



KAB NATIONAL LITTER INDEX 2019-2020

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RESEARCH. STRATEGY. SOLUTIONS.

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INTRODUCTION

2019-20 Keep Australia Beautiful (KAB) National Litter Index marks the fourteenth year in which the survey has been conducted on a national basis.

The 2019/20 survey reports the results of biannual litter counts at the same, undisclosed 983 sites across the country. While over time additional rural highway sites and surveys of critical litter infrastructure have been added, the heart of the survey remains and the KAB NLI is Australia's only long term, consistent survey of litter. Also unchanged is its aim to build a deeper understanding of what is being littered, and where, and how that is changing over time.

While data continues to be collected in the same way as it always has, in this report individual surveyed items have been consolidated into a few major categories: cigarette related; CDL beverage containers; takeaway food and beverage packaging; and, general other categories. We have also extracted from the data the major other categories, other paper, other plastic and other glass. Full details on this consolidation is contained in the next section of the report.

The report places greater emphasis on the actual litter count and the number of litter items per 1,000m². We have done this because we believe items counted is a more precise measure and also easier to visualise the nature of the litter stream. Those familiar with the survey will be aware that the items counted in the survey are also converted to a volumetric measure using an assumption for the volume of each of the surveyed categories, while the report does include details and commentary on volumetric impacts, the majority of the chart and tables reflect items counted and the number of litter items per 1,000m². Determining whether to use items counted or volume will require readers to apply their own judgement and consider the purpose for which the data is being used.

It is interesting to note that a reduction in "items counted" overall does not automatically result in a corresponding "equivalent volume" reduction. There are some instances where a reduction in overall items counted has resulted in increased litter volumes. We endeavour to report with clarity, and as such both methods of measure (by item & by volume), both of which are referred to in this report and provide important perspectives on litter.

METHODOLOGY

This data collection for 2019-2020 was conducted by McGregor Tan in 2 waves:

Wave 1: November 2019, Wave 2: May 2020



The purpose of the research is to provide insight regarding the presence of litter items at sites within broadly comparable regions.

It is expected that the information derived from this research will be used by governments and community organisations to develop policies/ programs that will reduce litter and create increased pride in communities.



Sites surveyed within the research program were sampled primarily from urban and near-urban areas (i.e. generally within 50km of the urban areas surrounding each state capital and major cities). Generalization of findings to regional locations must therefore be made with caution.

The total area surveyed across all sites nationally was 1,499,791m². This area spanned a total of 983 sites, and the average site size was 1,526 m².



All sites incorporated within the survey were categorised according to 8 different site types : Residential, beach, industrial, car park, shopping center, retail strip / shop, recreational park, highway.

Uniform guidelines were conformed to during site selection.



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We have achieved this through the vision of our researchers which is underpinned by a strong company ethos respecting tradition while driving innovation and new technologies.

SITES & CATEGORIES REPRESENTATION

Site type representation

The following table outlines the number of sites within each of the 8 distinct site types that were sampled within each state:

Site type	ACT / NT / TAS	All other states	Total sites Nationally
Beach	8	16	104
Car Park	11	23	148
Highway	13	27	174
Industrial	9	17	112
Recreational Park	7	13	86
Residential	13	26	169
Retail	8	15	99
Shopping Centre	7	14	91
Total	76	151	983

Reporting

Litter counts have been conducted bi-annually in November and May across the years from 2005/06, unless stated otherwise, the 2019/20 results are reported on an annual basis incorporating average figures corresponding to November 2019 and May 2020 counts.

Litter per 1,000 m²

When calculating the overall average number of litter items per 1,000m² the average result is calculated using the overall number of litter items and the total square metres of all sites. The following example outlines the calculation to calculate overall averages.

Site Types	Total area (m ²)	Total number of litter items	Number of litter items per 1,000m ²
Type 1	1,000	40	40
Type 2	2,000	80	40
Type 3	7,000	70	10
All Site Types	10,000	190	19

CATEGORY CONSOLIDATION

The NLI is a data rich survey and as a result is complex to interpret. To simplify we have consolidated various litter items into broader categories as represented in the table.

Most of the groupings should be self-evident but it is worth explaining the beverage container category in more detail. In this instance we have included in the beverage container category only those items currently classified as eligible containers as part of the SA, NT, NSW and QLD CDS schemes. These schemes exclude items that would, under different circumstances, be regarded as a beverage container. However, given that many of the other State jurisdictions have announced an intention to adopt similar schemes we felt it was easiest to use the SA/NT/NSW “definition” and apply that to all states. It is acknowledged that this is not a legislated policy in other states and is simply an attempt to enable a level of consistency in the way the KAB NLI data is interpreted.

Consolidated Category	Historical Classification
Butts & Packaging	Cigarettes Paper/Paperboard - Cigarette packets
CDL Beverage Containers	Glass - Alcoholic sodas / spirit-based mixers, all sizes Glass - Beer, all colours of glass, <750ml Glass - Beer, all colours of glass, 750ml+ Glass - Cider/fruit based etc. Glass - Flav. water/soft drink (carbonated) <1 litre Glass - Flav. water/soft drink (carbonated) 1 litre+ Glass - Flav.wtr/fruit j. dr/sprts dr, (non-carb), <1 litre Glass - Flav.wtr/fruit j. dr/sprts dr, (non-carb), 1 litre+ Glass - Fruit juice, < 1 litre Glass - Plain water (carbonated or non-carb.), <1 litre Glass - Plain water (carbonated or non-carb.), 1 litre+ Glass - Wine cooler, all sizes Metal - Alcoholic sodas & spirit-based mixers Metal - Beer, aluminium, all types, all sizes Metal - Cider/fruit based etc. Metal - Flav. water/soft drink, (carbonated), all sizes Metal - Flav. water/soft drink, (non-carb), all sizes Paper/Paperboard - Cartons, flavoured milk < 1 litre Paper/Paperboard - Cartons, fruit juice, < 1 litre Paper/Paperboard - Flav. water / fruit j. drink/sports drink, (non-carb), 1 litre+ Paper/Paperboard - Flav. water/fruit j. drink/sports drink, non-carb, <1 litre Plastic - Drink pouches Plastic - Flav. milk, <1 litre Plastic - Flav. water/soft drink (carbonated) <1 litre Plastic - Flav. water/soft drink (carbonated) 1 litre+ Plastic - Flav. wtr/fruit j. dr, sprts dr etc (non-carb) 1 litre+ Plastic - Flav.wtr/fruit j. dr, sprts dr etc (non-carb) <1 litre Plastic - Fruit juice <1 litre Plastic - Plain water (carbonated or non-carb) <1 litre Plastic - Plain water (carbonated or non-carb) 1 litre+
Takeaway Food & Beverage Packaging	Metal - Foil take away Metal - Metal bottle tops and can pull rings Miscellaneous - Ice cream sticks Paper/Paperboard - Coffee cups Paper/Paperboard - Cups/take away containers Paper/Paperboard - Ice cream wrappers Plastic - Lollipop sticks Plastic - Plastic bottle tops Plastic - Snack bags & confectionary wrappers Plastic - Spoons/ cutlery Plastic - Straws Plastic - Take away & cups
Other Glass	Glass - Other glass
Other Paper	Paper/Paperboard - Other paper
Other Plastic	Plastic - Other plastic
Plastic Bags	Plastic - Bags - heavier glossy typically branded carry bags Plastic - Bags - supermarket type light weight carry bags
General Other	Glass - Fruit juice, 1 litre+ Glass - Wine & spirit, all sizes Metal - Aerosols - pressure packs Metal - Food cans (including pet food) Metal - Industrial cans - all types Metal - Metal pieces Metal - Other foil Miscellaneous - Clothing & materials Miscellaneous - Condoms Miscellaneous - Construction materials Miscellaneous - Disposable nappies Miscellaneous - Other miscellaneous Miscellaneous - Rubber pieces (not tyres) Miscellaneous - Syringes Miscellaneous - Tyres & pieces Paper/Paperboard - Cartons, flavoured milk 1 litre+ Paper/Paperboard - Cartons, fruit juice, 1 litre+ Paper/Paperboard - Cartons, milk, plain (white) all sizes Paper/Paperboard - Junk mail / free circulars Paper/Paperboard - Newspapers & magazines Paper/Paperboard - Packages & boxes Paper/Paperboard - Paper bags Paper/Paperboard - Shopper docket & related shopping paper (eg. lists) Paper/Paperboard - Tickets, e.g. bus, ATM, vending machine etc. Plastic - 6 ring can holders Plastic - Bread bag tags Plastic - Containers, domestic type Plastic - Containers, industrial e.g. oil Plastic - Flav. milk, 1 litre+ Plastic - Fruit juice, 1 litre+ Plastic - Packing tape & straps Plastic - Sacks - sheeting - other bags Plastic - Styrene foam boxes, sheets, etc Plastic - White milk, all sizes Plastic - Wine cask bladders
Illegal Dumping	Illegal Dumping



EXECUTIVE SUMMARY

KEY INSIGHTS

LITTER OVERVIEW

- There has been a continuous decrease in litter items in Australia over the last 10 years and 56,087 items of litter were counted nationally for 2019-20, a decrease of 3.2% compared to the previous year.
- The reduction in litter items was recorded across all regions with the exception of NSW, SA and Queensland.
- Victoria, Tasmania & NT recorded the largest decrease.
- Tasmania (67) recorded the highest number of items per 1,000m² followed by Queensland and NSW (46).
- In terms of volumes, these items translate to 5,414 litres of litter volume, a decline of 7.4% compared to last year.

CATEGORIES

- The largest contributors to litter items were cigarette butts & packaging (40%) followed by takeaway packaging (16%) and other general items (15%).
- However, in terms of litter volumes the largest contributors were CDL beverage containers (27%) closely followed by illegal dumping (25%), other general items (23%) and takeaway packaging (22%).
- The overall reduction in litter of 3.2% in 2019-20 was attributed to the decline in litter items for the key contributing categories – butts & packaging (9.1%) and takeaway packaging (7.4%).

SITE TYPES

- Highways (31%) and car parks (18%) are the main contributors towards litter items at a national level. However, in terms of volume, highways (48%) alone contributed to half the litter volume at a national level.
- Litter items reduced across all site types except industrial, car park, shopping centres and beaches.
- Car parks recorded the highest increase in the number of litter items in this year across most regions with the exception of WA and ACT.
- There were increases in the litter at shopping centres recorded in Tasmania, Queensland, ACT and NT, while there were increases at Industrial sites in NSW, WA and Queensland.
- Industrial sites, shopping centres and retail precincts recorded a higher number of litter items per 1,000m².

BUTTS & PACKAGING

- Butts & packaging litter items decreased by 9.1% – recorded across regions except Queensland and NSW.
- Queensland increased in beaches, car park, industrial and residential while NSW in beaches, industrial and residential.
- In addition, litter items increased at car parks across regions except ACT, NSW and WA and at shopping centres in ACT, NT and Tasmania.
- Tasmania (46) recorded the highest number of litter items per 1,000m² - three times the national average followed by ACT (16), Queensland and NSW (16).

TAKEAWAY PACKAGING

- Takeaway packaging litter items decreased by 7.4% – decreases recorded across regions except NSW and ACT
- NSW increased at car parks, industrial and residential while ACT increased across all sites except car park and industrial.
- In addition, litter items increased at highways in Tasmania and WA and car parks in Queensland, SA and Tasmania.
- NSW (9), Queensland, Tasmania (8) and NT recorded the highest number of litter items per 1,000m².
- In terms of type of packaging, plastic (63%) contributed the most followed by metal (17%) and paper / paperboard (17%).

KEY INSIGHTS

CDL BEVERAGE CONTAINERS

- CDL beverage containers contributed to 5% of litter items and decreased by 19.2%, while in terms of volumes it contributed the most (27%) and decreased by 22.3%.
- All regions recorded a decrease in the litter items for CDL containers except NT.
- While the litter items for CDL beverage containers have decreased at an overall level across regions, there is an increase recorded at: highways in Tasmania, industrial in NSW and NT, car parks across regions except NSW, WA, SA and beaches in Queensland and WA.
- WA (4.4) recorded the highest number of litter items per 1,000m² - double the national average followed by NSW (2.5).
- In terms of type of packaging, metal (43%) alone contributes to nearly half the litter items for CDL beverage containers followed by plastic items (30%), a decrease in litter recorded across packaging types.

PLASTIC BAGS

- Plastic bags contributed to less than 1% of litter and decreased by 11.8% - decreases recorded across regions except NSW and Tasmania.
- NSW also recorded the highest litter items per 1000 m².

GENERAL OTHERS

- Other general items contributes to 15% of litter items and recorded an increase of 9.7% - increase in litter across regions except SA and NT where it decreased.
- Queensland and NSW (19%) are the key contributors to general litter items and also recorded the highest number of litter items per 1000 m².
- Increase in other general items at Highways across regions except Queensland, SA, WA; Industrial across all regions except ACT, NT, Queensland, SA.
- In terms of the type of items, the increase in litter items is recorded across all material types with paper board (36% contribution) increasing the most (12%)

COFFEE CUPS

- The total litter for coffee cups contributes to 1% of litter items and has decreased by 14.6% - decreases recorded across regions with the exception of Queensland where it increased by 4.5%.
- NSW (0.9) recorded the highest number of coffee cups per 1000 m² compared to the national average (0.4).

BRANDED LITTER

- 11% of the total litter is branded with McDonalds contributing the most to branded litter items followed by Coca Cola.

SINGLE USE PLASTIC

- Single use plastic contributes to 9% of the overall litter and has reduced by 9.5% over the last year.
- The reduction in litter for single use plastic is recorded across all regions except NSW where it increased by 5.0%.
- NSW (5.8) also recorded the highest number of items for single use plastic per 1,000 m² followed by Tasmania (5.1).
- Snack bags and confectionary wrappers (30%) are the biggest contributor to the overall litter for single use plastic followed by straws (25%) and takeaway & cups (19%).

ILLEGAL DUMPING

- Illegal dumping (25% contribution) increased by 22.6% this year across regions except Queensland and Tasmania.
- NSW (1.8), SA (1.2) and WA (1.2) recorded the highest volume of illegal dumping per 1,000 m².

COVID IMPACT (MAY 2020)

- The overall litter items decreased by 5.9% during May 2020 compared to May 2019, there was a decrease in the items recorded in NT, Victoria, SA and Tasmania.
- Highways, retail and recreational parks recorded a reduction in litter for most of the regions indicating a possible impact due to COVID restrictions.
- The litter increased at shopping centres across almost all regions except NSW, WA and NT and all beaches except Victoria and NT.

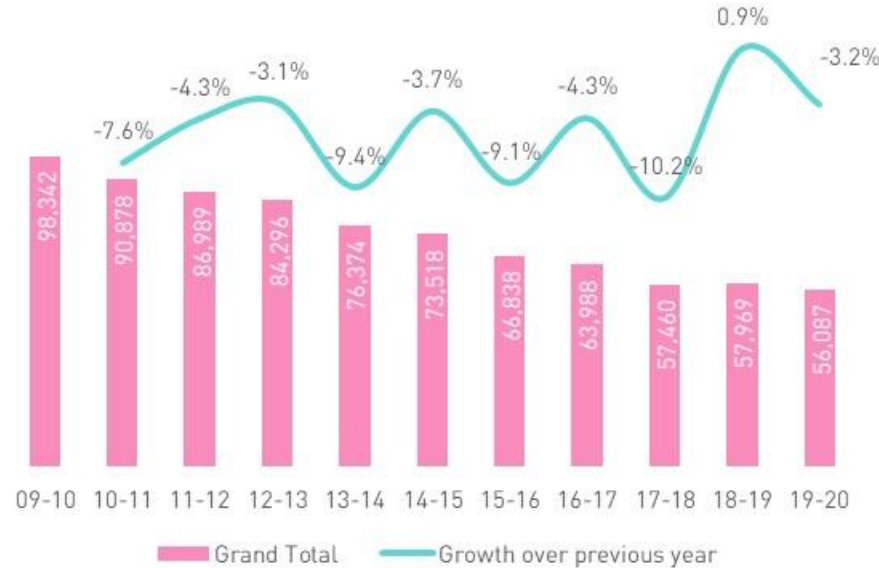


OVERALL LITTER INDEX

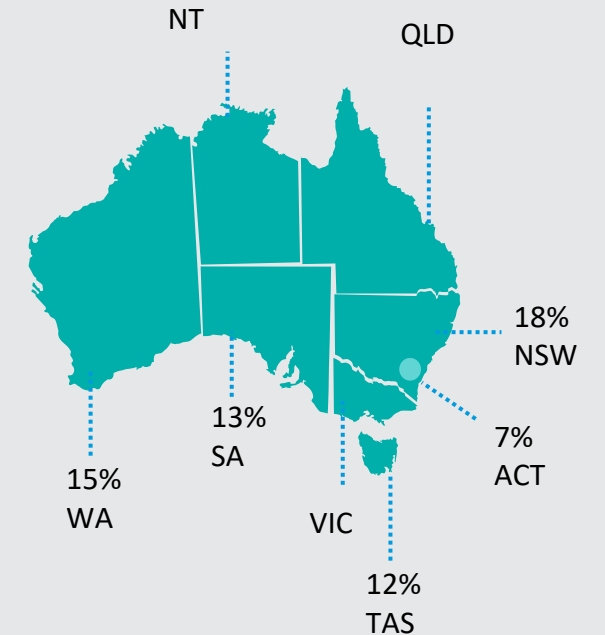
OVERVIEW OF LITTER INDEX

There were 56,087 items of litter counted nationally for 2019-20, a decrease of 3.2% compared to the previous year (37 items per 1,000m², down from 39 items per 1,000m² in 2018-19). There has been a continuous decline in litter items in Australia over the last 10 years.

In terms of litter volumes, these items translate to 5,414 litres of litter volume nationally and a decrease in volume of 7.4% compared to the previous year (3.6 litres per 1,000m², down from 3.9 litres per 1,000m² in 2018-19).



States contribution to litter



56,087

(-3.2%)

Litter items in 2019-20

37

(-2 items)

Items per 1,000m²

5,414 litre

(-7.4%)

Litter volume in 2019-20

3.6 litre

(-0.3 litre)

Volume per 1,000m²

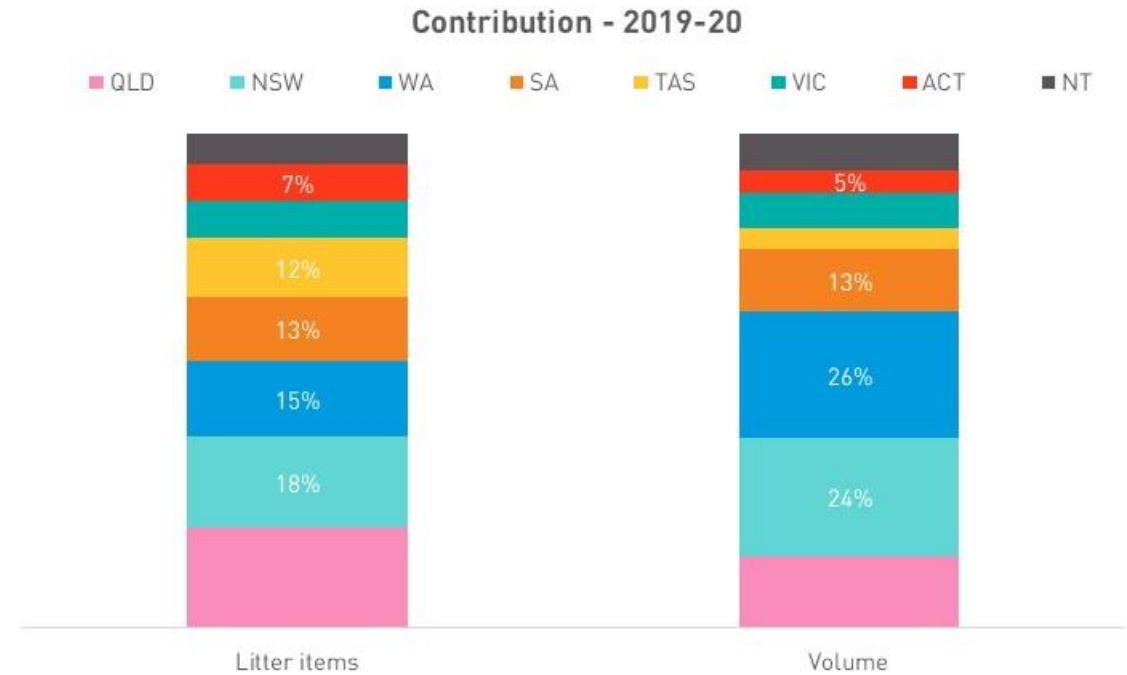


REGIONS

LITTER BY REGIONS

In terms of the raw litter data, Queensland, NSW (18%) and WA (15%) were associated with higher contributions to the national litter compared to the other regions. While in terms of volume of litter, NSW and WA have a higher contribution in 2019-20.

However, when the number of sites and area surveyed is taken into account, Tasmania (67) recorded the highest number of litter items per 1,000m² followed by Queensland and NSW (46).



Litter items per 1,000m²

37
NATIONAL

67
TAS

46
NSW

37
WA

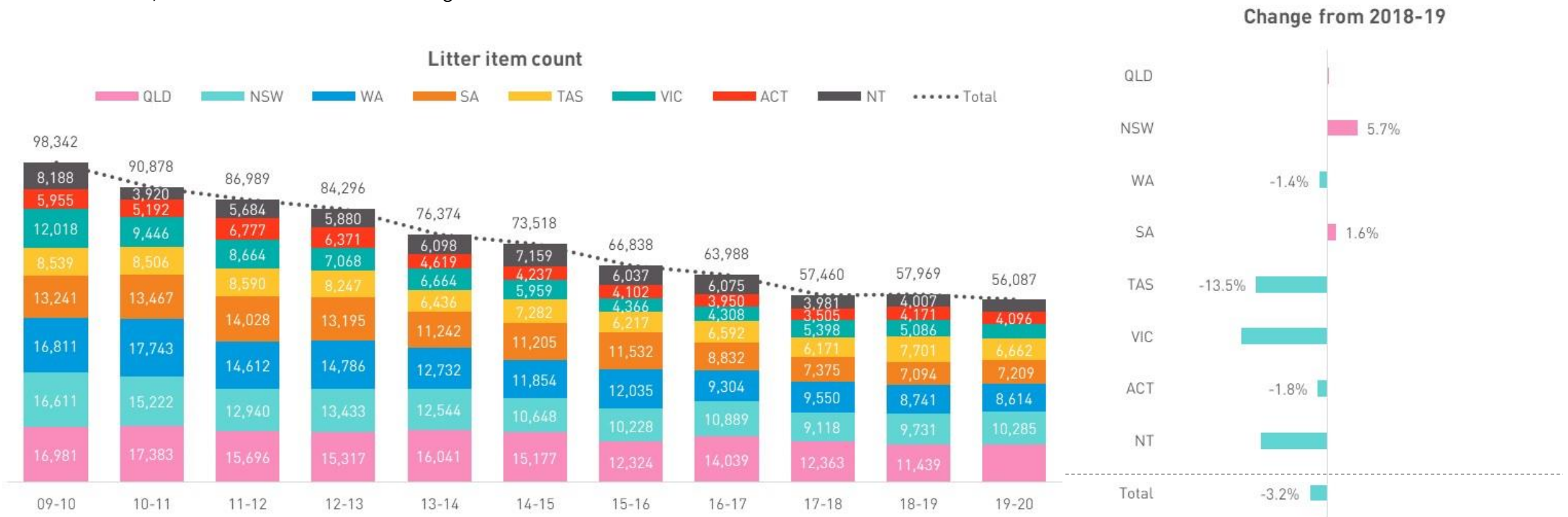
35
ACT

29
SA

LITTER ITEMS BY REGIONS

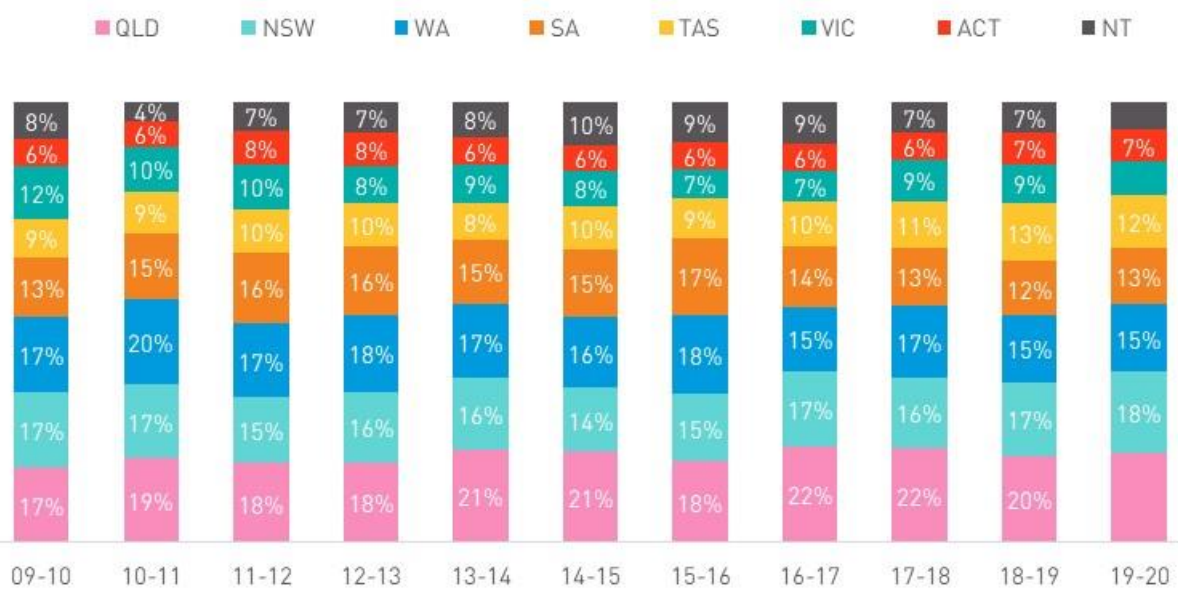
At an overall level, litter items decreased by 3.2% in 2019-20 compared to the previous year. The reduction in litter was recorded across all states with the exception of NSW, SA and Queensland.

Victoria, Tasmania and NT recorded the largest decrease in litter items in 2019-20.

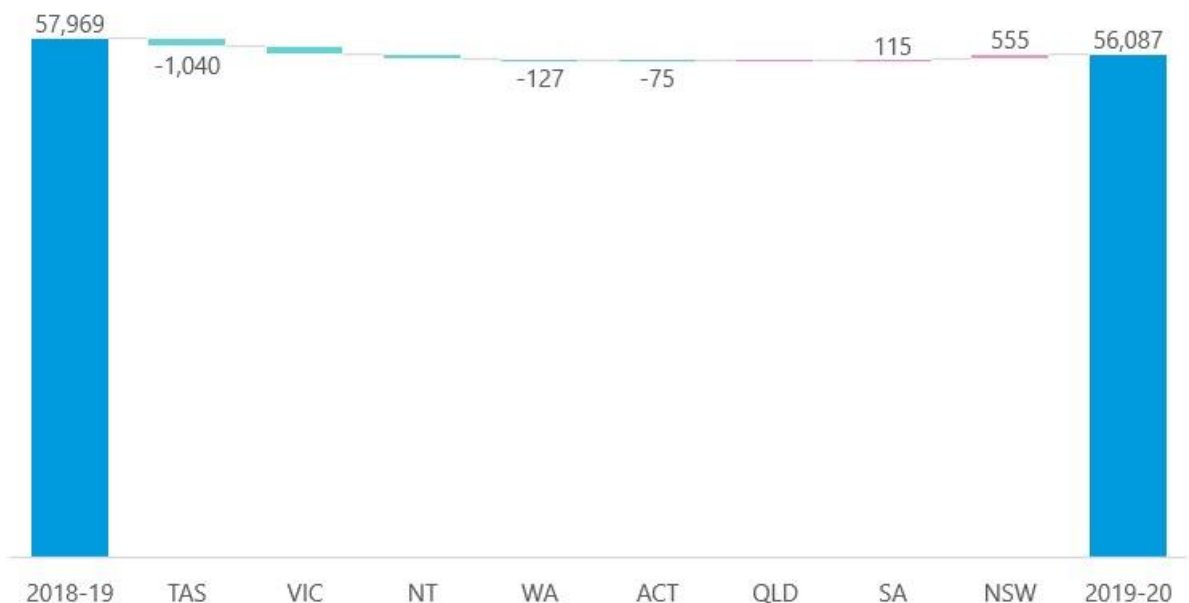


CONTRIBUTION TO CHANGE (LITTER ITEMS)

Litter item contribution



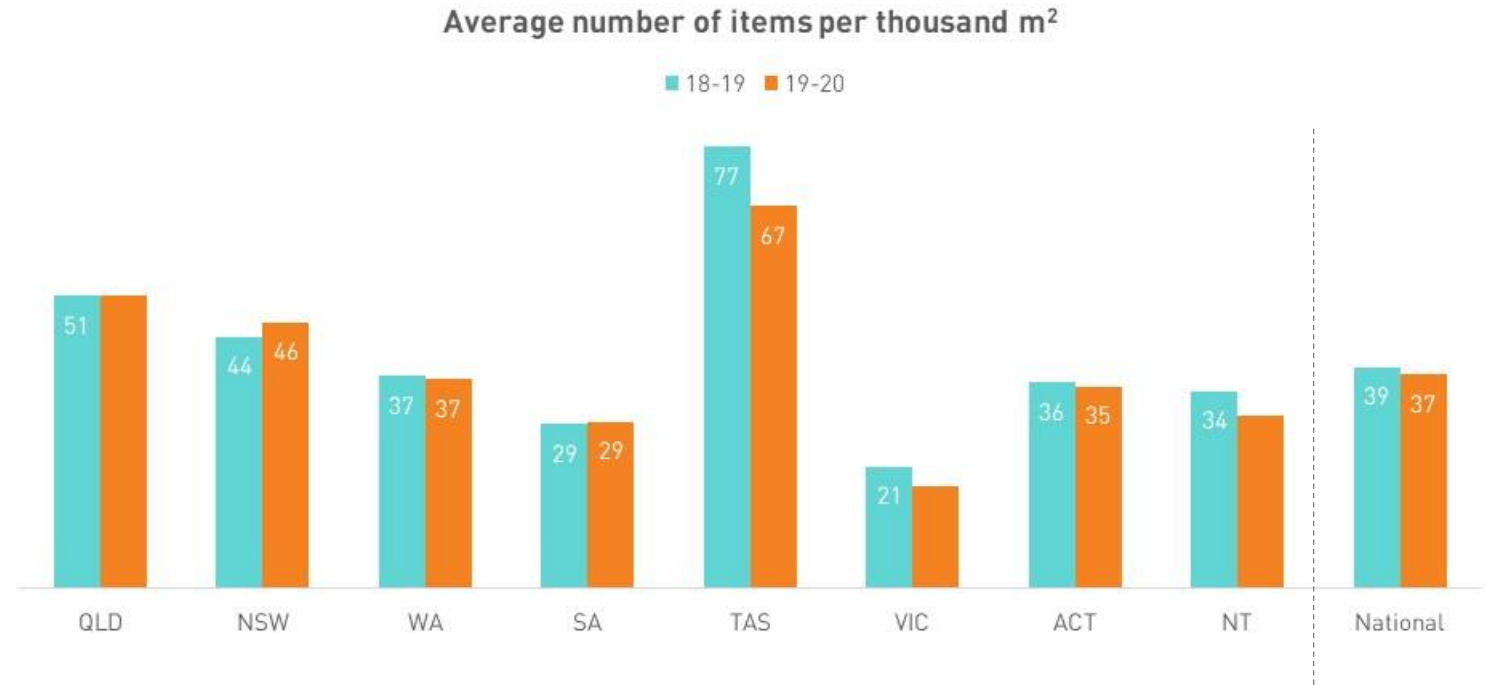
Contribution to change by region



LITTER ITEMS PER 1,000m² BY REGIONS

Tasmania recorded the highest number of litter items per 1,000m², however this was lower compared to the previous year.

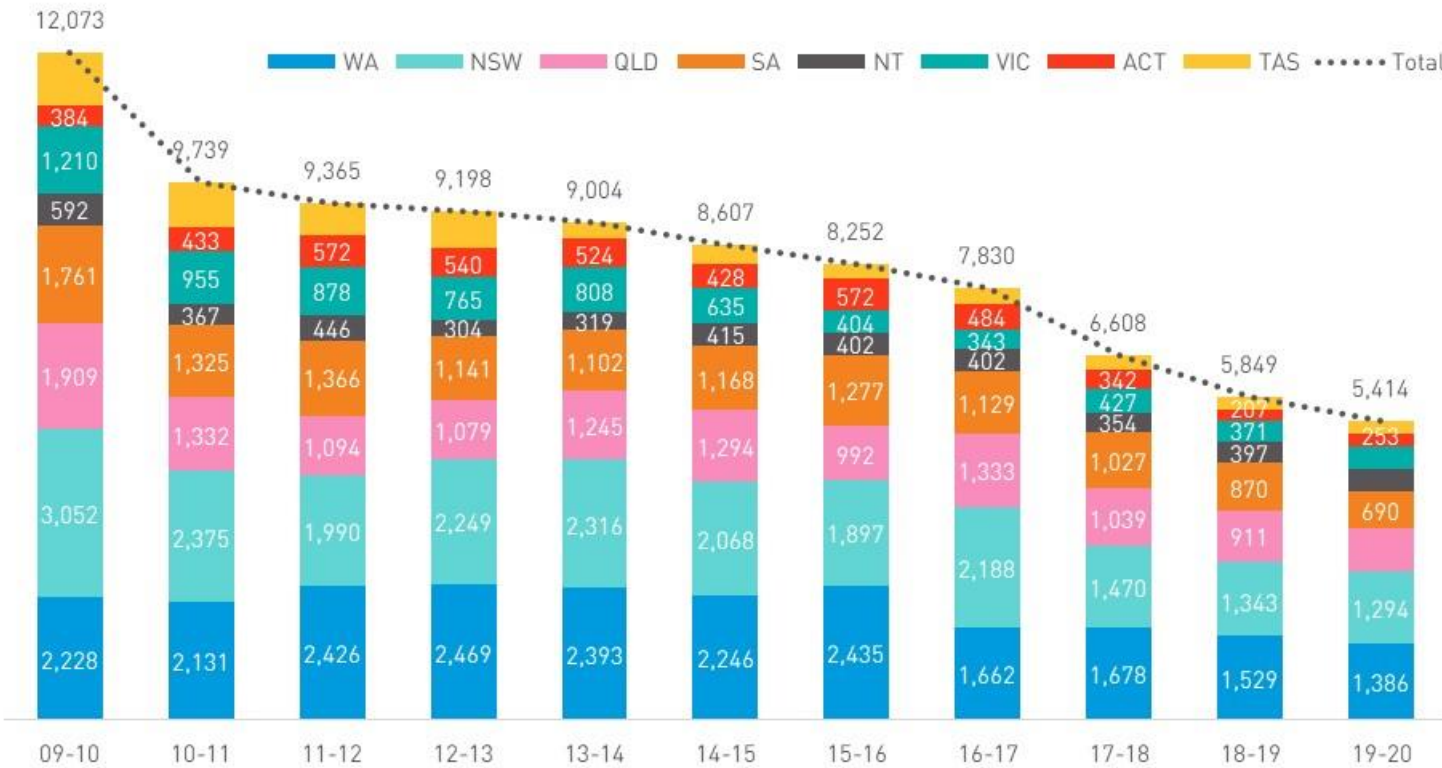
Queensland and NSW also recorded higher numbers of litter items per 1,000m² when compared to the national average.



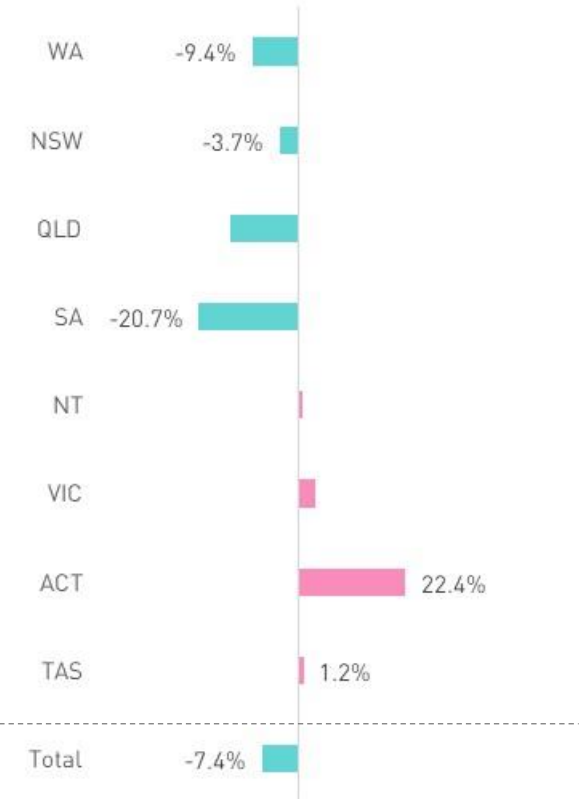
LITTER VOLUME BY REGIONS

The overall litter volume decreased by 7.4% over the previous year, mainly attributed to falls in WA, NSW, Queensland and SA. Conversely, NT, Victoria, ACT and Tasmania recorded an increase in the volume of litter this year.

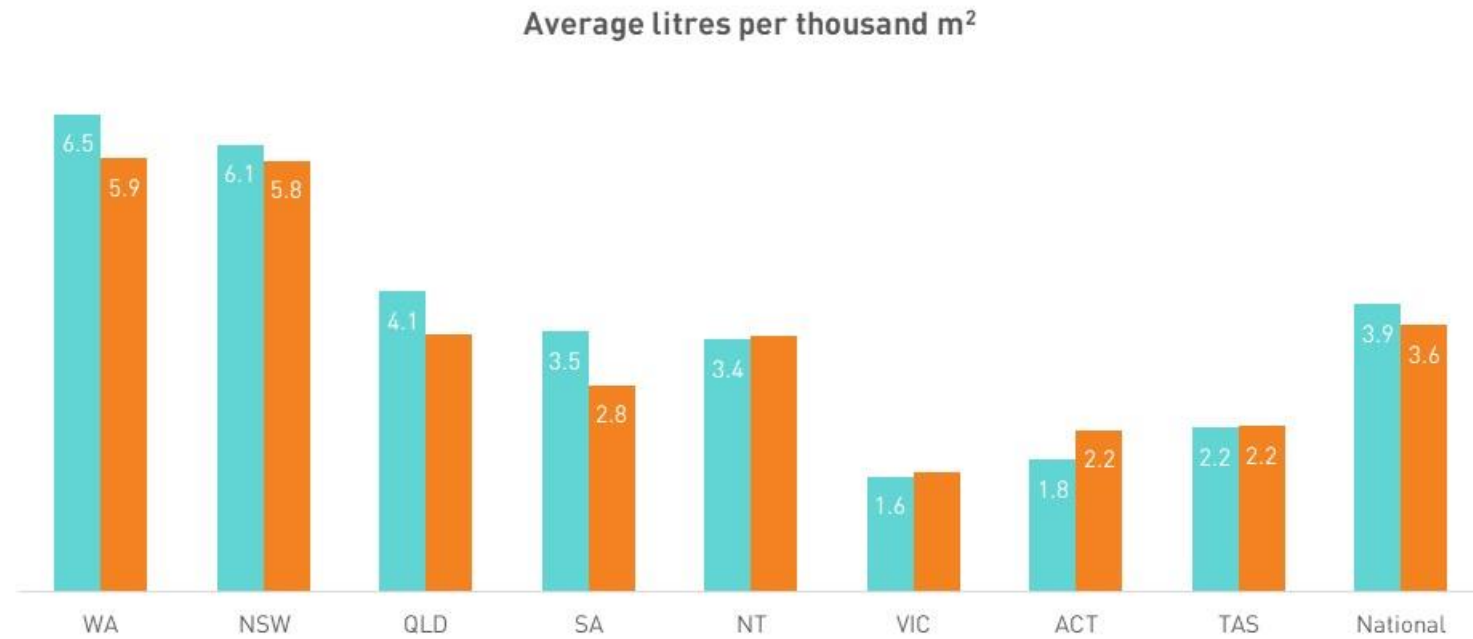
Volume - Litres



Change from 18-19



LITTER VOLUME PER 1,000m² BY REGIONS



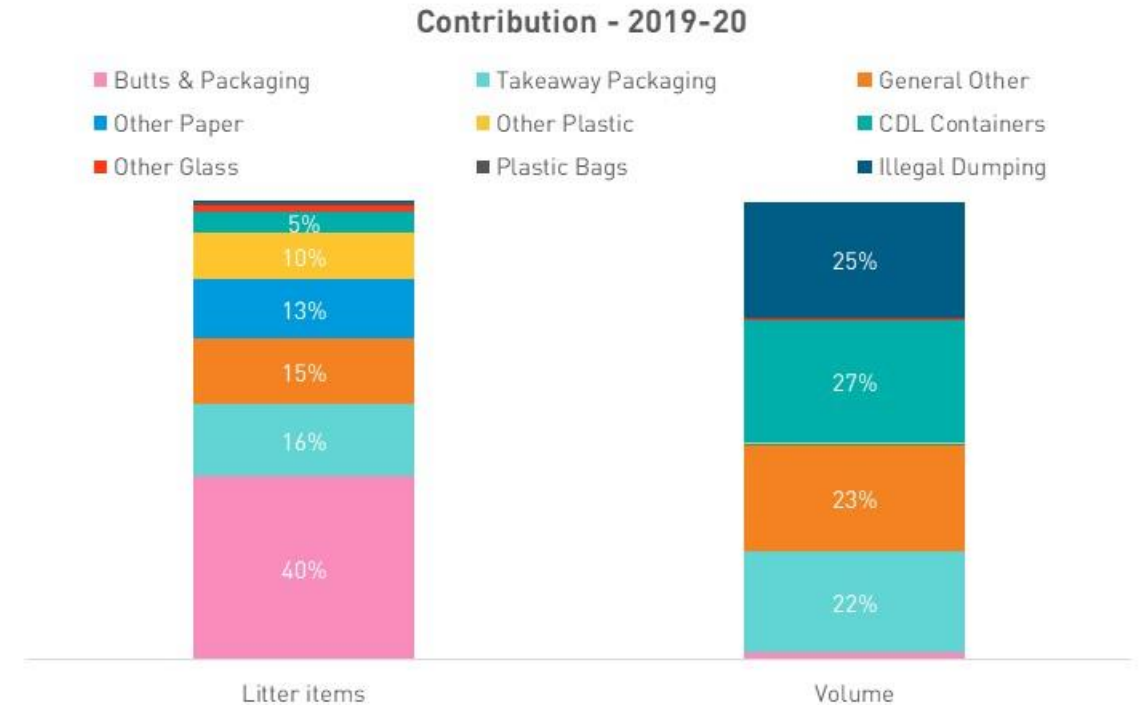


CATEGORIES

LITTER BY CATEGORIES

In terms of categories, the largest contributors to number of litter items were cigarette butts & packaging (40%) followed by takeaway packaging (16%) and other general items (15%). However, in terms of litter volumes the largest contributors were CDL beverage containers (27%) closely followed by illegal dumping (25%), other general items (23%) and takeaway packaging (22%).

Takeaway packaging has increased in terms of contribution to both litter items and volumes over the last 10 years.



15

Butts & packaging
Items per 1,000m²

6

Takeaway packaging
Items per 1,000m²

1 litre

CDL containers volume per
1,000m²

0.9 litre

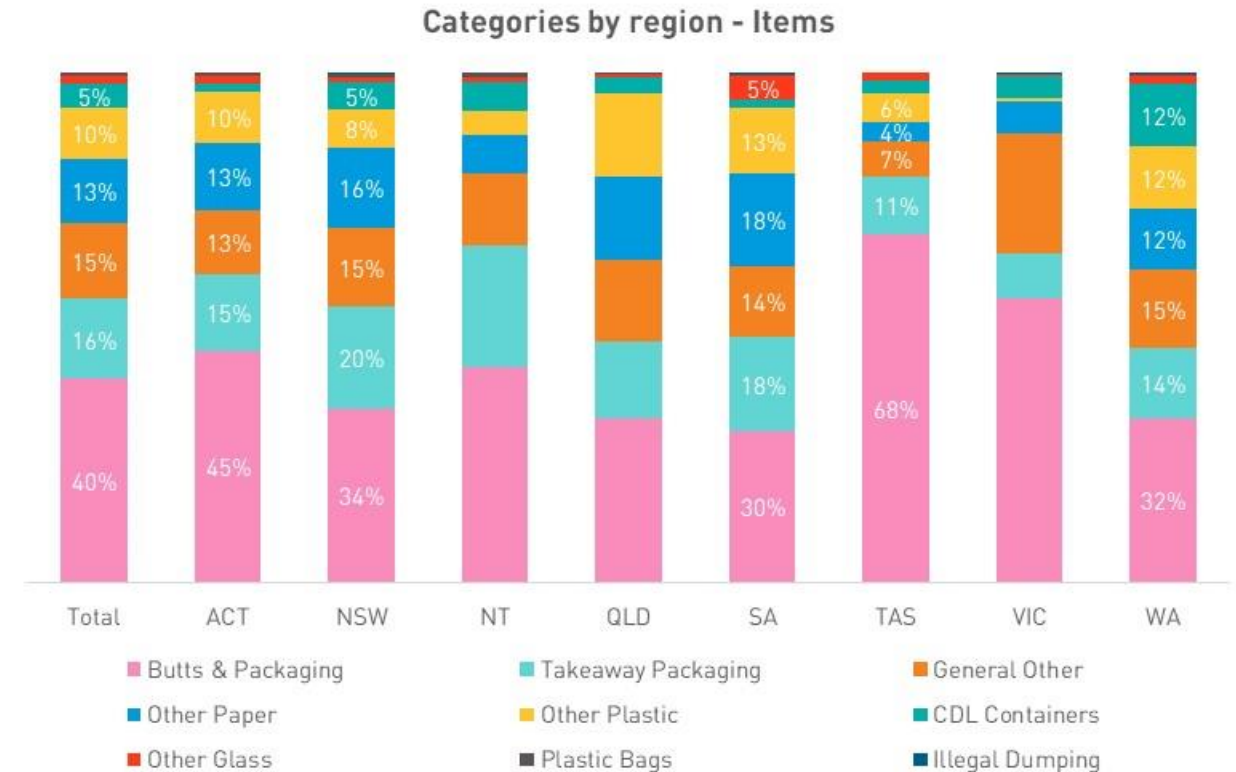
Illegal dumping
volume per 1,000m²

LITTER BY CATEGORIES X REGIONS

Cigarette butts & packaging had a higher contribution to litter items in ACT, NT, Tasmania and Victoria.

Takeaway packaging had a higher contribution in NSW and NT compared to national average.

WA had the highest contribution for CDL containers compared to the other states.



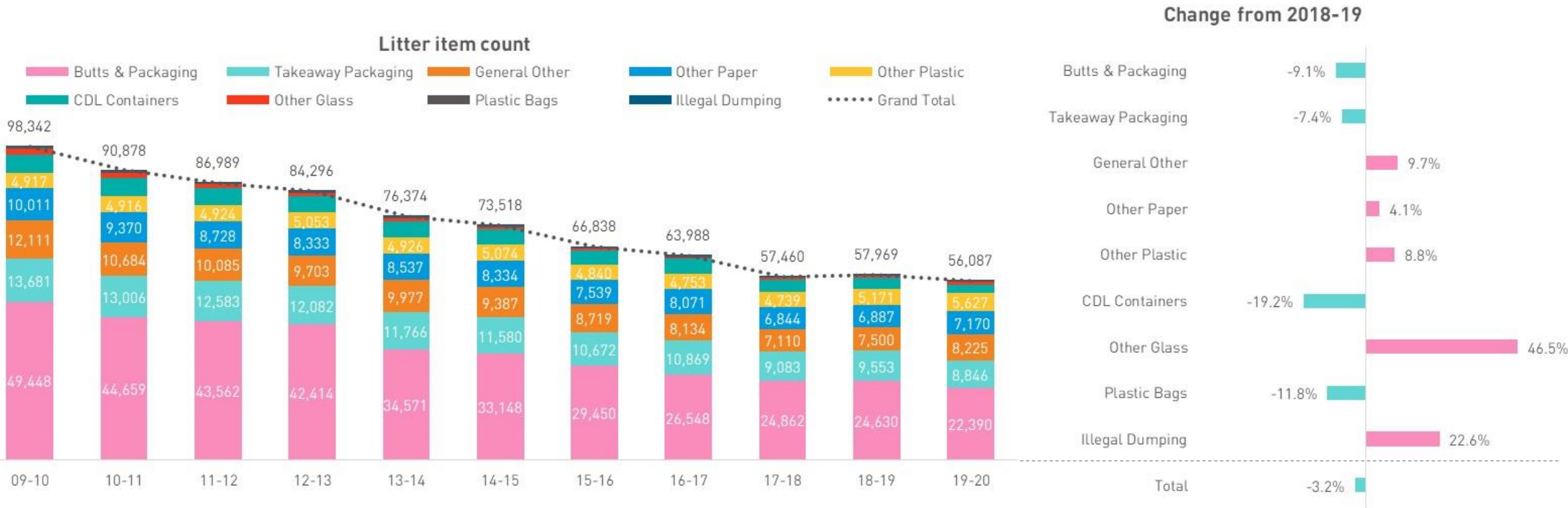
EVOLUTION OF CATEGORIES MIX



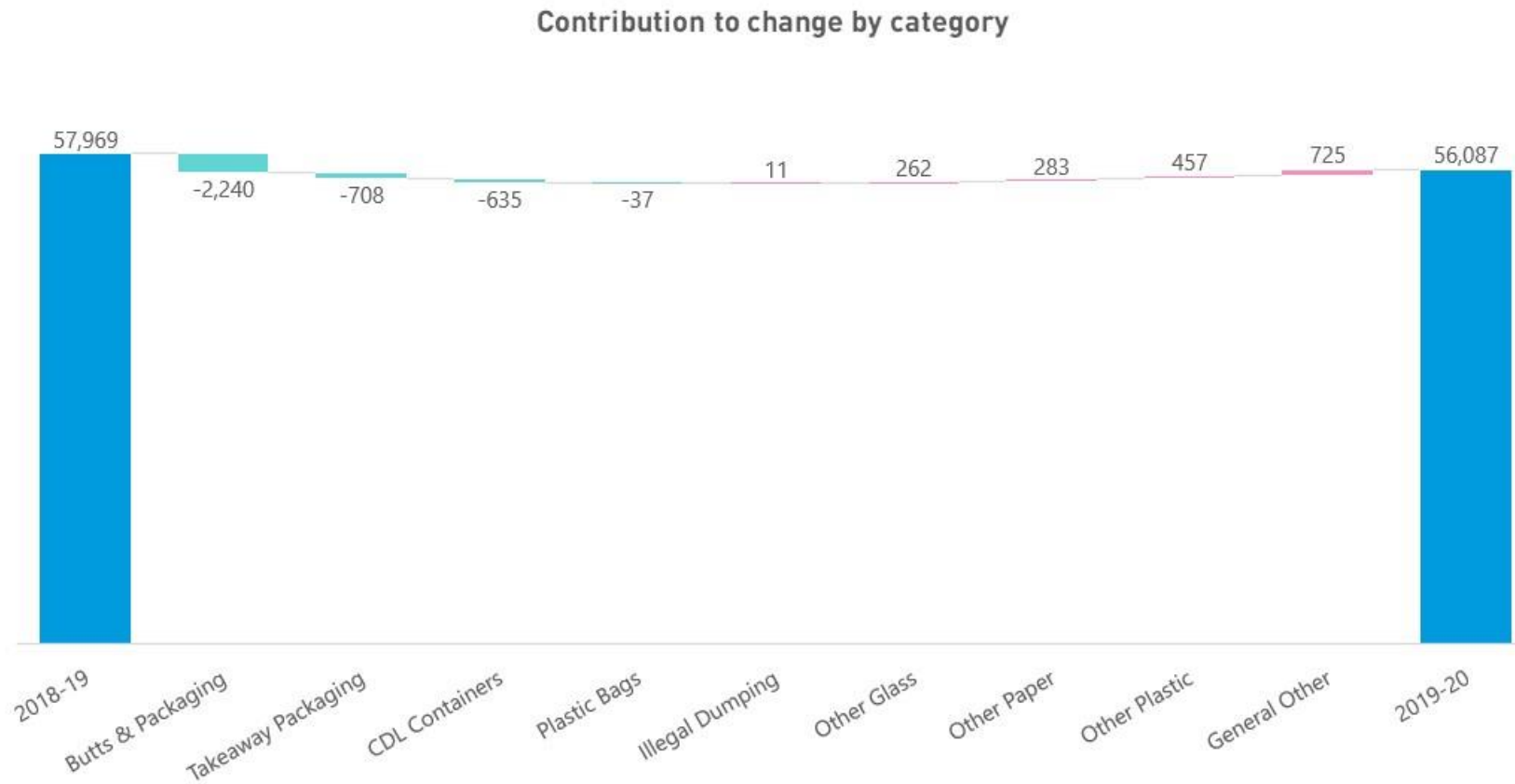
LITTER ITEMS BY CATEGORIES

The overall reduction in litter of 3.2% in 2019-20 was attributed to a decrease in litter items for the key contributing categories – butts & packaging and takeaway packaging. However, there was an increase in litter items for other general, paper, plastic, glass items and illegal dumping.

CDL containers were also associated with a 19.2% decrease and plastic items 11.8% with decrease in litter items at a national level.

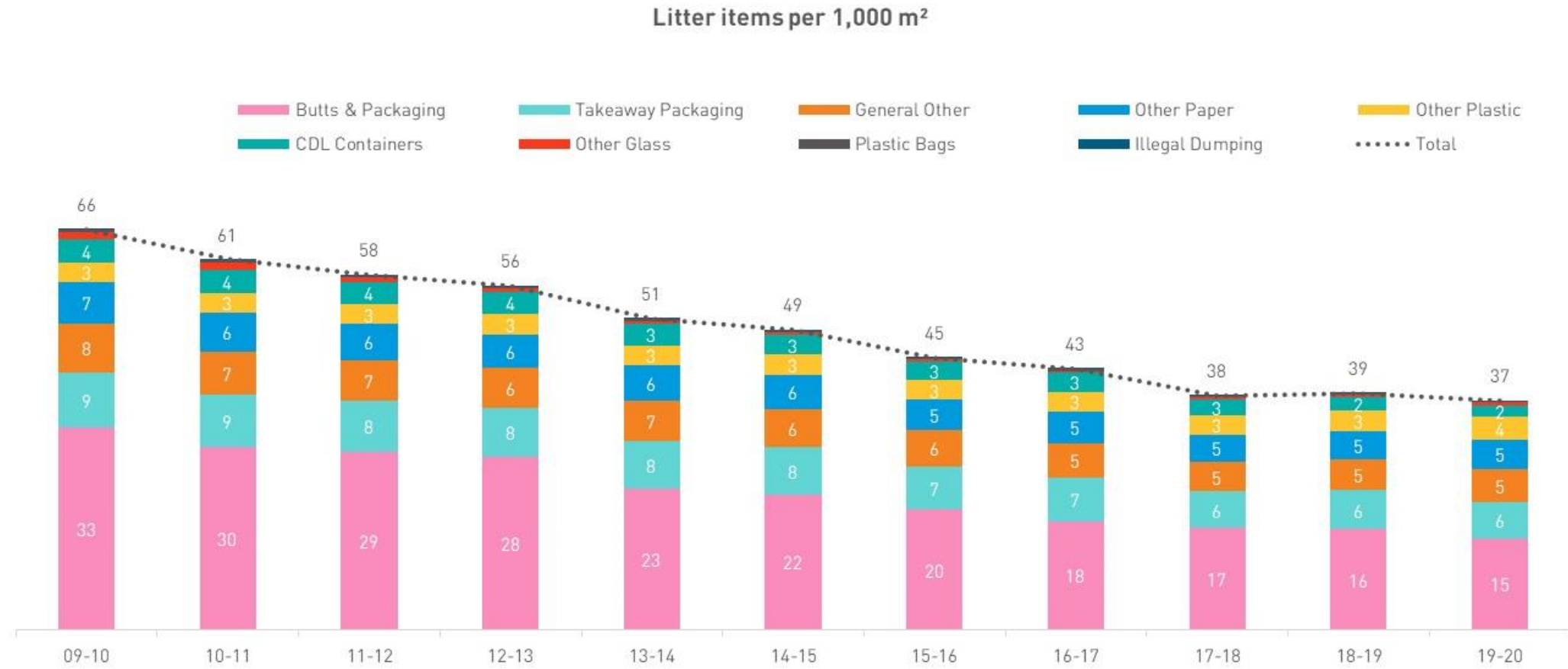


CONTRIBUTION TO CHANGE (LITTER ITEMS)



LITTER ITEMS PER 1,000m² BY CATEGORIES

Similar to the overall contribution, cigarette butts & packaging had the highest number of litter items per 1,000m² followed by takeaway packaging.



LITTER VOLUME BY CATEGORIES

There was a decrease in litter volume across categories with the exception of illegal dumping, other glass, paper and plastic litter.

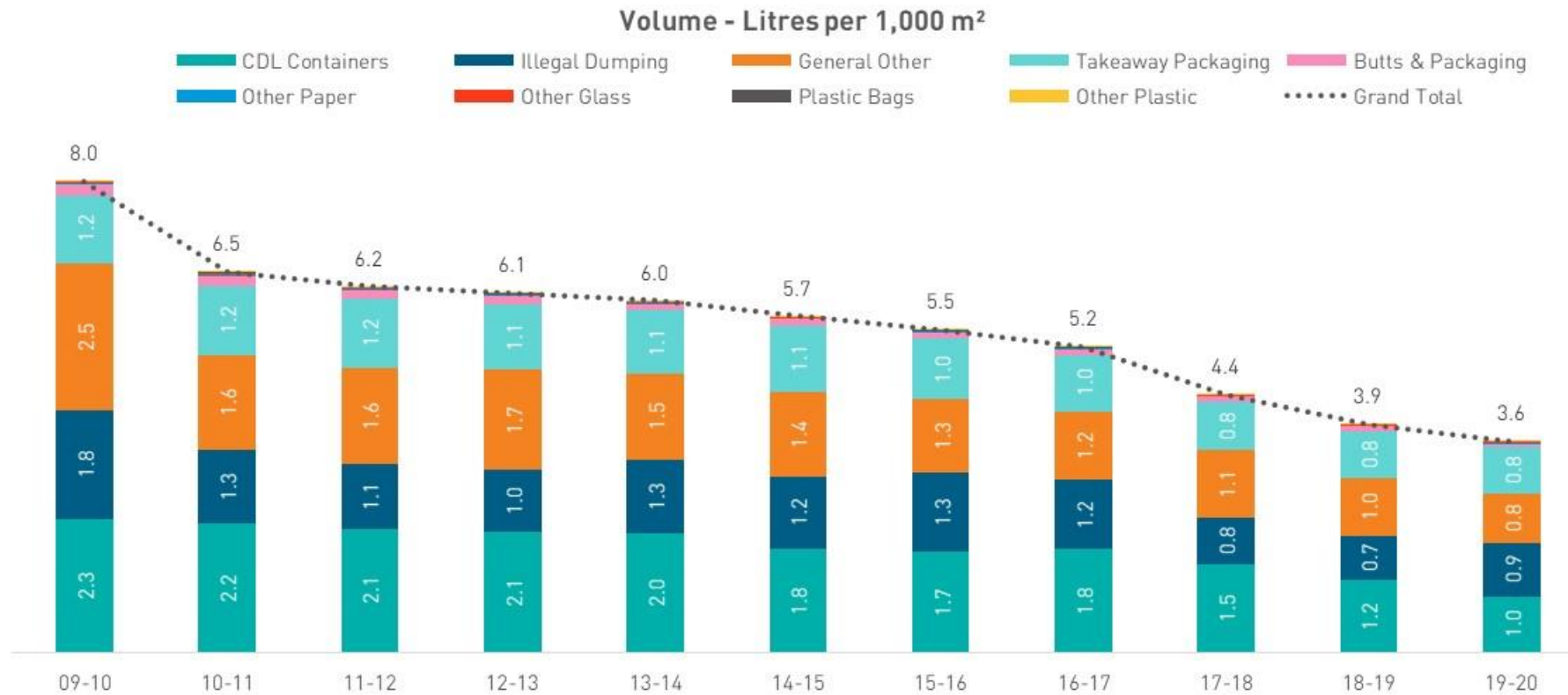
Volume - Litres



Change from 18-19



LITTER VOLUME PER 1,000m² BY CATEGORIES



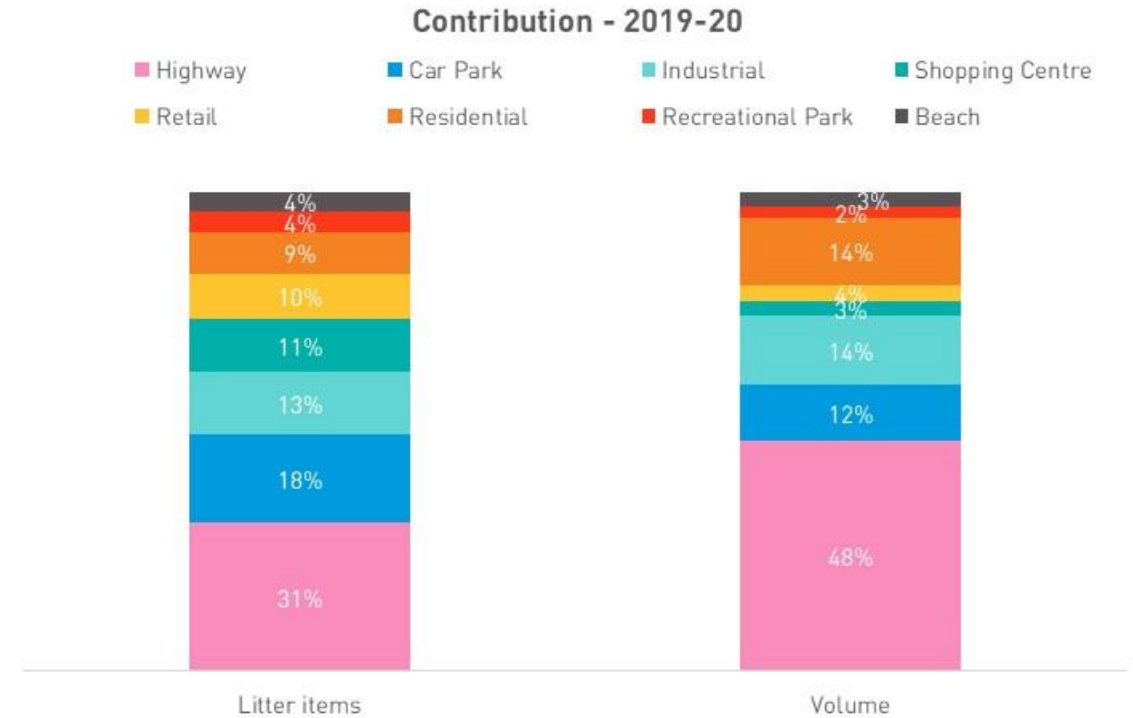


SITE TYPES

LITTER BY SITE TYPES

Highways (31%) and car parks (18%) were the main contributors towards litter items at a national level. However, in terms of volume, highways (48%) alone contributed to half the litter volume at a national level.

In terms of litter items per 1,000m², retail strips, shopping centres, industrial sites and car parks recorded higher numbers of litter items compared to the national average.



ITEMS PER 1,000M²

37
TOTAL

47
Car park

63
Industrial

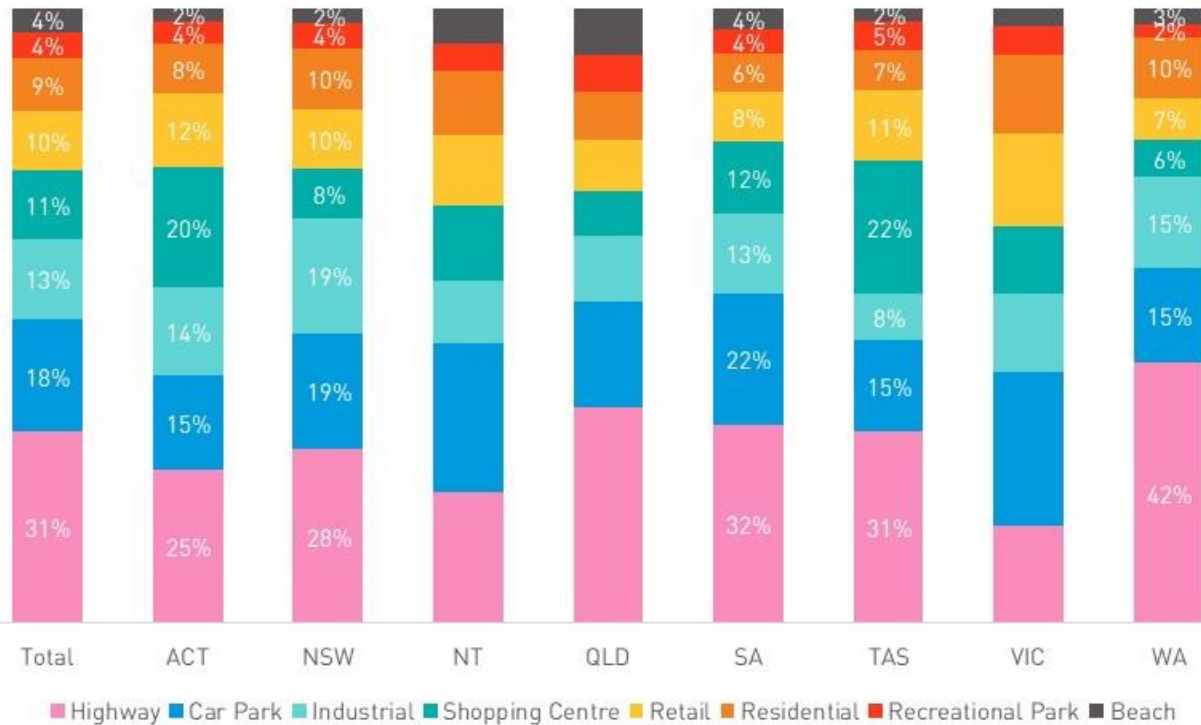
66
Shopping centre

67
Retail

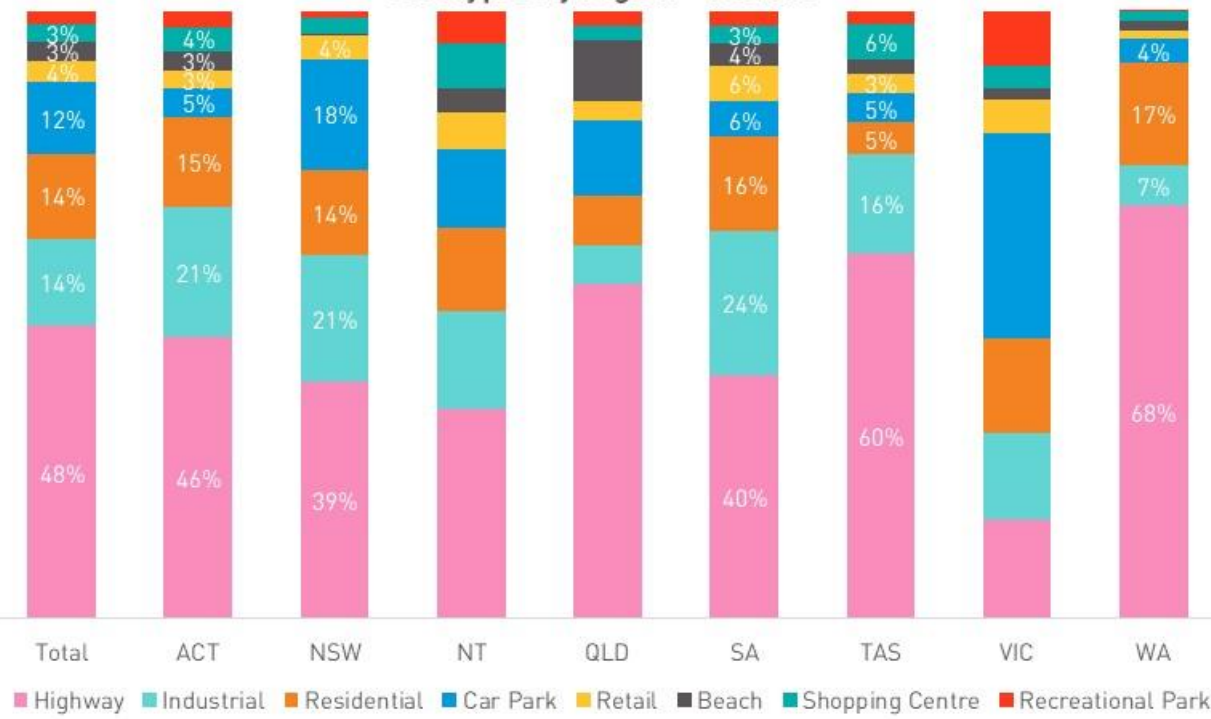
LITTER BY SITE TYPES X REGIONS

Queensland, SA and WA were associated with higher contributions from highways compared to the national average.

Site types by region - Items

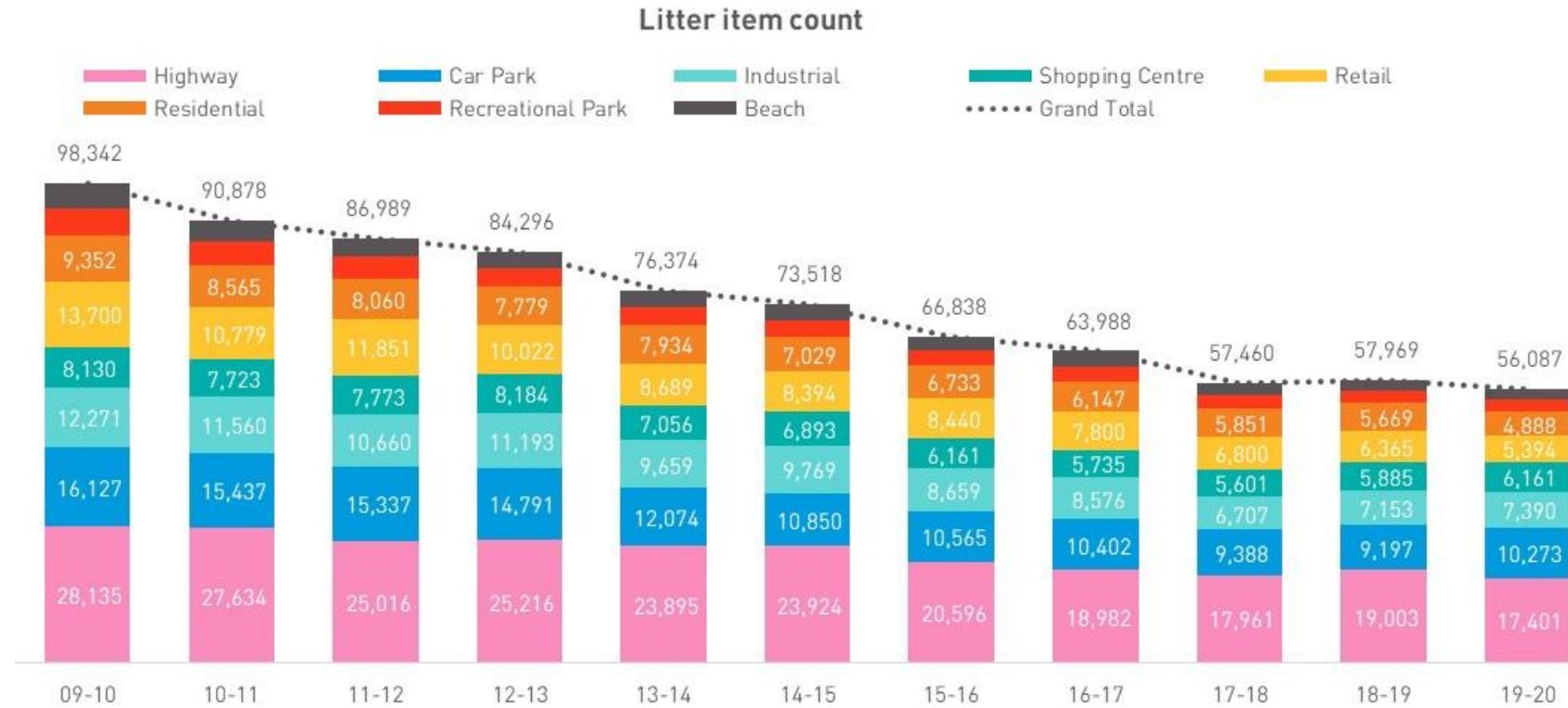


Site types by region - Volume



LITTER ITEMS BY SITE TYPES

Litter items decreased overall by 3.2% in 2019-20 compared to the previous year with reductions in litter items across all site types except industrial, car parks, beaches and shopping centres.



CHANGE FROM 2018-19

-8%
Highways

+3%
Industrial

+12%
Car park

+5%
Shopping centre

-15%
Retail

-14%
Residential

-5%
Recreational park

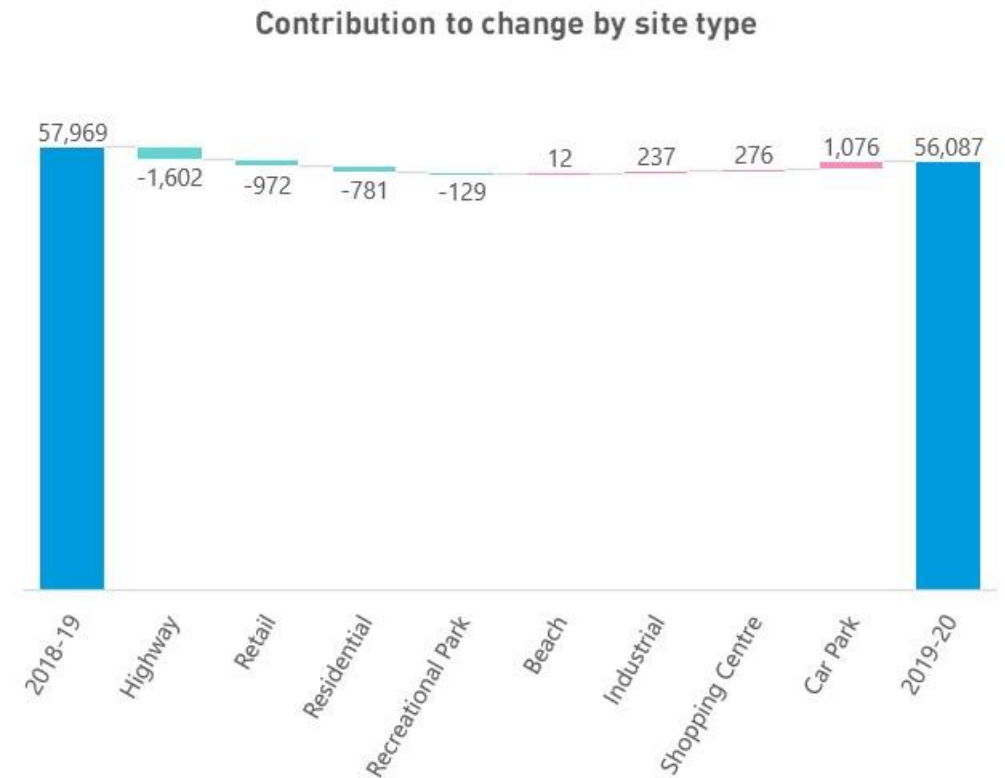
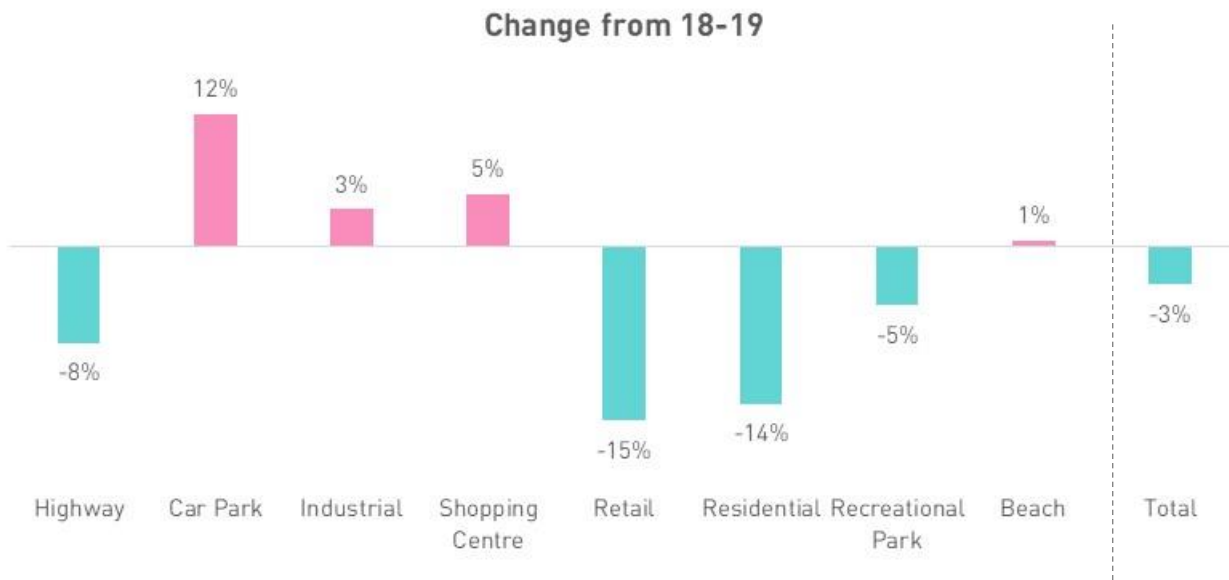
+1%
Beach

CHANGE IN LITTER ITEMS

Car parks recorded the highest increase in the number of litter items this year across all regions with the exception of WA and ACT.

There were increases in the litter at shopping centres recorded in Tasmania, Queensland, ACT and NT, while there were increases at Industrial sites in NSW, WA and Queensland.

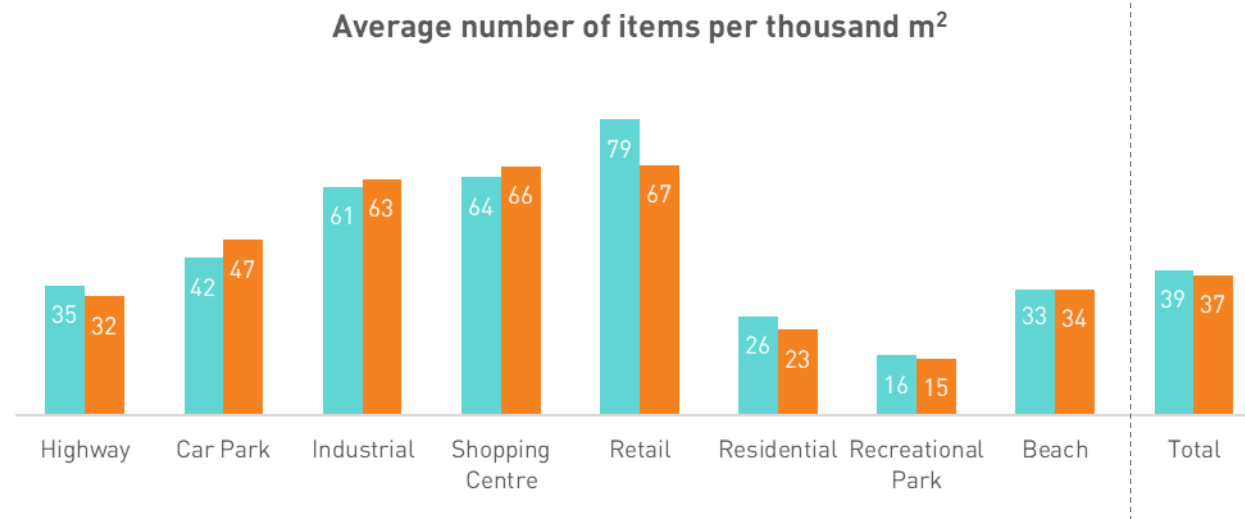
Litter at beaches increased only in Queensland, SA and WA.



LITTER ITEMS PER 1,000m² BY SITE TYPE

Industrial sites, shopping centres and retail precincts recorded a higher number of litter items per 1,000m².

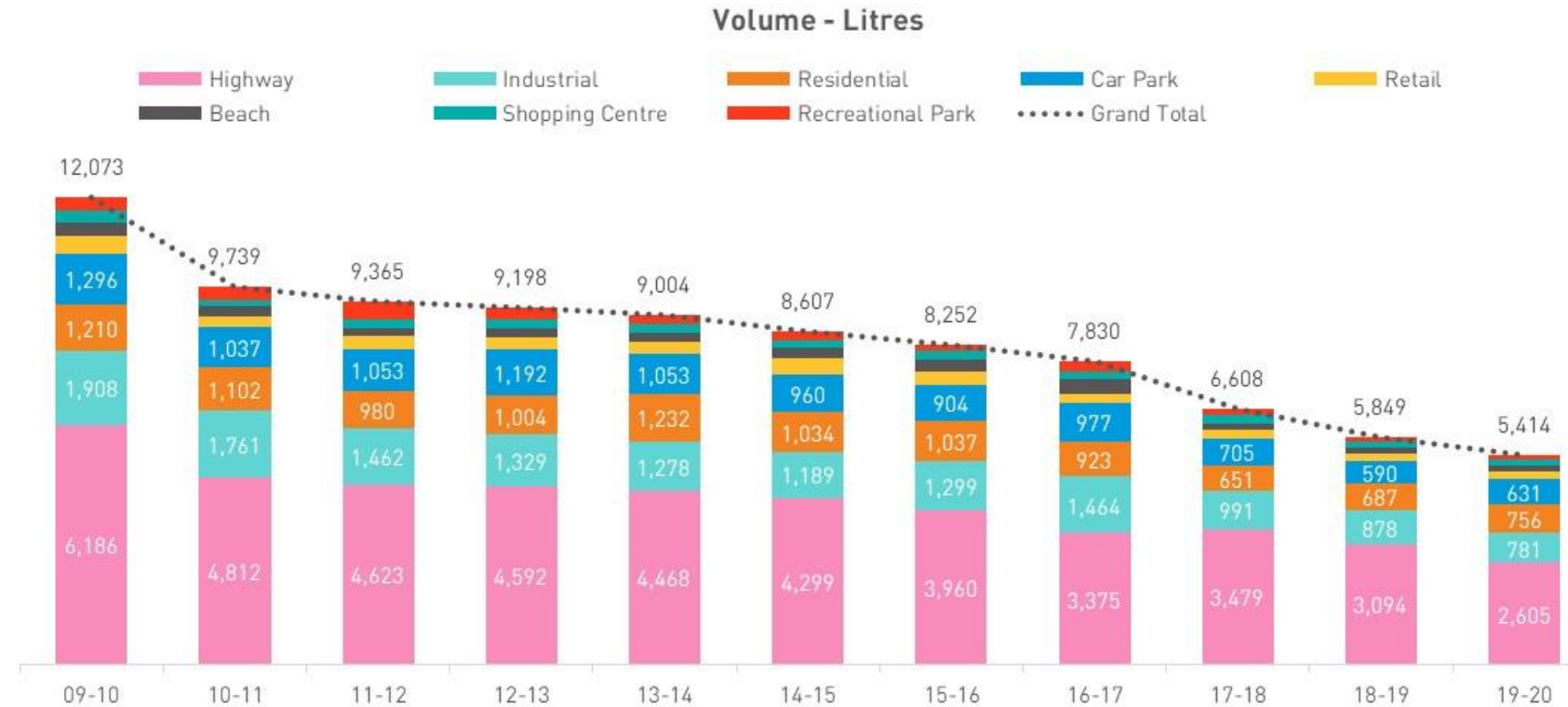
Car parks also recorded higher numbers of litter items when compared to the overall average.



LITTER VOLUME BY SITE TYPES

A reduction in the volume of litter was mainly associated with highways, industrial and retail sites while all other sites were associated with an increase in the volume of litter in 2019-20.

Industrial sites (6.6 litres) contributed the highest volume of litter per 1,000m² followed by highways (4.7 litres).



CHANGE FROM 2018-19

-16%
Highways

-11%
Industrial

+7%
Car park

+10%
Residential

-5%
Retail

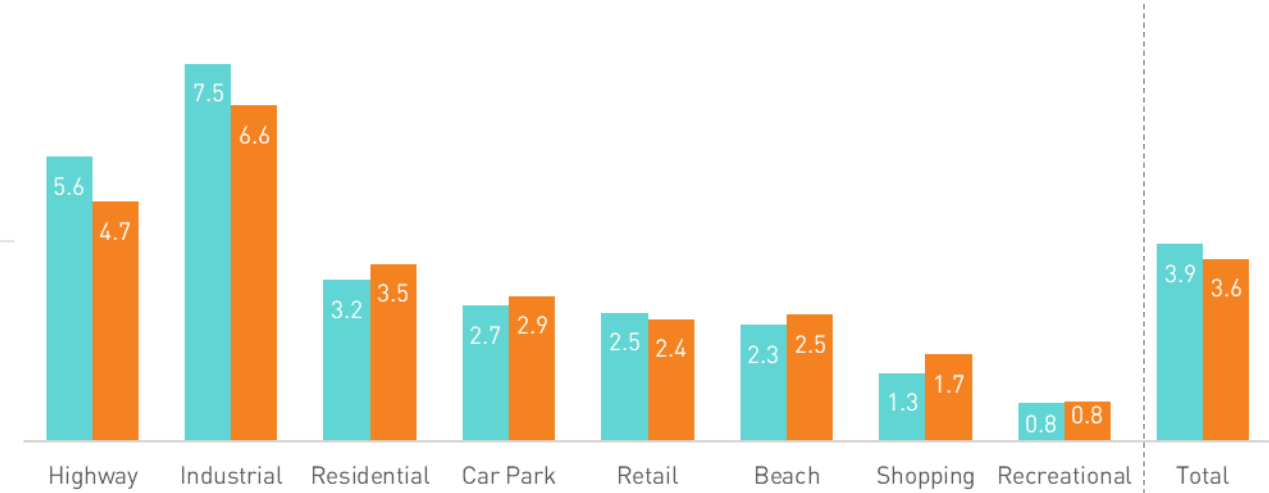
+28%
Shopping centre

LITTER VOLUME BY SITE TYPE

Change from 18-19



Average litres per thousand m²





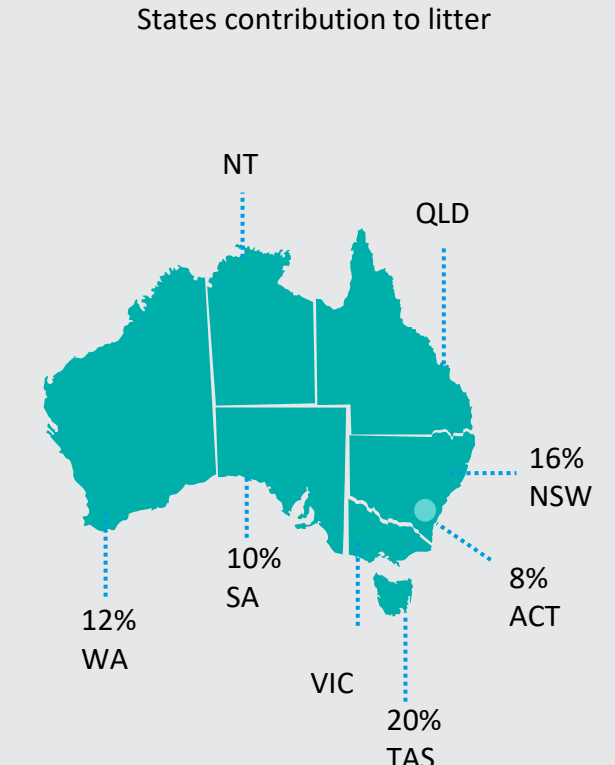
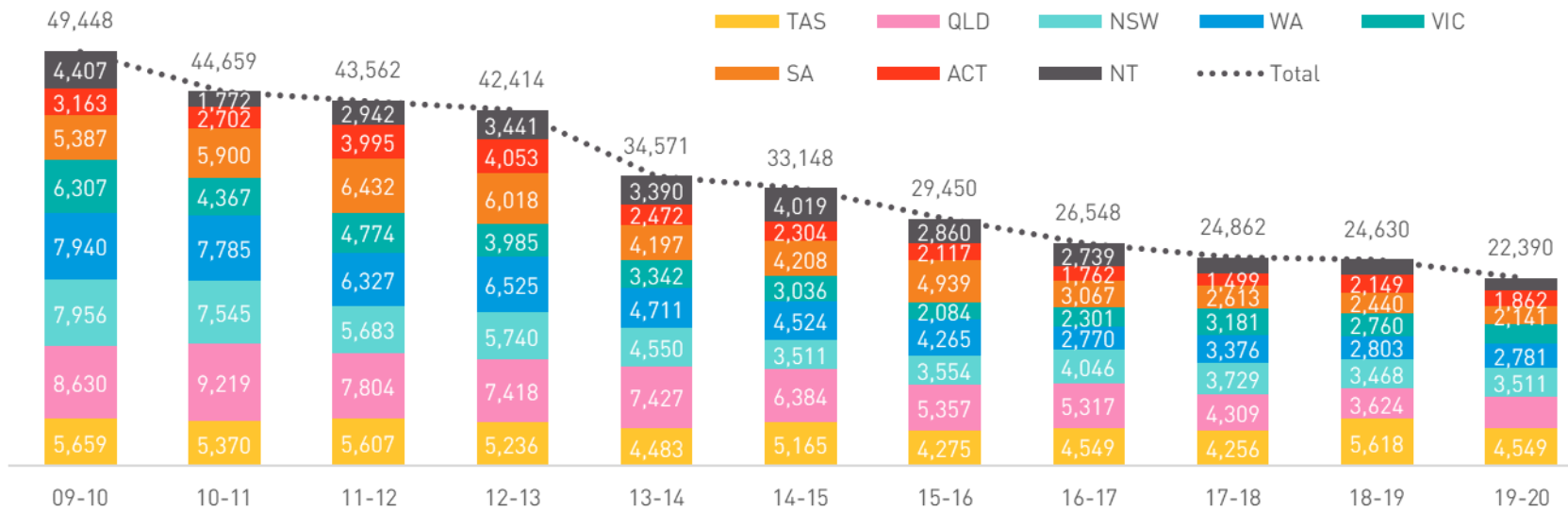
EVALUATING KEY CATEGORIES

BUTTS & PACKAGING

Butts & packaging contributed 40% of litter items and decreased by 9.1% in 2019-20 compared to last year. The contribution in terms of volume was low at 2% of the overall litter volume in 2019-20.

Tasmania (20%), Queensland and NSW (16%) contributed the highest counts of cigarette related litter.

Tasmania (46) recorded the highest number of cigarette related litter items per 1,000m².



22,390

(-9.1%)

litter items in 2019-20

15

(-1 items)

items per 1,000m²

92 litre

(-29.6%)

Litter volume in 2019-20

0.06 litre

(-0.03 litre)

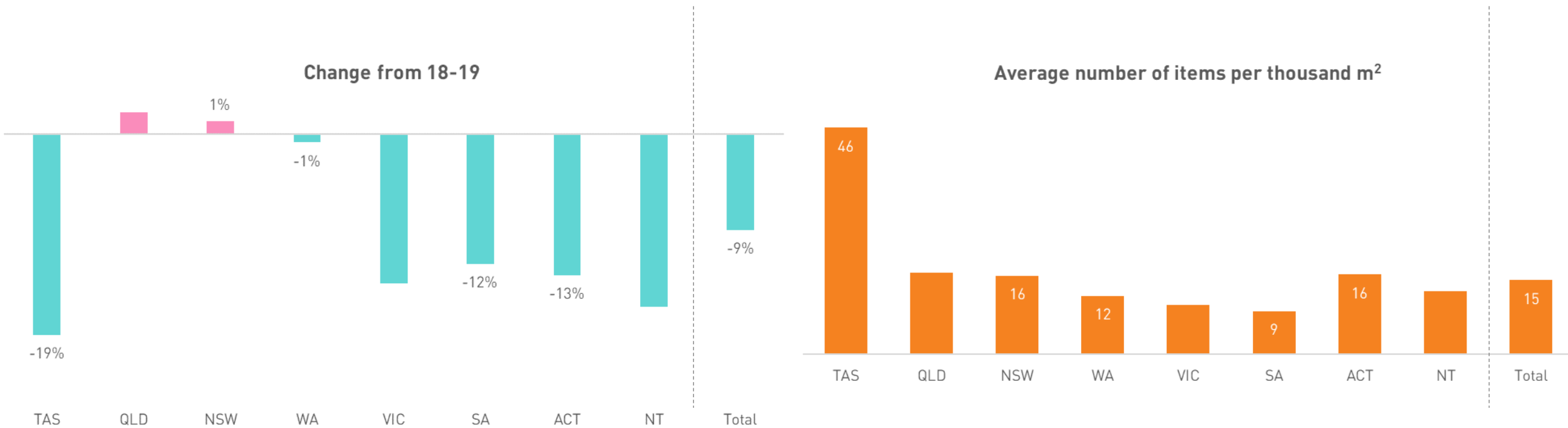
Volume per 1,000m²

BUTTS & PACKAGING (LITTER ITEMS)

The overall number of cigarette butts and packaging litter items reduced by 9.1% over the last year across most regions with the exception of Queensland and NSW.

Tasmania recorded three times the litter items for butts & packaging per 1,000m² compared to the national average.

ACT, Queensland and NSW also recorded a higher number of litter items per 1,000m² compared to the national average.

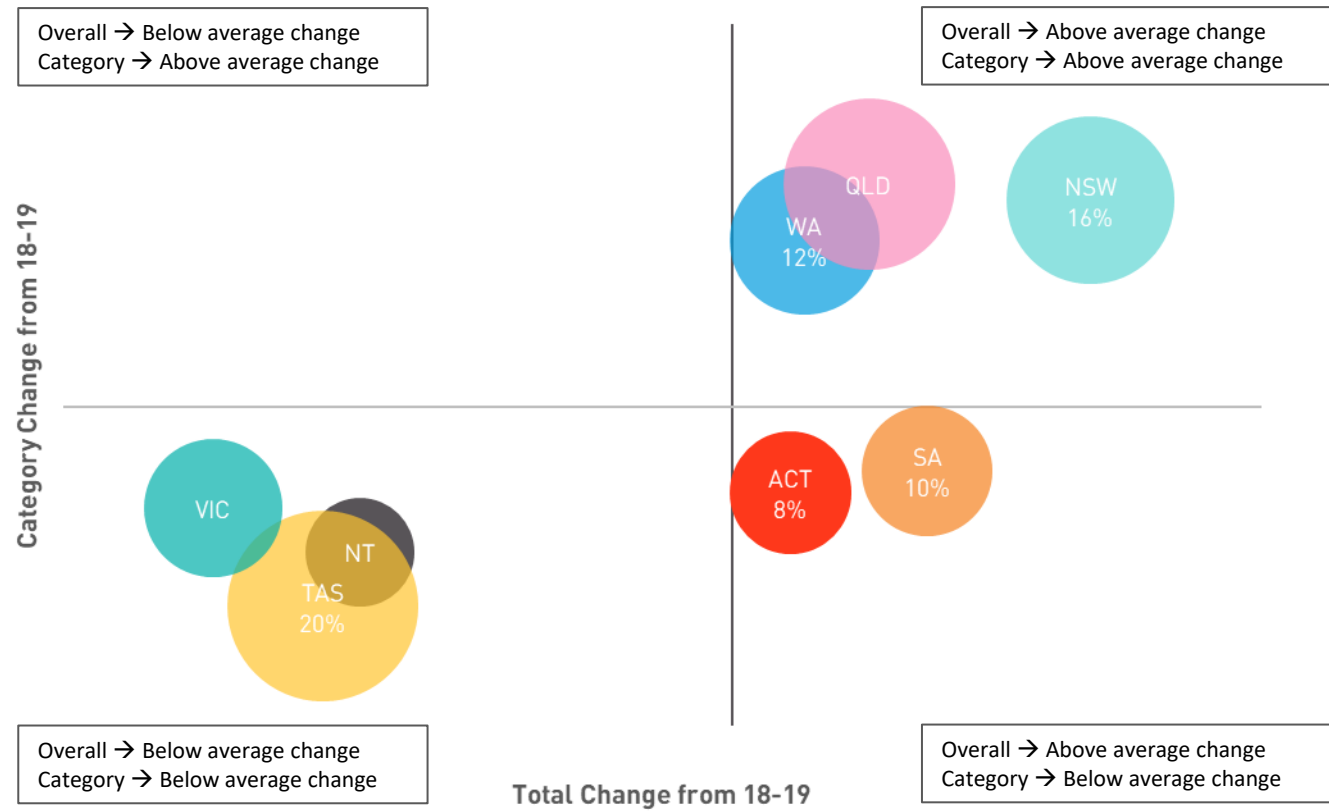
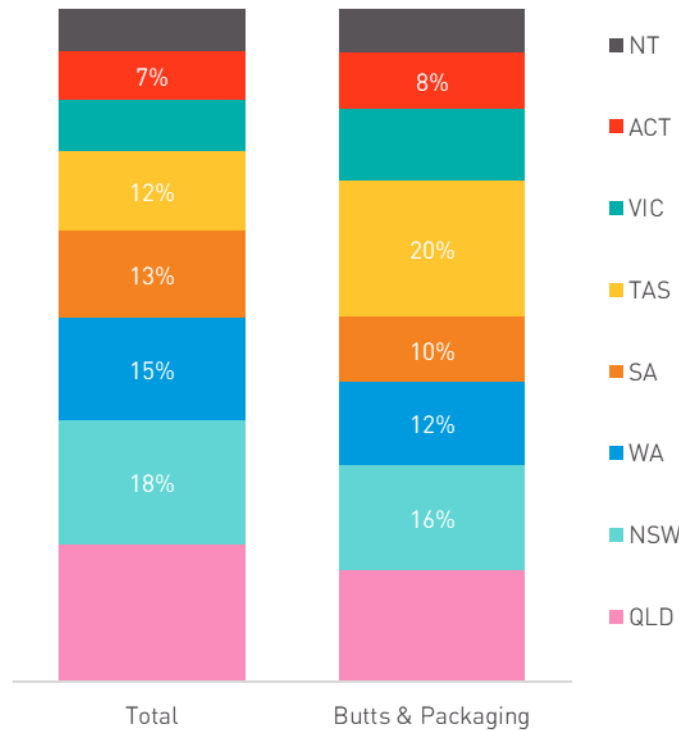


BUTTS & PACKAGING (LITTER ITEMS)

Prioritise focus on

- Queensland – high contributing, fastest growing site.
- NSW - high contributing, fast growing site.
- WA – rate of reduction lower than the overall national average.

Litter item contribution

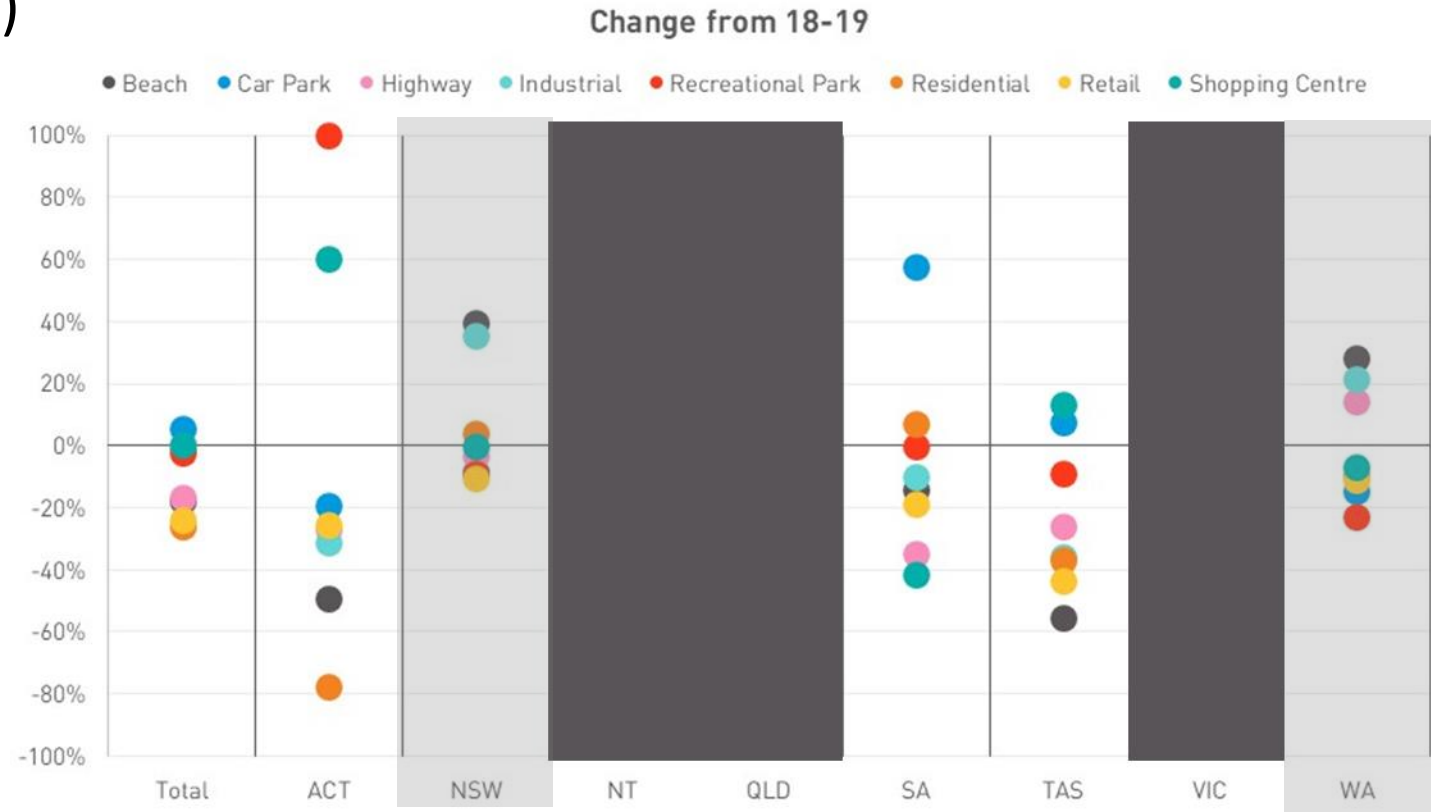


BUTTS & PACKAGING (LITTER ITEMS)

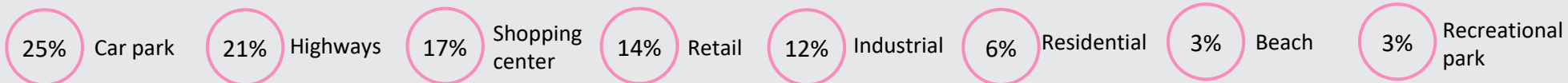
Increase in litter for butts & packaging at:

- NSW – Beach, industrial, residential.
- WA - Beach, highway, industrial.

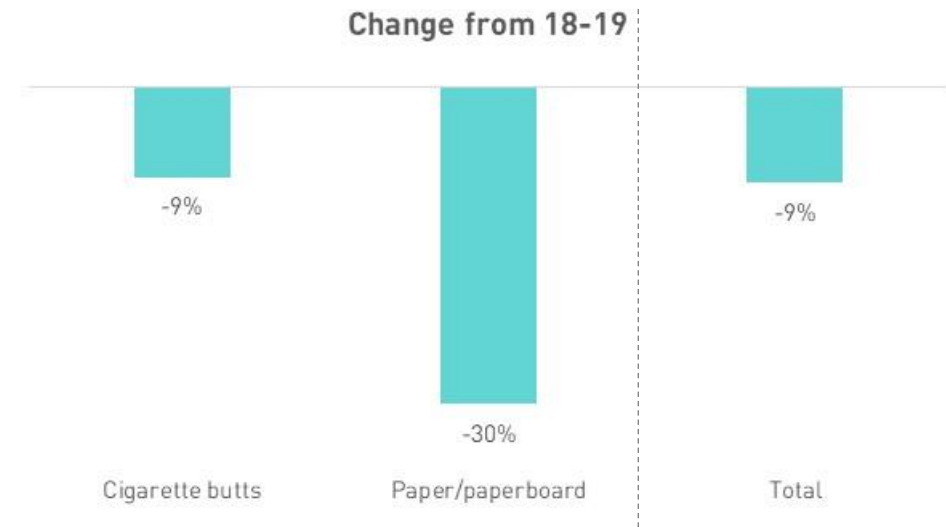
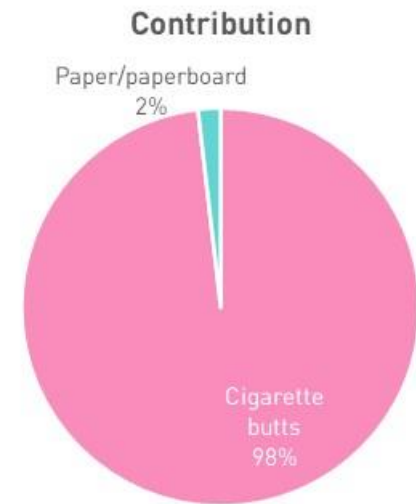
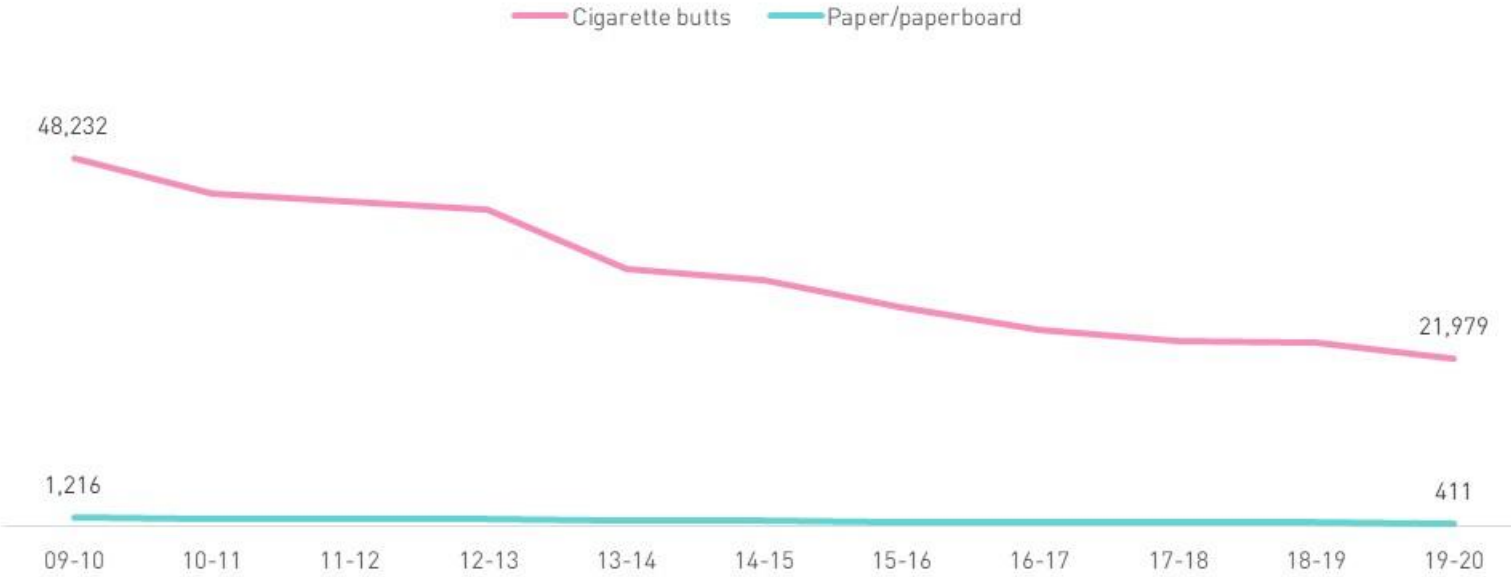
In addition, litter items increased at car parks across most regions except ACT, NSW and WA, and at shopping centres in ACT and Tasmania.



Sites contribution – National



BUTTS & PACKAGING – MATERIAL (LITTER ITEMS)

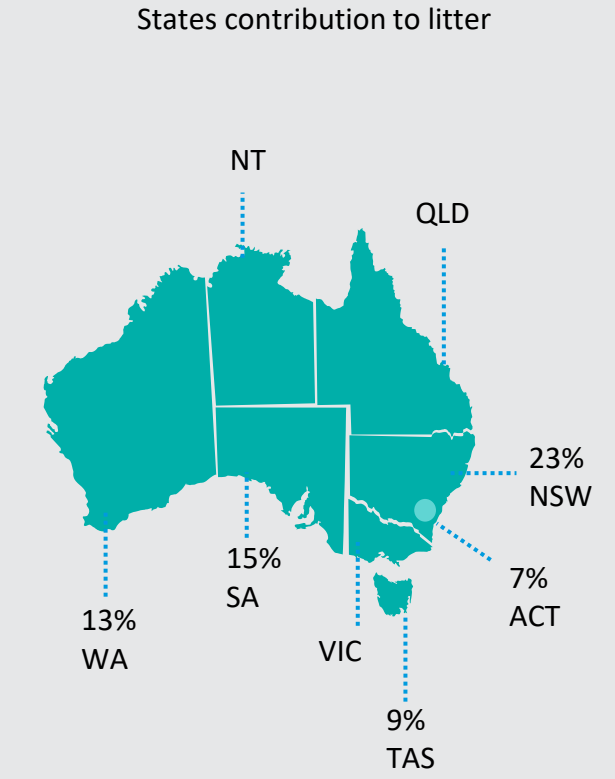
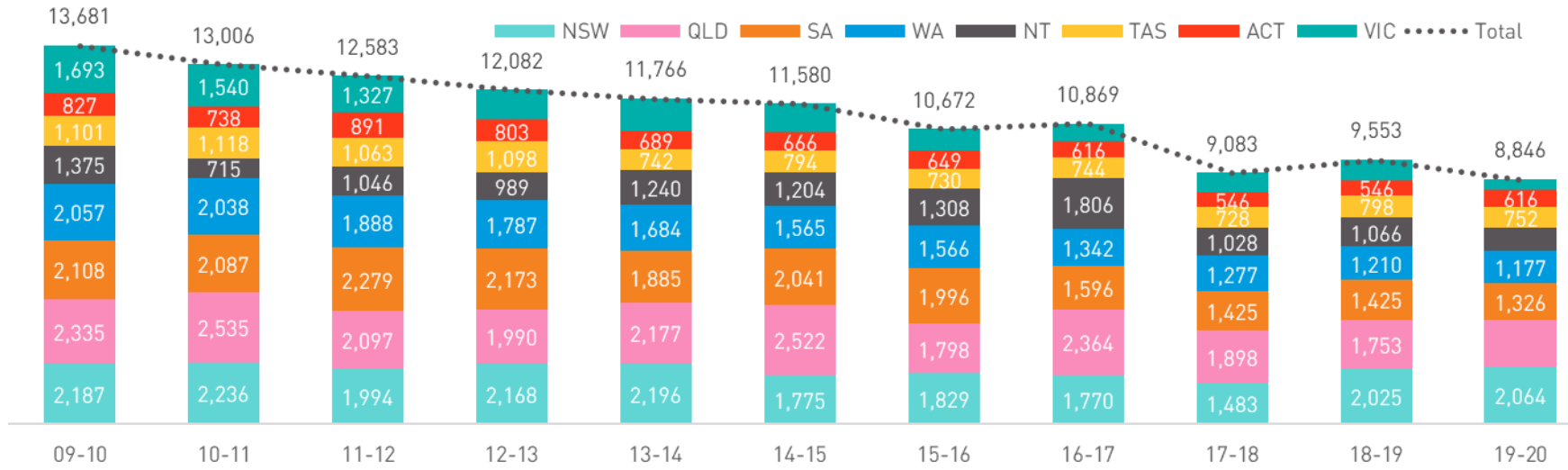


TAKEAWAY PACKAGING

Takeaway packaging contributed 16% of litter items and decreased by 7.4% in 2019-20 compared to last year. In terms of volume, takeaway packaging contributed 22% of overall litter volume in 2019-20, a decrease of 1.6% from the previous year.

NSW (23%), Queensland and SA (15%) contributed the most litter items for takeaway & packaging.

NSW, Queensland, Tasmania and NT had a higher than national average number of litter items per 1000 m².



8,846

(-7.4%)

litter items in 2019-20

5.9

(-0.5 items)

items per 1,000m²

1,180 litre

(-1.6%)

Litter volume in 2019-20

0.8 litre

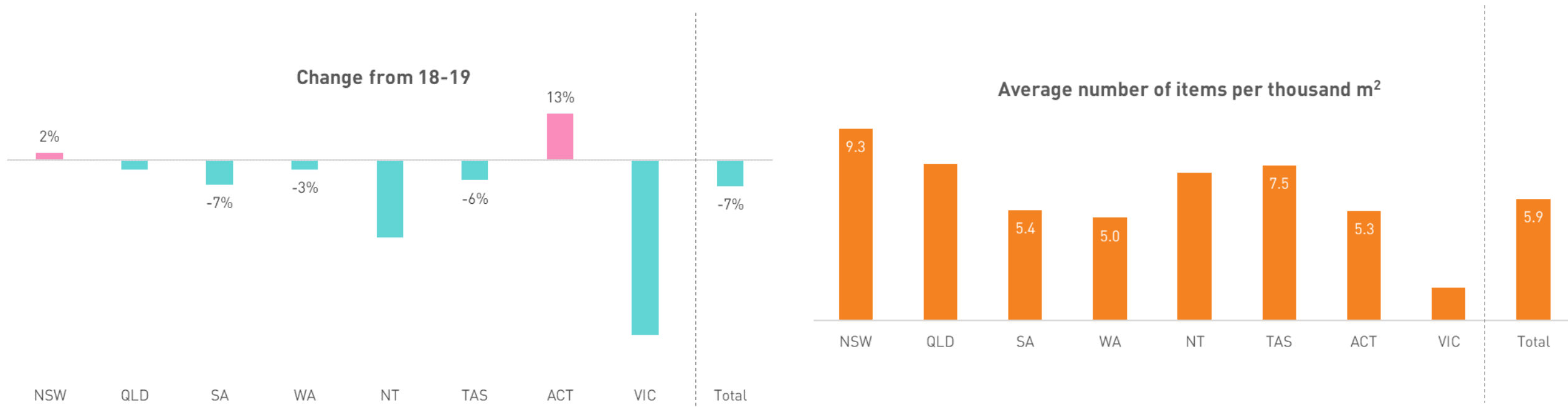
(-0.01 litre)

Volume per 1,000m²

TAKEAWAY PACKAGING (LITTER ITEMS)

The overall number of takeaway packaging litter items decreased by 7.4% over the last year with the reduction in litter items observed across most regions except NSW and ACT.

NSW was also associated with the highest number of takeaway packaging litter items per thousand metre square (9.3 items per 1,000m²).

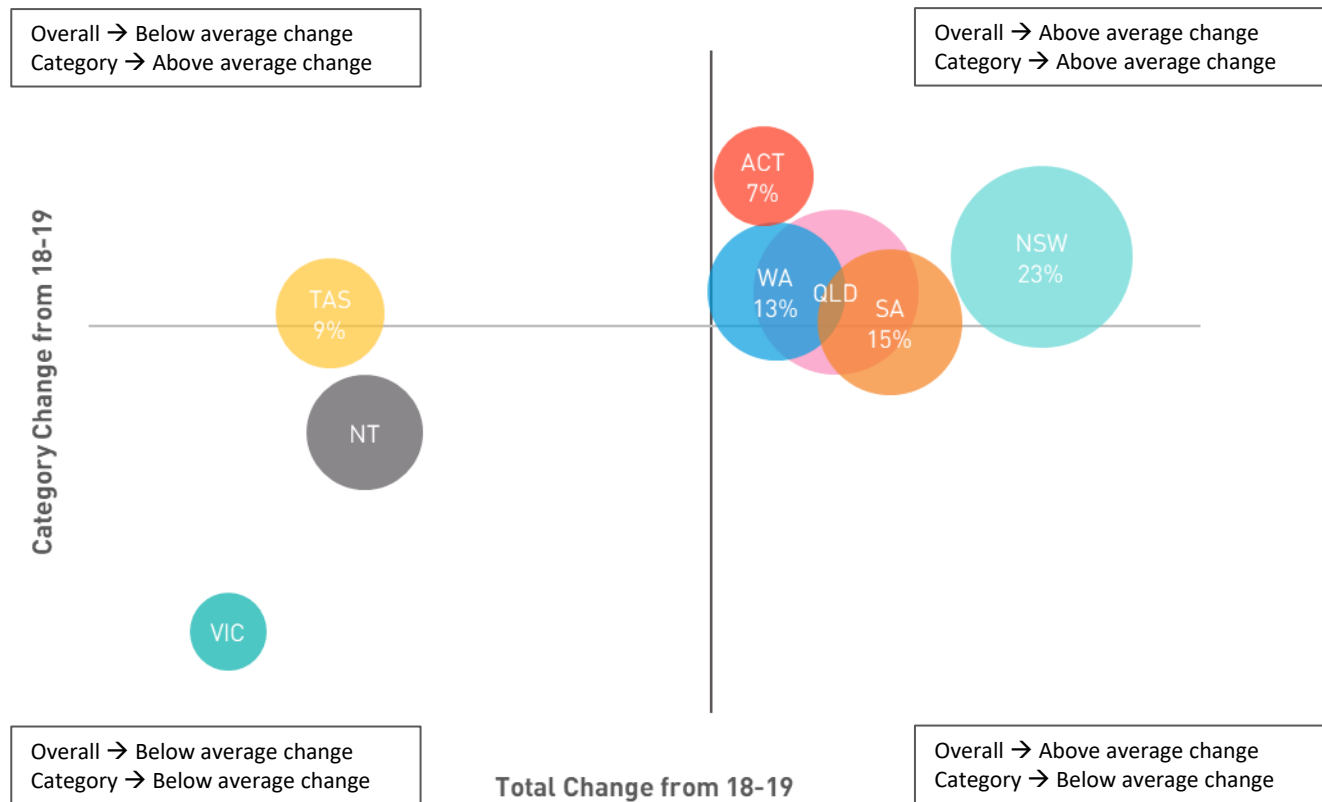
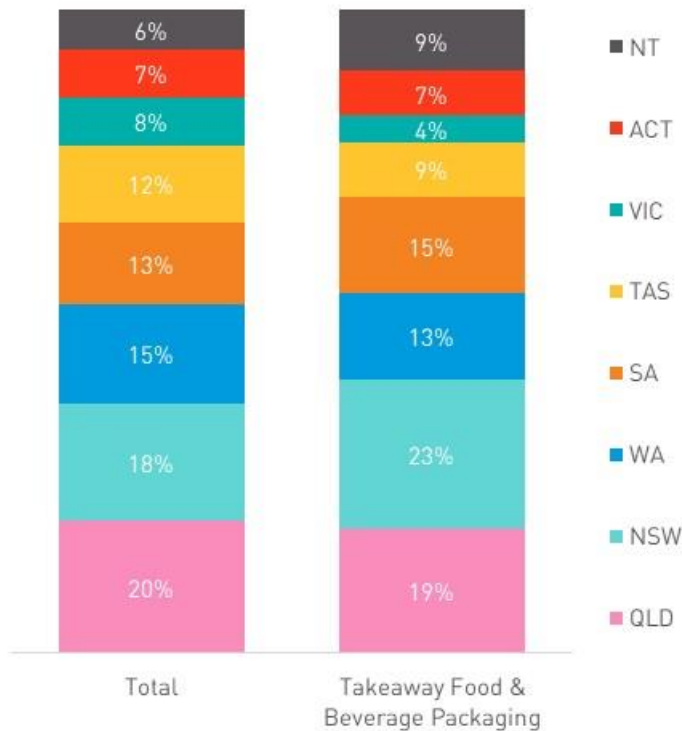


TAKEAWAY PACKAGING (LITTER ITEMS)

Prioritise focus on

- NSW – highest contributing, fast growing site.
- ACT– fastest growing.
- Queensland & WA – high contribution, decreasing at a slower than the national average.

Litter item contribution



TAKEAWAY PACKAGING (LITTER ITEMS)

Change from 18-19

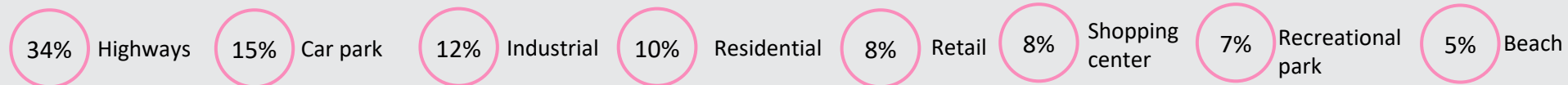
Increase in litter for takeaway packaging at:

- ACT – Across all site types except car park and industrial.
- NSW – Car park, industrial, residential.

In addition, litter items increased at highways in Tasmania and WA and car parks in SA and Tasmania.



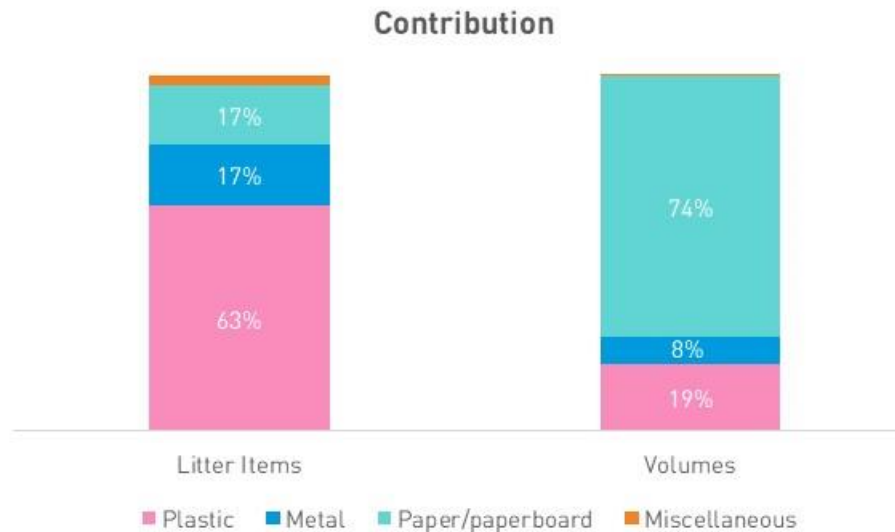
Sites contribution – National



TAKEAWAY PACKAGING MATERIAL

Plastic packaging items were the biggest contributor to overall takeaway packaging litter items and decreased by 9.2% over the last year.

However, in terms of volumes, paper / paperboard contributed the most and decreased by 3.0% this year.



-9.2%
Item change for Plastic

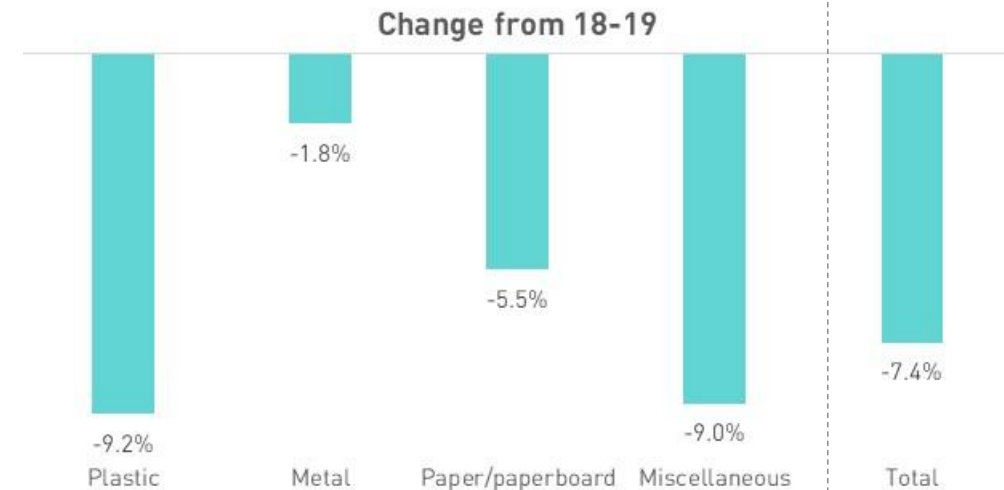
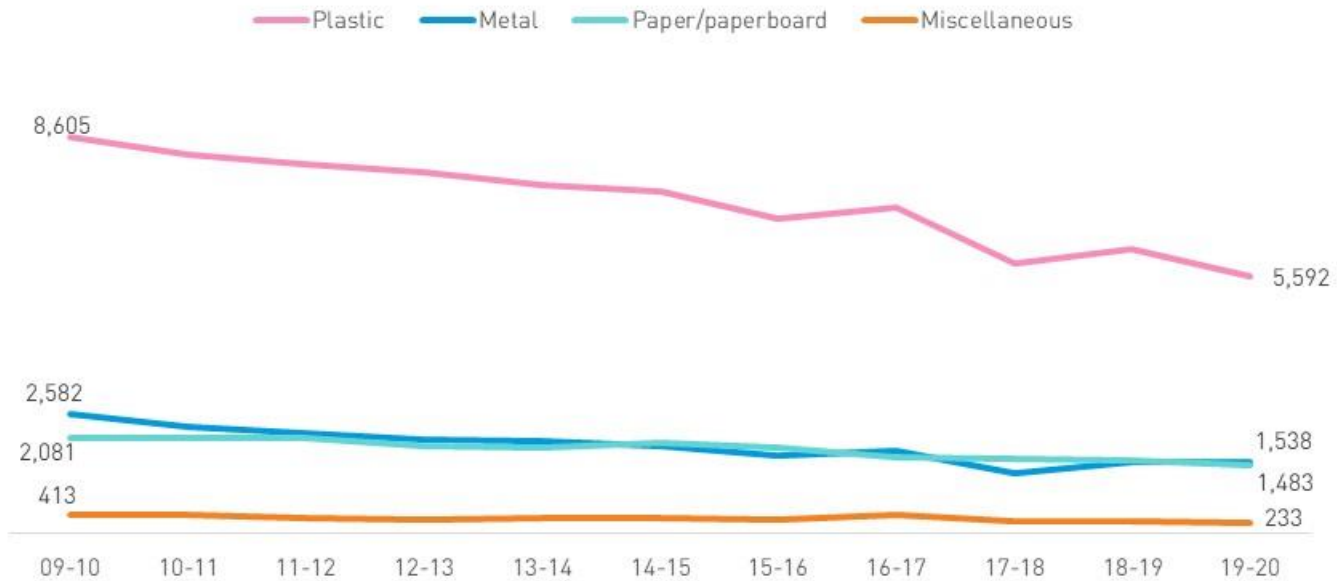
-1.8%
Item change for Metal

-5.5%
Item change for Paper /
paperboard

-3.0%
Volume change Paper /
paperboard

TAKEAWAY PACKAGING MATERIAL (LITTER ITEMS)

The reduction in litter items in 2019-20 was driven by decreased litter for all takeaway packaging types.



TAKEAWAY PACKAGING MATERIAL (LITTER ITEMS) – BY SITE TYPE

While the litter items decreased at a national level across takeaway packaging types, there was an increase in plastic litter items in NSW, ACT; metal items across regions and paper / paperboard packaging in ACT.

PLASTIC	Contribution in 19-20	Change from 18-19
NSW	23%	3%
QLD		
SA	15%	-14%
WA	13%	-6%
NT		
TAS	9%	-10%
ACT	7%	15%
VIC		
TOTAL		-9%

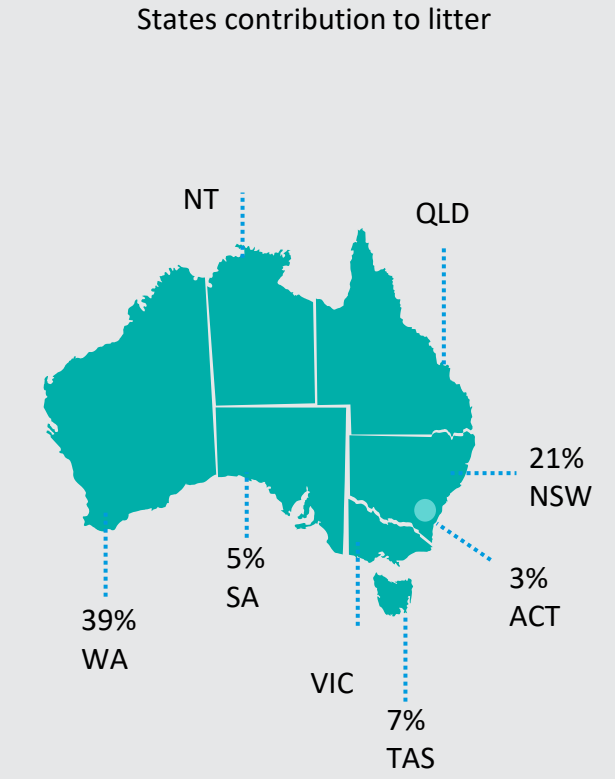
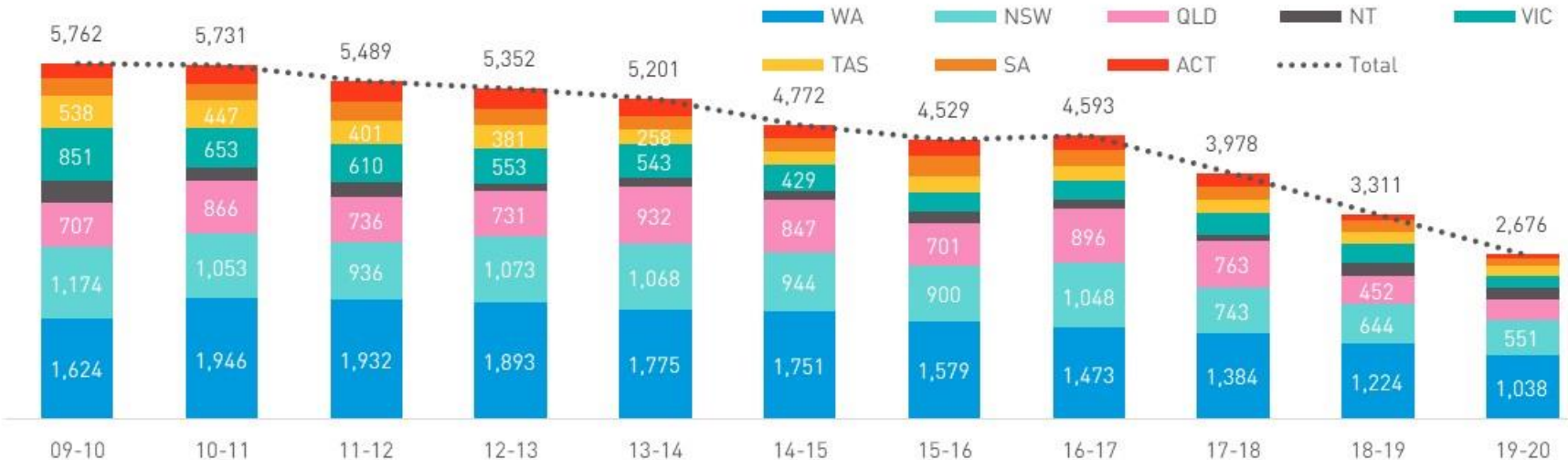
METAL	Contribution in 19-20	Change from 18-19
NSW	19%	15%
QLD		
SA	17%	34%
WA	13%	3%
NT		
TAS	10%	25%
ACT	7%	18%
VIC		
TOTAL		-2%

PAPER / PAPERBOARD	Contribution in 19-20	Change from 18-19
NSW	26%	-9%
QLD		
WA	17%	0%
SA	14%	-15%
ACT	9%	2%
NT		
TAS	5%	-1%
VIC		
TOTAL		-6%

CDL BEVERAGE CONTAINERS

CDL beverage containers contributed 5% of litter items and decreased by 19.2% this year, while in terms of volumes it contributed the largest volume (27%) and decreased by 22.3%.

More than a third of litter items counted for CDL beverage containers were from WA (39%) followed by NSW (21%). These states also had the highest number of litter items per 1000 m².



2,676

(-19.2%)

litter items in 2019-20

1.8

(-0.4 items)

items per 1,000m²

1,454 litre

(-22.3%)

Litter volume in 2019-20

1 litre

(-0.3 litre)

Volume per 1,000m²

CDL BEVERAGE CONTAINERS

There was a decrease in the litter items for CDL beverage containers (-19.2%) compared to last year. The decrease was recorded across all regions except NT which remains static.

Change from 18-19



Average number of items per thousand m²

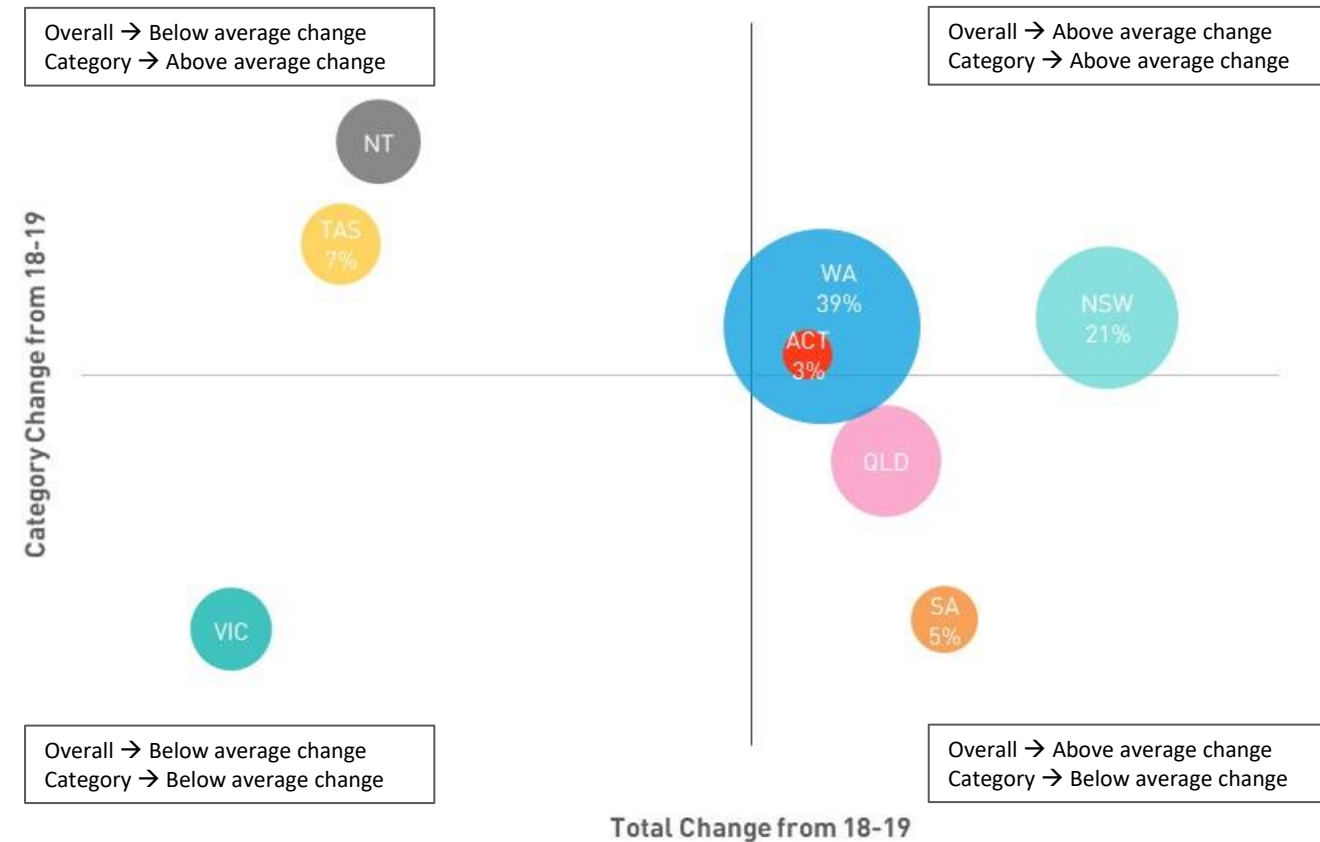
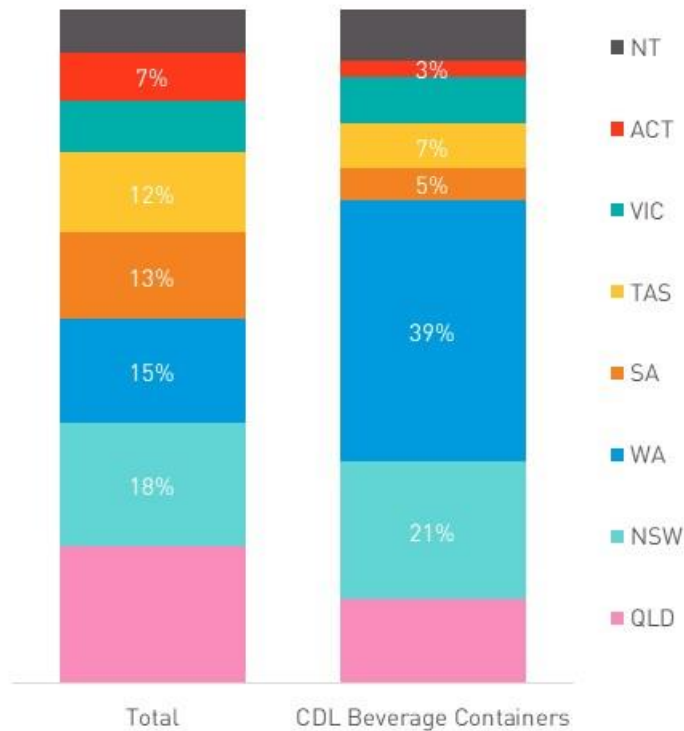


CDL BEVERAGE CONTAINERS

Prioritise focus on

- WA – highest contributing, decreasing at a slower rate (-15.2%) when compared to national average (-19.2%).
- NT – Overall litter items in NT declining while litter for CDL is static

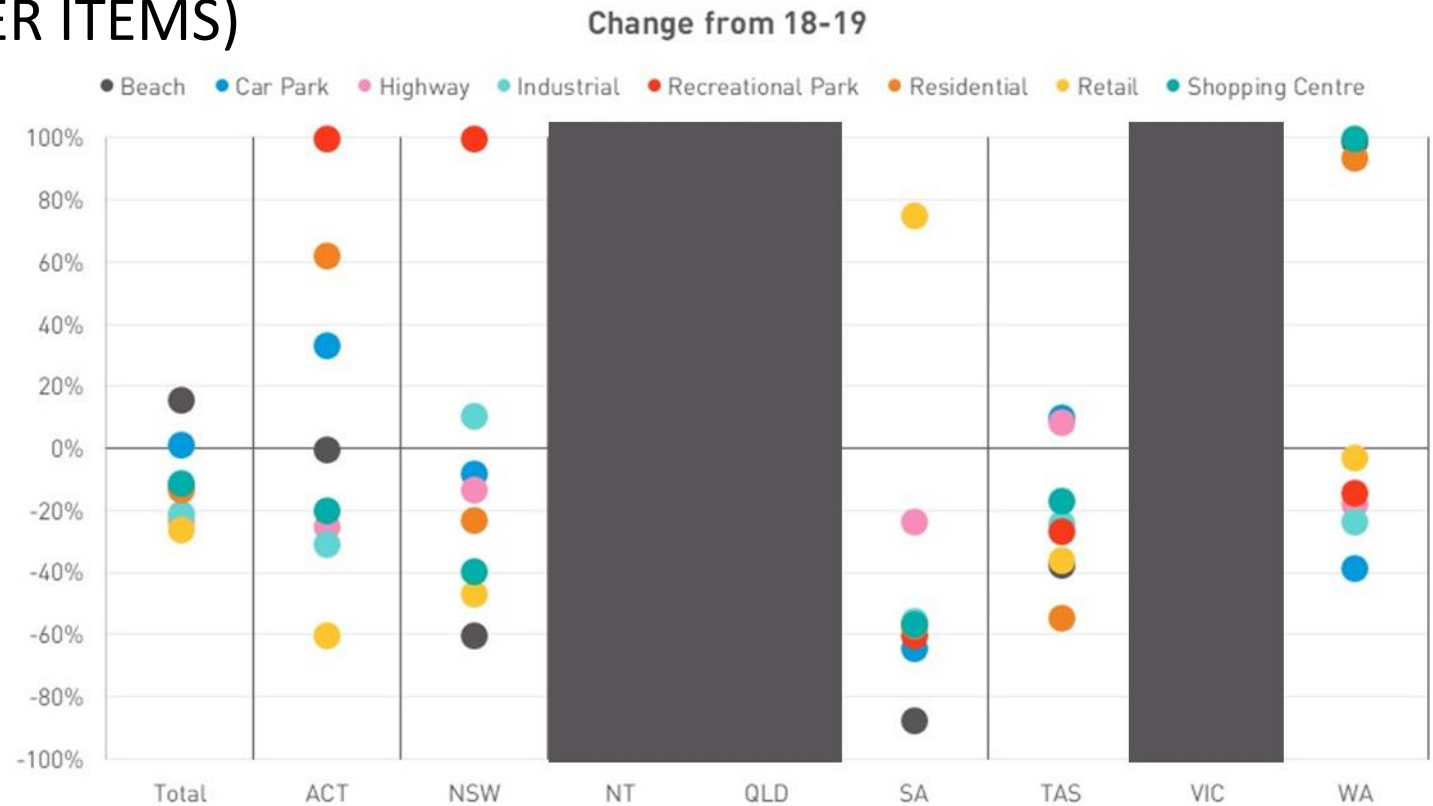
Litter item contribution



CDL BEVERAGE CONTAINERS (LITTER ITEMS)

While the litter items for CDL beverage containers decreased at an overall level across regions, there was an increase recorded at :

- Highways in Tasmania.
- Industrial in NSW.
- Car parks across most regions except NSW, WA, SA.
- Beaches in WA.



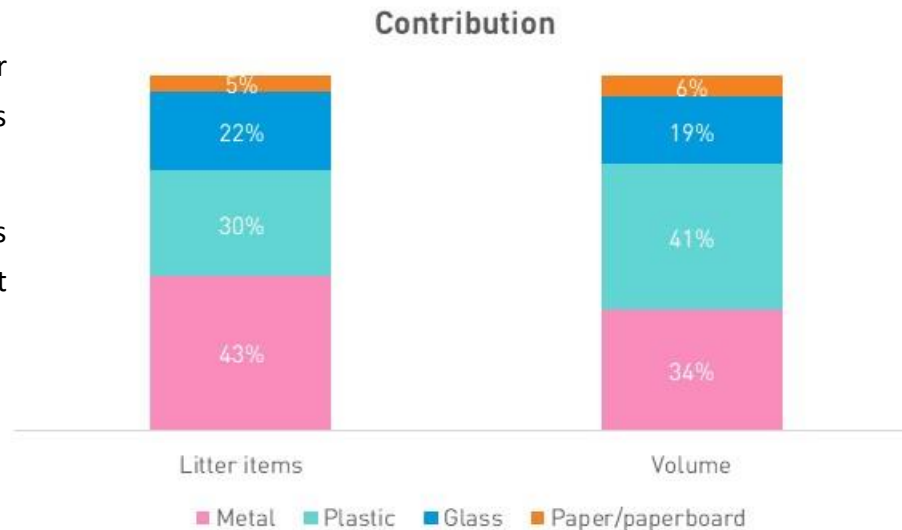
Sites contribution – National



CDL BEVERAGE CONTAINERS MATERIAL

Metal (43%) contributed the most to litter items for CDL beverage containers followed by plastic items (30%).

There was a sharp decrease in the litter items across packaging types for CDL beverage containers except glass items which increased by 5.0% in this year.



-20%

Item and volume change for Metal

-29%

Item and volume change for Plastic

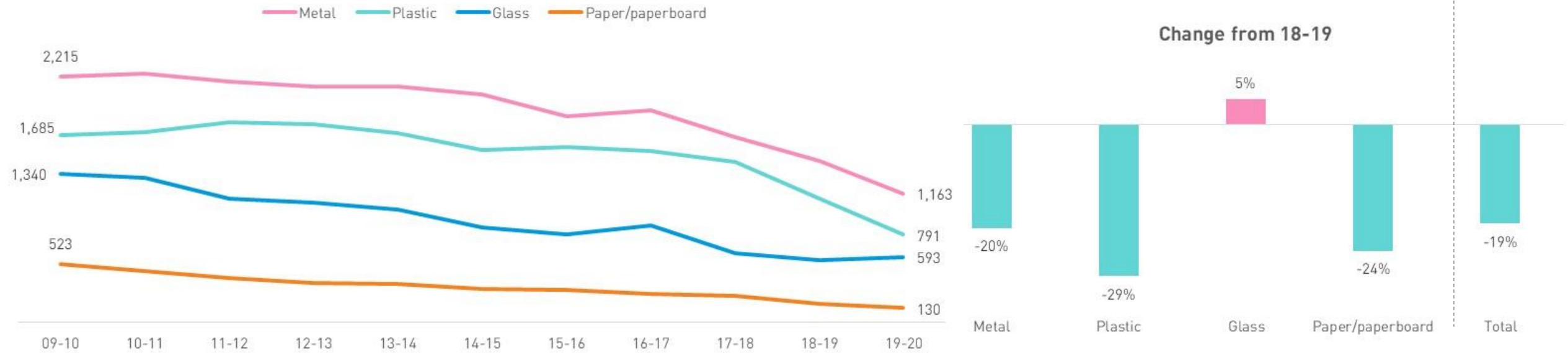
+5%

Item change for Glass

-7%

Volume change for Glass

CDL BEVERAGE CONTAINERS MATERIAL (LITTER ITEMS)



CDL BEVERAGE CONTAINERS MATERIAL (LITTER ITEMS) BY SITE TYPE

The increase for glass items for CDL beverage containers was recorded in NSW and Tasmania

METAL	Contribution in 19-20	Change from 18-19
WA	39%	-14%
NSW	21%	-7%
TAS	9%	-14%
SA	5%	-17%
ACT	3%	-21%
Total		-20%

GLASS	Contribution in 19-20	Change from 18-19
WA	34%	-13%
NSW	16%	43%
SA	6%	-40%
TAS	4%	31%
ACT	1%	-27%
TOTAL		5%

PLASTIC	Contribution in 19-20	Change from 18-19
WA	43%	-17%
NSW	20%	-40%
TAS	5%	-7%
SA	4%	-56%
ACT	3%	-17%
TOTAL		-29%

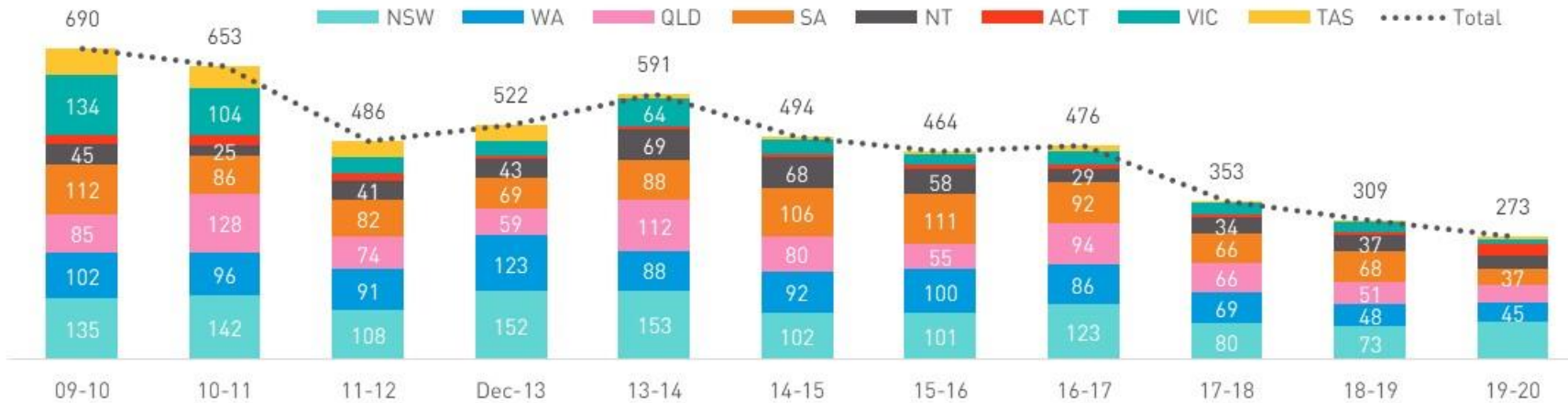
PAPER / PAPERBOARD	Contribution in 19-20	Change from 18-19
NSW	39%	10%
WA	29%	-24%
SA	7%	-53%
TAS	5%	-25%
ACT	2%	200%
TOTAL		-24%

PLASTIC BAGS

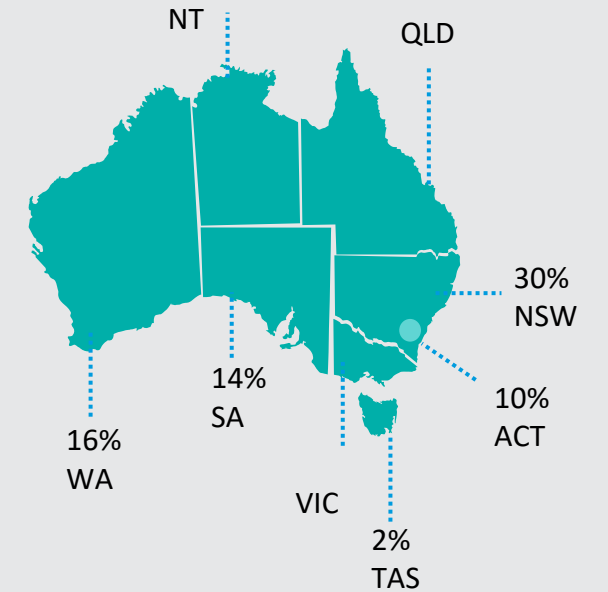
Plastic bags contributed to less than 1% of litter – both in terms of items (0.5%) and volume (0.2%). Plastic bag litter items decreased by 11.8% this year.

NSW (30%), WA (16%), Queensland and SA (14%) were associated with a higher contribution of plastic bag litter compared to other regions.

NSW also recorded the highest litter items per 1,000m².



States contribution to litter



273

(-11.8%)

litter items in 2019-20

0.2

items per 1,000m²

13 litre

(-17.1%)

Litter volume in 2019-20

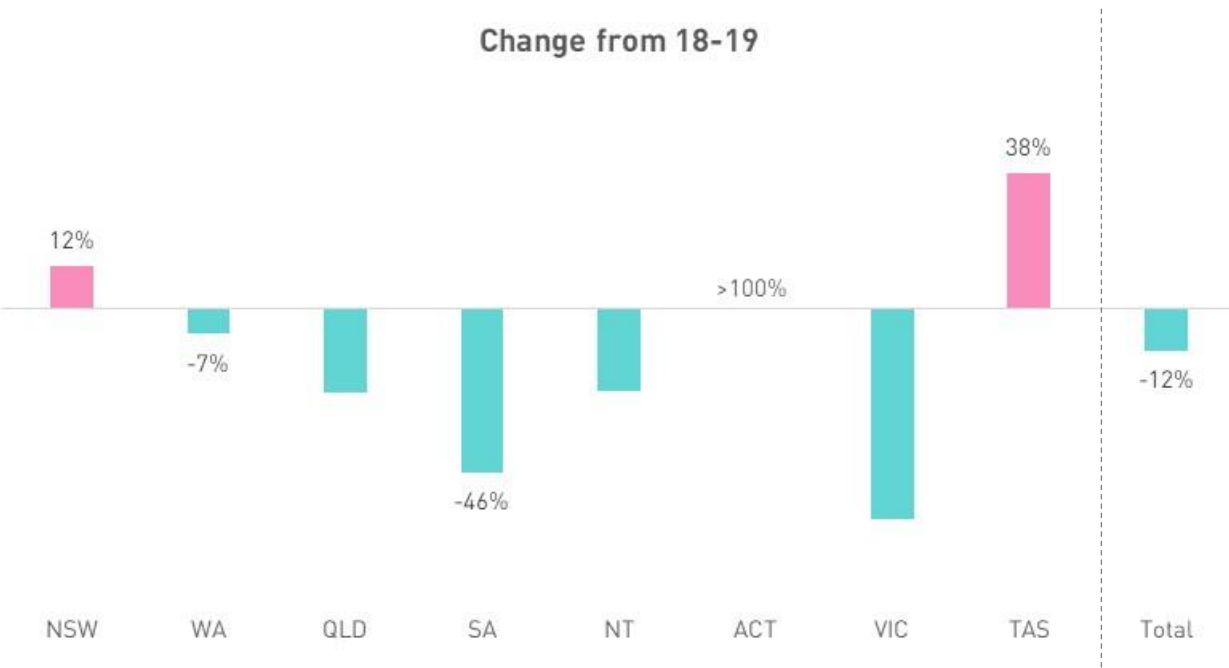
0.01 litre

Volume per 1,000m²

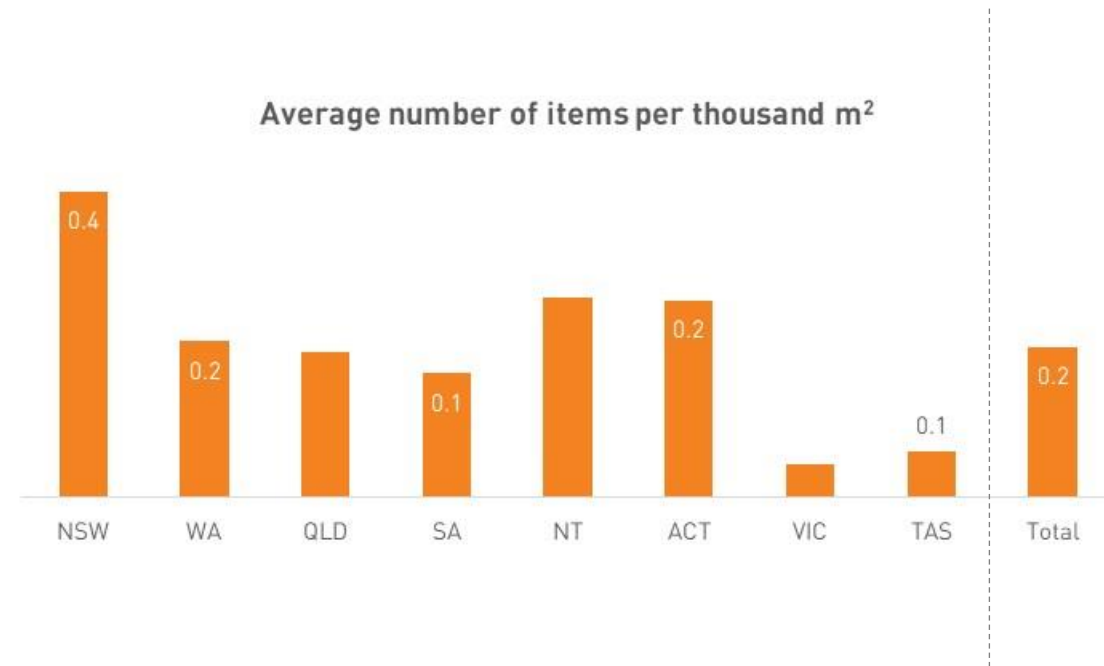
PLASTIC BAGS (LITTER ITEMS)

The reduction in litter items was recorded across most states except NSW, ACT and Tasmania.

Change from 18-19



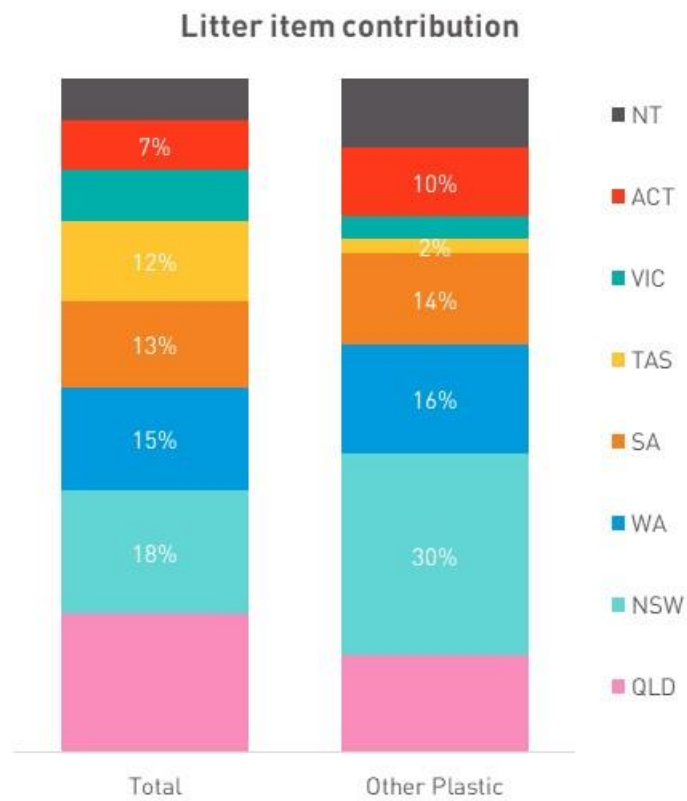
Average number of items per thousand m²



PLASTIC BAGS (LITTER ITEMS)

Priority order:

- NSW – highest contributing, fast growing.
- ACT – fastest growing for plastic bags while overall litter in ACT decreased (-1.8%).



PLASTIC BAGS (LITTER ITEMS)

Increase in litter for plastic bags at:

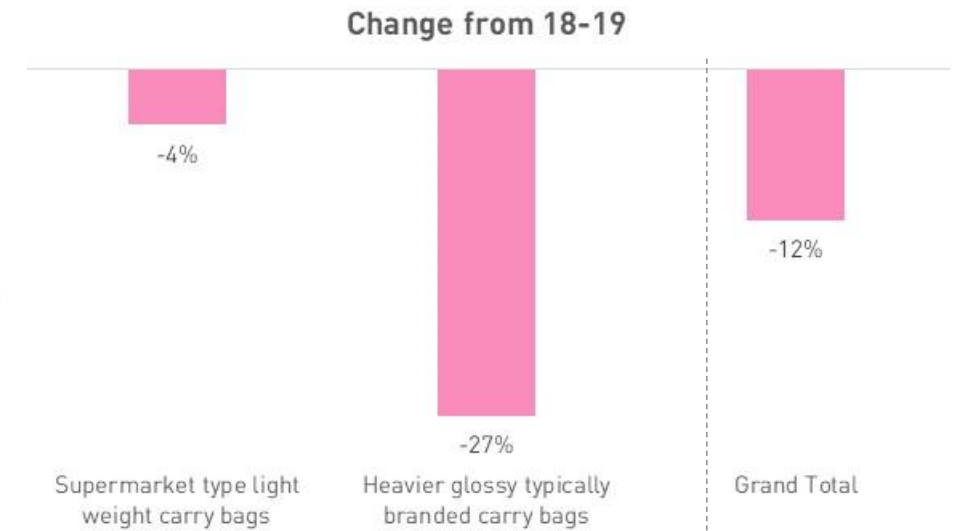
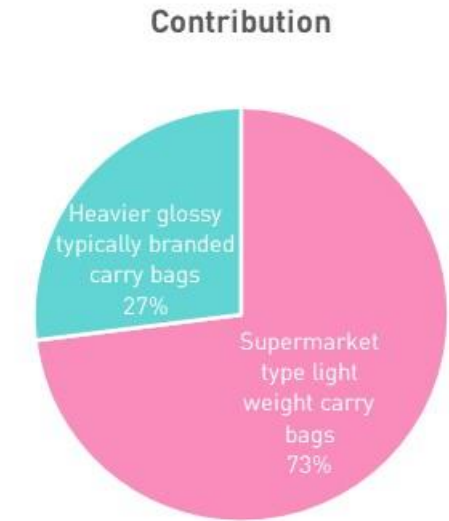
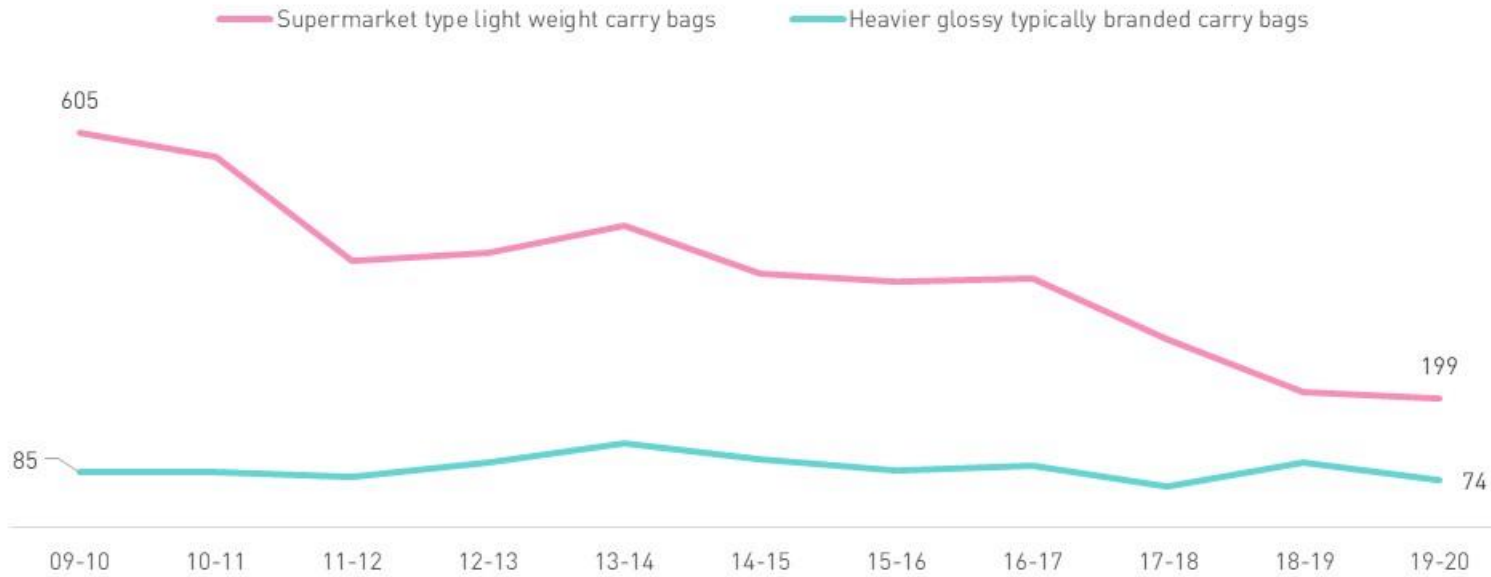
- ACT – Across all site types except residential.
- NSW – Across all site types except beach, highway and shopping centre.
- Tasmania – Highway, recreational park, residential, retail and shopping centre.



Sites contribution – National



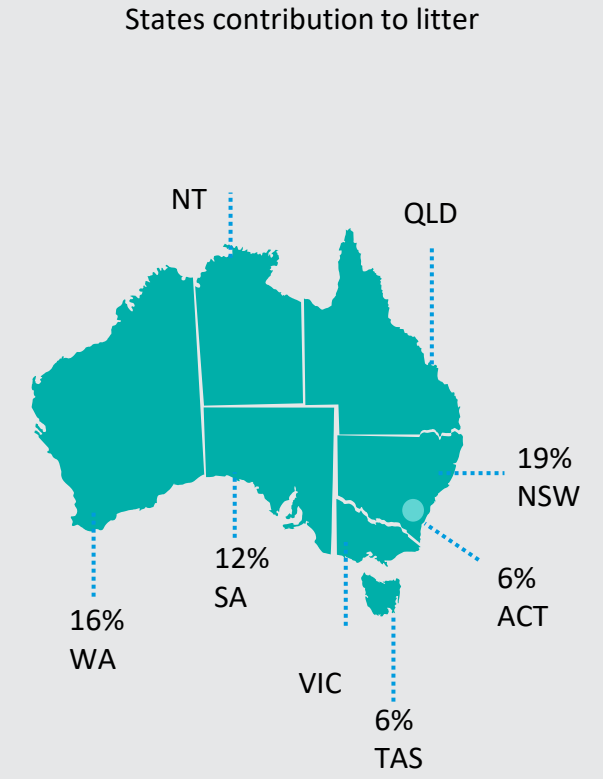
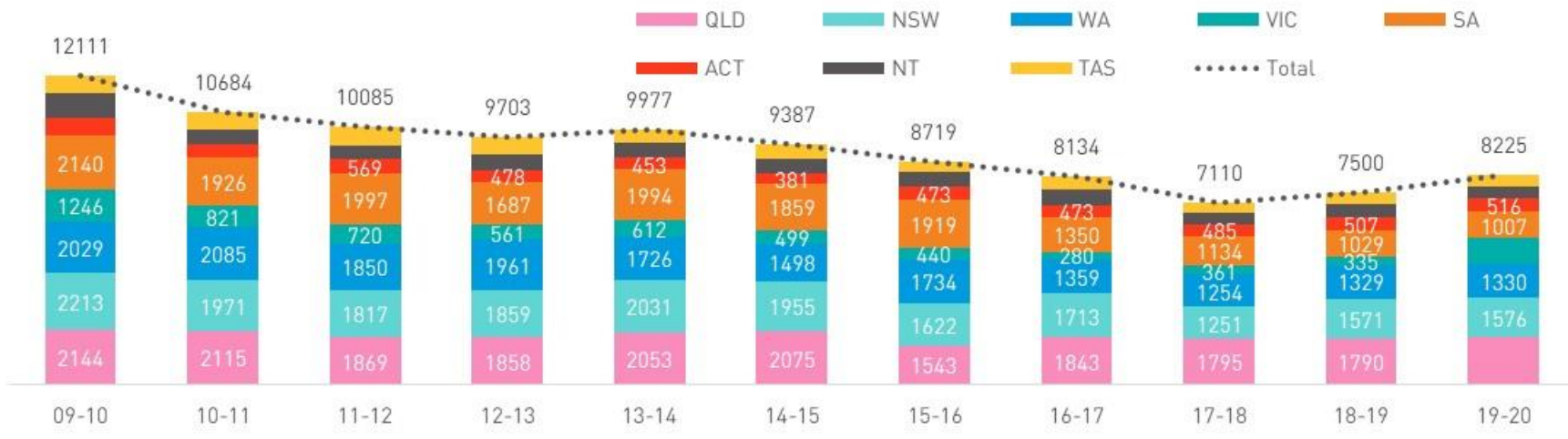
PLASTIC BAGS TYPE (LITTER ITEMS)



GENERAL OTHER

Other general items contributed to 15% of litter items and recorded an increase of 9.7% compared to last year, while in terms of volume it contributed 23% and decreased by 14.6%.

Queensland and NSW (19%) were the main contributors to general other litter items and also recorded the highest number of litter items per 1,000m².



8,225

(+9.7%)

litter items in 2019-20

5.5

(+0.5 items)

items per 1,000m²

1,259 litre

(-14.6%)

Litter volume in 2019-20

0.8 litre

(-0.14 litre)

Volume per 1,000m²

GENERAL OTHER (LITTER ITEMS)

The increase in general other litter items was recorded across all regions with the exception of SA and NT.

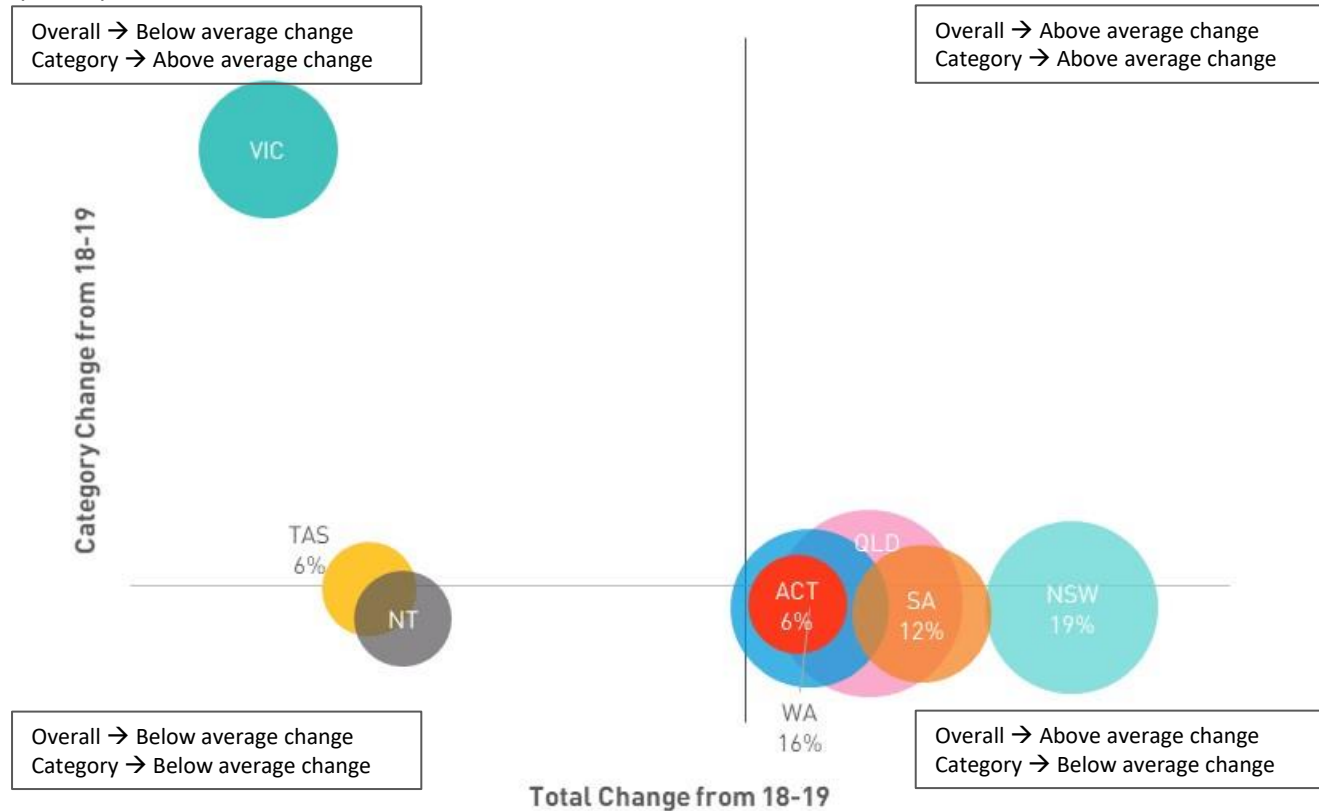
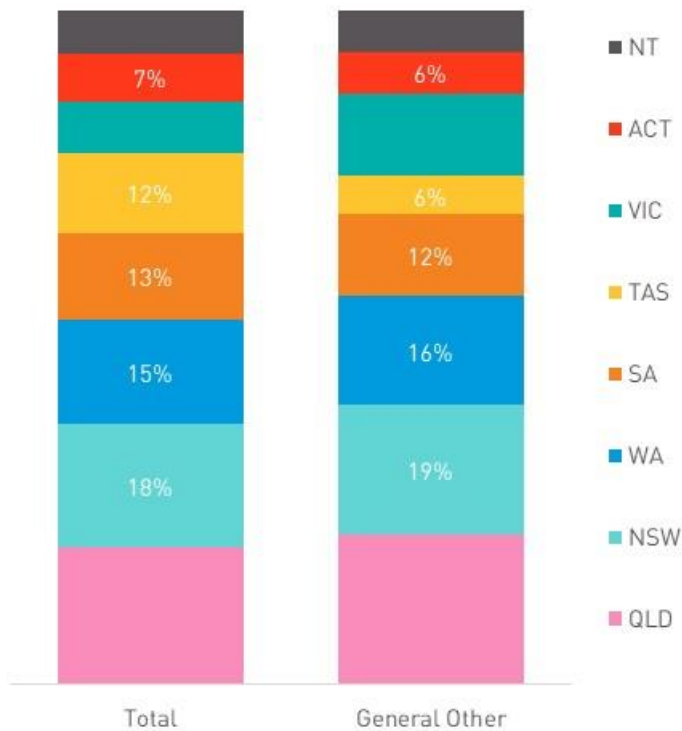


GENERAL OTHER (LITTER ITEMS)

Priority order:

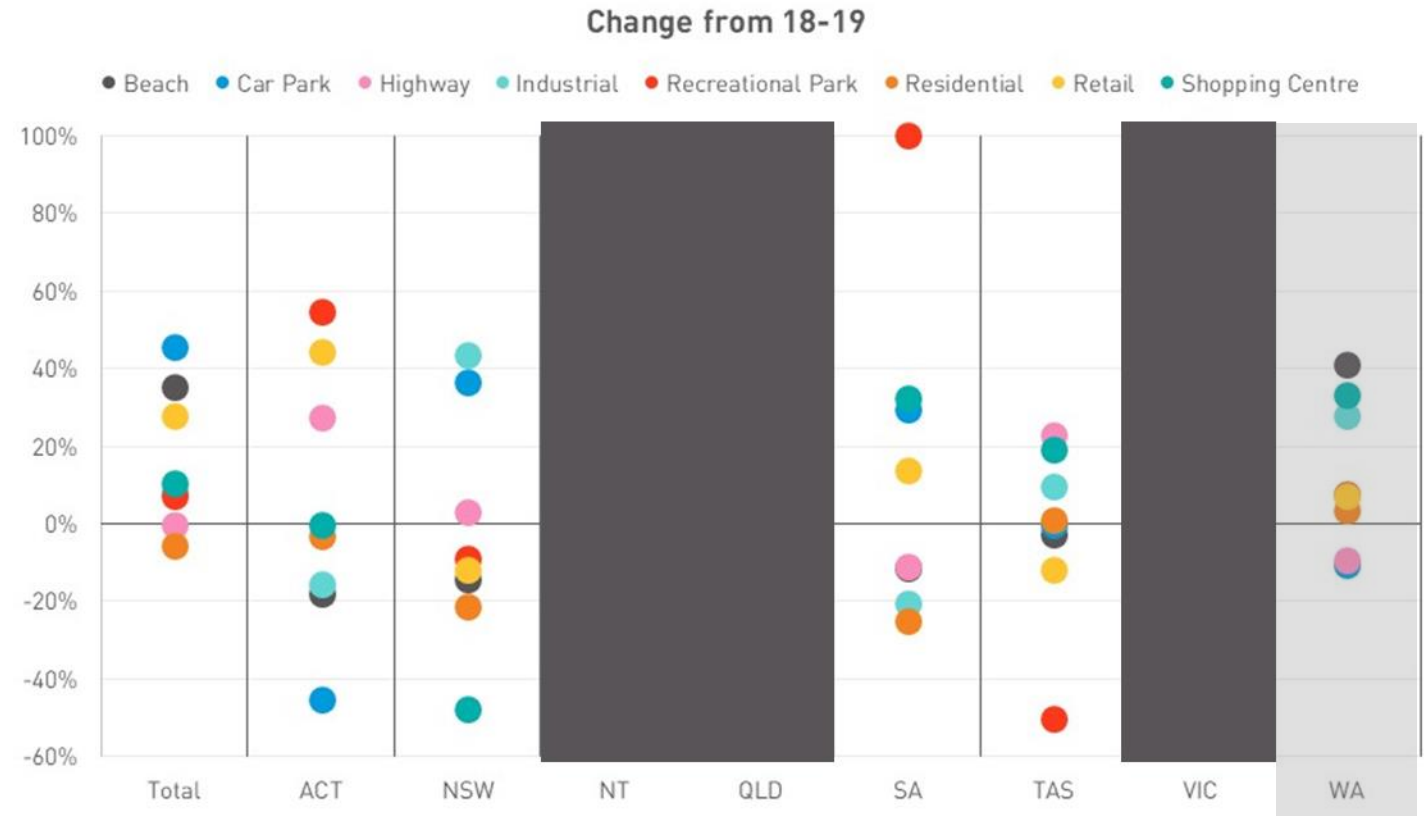
- Victoria – high contributing, fastest increase in litter items.
- Queensland – highest contributing, litter for general others growing faster than the overall litter in the state.
- WA – high contribution, litter for general others is static while the overall litter (-1.4%) decreased in the state.

Litter item contribution

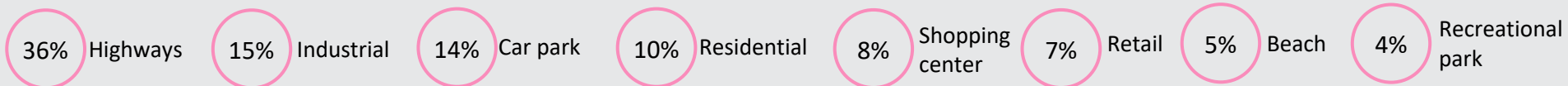


GENERAL OTHER (LITTER ITEMS)

- Highways increased for all regions except SA, WA.
- Industrial also increased across all regions except ACT, SA.
- Car parks increased across all regions except ACT, Tasmania, WA.

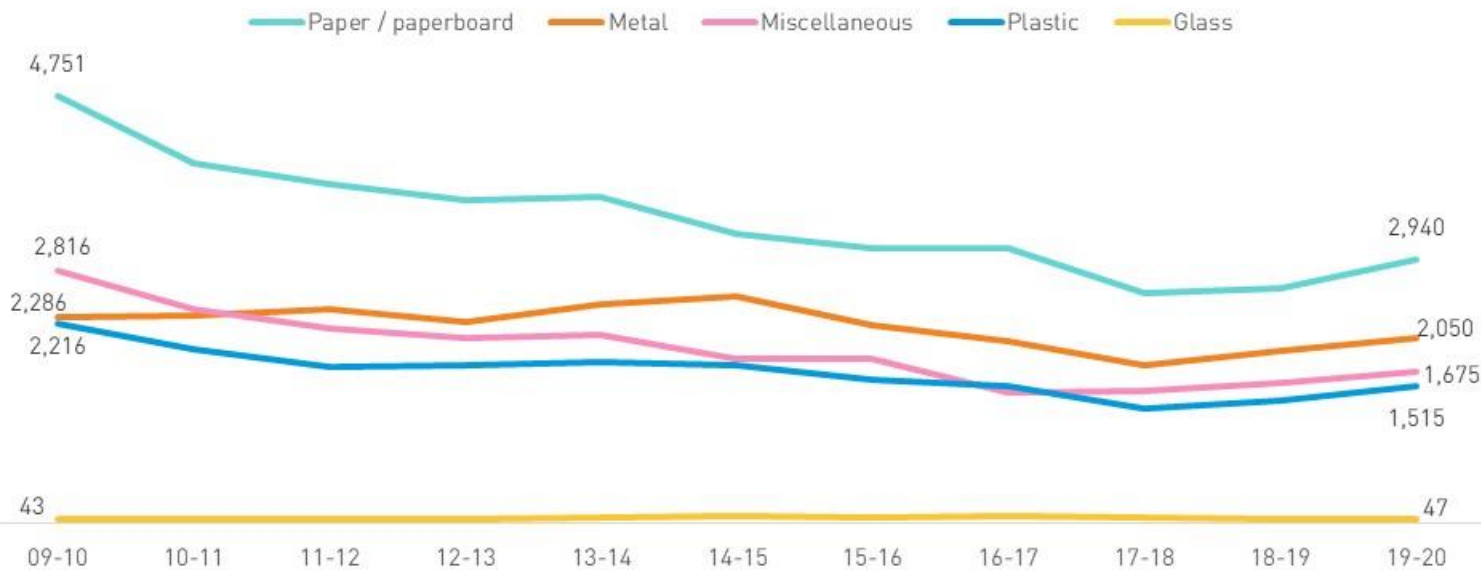


Sites contribution – National

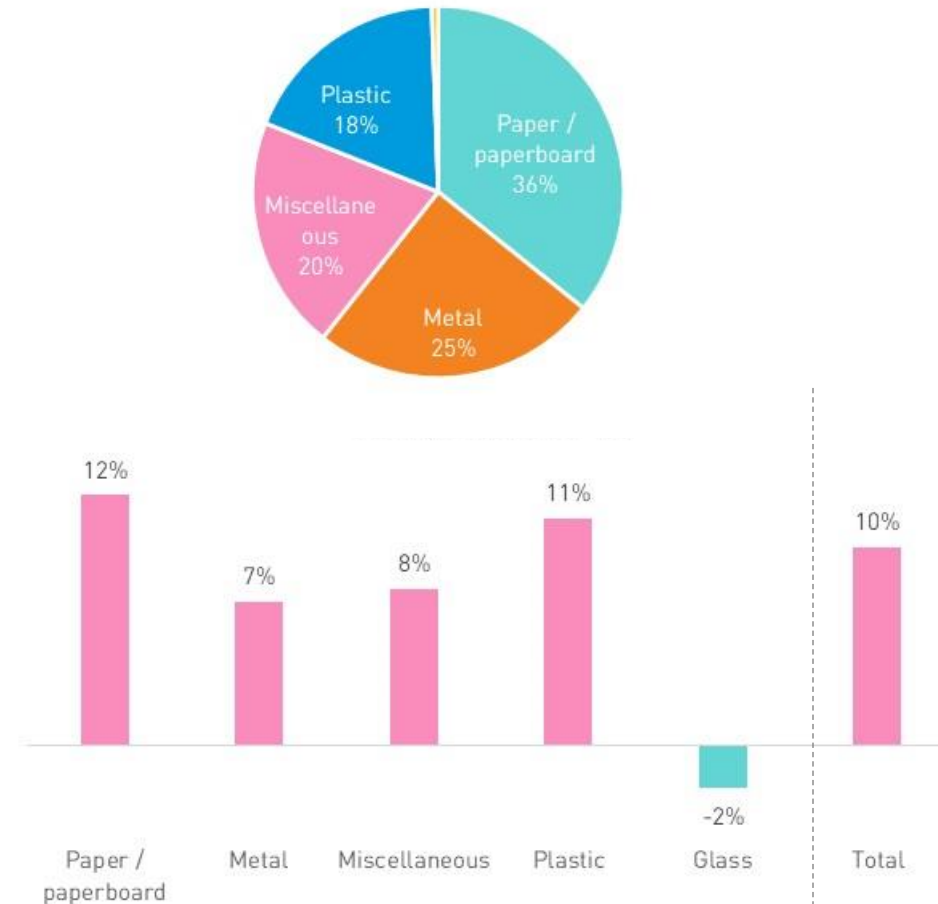


GENERAL OTHER MATERIAL (LITTER ITEMS)

The increase in general other litter items was recorded across all material types with the exception of glass items which only contribute to 1% of the litter for general other items.



Contribution



GENERAL OTHER MATERIAL - (LITTER ITEMS)

Metal recorded higher litter across regions, while paper / paper board litter decreased in most of the regions with the exception of ACT.

Plastic litter increased in most of the regions with the exception of SA and ACT.

PAPER / PAPERBOARD	Contribution in 19-20	Change from 18-19
VIC		
NSW	19%	-18%
QLD		
SA	9%	-35%
WA	9%	-26%
NT		
ACT	6%	18%
TAS	5%	-9%
TOTAL		12%

METAL	Contribution in 19-20	Change from 18-19
QLD		
NSW	23%	16%
WA	15%	8%
SA	13%	47%
ACT	9%	6%
TAS	5%	16%
NT		
VIC		
TOTAL		7%

PLASTIC	Contribution in 19-20	Change from 18-19
QLD		
NSW	22%	21%
WA	16%	17%
SA	11%	-24%
VIC		
TAS	9%	13%
ACT	5%	-12%
NT		
TOTAL		11%

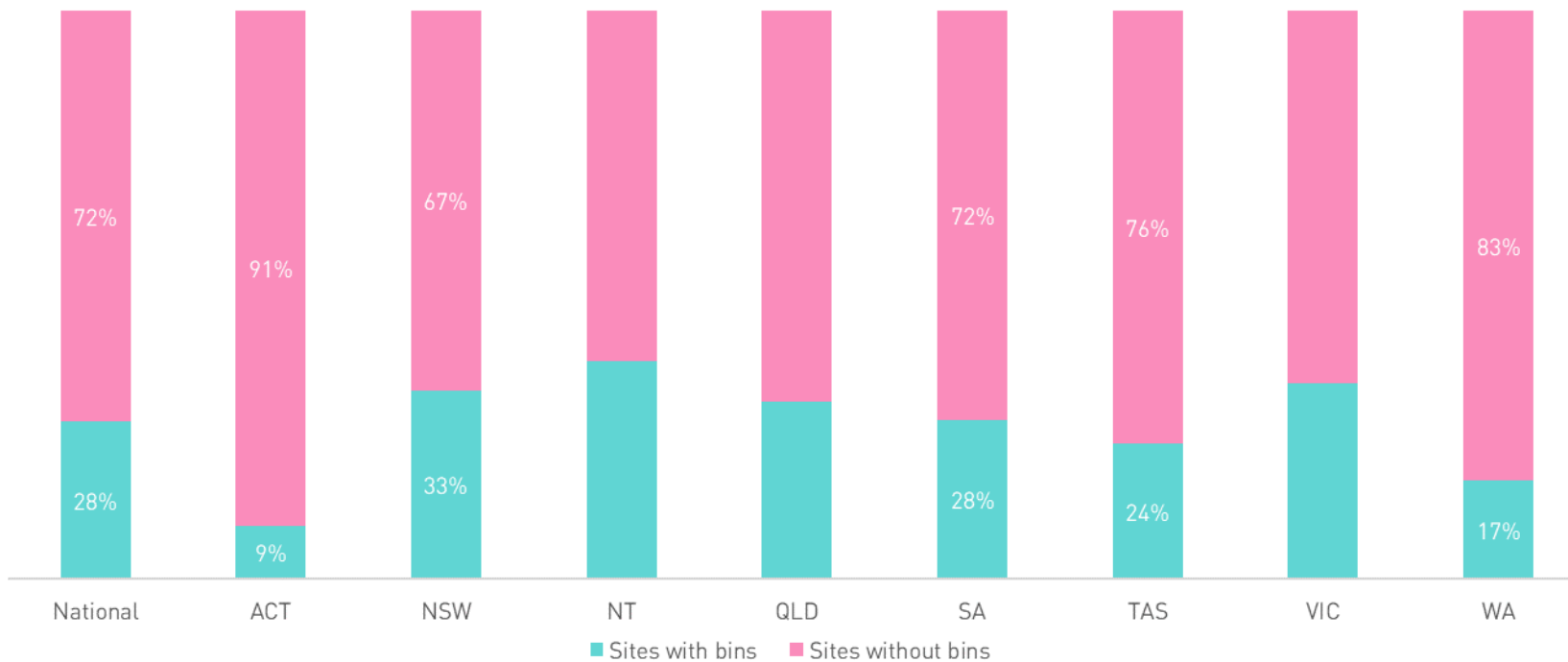


ADDITIONAL ANALYSIS

LITTER BINS

72% of the total sites audited were without bins. ACT and WA were the regions that had the least proportion of sites with bins.

In terms of the site types, retail, shopping centre and recreational parks were more likely to have sites with bins than the other sites.



28%

Sites with bins

30%

Retail without bins

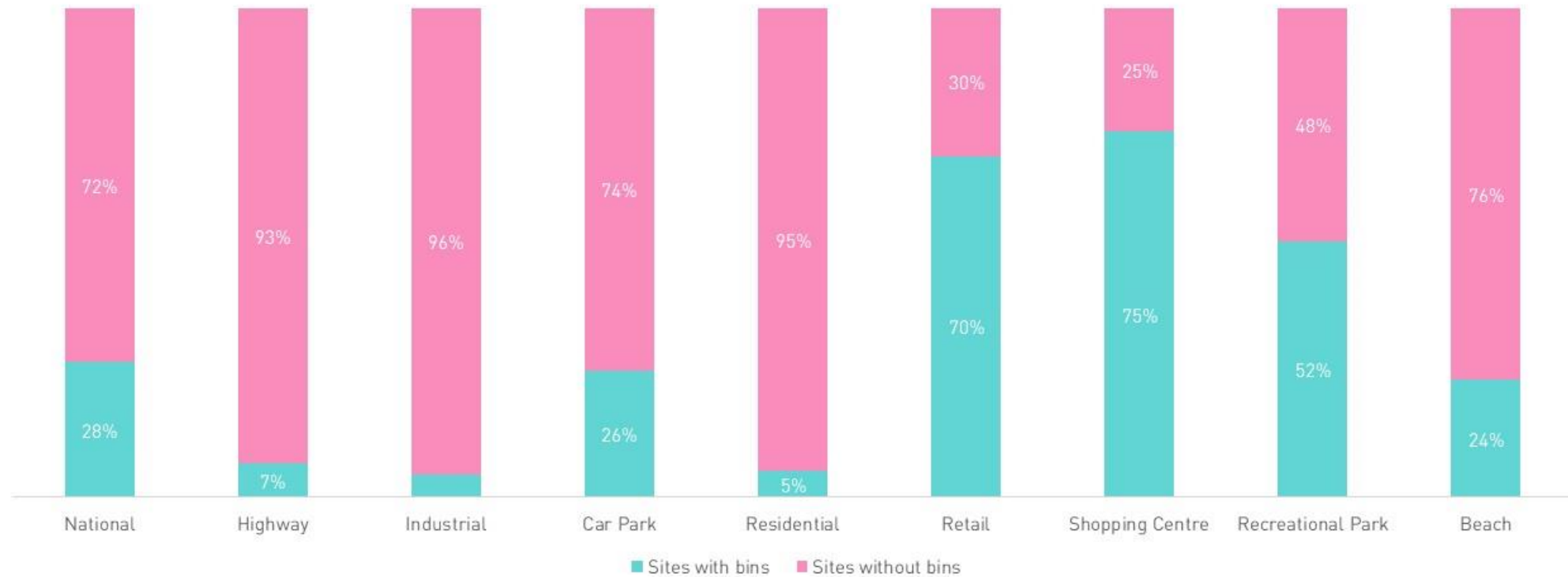
25%

Shopping centres without bins

76%

Beaches without bins

LITTER BINS BY SITE TYPE



CIGARETTES BUTT BINS

Most of the regions had no cigarette bins (92%).

NT and Queensland had a relatively higher number of sites with butt bins compared to other regions.



8%

Sites with butt bins

79%

Retail without bins

70%

Shopping centres without bins

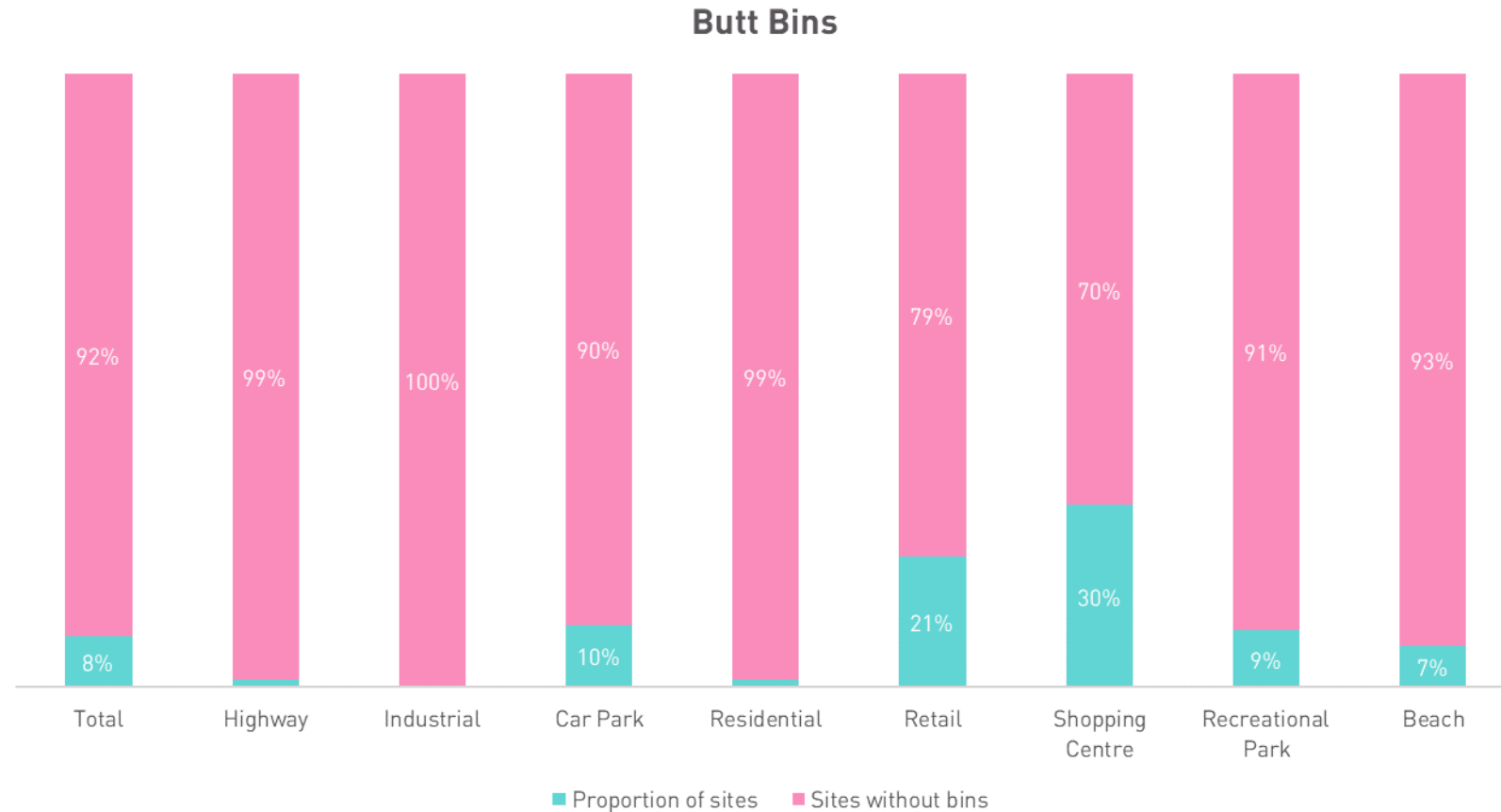
93%

Beaches without bins

CIGARETTES BUTT BINS

Most of the site types had no cigarette bins.

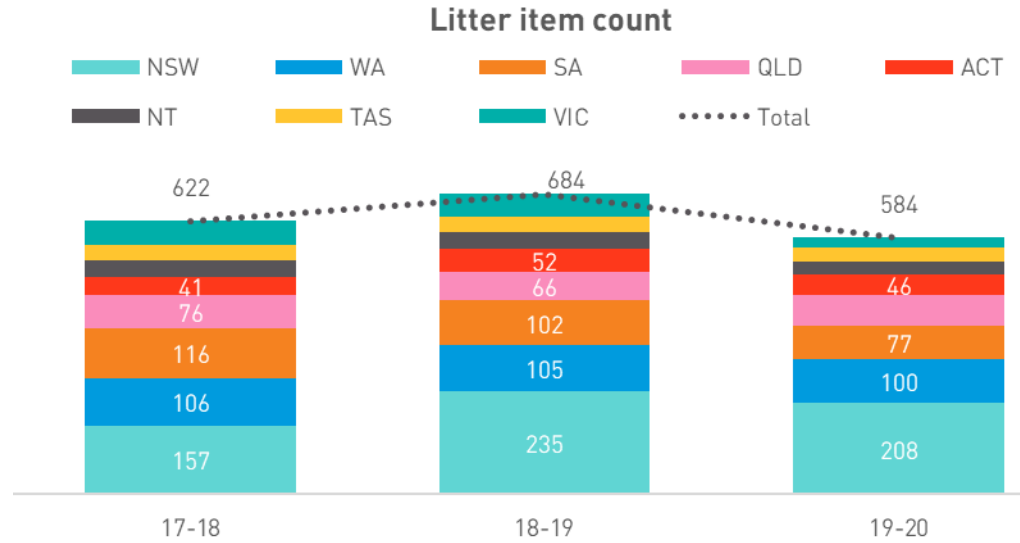
Retail and shopping centre recorded a higher proportion of sites with bins compared to the overall average.



COFFEE CUPS

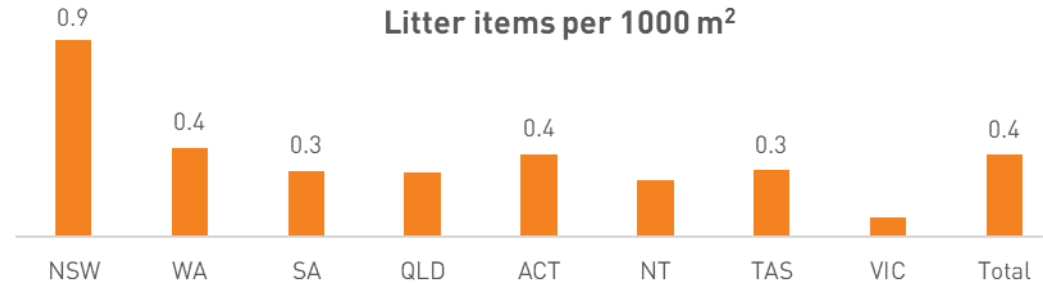
The total litter for coffee cups contributed 1% of litter items and decreased by 14.6%. The litter for coffee cups fell across most regions with the exception of Queensland where it increased.

NSW recorded the highest number of coffee cups per 1,000m².



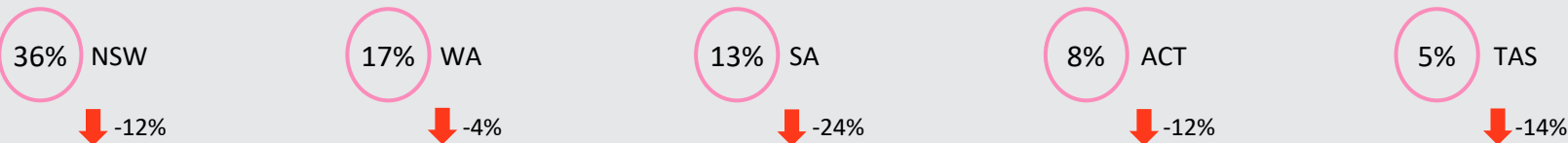
584
litter items in 2019-20

-14.6%
Decline versus 2018-19



NSW
Highest number of litter items per 1000 m²

Sites contribution & growth over last year (2019-20 over 2018-19)



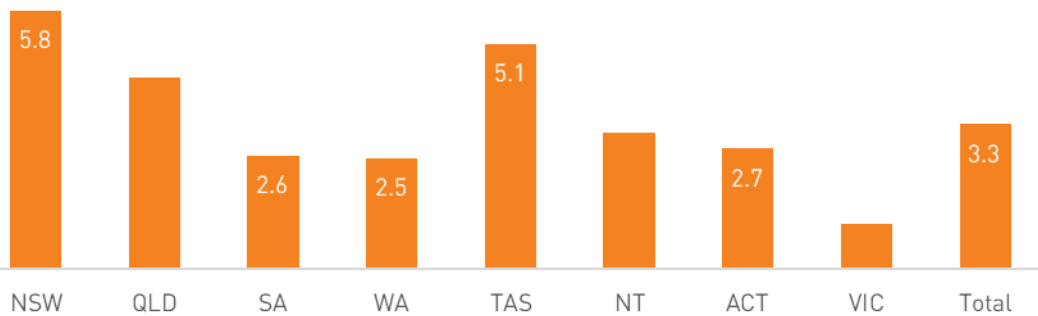
SINGLE USE PLASTIC

Single use plastic contributed 9% of the overall litter and fell by 9.5% over the last year.

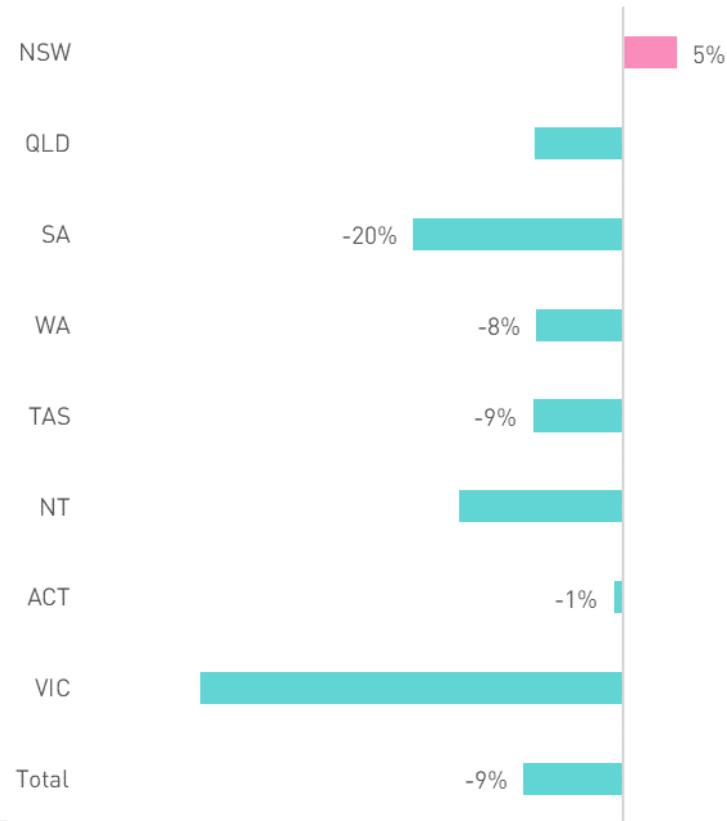
The reduction in litter for single use plastic was observed across all regions except NSW where it increased by 5.0%.

NSW also recorded the highest number of litter items for single use plastic per 1,000m² followed by Tasmania.

Litter items per 1000 m²



Change over 2018-19



4,914

litter items in 2019-20

-9.5%

Decrease compared to 2018-19

5.8

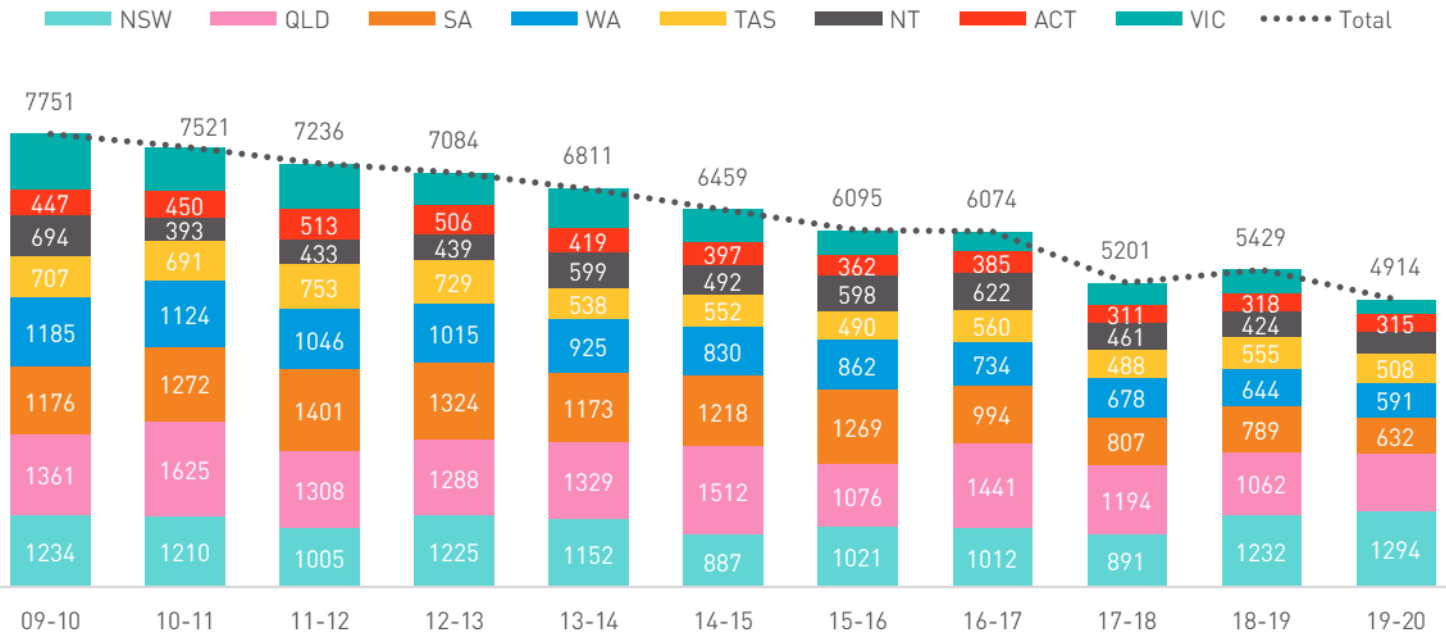
NSW – Items per 1,000 m²

5.1

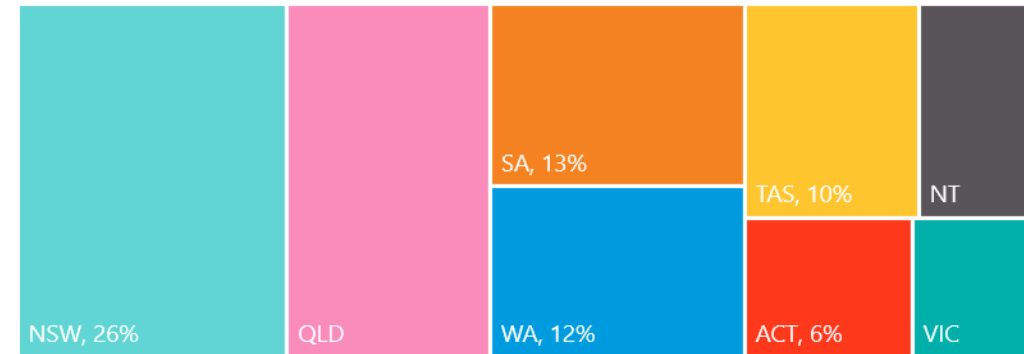
TAS – Items per 1,000 m²

SINGLE USE PLASTIC BY SITE TYPE

Litter item count - Single use plastic



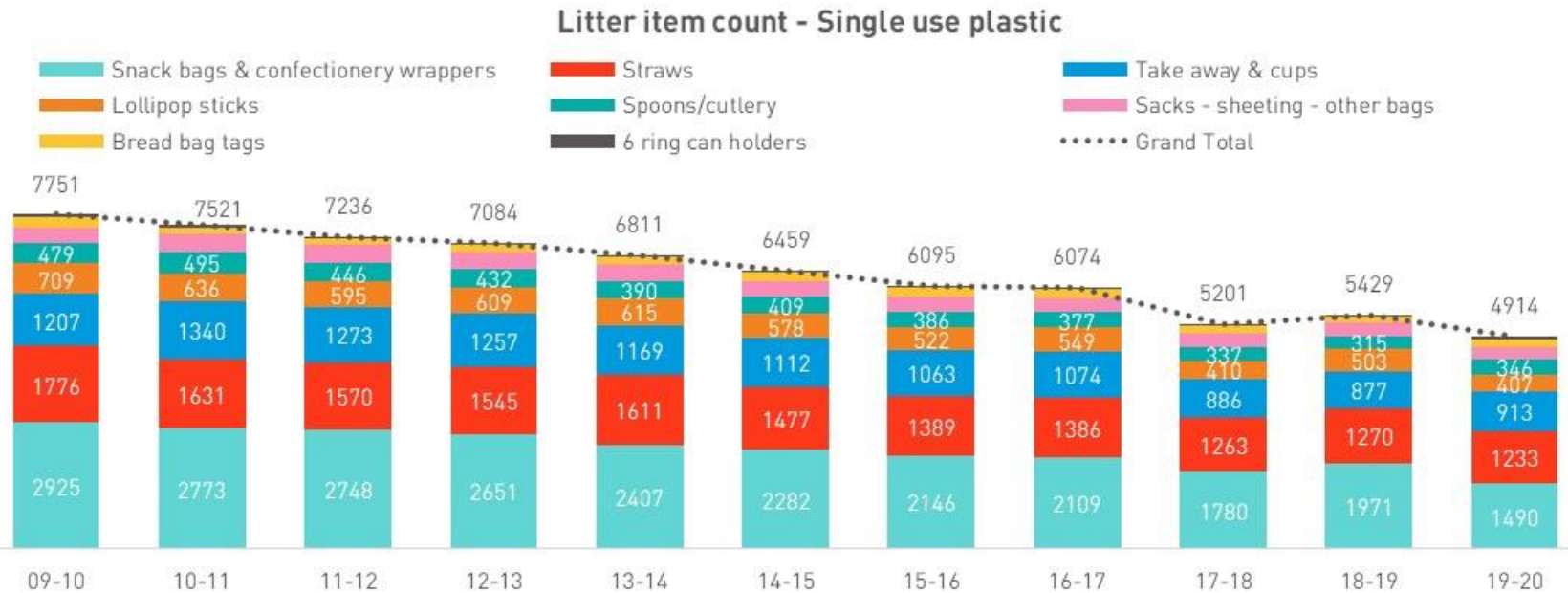
Contribution



SINGLE USE PLASTIC – ITEM TYPE

Snack bags and confectionery wrappers (30%) were the biggest contributor to the overall litter for single use plastic followed by straws (25%) and takeaway & cups (19%).

The decrease for single use plastics in 2019-20 was observed across the main contributing item types except takeaway & cups and spoons / cutlery.



-3.0%

Straws

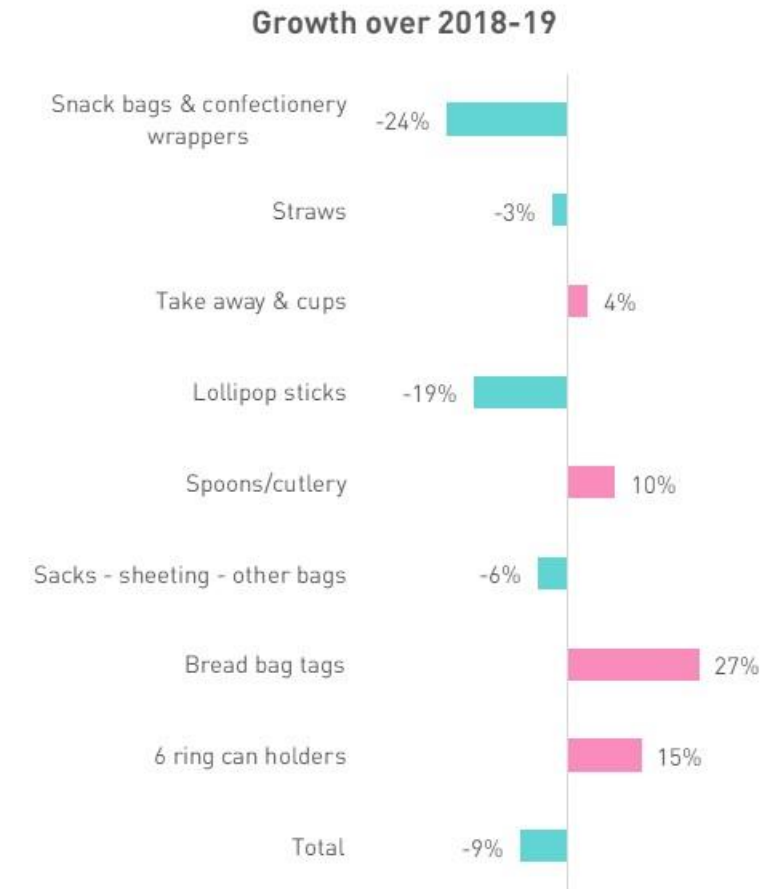
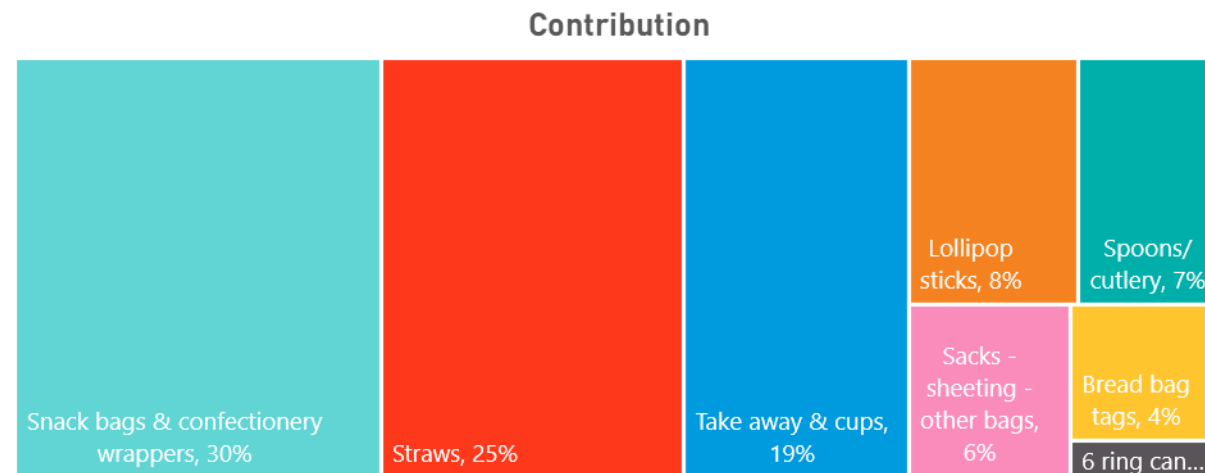
-24.4%

Snack bags & confectionery wrappers

4.2%

Takeaway & cups

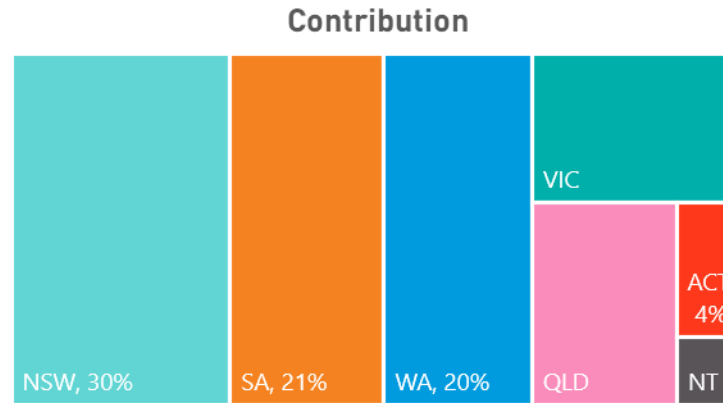
SINGLE USE PLASTIC BY TYPE OF ITEM



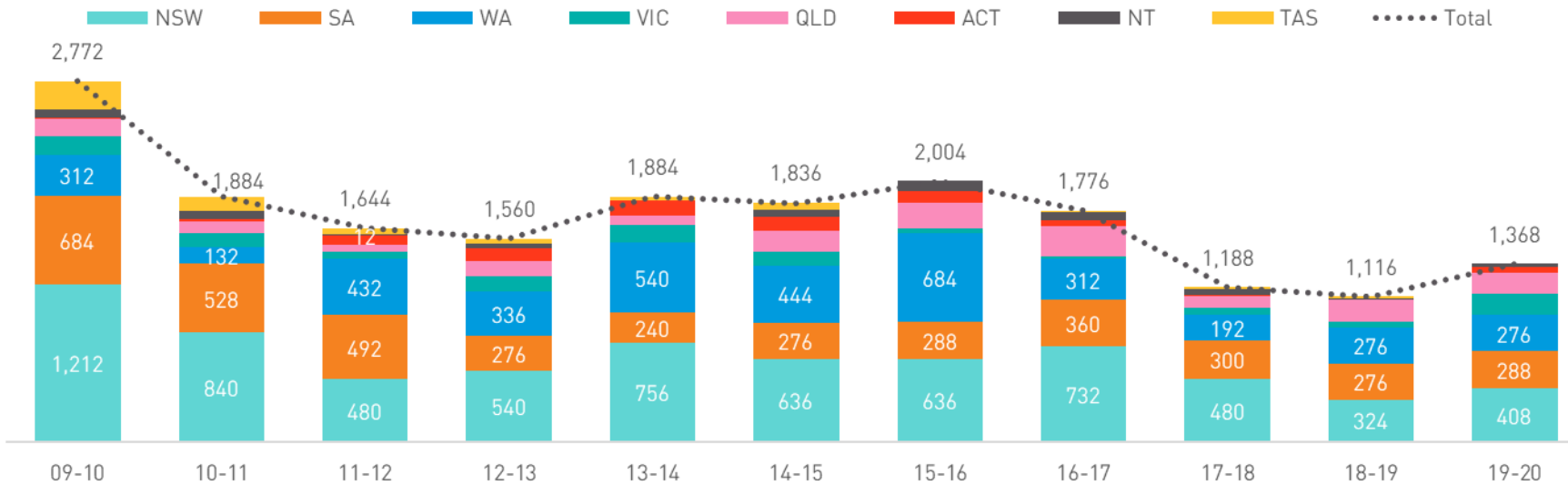
ILLEGAL DUMPING

Illegal dumping contributed 25% of the litter volume and increased by 22.6% this year. The increase in illegal dumping was recorded across all regions with the exception of Queensland and Tasmania.

NSW (1.8), SA (1.2) and WA (1.2) recorded the highest volume of illegal dumping per 1,000 m².



Volume - Illegal dumping



57

(+22.6%)

litter items in 2019-20

1,368 litre

(+22.6%)

Litter volume in 2019-20

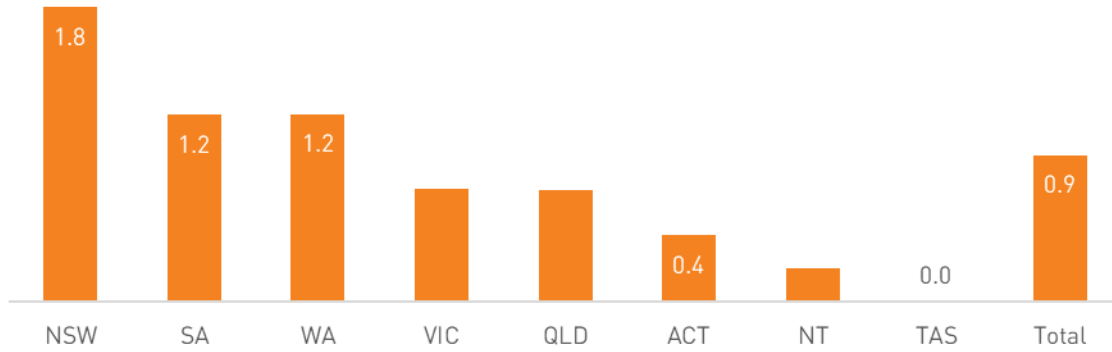
0.9 litre

(+0.2 litre)

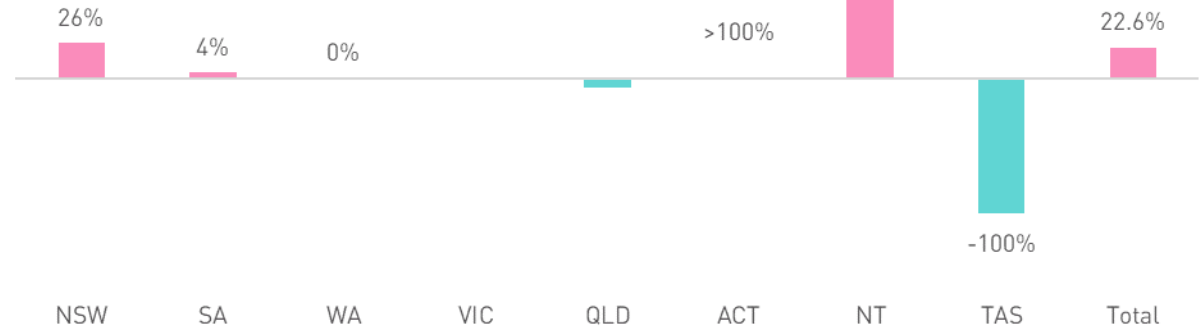
Volume per 1,000m²

ILLEGAL DUMPING

Litter volume per 1000 m2

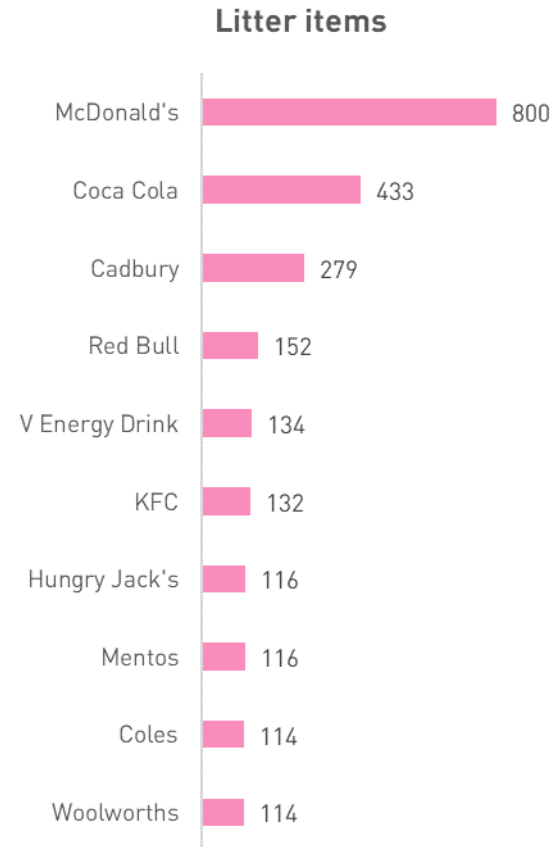
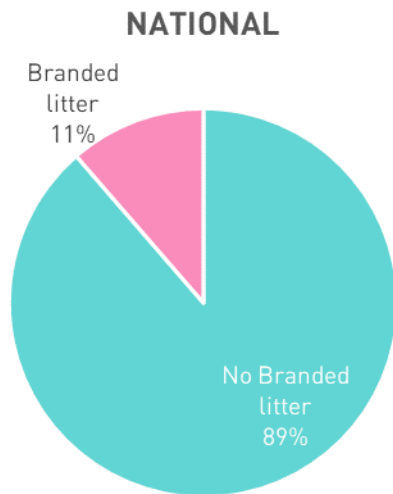


Growth over 2018-19



BRANDS RESPONSIBLE FOR LITTER

11% of the total litter was branded with McDonalds contributing the most to branded litter items followed by Coca Cola.



McDonalds

Coca Cola

Cadbury

Red Bull

V Energy drink

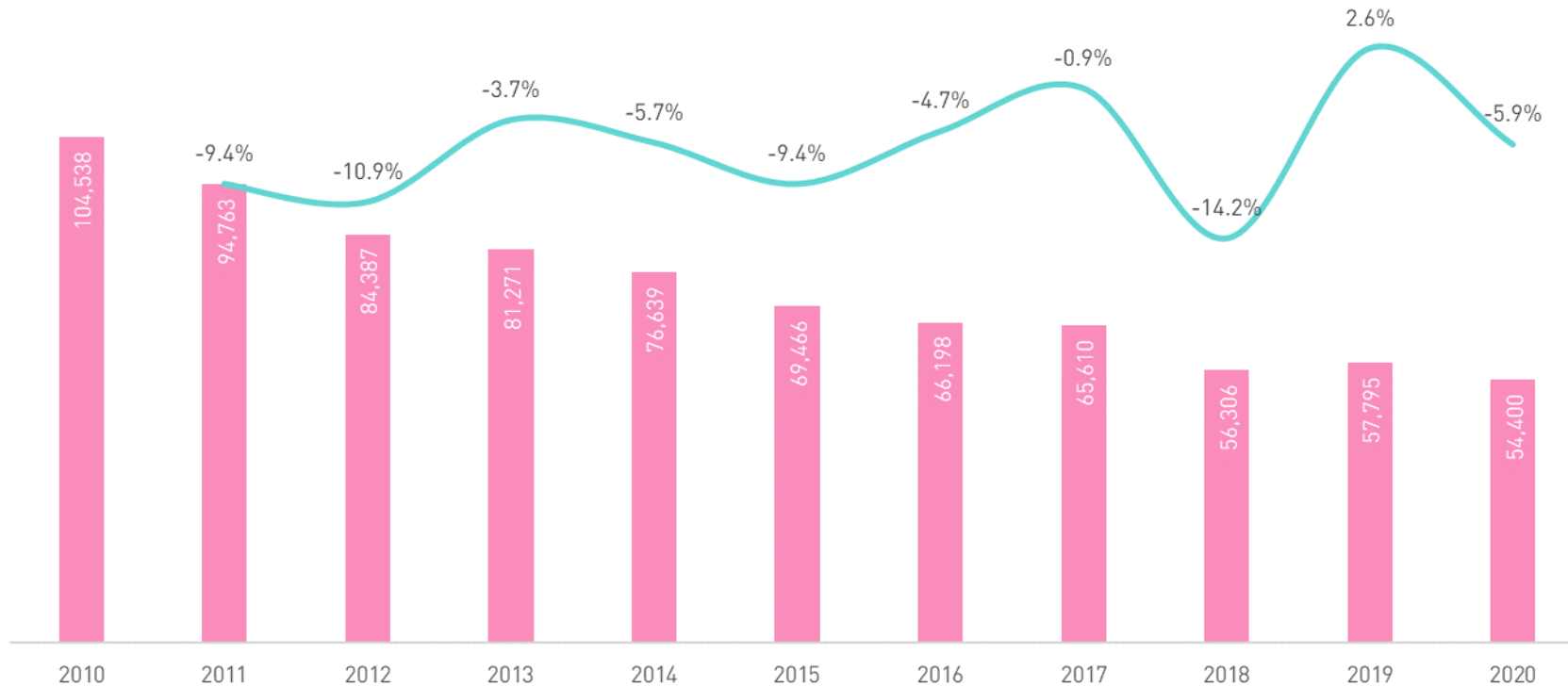
KFC



IMPACT OF COVID (MAY DATA)

LITTER ITEMS (MAY)

The overall litter items decreased by 5.9% during May 2020 compared to May 2019, there was a decrease in the items recorded in NT, Victoria, SA, Tasmania and Victoria.



+4.2%

NSW

+1.2%

WA

-19.6%

TAS

-10.2%

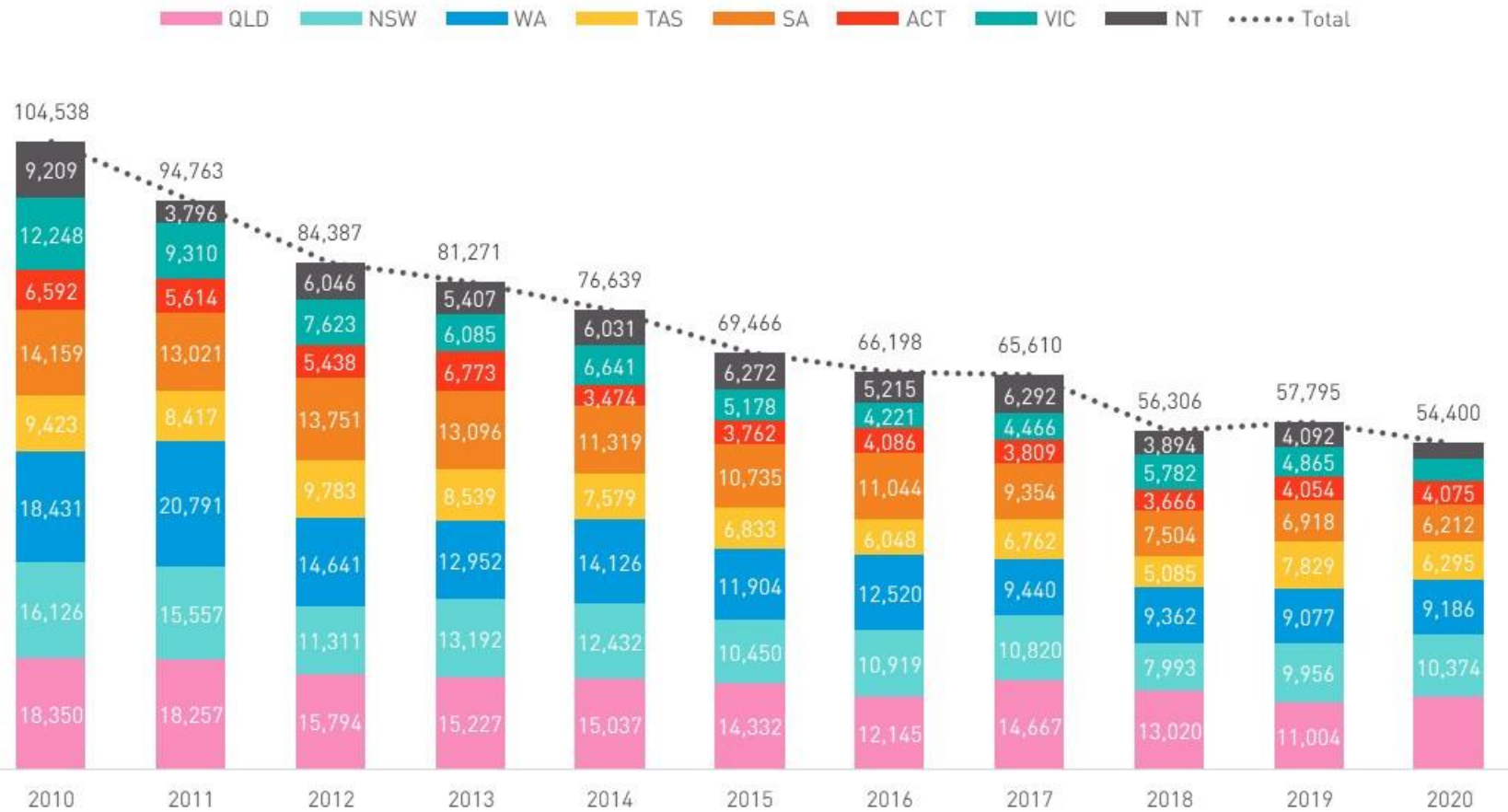
SA

+0.5%

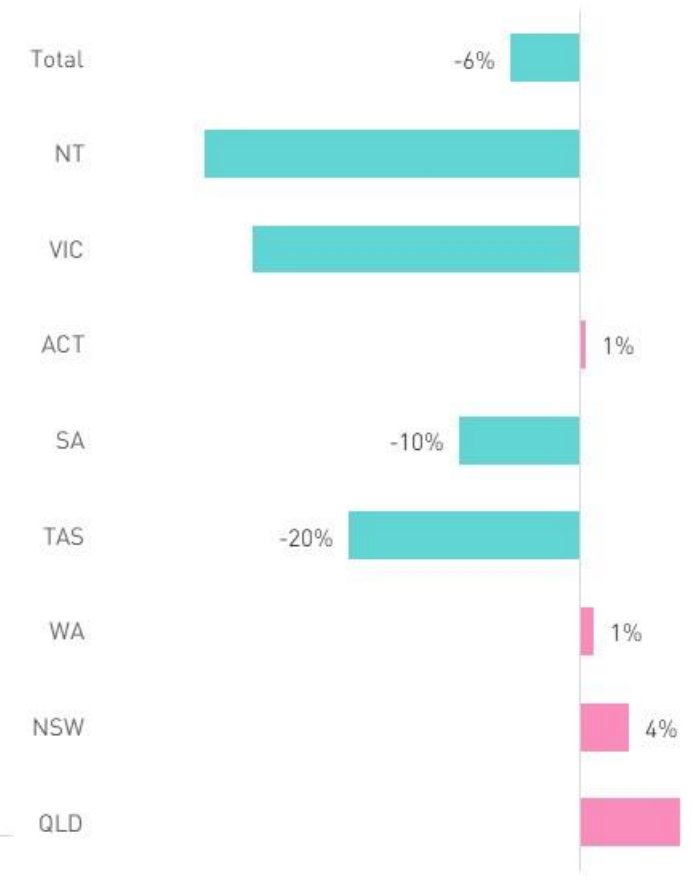
ACT

LITTER ITEMS (MAY)

Litter items by site types



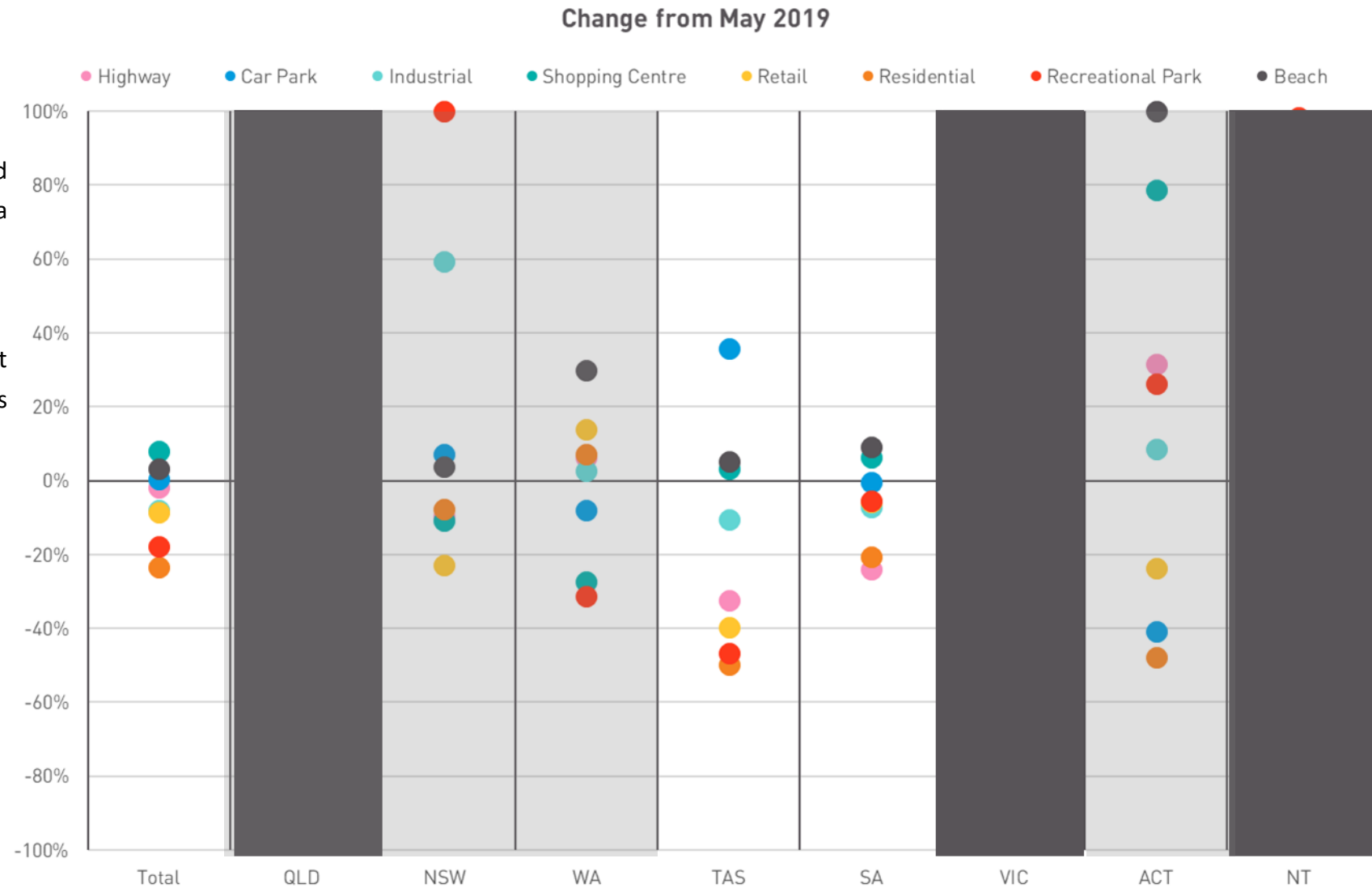
Change from May 2019



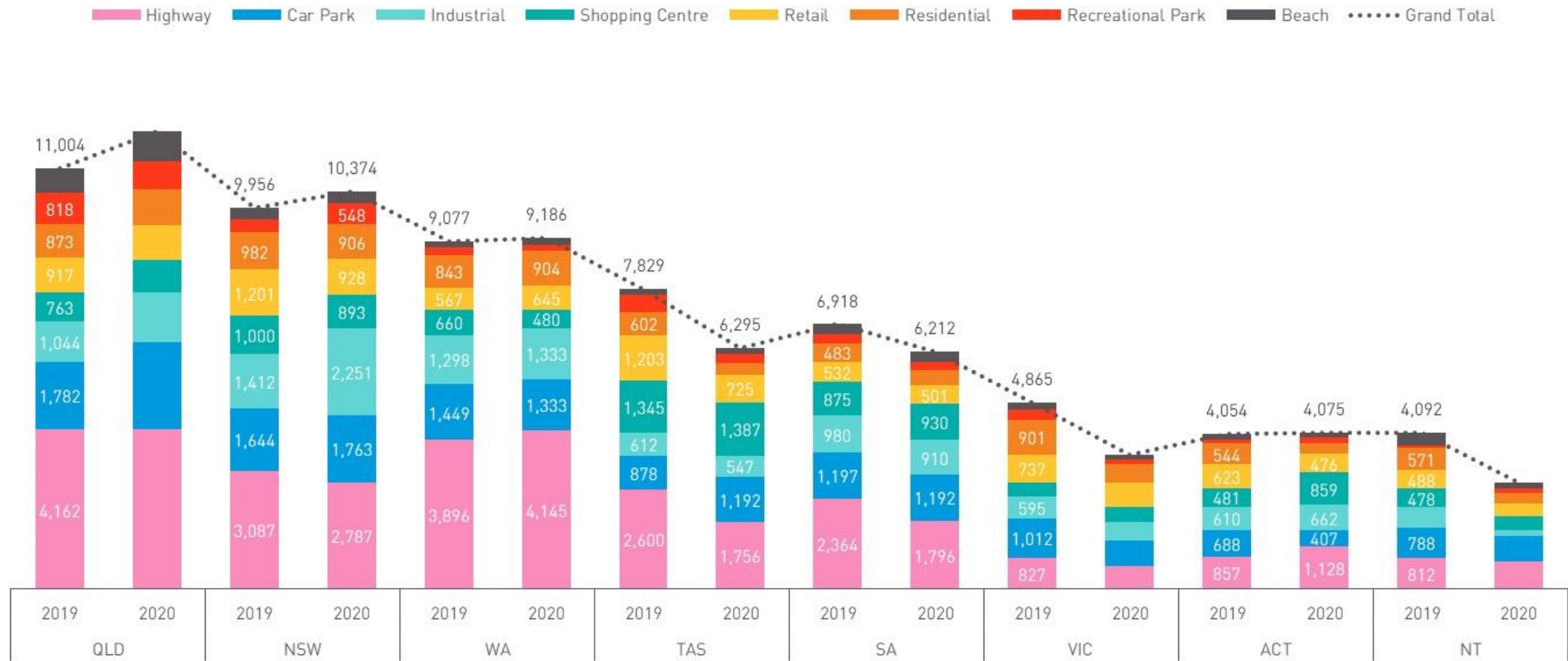
LITTER ITEMS (MAY)

Highways, retail and recreational parks recorded reduced litter for most of the regions indicating a possible impact due to COVID restrictions.

Litter increased at shopping centres across almost all regions except NSW, WA and NT and all beaches except Victoria and NT.



LITTER ITEMS (MAY)



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THANK YOU