove the rechargeable battery before disposal. If the device isn't yours, have the user do this.
- Store all items--especially rechargeable batteries--in a cool, temperature-controlled environment and in a container that is sealed and clearly labeled for hazardous waste.
- Never throw rechargeable batteries into the trash. Keep them in a separate container for hazardous waste.
- Deliver the sealed container of e-cigarette waste to a local hazardous waste facility at least every 90 days.
- Do not rinse e-cigarette items, such as spent cartridges, to remove the liquid nicotine residue. That water will become hazardous waste, and you will need to store and dispose of the water properly.
- Handle used and discarded cartridges carefully to avoid unintentional exposure to unused nicotine. Do not throw them away in the regular trash.
- Always be careful handling products. Liquid nicotine can be absorbed through the skin and cause accidental poisoning.



Image sourced from [www.fda.gov](http://www.fda.gov)



# SECTION 3

PROPONENT

NOMOREBUTTS

## Proponent

Founded in June 2020 under the original entity name, NO BUTTS ABOUT IT (INTERNATIONAL) LTD, No More Butts is a registered charity, entered into the Register of Environmental Organisations in December 2020.

In August 2020, No More Butts made a submission to the New Product Stewardship Investment Fund for cigarettes. Since then, No More Butts has continued to work extensively across industry, environmental groups, peak bodies, and Commonwealth, State and Local government departments to build a strong network.

In December 2020, No More Butts consulted to Equilibrium in their preparation of the report commissioned by WWF regarding cigarette butt litter, which has just been released in November 2021. In June of 2021, NSW EPA contracted No More Butts to consult on this topic, helping to prepare monitoring and evaluation framework and provide guidance for future programs.

Based on an abstract submission, No More Butts were invited to present on the considerations and proposed framework for a national Product Stewardship Scheme for cigarettes at KAB NSW Litter Congress in April at UTS in Sydney, with their presentation titled “Igniting a new scheme: Addressing our most littered item - cigarette butts”. Following this presentation, No More Butts were guests on the Ocean Protect and Banish podcasts to talk about the issue. This was followed up by another speaking engagement at Waste and Recycle Conference 2021.

No More Butts has engaged with the Commonwealth Plastics Plan team across 2021 around different actions from the March 2021 plan, including the creation of a national framework for litter reporting.

No More Butts has continually engaged with the leadership team of the Product Stewardship Centre of Excellence and has also engaged with the offices of the Federal Minister and the Assistant Minister for the Environment to discuss potential actions and considerations to address this waste problem.

More recently, No More Butts has deployed programs in Wollongong and across Perth to bring solutions to LGAs.

In 2022, No More Butts has already been invited to speak at Waste on the topic of the emerging threat of vaping in the environment.

As a company limited by guarantee, it is run by volunteers based across Australia and has members across the world.



## **Our Vision**

“A butt free environment”.

We see a future where cigarette butts will be recycled, with the products created having a further positive impact on the community.

## **Our Mission**

We run national awareness campaigns on the impact of littering and recycling options, with the aim to make people think twice before carelessly discarding their butts.

We assist in the beautification and regeneration of our natural environment through participation in, or coordination of, clean-up events.

We intend to scale national recycling programs and research alternative solutions whilst challenging industry to identify more environmentally friendly materials for cigarette butt filters.

## **Our Approach**

Re-educate - We re-educate people, businesses, governments and organisations on the importance of the correct disposal, options for awareness programs and infrastructure, and on the ability to recycle.

Retrieve - We retrieve cigarette butts where they have been discarded, promoting the preservation and recovery of the natural environment. We partner with groups and run our own events.

Recycle - We promote existing recycling options and intend to scale these into as many communities and workplaces as possible.

Research – We work across research foundations and engage industry to identify alternative recycling methods, commercialise products made from the recycled materials, and progress research into alternative materials for filters.

Reward - We plan to pilot rewards schemes, with support from companies and governments, to drive a step-change in awareness and mindset.

## Founder's Biography

After an early work history spanning hospitality and entertainment, our CEO - Shannon Mead, forged a successful corporate career over two decades with multi-national companies, including Nokia and Microsoft.

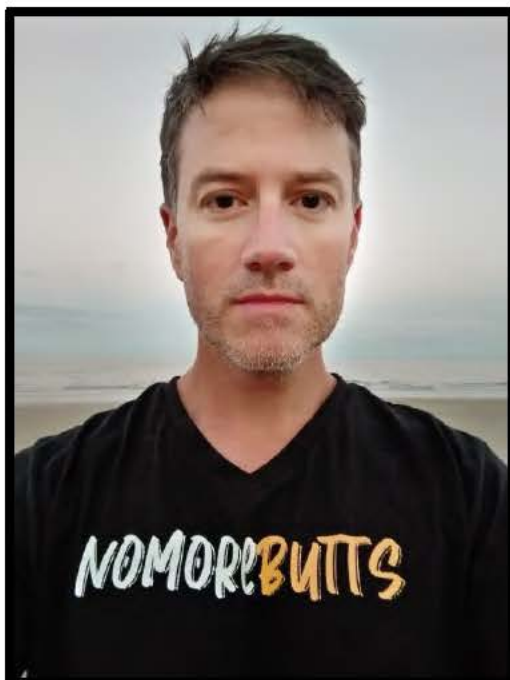
Most recently, Shannon led Commercial Operations & Go-to-market for a global consumer electronics company, accountable for governance, analytics, training, and retail operations across 14 countries in the Asia Pacific region, reporting to the Global Chief Commercial Officer. During his tenure, Shannon held the role of General Manager for Philippines, Singapore, Indonesia and Pacific Islands, living in the three former countries, giving him a greater sense of worldwide impact and cultural understanding.

Prior to joining this company, Shannon led Sales Operations across Australasia for Microsoft Devices after being involved in sales, product management, and training roles with Nokia.

In 2021, Shannon was invited to present at KAB NSW on the topic of cigarette butt litter, considerations for recycling and the importance of democratisation of data.

Along with a team of 10 others, Shannon works as a volunteer in the organisation, as a full-time focus and is an Executive Director.

Shannon was presented with the Cairns Regional Council 2022 Australia Day Awards "Volunteer of the Year" for his efforts with No More Butts.





## **Governance**

### **Board**

Roderic Byrnes (Chair / Executive Director)

Samuel Hawkins (Executive Director)

Shannon Mead (Executive Director)

Natalie Pharaoh (Company Secretary)

### **Public Fund Committee**

Roderic Byrnes

Shannon Mead

Natalie Pharaoh

### **Structure**

NO MORE BUTTS LTD is an Australian based charity, as a public company, limited by guarantee.

The No More Butts Public Fund has been granted Deductible Gift Recipient status in Australia, and as such, all donors are entitled to a tax receipt and a full tax deduction for their donations.

### **Policies**

The Board works with a number of Policies, which provide a framework for the corporate governance of NO MORE BUTTS LTD.

All Directors are required upon appointment to disclose any conflict of interest and must complete a Declaration for Responsible Persons, confirming that they are not disqualified under Governance Standard 4 to hold a Director position on the Board.

### **Meetings**

Due to COVID, the Board passed most motions as Directors Circular Resolutions. In addition, the Board met five times in 2021.

## Membership to No More Butts Ltd

In order to be entered and retained on the Register of Environmental Organisations (REO), No More Butts conducted a recruitment drive in the first year of our operation.

Using our website, along with organic Facebook, LinkedIn, and Instagram marketing, we reached and retained the requirement of a minimum of 50 members.

As a public company, limited by guarantee, our members have a financial obligation to the company. This obligation can either be fulfilled up front, or if ever called upon. In our constitution, we resolved to have this membership fee at \$10.

There is currently no separation of obligations or entitlements for members who have already contributed their obligation.

We are required to submit a annual report to retain our REO status, confirming the current level of membership. This was completed after the Annual General Meeting, where a motion was passed to change the name of the legal entity from NO BUTTS ABOUT IT (INTERNATIONAL) LTD to NO MORE BUTTS LTD.



## Memberships



One planet  
handle with care

## Alignment with United Nations SDGs



# APPENDICES

- ACRONYMS

- FURTHER RESEARCH

NOMOREBUTTS



# Acronyms

Acronym	Definition
AIHW	Australian Institute of Health and Welfare
AMDI	Australian Marine Database Initiative
EPA	Environmental Protection Agency
HSN	Harmonized System Nomenclature
KAB	Keep Australia Beautiful
MPL	Minister's Priority List
RACGP	Royal Australian College of General Practitioners
RMIT	Royal Melbourne Institute of Technology
TIPSS	Tobacco Industry Product Stewardship Scheme
UNU	United Nations University Keys
UCSF	University of California, San Francisco
WWF	World Wildlife Fund

## Further research

- <https://vapingfacts.health.nz/the-facts-of-vaping/what-is-vaping/>
- <https://www.health.qld.gov.au/news-events/news/whats-really-in-vape-juice>
- <https://www.tobaccoinaustralia.org.au/chapter-18-harm-reduction/indepth-18b-e-cigarettes/18b-3-extent>
- <https://www.statista.com/statistics/1189066/australia-electronic-cigarette-and-vaping-sales-value/>
- <https://www.aihw.gov.au/reports/phe/221/alcohol-tobacco-other-drugs-australia/contents/drug-types/tobacco>
- <https://www.drugabuse.gov/publications/drugfacts/vaping-devices-electronic-cigarettes>
- <https://tobaccofreeca.com/environment/vape-waste-more-harmful-than-you-think>
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- <https://www.tga.gov.au/authorised-prescribers-unapproved-nicotine-vaping-products>
- <https://www.tga.gov.au/nicotine-vaping-products-information-prescribers>
- <https://www.athra.org.au/vaping/the-law/>
- <https://www.myduke.com.au/pages/how-it-works>
- <https://www.terracycle.com/en-CA/brigades/tweed>
- <https://www.onegreenplanet.org/environment/how-e-cigarettes-and-vapes-create-electronic-environmental-waste/>
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- <https://thewest.com.au/news/environment/smokers-butts-causing-global-litter-havoc-c-3338044>
- <https://808novape.org/your-vape-litter-is-becoming-an-environmental-disaster/>
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- <https://www.vapo.co.nz/pages/the-only-recyclable-pod>
- [https://ec.europa.eu/health/scientific\\_committees/consultations/public\\_consultations/scheer\\_consultation\\_10\\_en](https://ec.europa.eu/health/scientific_committees/consultations/public_consultations/scheer_consultation_10_en)
- <https://www.csiro.au/en/research/health-medical/diseases/health-impacts-of-electronic-cigarettes>
- <https://www.quitclinics.com/>



- <https://adf.org.au/talking-about-drugs/parenting/vaping-youth/vaping-australia/>
- [http://www.healthstats.nsw.gov.au/Indicator/beh\\_esmo\\_age/beh\\_esmo\\_age](http://www.healthstats.nsw.gov.au/Indicator/beh_esmo_age/beh_esmo_age)
- <https://www.athra.org.au/blog/2020/07/22/over-500000-vapers-in-australia-now-according-to-government-study/>
- <https://www.drugabuse.gov/publications/drugfacts/vaping-devices-electronic-cigarettes>
- [https://www.researchgate.net/figure/Components-of-an-electronic-cigarette\\_fig1\\_269875112](https://www.researchgate.net/figure/Components-of-an-electronic-cigarette_fig1_269875112)
- <https://www.athra.org.au/vaping/the-law/>
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[nomorebutts.org.au](http://nomorebutts.org.au) | [contact@nomorebutts.org](mailto:contact@nomorebutts.org) | 0411 868 275

**@NoMoreButtsAU**  
**#nomorebutts**



ABN: 48 641 916 903





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