

Clean Up



LITTER REPORT FY24

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Data collated by Linda Boettcher
Report written by Lucia Moon
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INTRODUCTION

It has been another great year for Clean Up Australia, with 16,320 Clean Up events taking place across the country throughout FY24. With over 1 million volunteers participating across community, school and business events over a one-year period, we are proud to be one of Australia's most influential environmental organisations.

This was confirmed during FY24, when we were fortunate to receive pro bono support to undertake a nation-wide brand sentiment study, confirming that Clean Up Australia is one of the country's most loved and trusted organisations. With brand trust at over 85%, we were delighted to formally verify what Clean Up Australia means to Australians for the first time in our three-decade history.

With such a large and supportive volunteer base, Clean Up Australia is in the unique position to harness our volunteer body as a source for sound data on litter trends in the environment. The Litter Report FY24 is exactly that: **An analysis of trends in the types and spread of litter throughout Australia.**

This analysis would not have been possible without the hard-work and dedication of our volunteers, who donned their gloves, picked up a bag and got out there to do the hard work, then topped it all off by filling out an End of Clean Up Report with their valuable data. We take our hats off to you! We would also like to thank Clean Up Australia's [corporate partners](#) who generously support our work.

The Litter Report FY24 shows that the biggest contributor to litter in our environment is once again plastics, dominating all other materials and representing 80.7% of all counted litter this financial year.

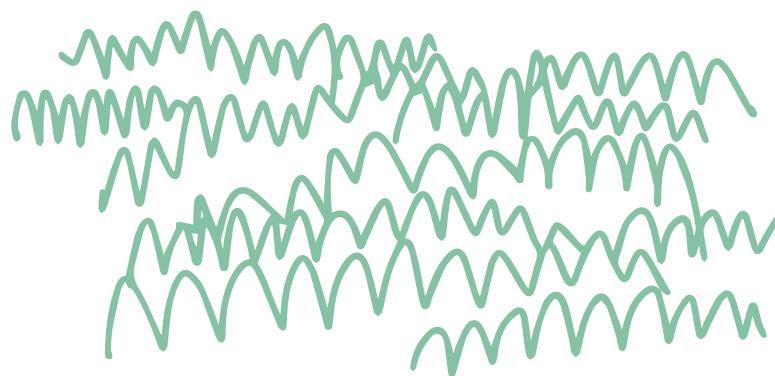
With a recent study by CSIRO indicating that over half of branded plastic pollution is linked to just 56 companies worldwide,¹ the results of the report point to a clear need for implementation of Extended Producer Responsibility (EPR) schemes, which would see producers funding and taking responsibility for the lifecycle of the materials they place on the market.

As in the successful case of Australia's Container Deposit Schemes, EPR schemes ensure that material resources are recovered and recycled, before they have a chance to end up in landfill or finish as litter in our precious environment.

With plastic waste generation now directly linked to plastic production levels,² we hope that the Clean Up Australia Litter Report FY24 will play its part in the broader movement to decrease virgin plastic production, decrease over-consumption and increase reliance on those higher-level actions of the waste management hierarchy for which we stand for: avoidance, reuse and repair.

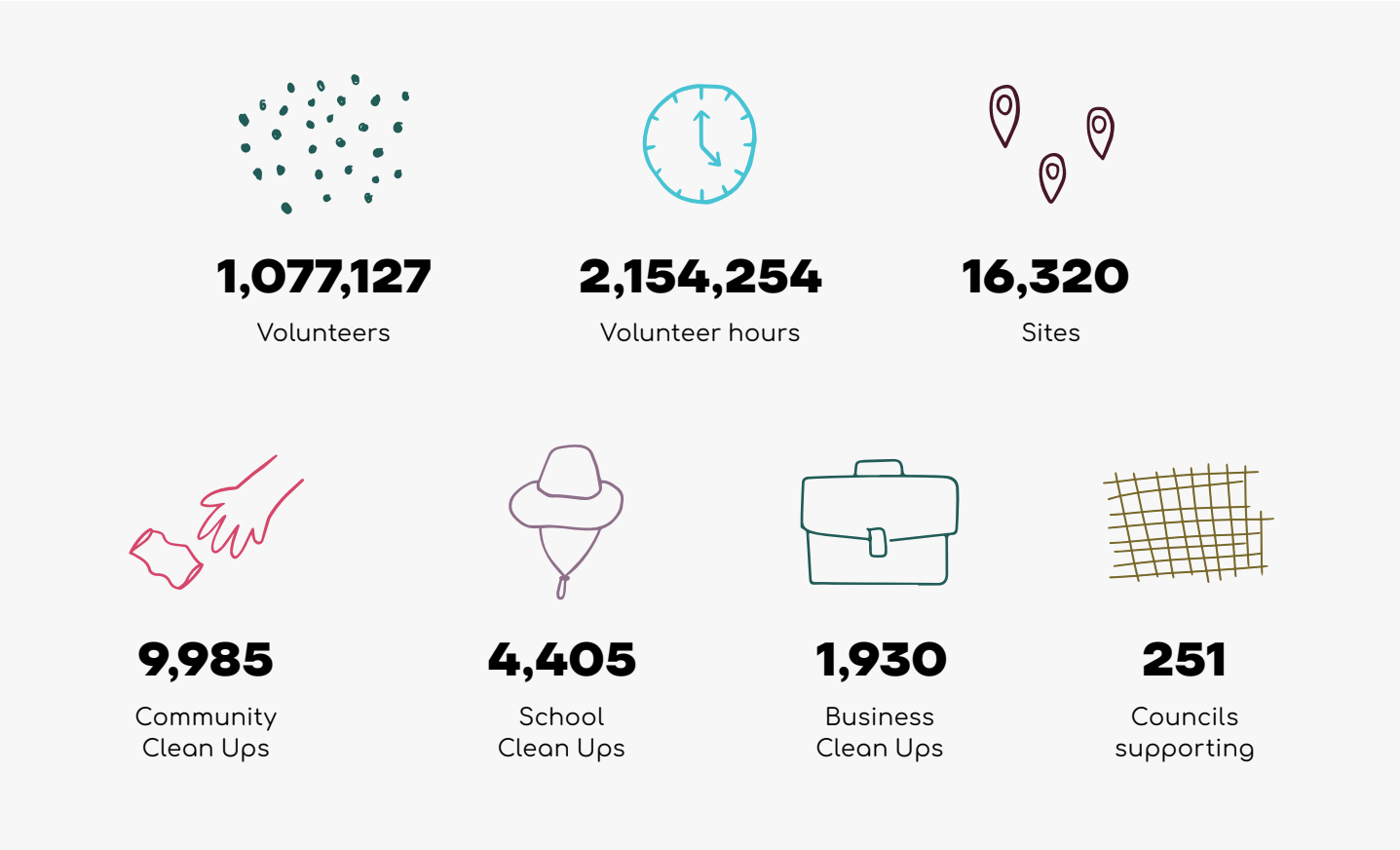
As we continue to implement data-driven actions and champion a circular economy, in FY25 Clean Up Australia will commence work to technologically enhance our data-reporting methods and ultimately improve the quality of our data in the long-term. There is further potential to be harnessed from our volunteer base, as we work to engage them alongside their incredible Clean Up efforts in additional preventative action.

There is no place for unnecessary single-use plastics in a circular economy. We will continue to advocate for improved regulatory schemes which ultimately reduce waste and reduce the incidence of litter in our parks, streets, beaches and waterways.



OUR ANNUAL IMPACT

During the financial year of 2024, Clean Up Australia volunteers continued to unite against litter by taking to their streets, beaches, rivers and bushland to Clean Up. An estimated 1,077,127 volunteers registered 16,320 Clean Up sites, donating around 2,154,254 hours of their time and effort across the nation to remove accumulated litter, in a truly special show of community action. This effort was made possible thanks to the 251 supporting councils that assisted in disposing of collected litter.



The accumulative result of this year’s effort means that over the past 35 years, more than 22 million volunteers have donated more than 44 million hours to their local communities, removing hundreds of thousands of ute loads of litter from over 248,800 registered locations across the country.

With over 130,000 tonnes of plastic pollution leaking into the marine environment in Australia every year, ³ the work of Clean Up Australia volunteers is invaluable. As this Litter Report demonstrates, every bit of effort in litter removal makes a big difference.

What becomes clear is the need for waste prevention efforts at the design, use and disposal stages, to prevent resources from being wasted in landfill or entering our environment as litter. As we look ahead, Clean Up Australia will continue empowering volunteers to participate in positive practical action by Cleaning Up, as well as encouraging Australians from all walks of life to rethink their relationship with the products and packaging they use.

EXECUTIVE SUMMARY

KEY POINTS

- Across the nation, **plastics** continue to dominate as the material type most reported on surveyed Clean Up sites, representing 80.7% of all counted litter this financial year [81.1% in FY23].
 - Plastic waste generation is directly linked to plastic production levels, with a study by CSIRO showing a 1% increase in plastic production leads to a 1% increase in plastic pollution, meaning unmanaged waste such as bottles in rivers and floating plastic in the oceans. ⁴
- The top 3 counted **litter items** on Clean Up Australia sites in FY24 are:
 1. Soft plastics – packets, wrappers, pieces – representing 24.6% of all counted litter
 2. Cigarette butts – representing 20.1% of all counted litter
 3. Plastic bags – food, retail, garbage – representing 6.9% of all counted litter
- The top 3 counted **litter categories** on Clean Up Australia sites in FY24 are:
 1. Soft plastics – all, including plastic bags – representing 31.8% of all counted litter
 2. Non-food packaging – boxes, bags, butts – representing 30.4% of all counted litter
 3. Beverage containers – bottles, cans, cartons – representing 15.0% of all counted litter
- As a percentage of types of litter, **soft plastics** represent 31.8% of all counted litter in FY24 [34.1% in FY23]. **Plastic bags** represent 6.9% of all counted litter in FY24.
 - With soft plastics continuously making up over 30% of reported litter, supermarkets and other food and grocery distributors are under increasing pressure to reduce single-use plastics on products and introduce reusable alternatives. ⁵
- **Hard plastics**, including plastic beverage bottles, take-away food containers and single-use cutlery and plates represent 23.4% of all surveyed litter [28.0% in FY23].
 - Although hard plastics have high recyclability, consumer education to improve sorting would increase recycling rates – and decrease litter – for these materials. ⁶
- **Packaging** [non-food, beverage containers and food] continues to lead litter counts, representing 57.8% of all reported litter during the year [55.2% in FY23]. Packaging continues to be a persistent problem in the Australian national landscape.
 - Australia is awaiting notification as to progress toward development of an EPR scheme for packaging in line with global best practice, following Federal consultation on packaging which closed October 29, 2024.
- **Cigarette butts** are one of the most reported individual items by volunteers, representing a whopping 20.1% of all counted litter. This is an increase of 3.9% on FY23 which counted cigarette butts at 16.2% of all reported litter nationally.
 - Cigarette butt counts are second only to soft plastic packets, wrappers and pieces counts in the individual items list.
- **Beverage containers** represent 15.0% of all counted litter [14.5% in FY23].
 - Beverage container counts have remained steady from FY23, but with all states and territories with operational Container Deposit Schemes in place from 2025, it is expected that beverage container litter levels will gradually decrease.
- **Wine and large alcohol bottles** represent 13.4% of all counted glass in FY24 [6.2% in FY23].
 - Wine bottles were newly listed as a priority item on the End of Clean Up Report in FY24, which may have influenced increased counts. Nevertheless, with persistent presence in the environment, Clean Up Australia supports the addition of these bottles as eligible CDS containers in all states.

EXECUTIVE SUMMARY (CONT.)

- **Plastic takeaway food containers, including plates and cutlery**, represent 5.0% of all surveyed litter.

SA and WA are the first states to implement bans on single-use plastic takeaway food containers. These are being phased out from September 1, 2024. ⁷

Nationally, all states except the NT and Tasmania have banned single-use plastic cutlery and plates. ⁸

- **Vapes** were collected from 30.1% of sites surveyed in FY24 [22.4% of sites in FY23].

Despite Federal banning of single-use vapes across the country, vapes are being found as litter at 7.7% more sites than in FY23.

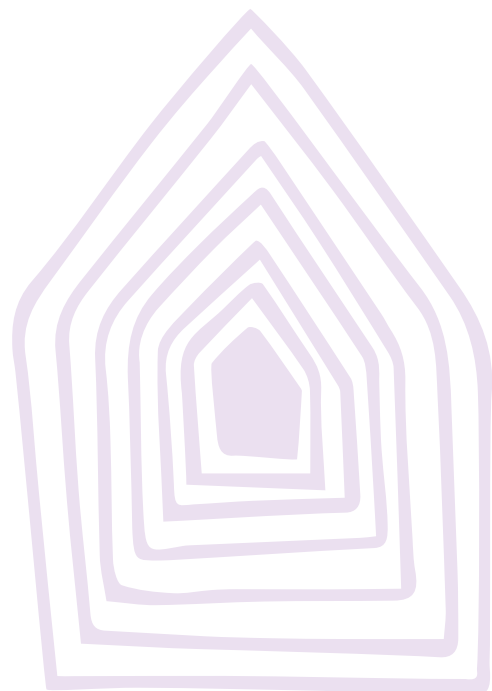
Vapes are a triple-threat when littered in our environment as they contain plastic, hazardous and electronic waste. Sadly, there is no consistent approach across the nation on how they are to be disposed.

- **Facemasks** make up 0.3% of all litter counted in FY24, a reduction from 0.4% of all litter counted in FY23.

This is a marked reduction from 2022 mid-pandemic when facemasks accounted for 3.2% of all litter reported.

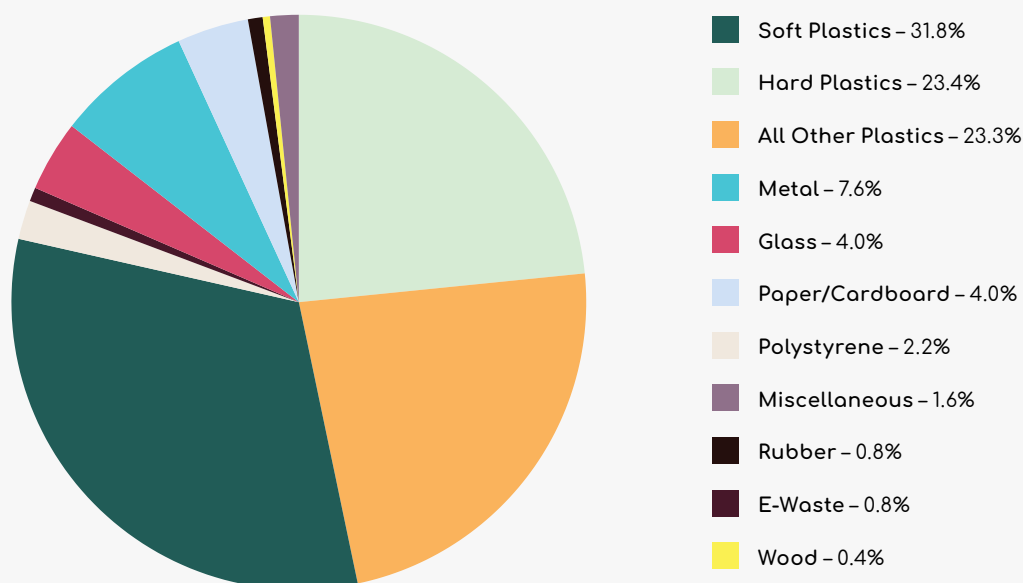
- Of all pieces of litter, polystyrene packaging accounts for 2.2% [1.9% in FY23].

Polystyrene takeaway containers are banned in all states apart from the NT and TAS. ⁹



MAJOR TYPES OF LITTER

LITTER BY MATERIAL TYPE



PLASTIC [hard, soft, mixed plastics and polystyrene] is the most common litter type, representing 80.7% [81.1% in FY23] of all litter items counted. Plastic continues to dominate the 'Major Types of Litter' over 35 years of reporting. Plastic is the most prevalent litter type in the environment, dominating the other types of litter counted. Plastic waste generation is directly linked to plastic production levels, with a study by CSIRO showing a 1% increase in plastic production leads to a 1% increase in plastic pollution.¹⁰

Soft plastic counts include chip and confectionary wrappers, plastic food bags, retail and garbage bags, cling wrap, miscellaneous soft plastic pieces, reusable shopping bags, and bait bags. In FY24, volunteers counted 131,734 soft plastic items [159,962 in FY23], representing 31.8% [34.1% in FY23] of all surveyed litter and 39.4% [42.1% in FY23] of plastics.

Hard plastics, including plastic beverage bottles, take-away food containers and single-use cutlery and plates represent 23.4% of all surveyed litter [28.0% in FY23].

Miscellaneous mixed plastics counts including cigarette butts, lighters, facemasks and polystyrene counts accounted for 25.5% of all surveyed litter [19.0% in FY23]. Miscellaneous mixed plastics counts have increased by 6.5% from FY23.

METALS again took second position in the major material types of litter, representing 7.6% of the total count this year [7.2% in FY23]. Beverage containers continue to dominate metals representing 77.4% of metal litter reported [73.8% in FY23]. Bottle caps represent 10.7% of metal litter reported, compared to 13.1% in FY23.

PAPER AND CARDBOARD represents 4.0% of all litter reported [5.1% in FY23]. Within this category, the most counted items [in the 'other' category] include newspapers, books, magazines, junk mail and paper pieces, which taken together represent 56.5% of all paper counted [37.8% in FY23]. Food packaging also dominates the category, accounting for 23.3% of all counted paper and cardboard [25.7% in FY23].

GLASS reflects 4.0% of the count, a reduction of 0.2% from FY23 [4.2%]. Glass counts have decreased as a percentage of overall litter over the past two years [7.3% in 2022] and may reflect increased glass bottle returns to almost nationwide Container Deposit Schemes. Glass beverage containers including beer, soft drink, spirits, and wine bottles account for 85.2% of all glass counted.

MISCELLANEOUS items represent 1.6% of all counted litter [0.9% in FY23]. The miscellaneous category includes mixed material items, carpet, construction materials, clothing and nappies.

E-WASTE represents 0.8% of all litter counted [0.5% in FY23]. Vapes represent 54.7% of all e-waste reported, while batteries represent 37.1% of all e-waste reported.

Similarly, **RUBBER** represents 0.8% of the count [0.5% in FY23].

The material type least represented both this year and last year is **WOOD** at 0.4% [0.4% in FY23].

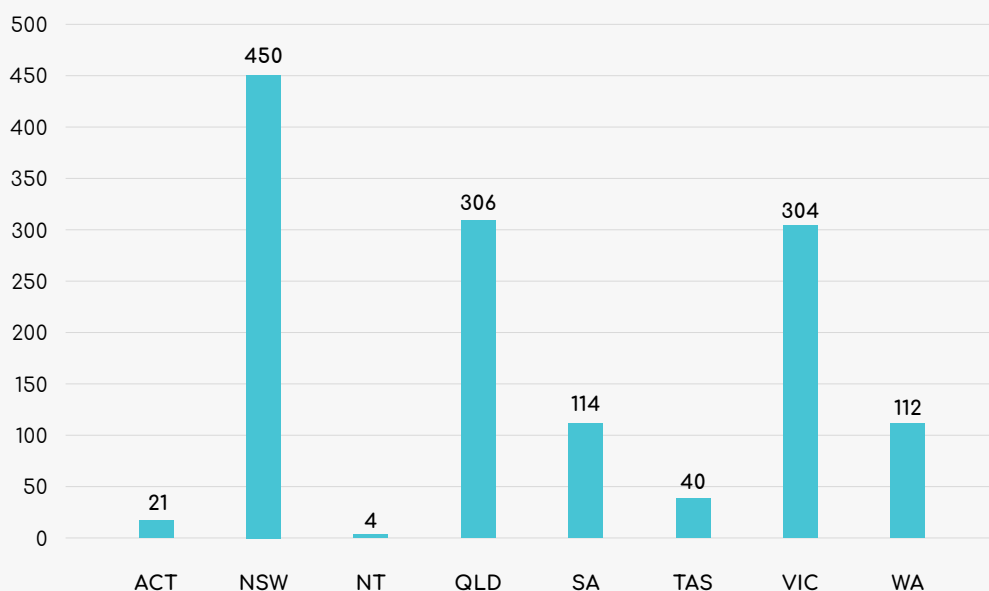
METHODOLOGY

In FY24, an estimated 1,077,127 volunteers registered 16,320 Clean Up events across the nation, collecting hundreds of thousands of bags. The figures presented in the Litter Report FY24 are based on a sample of Clean Up sites where data is collected by our dedicated volunteers within the End of Clean Up Report – our litter survey.

AT A GLANCE

- 1,351 End of Clean Up Reports analysed for the Litter Report FY24
- 4,995 bags of litter analysed on End of Clean Up Reports
- 79 surveyed litter items

RETURNED SURVEYS BY STATE



METHODOLOGY (CONT.)

THE END OF CLEAN UP REPORT

- Issued within Clean Up kits or available online.
- Volunteers either complete their End of Clean Up Report on paper, and email or post it to the Clean Up Australia head-office, where it is entered online, or it is entered online directly by volunteers.
- In FY24, a concerted effort was made to align Clean Up Australia’s End of Clean Up Report Litter Survey items and categories with the CSIRO Handbook of Survey Methodology Items List.¹¹ The biggest change was the addition of ‘Fishing’ as a category.

The End of Clean Up Report is divided into two sections: a Quick Count and the full report.

QUICK COUNT

The Quick Count includes 14 priority items which are commonly found as litter in the environment. These litter items also represent key waste areas for targeting, where reforms in policy could directly influence waste recovery and litter levels in the environment.

If volunteers are unable to complete the long form, they are encouraged to complete a quick count of priority items, contributing valuable and impactful data to Clean Up Australia in an easy and meaningful way.

LONG FORM

The longer Litter Survey consists of 79 items which are commonly found as litter in the environment. These items are organised into distinct categories which are in alignment with the CSIRO Handbook of Survey Methodology Items List.

Volunteers who contribute a full set of data from a sample of their bags play a key role in assisting Clean Up Australia to influence decision-making by government and business, to ultimately reduce the amount of litter entering our precious environment. We are grateful for volunteer efforts in taking the time to complete the full Litter Survey.

QUICK COUNT ITEMS

- | | |
|--|--|
| <ul style="list-style-type: none">• Aluminium drink cans, e.g. soft drink, beer• Balloons• Batteries• Cigarette butts• Glass beverage bottles (single-use)• Glass wine bottles• Plastic bags – food, retail, garbage• Plastic drink bottles | <ul style="list-style-type: none">• Plastic straws• Plastic takeaway food containers, plates, cutlery, utensils (single use)• Polystyrene takeaway food containers• Soft plastics, e.g. chip packets, food wrappers• Takeaway coffee cups• Vapes (e-cigarettes) |
|--|--|

LITTER SURVEY CATEGORIES

- Plastics
- Electrical Waste
- Glass
- Metal
- Paper/Cardboard
- Rubber
- Textiles
- Wood
- Miscellaneous
- Fishing
- Other

Total Item Count = 79

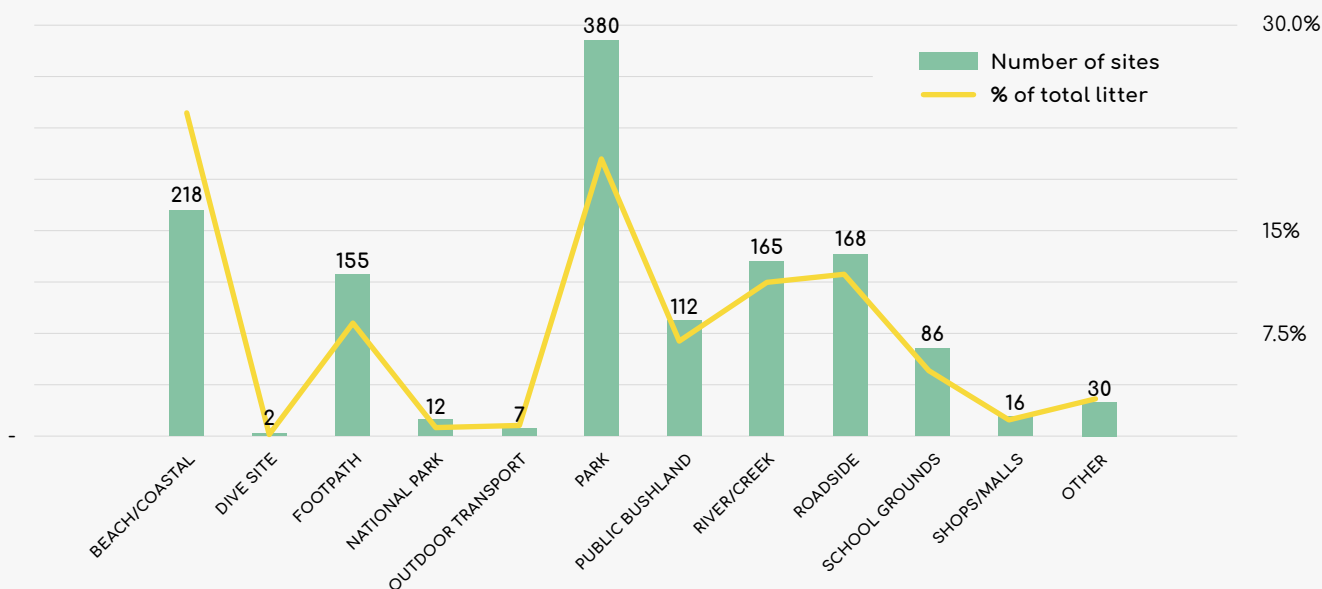
METHODOLOGY (CONT.)

SITE TYPES

Each site surveyed is classified by location. In FY24 these categories included:

- Beach/Coastal
- Dive Site
- Footpath
- National Park
- Outdoor Public Transport
- Park
- Public Bushland
- River/Creek
- Roadside
- School Grounds/Campus
- Shop/Malls
- Other (please specify)

LITTER DISTRIBUTION BY SITE TYPE



- In FY24, 38.2% of all reported litter was removed from waterway sites, including beaches, dive sites, rivers, and creeks [44.0% in FY23].
- 22.2% of all reported litter nationally was removed from parks [16.7% in FY23].
- 8.2% of all reported litter nationally was removed from bushland and national parks [11.7% in FY23].
- Despite more volunteers returning surveys on parks, more litter was reported in waterway sites, reminding us that litter has a strong likelihood of ending up in our precious rivers, creeks, and oceans.

TO NOTE

- Some figures previously reported in the Litter Report FY23 have been adapted slightly in this report to match our updated methodology in line with CSIRO's incoming National Plastics Portal. Updated categories for FY23 figures allow for accurate comparison of trends between FY23 and FY24.
- The Litter Report FY24 is a snapshot of information to show trends over time of litter removed during Clean Up Australia Day and Every Day Clean Ups. It is not intended to be a definitive survey representing all litter found in all Australian environments.

SUMMARY OF RESULTS

THE TOP TEN LITTER ITEMS

INDIVIDUAL ITEMS

The top 10 individual litter items collected and counted from Clean Up Australia sites in FY24 and ranked in order as a percentage of the total litter count, compared to FY23.

FY24		FY23		Rank
Item	% of total litter count	Item	% of total litter count	
Soft Plastics – packets, wrappers	24.6	Soft Plastics – packets, wrappers	33.6	1
Cigarette Butts	20.1	Cigarette Butts	16.2	2
Plastic Bags – food, retail, garbage	6.9	Plastic Beverage Bottles	7.0	3
Aluminium Beverage Cans	5.9	Plastic Food Containers & Utensils	6.2	4
Plastic Beverage Bottles	5.3	Aluminium Beverage Cans	5.3	5
Plastic Food Containers & Utensils	5.0	Hard Plastic Pieces	3.9	6
Plastic Fragments >5mm	4.5	Paper Items	3.0	7
Glass Beverage Bottles	2.9	Takeaway Coffee Cups	2.7	8
Takeaway Coffee Cups	2.8	Glass Beverage Bottles	1.8	9
Paper Items	1.6	Plastic Bags – food, retail, garbage	0.8	10
	79.6		80.5	

- The top 3 counted litter items on Clean Up Australia sites in FY24 are:
 1. Soft plastics – packets, wrappers, pieces
 2. Cigarette butts
 3. Plastic bags – food, retail, garbage
- Soft plastics and cigarette butts have consistently ranked in the top 2 collected items over the past 5 years from 2020.
- Soft plastics as a percentage of overall litter reported has dropped by 9% from FY23 to FY24, but this may be due to increased volunteer focus on cigarette butts, cans and other litter items. Nurdles and microplastics were added as an item on our survey in FY24 accounting for 1.7% of all litter. Soft plastics remain the most collected item proportionally.
- The presence of both soft plastics and plastic bags in the top 3 individual items list is indicative of the urgent need for a nationally implemented soft plastics Extended Producer Responsibility (EPR) collection and reprocessing scheme.
- Cigarette butt litter levels increased by 3.9% from FY23 to FY24, indicating a persistent and increasing problem regarding butt disposal and recycling in Australia. Despite a long downward trend in smokers in Australia over time,¹² the proportion of cigarette butts as a percentage of total litter counts has increased. This is likely due to the reduction of venues permitting smoking indoors, leading to more smoking outdoors.
- Plastic beverage bottles which ranked in the top 3 items in FY23 have been replaced by plastic bags. While plastic bottles can be returned for recycling via Container Deposit Schemes (CDS), plastic bags are a problem item lacking proper recovery options.
- Takeaway plastic food containers and utensils are a consistently problematic litter items, representing 5.0% of all litter reported in FY24.

GROUPED ITEMS

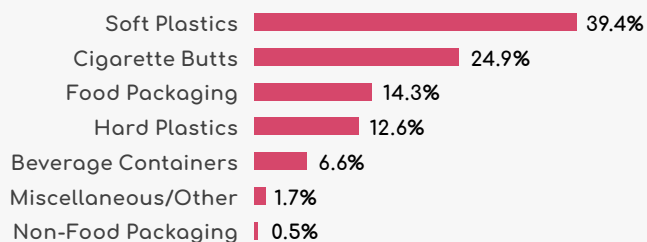
The top 10 categorised litter groups collected and counted from Clean Up Australia sites in FY24 and ranked in order as a percentage of total litter count, compared to FY23.

FY24		FY23		Rank
Item	% of total litter count	Item	% of total litter count	
Soft Plastics	31.8	Soft Plastics	34.1	1
Non-food Packaging	30.4	Non-food Packaging	27.2	2
Beverage Containers	15.0	Beverage Containers	14.5	3
Food Packaging	12.5	Food Packaging	13.5	4
Household Items	4.5	Beverage Litter	4.3	5
Beverage Litter	2.9	Household Items	2.6	6
E-Waste	0.8	Sanitary Items	1.0	7
Construction Materials	0.7	Construction Materials	0.9	8
Clothing	0.5	Clothing	0.6	9
Sanitary Items	0.5	Toys & Sporting Equipment	0.6	10
Toys & Sporting Equipment	0.3	E-Waste	0.5	
Automotive Items	0.1	Automotive Items	0.2	
	100		100	

- The top 3 counted litter categories on Clean Up Australia sites in FY24 are:
 1. Soft plastics
 2. Non-food packaging
 3. Beverage containers
- These are the same top 3 as FY23, although **soft plastics** as a proportion of overall litter have decreased by 2.3% from FY23 to FY24, while **non-food packaging** such as cigarette butts, plastic fragments, bags and boxes has increased by 3.2% and **beverage containers** by 0.5%.
- As a percentage of types of litter, **soft plastics** represent 31.8% of all counted litter in FY24, an alarming figure which indicates urgent need for a viable nationwide Product Stewardship Scheme. Under the newly formed Soft Plastic Stewardship Australia, soft plastics collection pilots are currently underway in different council areas in Victoria, NSW and SA.¹³
- Packaging** [non-food, beverage containers and food] continues to lead litter counts, representing 57.9% of all reported litter during the year [55.2% in FY23]. When taken together with **beverage litter**, which includes bottle caps, corks and straws, packaging makes up 60.8% of all litter counted in FY24. Packaging is a persistent problem in the Australian national landscape. Australia is awaiting notification as to progress toward development of an EPR scheme for packaging in line with global best practice, following Federal consultation on packaging which closed October 29, 2024.
- Household items** found as litter have increased proportionally by 1.9% from FY23 indicating a need for further consumer education around reuse, repair and consuming less.
- Clothing** represents 0.5% of all litter reported in FY24. On July 1, 2024 Australia's voluntary product stewardship scheme for fashion, Seamless launched.¹⁴ Clothing is a currently listed product on the Federal Environment Minister's Priority List for Product Stewardship action.¹⁵

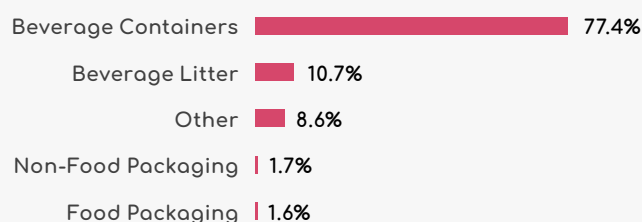
MAJOR SOURCES OF LITTER

PLASTICS



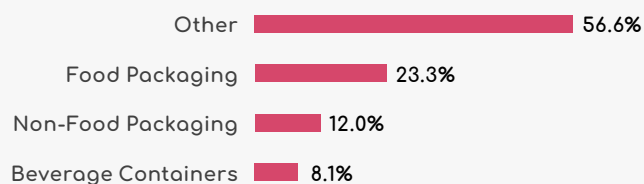
Distribution of plastics - 80.7% of all counted litter

METAL



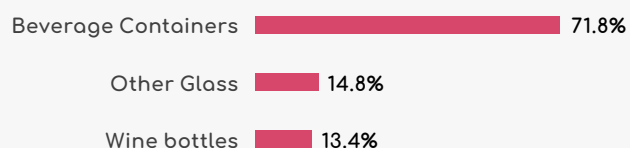
Distribution of metal - 7.6% of all counted litter

PAPER AND CARDBOARD



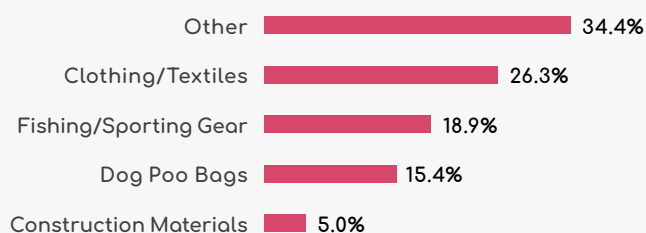
Distribution of paper and cardboard - 4.0% of all counted litter

GLASS



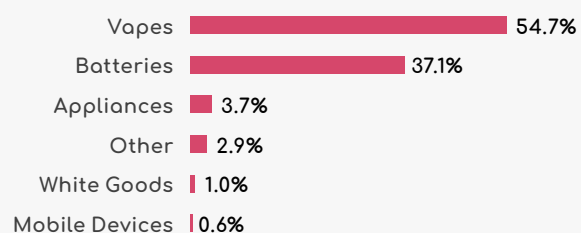
Distribution of glass - 4.0% of all counted litter

MISCELLANEOUS



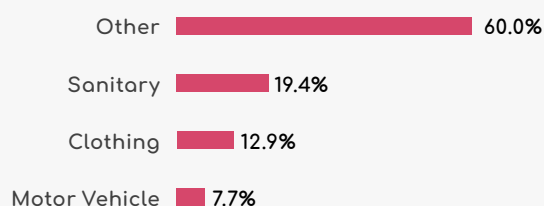
Distribution of miscellaneous - 1.6% of all counted litter

E-WASTE



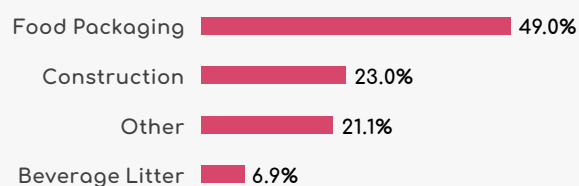
Distribution of e-waste - 0.8% of all counted litter

RUBBER



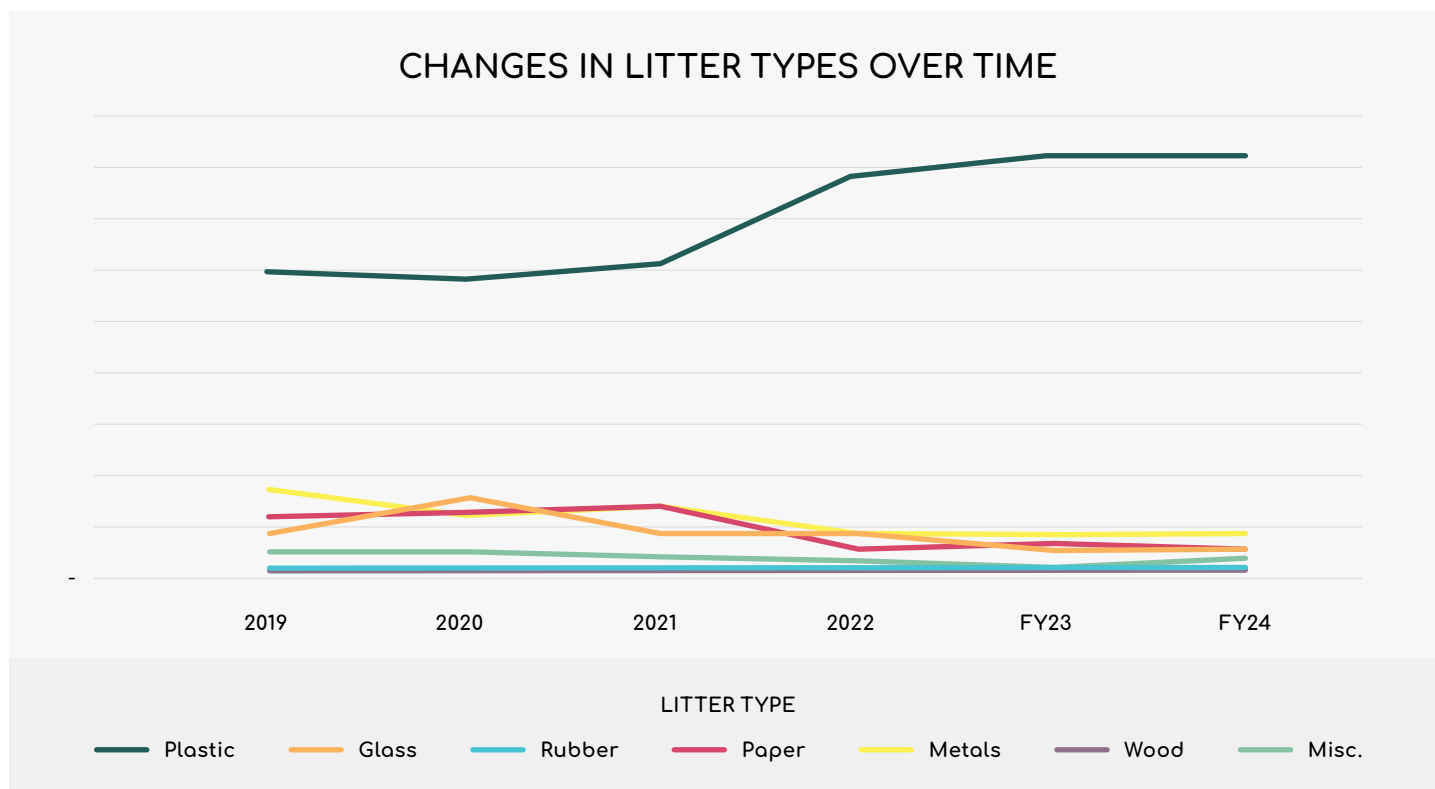
Distribution of rubber - 0.8% of all counted litter

WOOD



Distribution of wood - 0.4% of all counted litter

HISTORICAL COMPARISON



- The comparison graph shows changes in types of litter collected over the past 5.5 years.
- Since 2019, **plastics** have continually dominated the litter landscape, and as a category continues to increase as a percentage of overall litter since 2020.
- Since 2021, **plastics** as a category has seen a sharp increase in levels reported by our volunteers. This trend reflects a direct link between plastic production, plastic use and plastic waste and litter. In Australia, we generate more single-use plastic waste per person than any other country in the world, except Singapore.¹⁶ If we continue on our current path, Australia's plastic consumption and plastic-related emissions are expected to more than double by 2050.¹⁷
- Cigarette butts are counted in the plastics category for all years.
- **Glass and paper/cardboard** as a percentage of litter types has gradually decreased and may reflect increased reuptake of this waste stream via recycling. Paper and cardboard have the highest recovery rate of any waste stream, sitting at 68% of packaging placed on the market.¹⁸
- **Metals** as a percentage of litter types has also decreased over the five-year period and may reflect increased can collections through CDS. Nevertheless, the majority of metal litter continues to consist of beverage containers.
- E-waste as a material type was first separated from the **miscellaneous** category in FY23. For the current comparison graph, it has been included in the miscellaneous category.
- The graph is indicative of Australia's increasing plastic waste.

DISCUSSION



SINGLE-USE PLASTICS

With plastics once again dominating the FY24 Litter Report, representing 80.7% of all counted litter this year, and single-use plastics including soft plastic, cigarette butts, food packaging and beverage containers accounting for 85.2% of all reported plastics, single-use plastics are a hugely critical problem within the Australian litter and waste landscape.

It is now known that plastic pollution and litter levels are directly linked to plastic production, with research by CSIRO demonstrating a 1:1 correlation between plastic production levels and increased plastic pollution.¹⁹ Global plastic production levels are at a record high, having doubled between 2000 and 2019, from 234 to 460 million tonnes (Mt).²⁰

The Organization for Economic Cooperation and Development (OECD) predicts that global growth in plastics production and use will continue to outpace population growth over the next decade. As plastic volumes balloon, mismanaged waste will increase by 47% and plastic leakage to the environment by 50% by 2040 from 2020 levels, threatening ecosystems and the people that depend on them.²¹

In Australia, we use 3.5 million tonnes of plastic each year.²² With 130,000 tonnes of plastic litter leaking into the Australian marine environment annually, the plastic challenge in our country is alarming. While plastic has a place in our society,

the mismanagement and overuse of single-use plastics must change. Many of the states and territories have moved to phase-out unnecessary and problematic single-use plastics, including thicker plastic bags above 35 microns which are up for review in NSW, NT and SA from September 2024.²⁵ SA and WA are leading the way as the first states to implement bans on single-use plastic takeaway food containers, which are being phased out from September 1, 2024. This is a small win which may eventually lead to decreased levels of plastic takeaway food containers in the environment, which in FY24 represent 5.0% of all surveyed litter.

Despite gradual bans on single-use plastics coming into effect across states, progress in plastic reduction is slow. For key stakeholders and stockists of single-use plastics, such as supermarkets and food and grocery stores, there is a need for strong plastic reduction targets facilitated by 'quick win' actions, including: eliminating single-use plastic produce bags and stickers, introducing reusable containers for deli items, phasing out plastic straws and cutlery, reducing individually wrapped small serving sizes, and requiring loose fresh produce to be cost-competitive against packaged produce.²⁶

A GLOBAL PLASTICS TREATY

Australia is one of the contributing member states at the Intergovernmental Negotiating Committee (INC) meetings for the development of a Global Plastics Treaty. Since 2022, member states have met five times, with the fifth session concluding in December 2024. This was predicted to be the final session, however with member states unable to settle the agreement, the INC is set to reconvene in 2025. The treaty, mandated by a 2022 UN Environment Assembly resolution,²⁷ seeks to address the full lifecycle of plastic, including its production, design and disposal, through an international legally binding instrument. Clean Up Australia hopes to see included strong regulation around problematic chemicals in plastics as well as plastic reduction targets.



SOFT PLASTICS

Soft plastics in Australia remain a hugely problematic waste stream, with currently limited options for recycling and a proliferation of soft plastics used on everyday items. Consumer soft plastic packaging ranges from packaging for food, groceries and personal care items to household goods including electronics, clothing, post satchels and bubble wrap.

Despite strong household interest in recycling, and 62% of soft plastic material placed on the Australian market being recyclable, recycling rates in Australia have always been very low.²⁸ From 2021-2022, recovery rates for soft plastic totalled 12% of packaging placed on the market.²⁹ Comparatively, hard plastics had a 31% national recovery rate over 2021-2022.³⁰ REDcycle was Australia's short-lived national consumer soft plastics recycling scheme. After 10 years of operations by 2022, REDcycle collections peaked at less than 2% of the material placed on the market.³¹

After the collapse of REDcycle in 2022, the major supermarket chains formed the National Soft Plastics Taskforce.³² Together with the Australian Food and Grocery Council (AFGC) they began development of a National Plastic Recycling Scheme (NPRS).³³ These bodies have now formed an independent not-for-profit organisation Soft Plastic Stewardship Australia which is advancing the project of developing a national scheme for consumer soft plastics recycling.³⁴ Key priorities include: introducing easier ways for communities to recycle their soft plastic packaging, increasing recycling infrastructure and increasing demand for recycled products through end-markets.³⁵

As of September 2024, pilot collections were underway in Woolworths, Coles and ALDI stores in Melbourne VIC and Newcastle NSW, plus across six councils in VIC and NSW. In NSW, two new regional processing facilities will help process soft plastics, transforming them into composite railway sleepers for Australian rail infrastructure and other products like crates, shipping pallets and bins.³⁶ Trial collections continue in SA and more pilot locations have just been announced across QLD, with QLD injecting \$1 million into the project, developing hubs across both regional and urban areas.³⁷ Trials will allow consumers to return soft plastic packaging through in-store collection, kerbside yellow-lid bin collection, council drop-off locations and drop-off at central points, such as container refund points.

With soft plastics making up 31.8% of all counted litter in the Litter Report FY24, there is need for a nationally implemented soft plastics EPR scheme. A successful EPR scheme for soft plastics must be truly circular, with focus on both collection of materials at end-of-life and good design to minimise use and maximise recovery and recycling rates. Soft plastics must also incorporate Australian recycled plastic. If single-use soft plastics are designed to be food grade, they should be recycled back into food grade plastic.

PACKAGING

Packaging [non-food, beverage containers and food] continues to lead litter counts, representing 57.8% of all reported litter during FY24 [55.2% in FY23]. Further, packaging and soft plastics represent 60.8% of all plastics reported. Clean Up Australia's volunteer base reports vast quantities of packaging clogging rivers, streams, parks and beaches – including take-away containers, soft plastics and mixed-material packaging. Packaging is an extremely problematic litter item in the environment.

In 2023, the Australian Packaging Covenant Organisation (APCO) admitted that it would not meet its four voluntary national packaging targets, including the ambitious goal of ensuring all packaging is reusable, recyclable or compostable by 2025.³⁸ APCO's goal of recycling or composting 70% of all plastic packaging by 2025 is also far from being met, with the latest figures showing only 20% is being recovered.³⁹ This is an unacceptable quantity of plastic packaging waste being sent to landfill or ending up as litter in the environment. This could be prevented at the design stage, or otherwise recovered and recycled.

In 2024, the Federal government opened consultation for all stakeholders involved or interested in the production, use and recovery of packaging in Australia, with the aim of creating a reformed system for regulation of packaging in Australia. Clean Up Australia was one of many stakeholders who contributed to the consultation. A consultation paper was provided to stakeholders outlining three options for packaging reform in Australia.

Clean Up Australia prepared a submission in support of Option 3: An EPR scheme for packaging in line with global best practice – such as the European Union's Packaging and Packaging Waste Regulation – making producers legally responsible for the packaging they place on the market in Australia. The scheme should involve the entire supply chain, with producers directly accountable for meeting reduction, recovery and recycled content targets. The scheme should also incorporate clear standards to manage problematic packaging formats, excessive packaging, chemicals of concern and additives, while mandating recycled content thresholds and clear, accessible recyclability labelling.

This kind of scheme would both reduce packaging to landfill and reduce litter in the environment. Clean Up Australia would like to see the scheme developed in line with APCO's cutting-edge eco-modulation model, which would see financial incentives for packaging recyclability, and for recycled content levels.⁴⁰ Funds raised through the scheme could be directed to building reprocessing infrastructure, strengthening collection networks, litter reduction strategies, research and development in packaging, and consumer education to support the transition to and maintenance of a circular economy for packaging.

THE ROLE OF REUSABLES

With plastic production growing at an alarming rate and Australia's plastic consumption expected to more than double by 2050,⁴¹ it is not feasible to recycle our way out of this crisis. Rather, much greater upscale of reusable options is required. There is a need for policy which supports viable reuse options, and which provides incentives for reuse models in place of single-use. Currently, reusable options for packaging are scarce, with just 4% of plastic packaging put on the market by Australian, New Zealand and Pacific Islands Plastics Pact (ANZPAC) members being reusable in 2021.⁴²



Image source: Recup

An example of an innovative reuse model for coffee cups is the Recup model in Germany which has successfully scaled in cafes across the country.⁴³ As of December 1, 2024, Bermagui, NSW is the first Australian town to go single-use coffee cup free.⁴⁴ It has embraced a similar model to Germany's Recup system. With an entire town's cafes now single-use coffee-cup free, the case serves as an interesting pilot for further upscaling of reuse models.

Besides cups, reuse models could be implemented in supermarkets with refill options for different items including nuts, deli-items and cleaning products. Other examples where reusable and refillable packaging could replace single-use includes soaps and shampoos at hotels, food and drink containers at dine-in restaurants and events and across business-to-business supply chains. In an interesting case-study, AMCS and the Boomerang Alliance emphasise how Australian households have readily embraced swap-and-go systems for decades, including for gas canisters for soda water makers and barbeques.⁴⁵ It's time for reuse to be scaled to other products and contexts to help reduce single-use packaging, and ultimately reduce packaging in both landfill and in the environment as litter.

A decision as to the development of an EPR scheme for packaging in line with global best practice is expected to be made in early 2025. Packaging reform is vital, with packaging litter levels leading litter counts, representing 57.9% of all reported litter during the year in the Litter Report FY24.

CONTAINER DEPOSIT SCHEMES

This year was a momentous one for Australia and our Container Deposit Scheme (CDS) networks. With the announcement in September 2024 that Tasmania's CDS Recycle Rewards will commence operations by mid-2025,⁴⁶ Australia will be the first continent in the world to be fully covered by CDSs. That's a huge step for circular economy action in Australia!

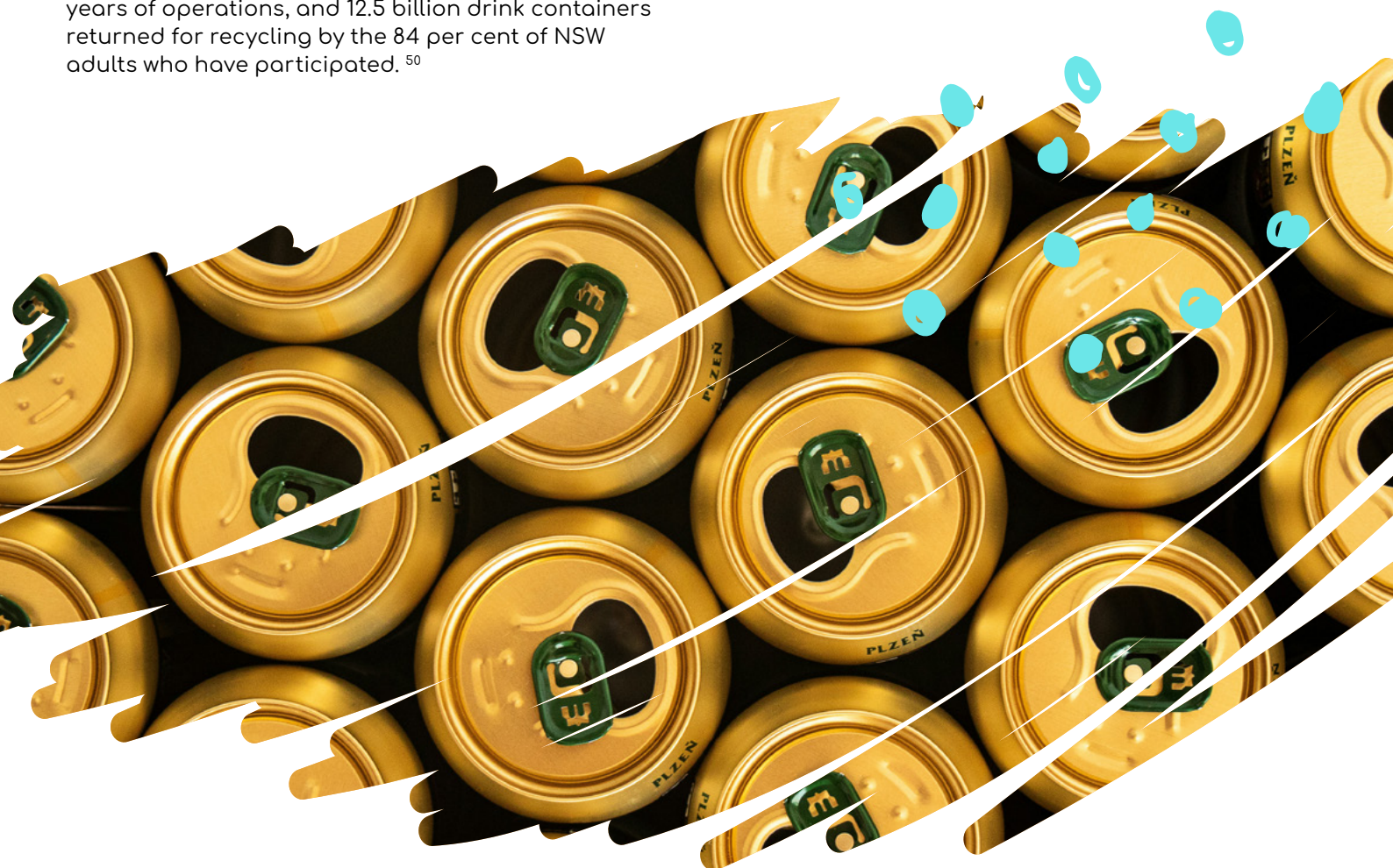
Under CDSs, a small, refundable deposit is added to the price of a beverage at the point of sale (10c in Australia). Empty eligible drink containers including plastic and glass bottles and cans can be returned to a collection point, where the consumer or collector receives a refund of the deposit. These schemes increase recycling rates overall, but also have a direct impact on litter, with a study by CSIRO showing that deposit schemes reduce drink containers in the ocean by 40%.⁴⁷ Further, Clean Up Australia's Litter Report shows that in NSW, prior to the commencement of the CDS in 2017, beverage container litter levels reflected 28.7% of all reported litter.⁴⁸ In FY24, this has reduced to 15.1%.

With beverage containers making up to 45% of Tasmania's litter, it is estimated the Tasmanian scheme will reduce this by almost 50%.⁴⁹ TasRecycle Limited have been announced as Scheme Coordinator and TOMRA Cleanaway Tasmania will be Network Operator for the Tasmanian scheme. This split responsibility model mimics the NSW model, which in 2024 celebrated seven years of operations, and 12.5 billion drink containers returned for recycling by the 84 per cent of NSW adults who have participated.⁵⁰

CDS Vic was launched in November 2023. It has since celebrated its first birthday on November 1, and has already recycled more than one billion containers in the first 12 months of operation.⁵¹ In FY24, QLD became the first state to expand its CDS scheme to allow glass wine and spirit bottles to be returned. Since then, the scheme has recorded a 13.5% increase in the quantity of glass bottles being returned – an excellent example of increased container type eligibility increasing recycling rates overall.⁵² With wine and large alcoholic bottles representing 13.4% of all counted glass in FY24, Clean Up Australia supports the addition of these bottles as eligible CDS containers in all states and territories.

Clean Up Australia further supports a national increase in the refund value from 10c. In 2008, the refund amount for eligible containers in SA increased from 5 to 10 cents. This change led to more South Australians participating in the scheme, resulting in less litter and less beverage containers sent to landfill.⁵³

In the Litter Report FY24, beverage container counts were at 15.0% of all counted national litter. With NSW beverage container counts dropping 13.6% since the CDS was established in 2017, it is expected that national beverage container litter levels will also begin to decrease, with operational CDS in place in all states and territories from 2025.



BATTERIES

With more than 10,000 battery-related fires and explosions occurring in the Australian waste sector each year, equating to 30 fires per day,⁵⁴ Clean Up Australia supports urgent calls for action on battery stewardship from Australia's leading peak waste and recycling industry organisations, including the Australian Council of Recycling (ACOR), National Waste and Recycling Industry Council (NWRIC) and state peak bodies, who in October joined together to demand action on the growing hazard posed by batteries and electronics in conventional waste and recycling streams.⁵⁵

In FY24, Waste Management Resource and Recovery Australia (WMRR) further voiced their concerns, calling for a national EPR scheme "that addresses everything from battery design through to end-of-life".⁵⁶ A national EPR scheme for batteries would see accessible collection points for safe disposal of loose and embedded batteries across Australia and mandated producer responsibility to fund disposal and processing of batteries. At the Environment Ministers' Meeting on December 10, 2024, Ministers noted the need for urgent reforms to product stewardship arrangements for batteries, to address the escalating risks of battery fires and create a safe, circular economy for batteries.⁵⁷

B-Cycle, Australia's current voluntary stewardship scheme, has done an excellent job in collecting used batteries in its second year of operation, with 2935 tonnes of used batteries collected in FY24 – a 24% increase from the previous year.⁵⁸ It has expanded its drop-off network, which now includes more than 5200 locations across Australia – up from fewer than 1000 before the scheme's launch. However, the scheme's collection rate of 15.3%, reflecting the proportion of batteries collected versus those available for recycling, underscores the need for ongoing innovation and regulation to increase participation.⁵⁹

While batteries and e-waste devices with embedded batteries make up only 0.7% of all counted litter in the Litter Report FY24, they are a problem item in the environment which release toxins, including heavy metals such as nickel, cadmium and mercury that leak into the soil and groundwater. These materials pose harmful risks to human, animal and plant life when contaminating waterways and precious ecosystems as litter or in landfill.

VAPES

Vapes in Australia remain a problem for both health, and environment. With new regulations surrounding the import and selling of vapes, there has been little action on a clear and consistent path for vape disposal. Vapes are problematic in landfill and as litter as they contain batteries and plastic, hazardous and electronic waste which can leak into groundwater. Single-use vapes are resource-heavy with a comparatively short usage period. Vapes were collected from 30.1% of sites surveyed in FY24, an increase of 7.7% on sites in FY23. In the Clean Up Australia Litter Report, reported vape numbers increased by more than 140% since FY23.



CONCLUSION

The Clean Up Australia Litter Report FY24 shows that plastics continue to dominate as the material type overwhelmingly picked up by volunteers from our precious environment. With every Australian producing approximately 60kg of plastic waste each year,⁶⁰ we are amid an enormous plastic waste challenge that is growing.

Indeed, there is now a clear link between plastic generation and plastic pollution flowing into the environment as litter.⁶¹ With 130,000 tonnes of plastic litter leaking into the Australian marine environment each year,⁶² the work of Clean Up Australia remains as important as ever.

In addition to our Clean Ups, Clean Up Australia works alongside businesses, communities, councils and schools, encouraging Australians across the nation to rethink their relationship with the products and packaging they use.

With an estimated 1,077,127 volunteers joining us in Clean Ups throughout FY24, we are in a unique position to leverage the voice of our amazing national volunteering body to advocate for policy reforms, programs and investment that should be prioritised to foster avoidance, using less for longer, repair, material recovery and product stewardship – which combined, all work to prevent waste and litter.

After all, it's our mission to *inspire and mobilise communities to improve and conserve our environment, eliminate litter, and end waste.*

Let's go, Australia – we can do this.



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