

VERSION 1: JULY 2022

# AUSTRALASIAN RECYCLING LABEL IMPACT FRAMEWORK REPORT

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# INTRODUCTION

The Australasian Recycling Label (ARL) Program is an on-pack labelling program that helps consumers to recycle correctly and supports brand owners and packaging manufacturers to design packaging that is recyclable at end-of-life.

This document outlines the ARL's impact on Australian and New Zealand consumers and the recycling system.

## The ARL Program features two key elements:

- **The Packaging Recyclability Evaluation Portal (PREP)** - an online tool that assesses packaging recyclability in the Australian and New Zealand kerbside or approved drop-off recycling systems.
- **The Australasian Recycling Label** - an on-pack label that provides clear and simple instructions about how to recycle all of the separable packaging components.

In Australia, the ARL Program has received strong support and endorsement from all levels of government. This support includes:

- Funding a two-year National Consumer Education Campaign which has facilitated collaboration between the Australian Packaging Covenant Organisation (APCO) and Planet Ark to develop social media assets, advertisements, curriculum-aligned lesson plans and infographics.
- Acknowledging the ARL in the National Waste Policy Action Plan and National Plastics Plan as a key action to improve consumer awareness and increase recycling rates. As part of the National Plastics Plan, the Australian Government has committed to working with industry to see the ARL displayed on 80% of supermarket products by the end of 2023.
- Committing \$5 million to support small-to-medium sized enterprises (SMEs) to adopt the ARL and improve packaging recyclability and education in Australia.



Figure 1 - Example of an ARL artwork array.

The ARL Program has continued to build support and impact through its partnerships, including recognising REDcycle as an alternative destination for Soft Plastics recycling.

In New Zealand, the ARL Program is continuing to grow. Since its inception, PREP Design has collected data from New Zealand councils and Materials Recovery Facilities (MRFs) so that ARL Program Members can message for recovery in both Australian and New Zealand council kerbside recovery systems. At the end of 2020, the ARL Program partnered with the New Zealand Soft Plastics Recycling Scheme, recognising it as an alternative destination under the ARL Program. This allows Members to partner with the Scheme and ensure consumers in New Zealand can return their soft plastics labelled with the ARL to a collection point for recovery and recycling. In 2021, the New Zealand government announced that the ARL is the preferred labelling option for New Zealand. This is a significant step towards increasing the ARL's recognition and awareness, which has already grown significantly year on year.

To track the impact of the ARL across Australia and New Zealand, APCO designed the ARL Impact Measurement Framework. This Framework gathers and analyses information against three key impact areas:

**Impact 1: Consumers increasingly recognise the ARL and dispose of packaging according to its instructions.**

**Impact 2: Resource recovery from the waste stream is maximised.**

**Impact 3: The ARL Program supports continual improvement of packaging design to increase recyclability and meet the 2025 National Packaging Targets.**

This is the first year this information has been published as the ARL Impact Framework Report. It consolidates the progress of these impacts and will provide annual insights and updates.

All data presented in this document comes from ARL Program Member annual reporting data and consumer research. Consumer research outcomes are available in a separately published document, the [2022 ARL Consumer Insights Report](#).

# IMPACT 1: Consumers increasingly recognise the ARL and dispose of packaging according to its instructions.

Impact 1 is informed by two key data sources: annual reporting by ARL Program Members and consumer research.

By March 31 each year, ARL Program Members are required to submit an ARL Report to APCO, detailing their use of the ARL in the previous calendar year. This involves providing the number of stock keeping units (SKUs) on the market that carried the ARL, along with the breakdown of ARL classifications – Recyclable, Conditionally Recyclable and Not Recyclable. The data from these reports informs our understanding of overall adoption of the ARL on the market, and highlights APCO Members' progress towards the 2025 National Packaging Targets (2025 Targets) and the target of 80% ARL uptake for supermarket packaging by December 2023.

Additionally, APCO commissions research on the ARL via consumer surveys in Australia and New Zealand, to ascertain the impact the ARL has on recycling behaviour. In the most recent survey (2021), a sample of Australians (1030 individuals) and New Zealanders (527 individuals) across varied demographics were asked questions on how they interact with their packaging and recycling.

Importantly, there is a consistent trend in consumers showing preference for organisations and brands that consider their environmental impact. When asked to value 12 social elements of an organisation, being 'environmentally friendly' was ranked second, above reliability and customer service. When asked what consumers think is the most helpful for the environment, regularly recycling was ranked first, above reusable packaging and purchasing packaging containing recycled content. The ARL Program provides a tangible way for organisations to both communicate the recyclability of their packaging and meet these consumer expectations. While consumers are still seeking out further information on recycling, 30% lack confidence in knowing what is and is not recyclable. This statistic drives demand for greater uptake of the ARL.

This research focuses on two key metrics:

**1. Recognition:** consumers are aware of and seek out the ARL and are frequently exposed to it in the market.

**2. Understanding:** consumers are looking for recycling information on-pack and following the ARL instructions to positively impact their recycling choices.

# IMPACT 1:

## RECOGNITION

We can determine the progress towards Impact 1 (increased consumer recognition of the ARL) by monitoring the following indicators:

- 1.1 Consumers’ awareness levels of the ARL and the ARL Program
- 1.2 Consumers actively seek out products that display the ARL
- 1.3 The ARL is widely adopted in the market

Product packaging is the main place that consumers are exposed to the ARL, compared to advertising, in offices or on social media. The data shows that consumers in both Australia and New Zealand are increasingly aware of the ARL’s placement on packaging.

They also recognise its value to recycling and are supportive of seeing it more widely used in the market. Awareness of the ARL as a recycling symbol has soared since 2018, when it was first recorded at 47% in Australia and 44% in New Zealand. In 2021, this reached 75% and 68% respectively, showing significant growth in both countries. Awareness of the ARL is highest among consumers aged 16-44 in both Australia and New Zealand. This is particularly evident among women, especially in New Zealand, where there was an increase in awareness of 23% from 2020-2021. The greatest opportunity to increase awareness is with those aged 45-54, where awareness sits slightly lower than other demographics.

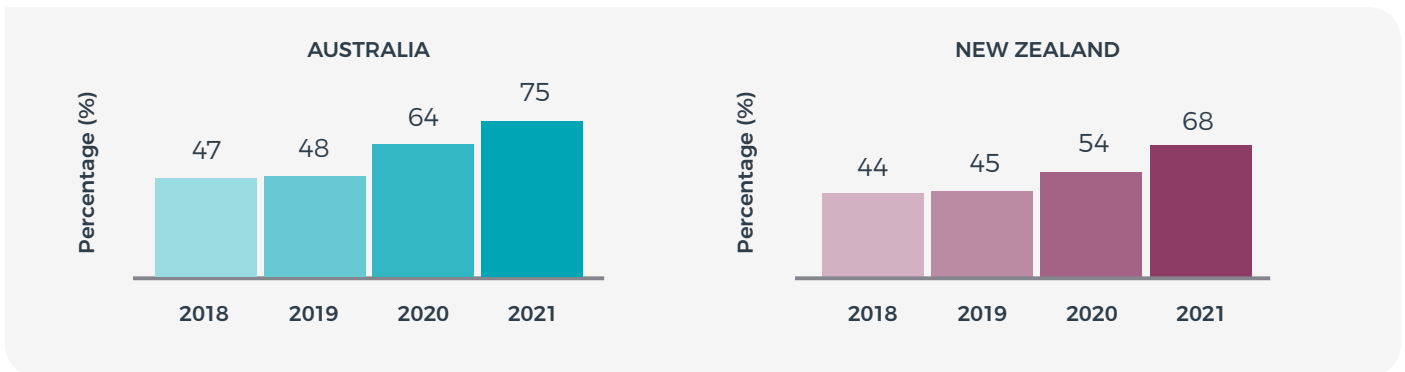


Figure 2 – Awareness of the ARL (%) by country from 2018 to 2021.

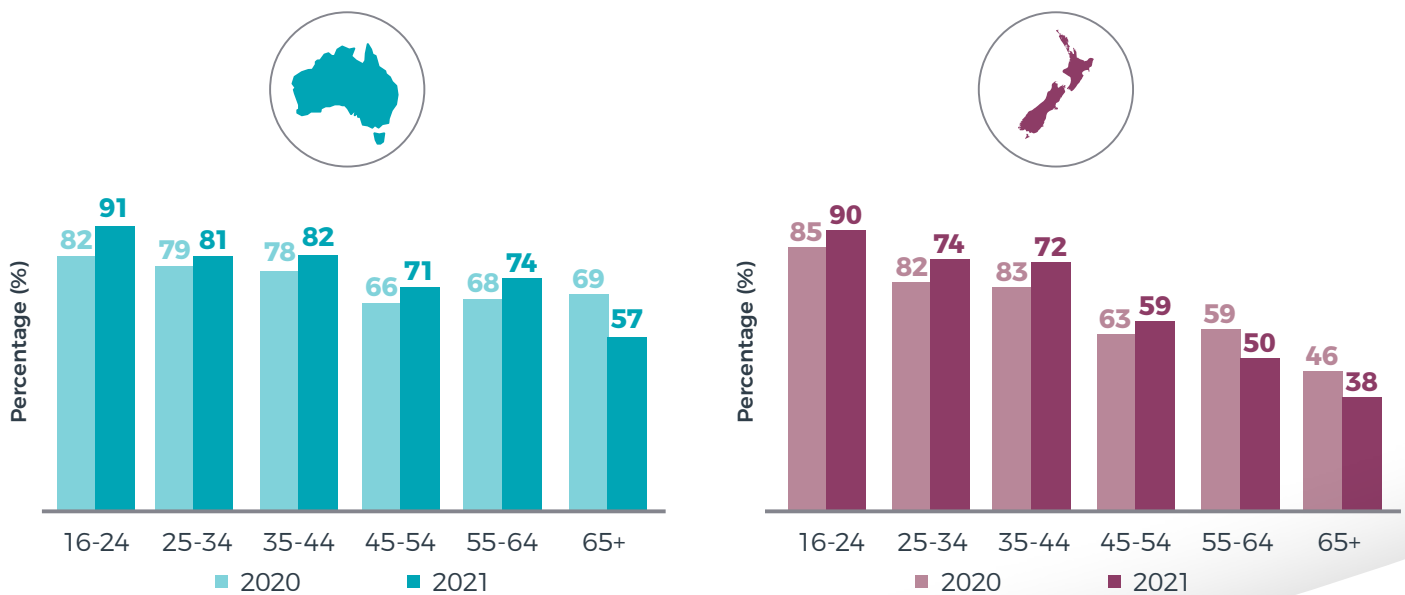


Figure 3 – Awareness of the ARL (%) by age and country from 2020 to 2021.

# IMPACT 1:

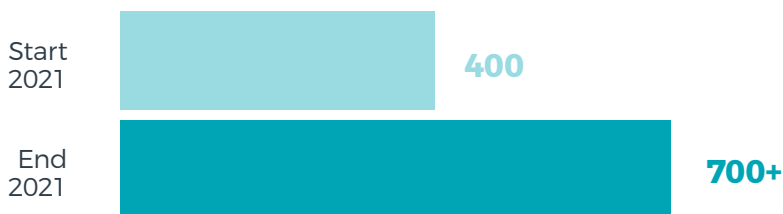


Figure 4 – Growth in the number of ARL Program Members.

In 2021 alone, the ARL Program almost doubled its uptake, starting the year with just over 400 Members and surpassing 700 by the year’s end. The growth in awareness of the ARL may also be attributed to the government’s goal as part of the National Waste Policy Plan 2019 for the ARL to be on 80% of supermarket items by the end of 2023.

The ARL is on track to achieve recognition in line with other common packaging symbols. These symbols include the **Tidyman**, **Mobius Loop** and **Plastic Identification Codes**, which have all maintained awareness rates between 75-96% from 2018-2021 in both Australia and New Zealand. Consumer awareness of these logos is consistently high, presenting an opportunity to clarify the intention of these messages and avoid confusion with recycling information like the ARL.

The Plastics Identification Code, for example, is a helpful way for organisations to identify the type of plastic a packaging format is made of. However, as recyclability is impacted by other packaging characteristics such as colour, size, and additional materials, these are not intended to depict recyclability. This can often be confusing for consumers, particularly when placed inside the Mobius Loop symbol which is commonly recognised as a recycling logo.

Similarly, the Tidyman symbol is an anti-littering icon, encouraging consumers to place packaging in the bin. The challenge remains for consumers to know which bin this is. While the ARL seeks to avoid conflicting messaging, consumers are still seeking consistent and clear information on how to recycle packaging.



Figure 5 – Packaging and disposal symbols commonly identified on-pack in Australia and New Zealand.

# IMPACT 1:

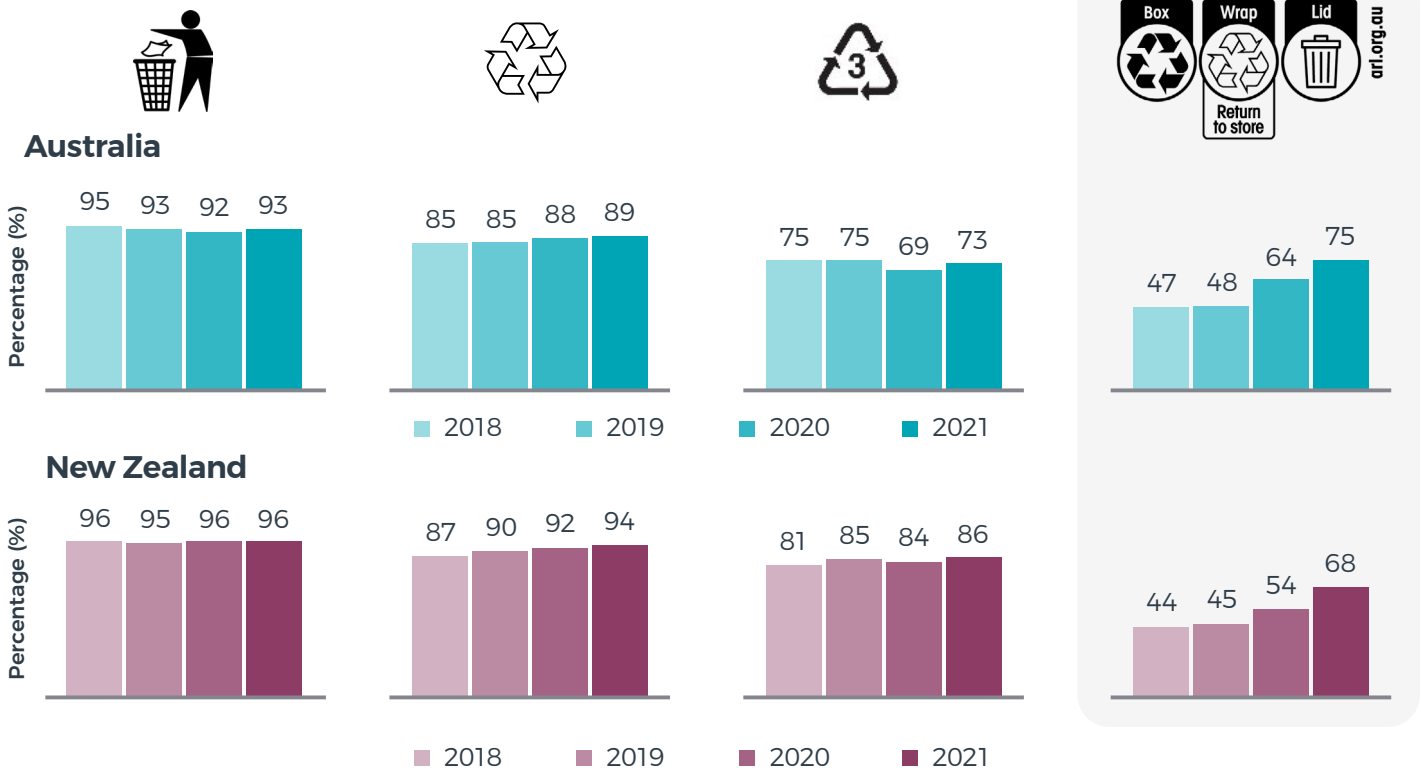


Figure 6 - Recognition of packaging and disposal labels among Australian and New Zealand consumers (%) from 2018 to 2021.

Excitingly, more consumers are seeking out packaging that carries the ARL. More than 70% of Australians and New Zealanders would like to see the ARL on all packaging, emphasising the importance of reaching the Australian Government’s target of 80% of supermarket

packaging carrying the ARL. Consumer Insights Report data also shows that consumers actively look for brands with sustainability credentials, with over half more likely to purchase a product when packaging is labelled with the ARL. Consumer purchasing choices are driving brand value of the ARL and further highlighting the importance of accessible, reliable recyclability information.

These consumer preferences translate into brands carrying the ARL even when their packaging is not recyclable. Consumers seek accountability and transparency from brands, even if this means communicating through the ARL that a packaging component is not recyclable and therefore must be placed in the general waste bin. Rather than viewing the brand negatively for their packaging choices, 64% of consumers in both Australia and New Zealand appreciated a brand’s transparency when applying the Not Recyclable ARL on-pack. Brands with little or no recyclable packaging can use the ARL as an evidence-based communication tool for packaging disposal, increasing consumer trust and keeping not-recyclable packaging out of the recycling system.

**These aren't recycling labels.**

**BUT THESE ARE**

Look for the new **Australasian Recycling Label** when disposing of your packaging today.

**PLANET ARK**

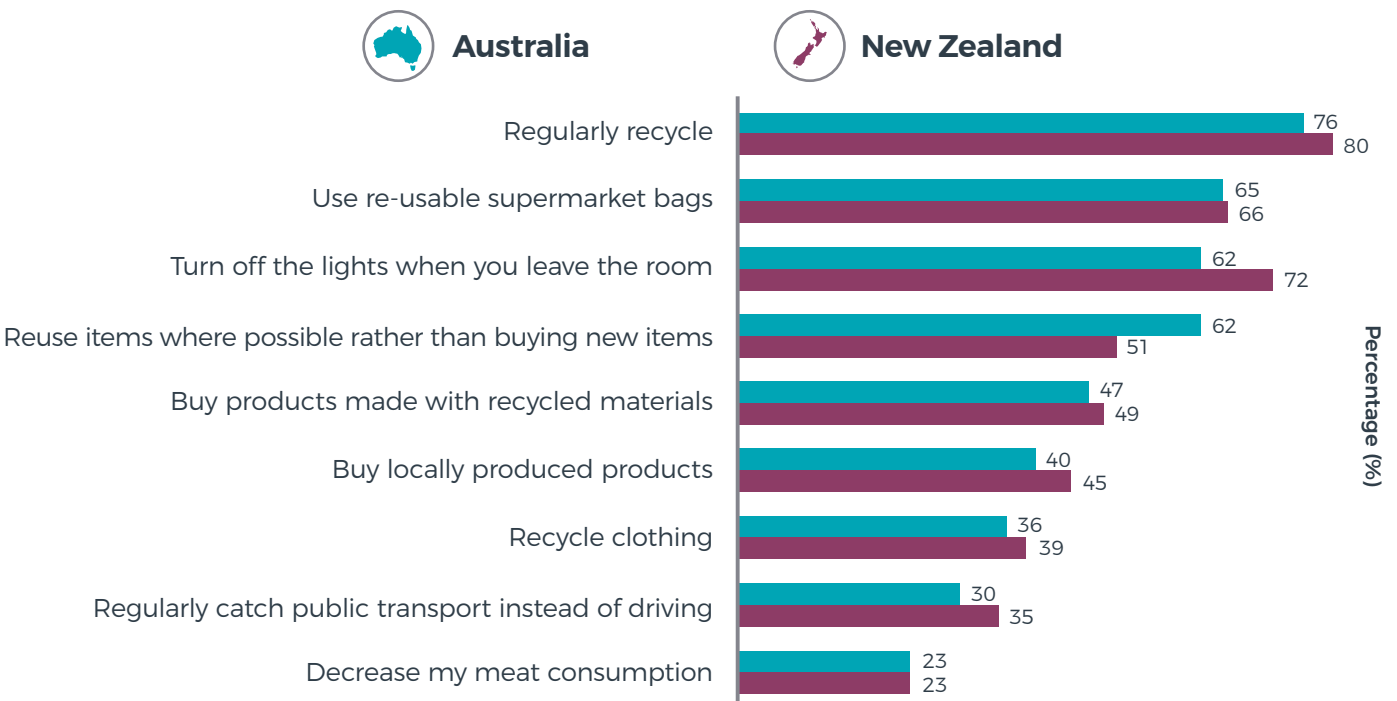
For more information visit [arl.org.au](http://arl.org.au)

Figure 7 - An example of advertising for the ARL developed by Planet Ark.

# IMPACT 1:

While consumers seek out the ARL, around 40% of consumers in Australia and New Zealand believe the ARL does not stand out enough on packaging. This is a marked improvement from 75% in 2018, however it suggests brands can do more to ensure the ARL is visible, large enough and not in conflict with other recyclability messaging on-pack.

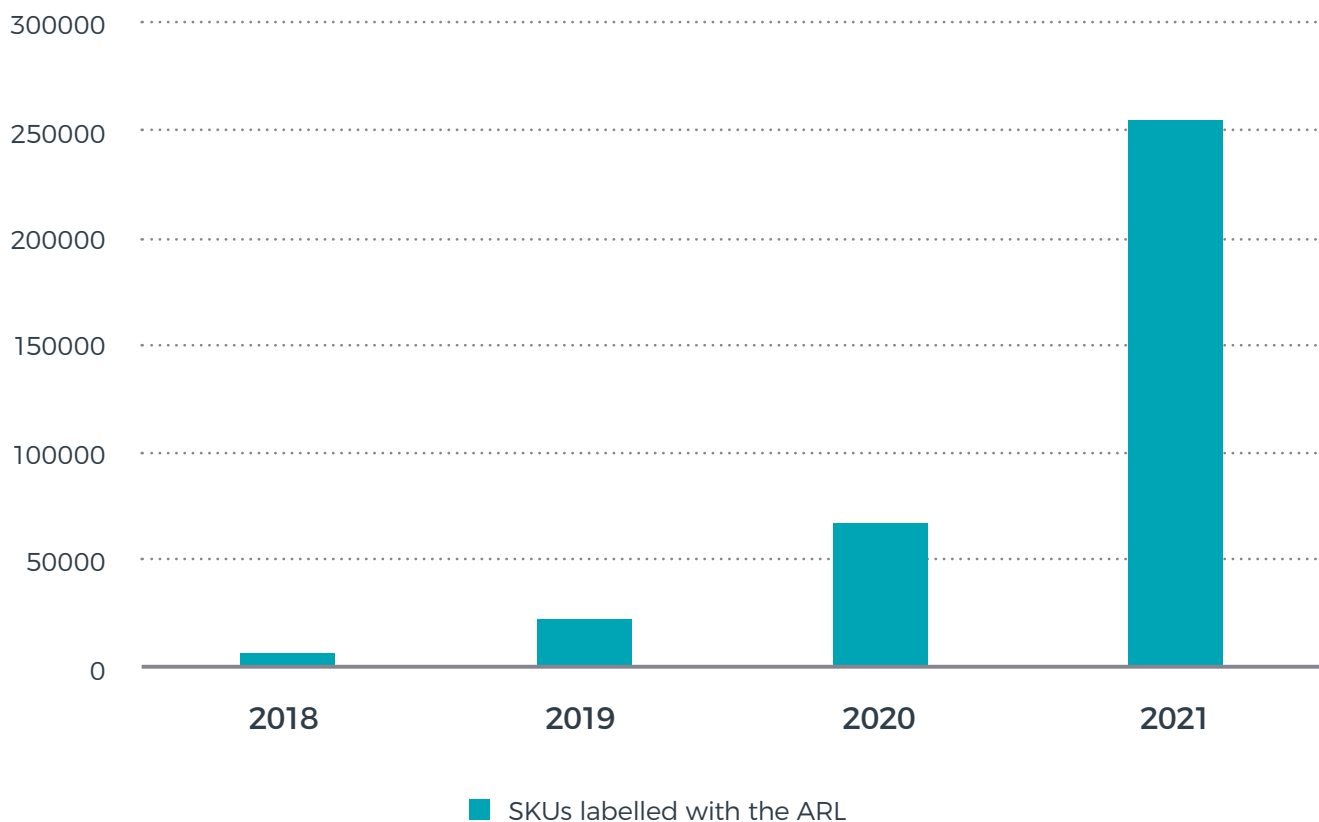
A portion of this statistic may derive from consumers 65 years and older, who recorded a slight decline in awareness of the ARL since 2018. This solidifies the importance that ARL Program Members adhere to sizing requirements as set by APCO to ensure the ARL is clear and legible on-pack, as well as reducing duplicated or conflicting recyclability messaging.



**Figure 8** - List of consumer actions that can help the environment and percentage (%) of Australian and New Zealand consumers who believe they are important.



# IMPACT 1:



**Figure 9** – Total number of SKUs reported on the Australian and New Zealand market, 2018-2021.

The ARL Program continues to be widely adopted across Australia and New Zealand. Since its launch to industry via APCO in 2018, there has been marked increase in the number of ARLs applied on-pack, and the number of components labelled with the ARL.

The number of SKUs in the market displaying the ARL in 2021 was 255,093 – almost four times the number of labels in 2020. With just over 23,000 SKUs labelled with the ARL in 2019, the remarkable uptake of the label, coupled with the fantastic acceleration over the past 12 months, is an incredible achievement by industry. It shows dedication to not only providing customers with vital information, but to improving our resource recovery and recycling rates.

Finally, the Consumer Insights data reported that around 45% of consumers would recycle more than they currently do if they observed the ARL on packaging. This is incredibly promising for industry’s aim to increase the recovery of packaging as the nation works towards the 2025 Targets. As key stakeholders in the packaging value chain, consumers have a direct influence on contamination in recycling bins and the materials recovered.

# IMPACT 1:

## UNDERSTANDING

We can further determine the progress towards Impact 1 (increasing the correct disposal of packaging) by monitoring the following indicators:

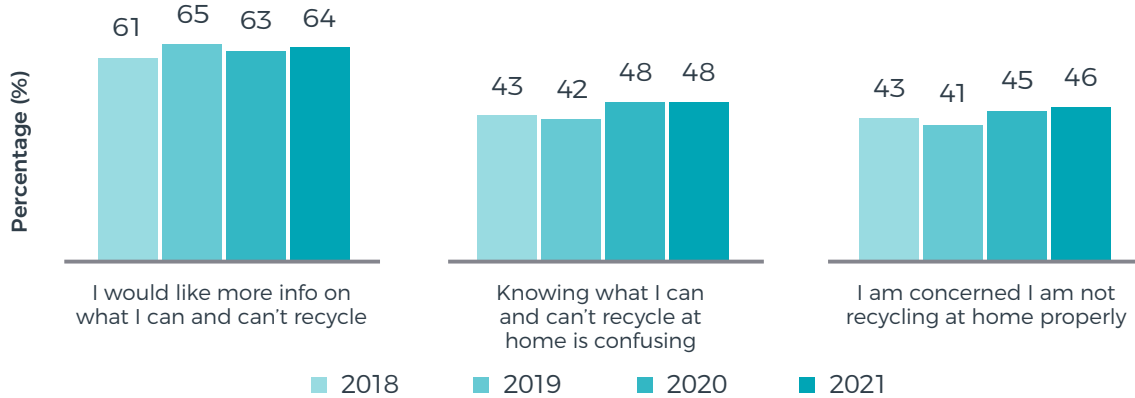
- 1.4 Consumers are actively looking for recycling information on packaging
- 1.5 Consumers follow the ARL instructions when recycling
- 1.6 Consumers change their recycling behaviour based on the ARL

Consumers actively seek recycling information, particularly on product packaging. However, almost half of consumers in Australia and New Zealand find household recycling confusing and are concerned they are not doing it correctly. 60% of consumers in both markets shared an appetite

for more recycling information, underpinning their support for the ARL and desire to see it widely adopted. While most consumers see recycling information as the responsibility of the brand or producer of the product, there is demand at a similar level for government and local councils to provide this – 50% of consumers in New Zealand look to their local councils as a source of information, and 43% in Australia. Most consumers would prefer to access recycling information on-pack, but they still hold government responsible for confirming their understanding.

There is continued growth in the number of consumers seeking information on product packaging, but half of consumers still find recycling at home confusing or have concerns that they are not recycling correctly.

### Australia



### New Zealand

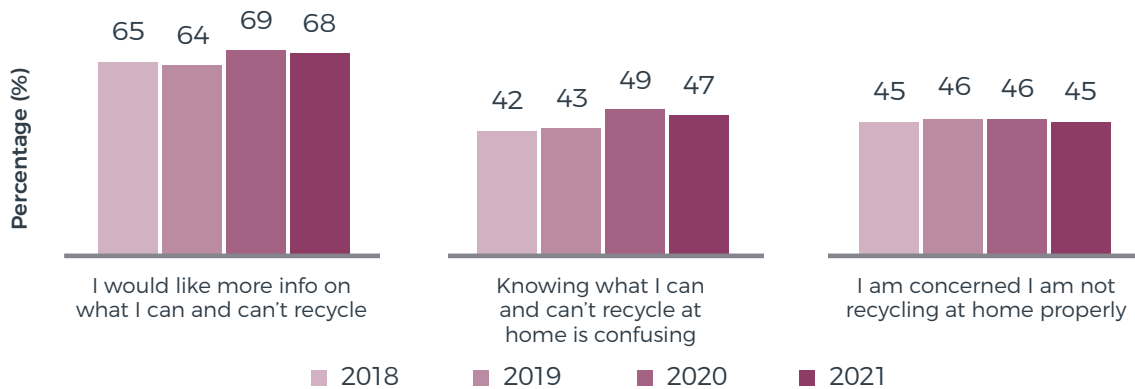


Figure 10 – Percentage (%) of consumers in Australia and New Zealand that agree with the statements regarding access to recycling information, 2018-2021.

## IMPACT 1:

As consumers have become more aware of the ARL, a greater understanding of the instructions has followed. 61% of Australians in 2021 answered that they would always do exactly what the label says, consistent with New Zealand at 59%. However, only half of consumers in both markets feel the ARL tells them everything they need to know. This could be because consumers require more education on the ARL, building upon existing recognition and awareness so that consumers feel confident following the instructions on the label. Further research into where consumers feel there are gaps in their knowledge of the recycling process could build consumer confidence in following the label's instructions.

APCO's ongoing work with Planet Ark seeks to increase consumer knowledge about the ARL, with regular, informative social media features and partnerships with brands seeking to highlight their involvement with the ARL Program. The ARL's National Consumer Education Campaign, a two-year government funded initiative, has produced a variety of infographics, animations, and assets that Members and APCO utilise to spread awareness, encouraging consumers to "Check It! Before You Chuck It".

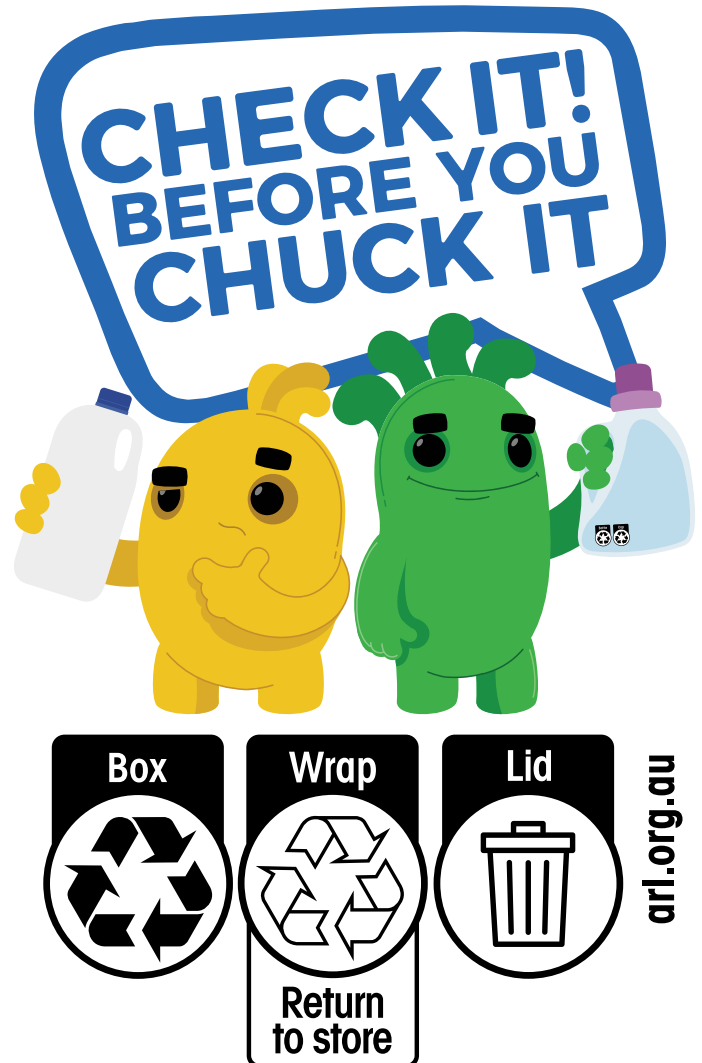


Figure 11 – The National Consumer Education Campaign's "Check It!" characters.

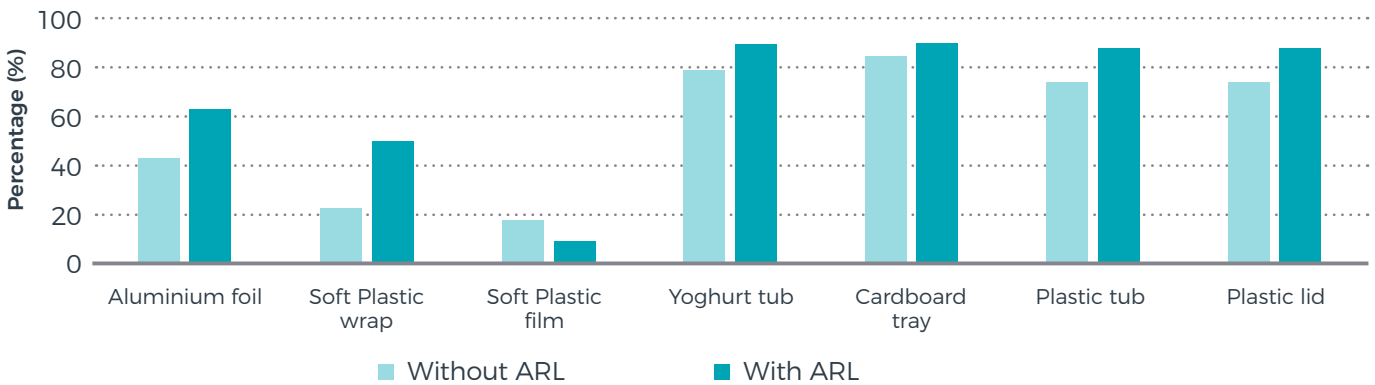
# IMPACT 1:

There is considerable opportunity for growth in the number of consumers who correctly follow the ARL's Conditionally Recyclable instructions, particularly for aluminium foil and soft plastic packaging formats. For instance, less than half of consumers know to correctly dispose of aluminium foil by scrunching it into a ball and placing it in their kerbside recycling bin. By comparison, over 75% of consumers know how to correctly recycle small rigid plastics and cardboard. Other formats (large rigid plastics and plastic lids) have ranged between 70-80% since 2018.

The ARL has an important role to play in, and has a demonstrated impact on, consumers' understanding of recycling. One in four consumers determined that an aluminium foil lid without an ARL present should be placed in a general waste bin. However, with an ARL present, the likelihood that it would be correctly placed in the recycling bin grew by 20%.

Even still, 37% of Australians and 58% of New Zealanders indicated that they would not know how to dispose of the foil lid even with an ARL on-pack. There is significant opportunity to increase recovery of foil components in packaging if consumers are exposed to more education around the Conditionally Recyclable ARL with instructions "Scrunch into Ball."

## Australia



## New Zealand

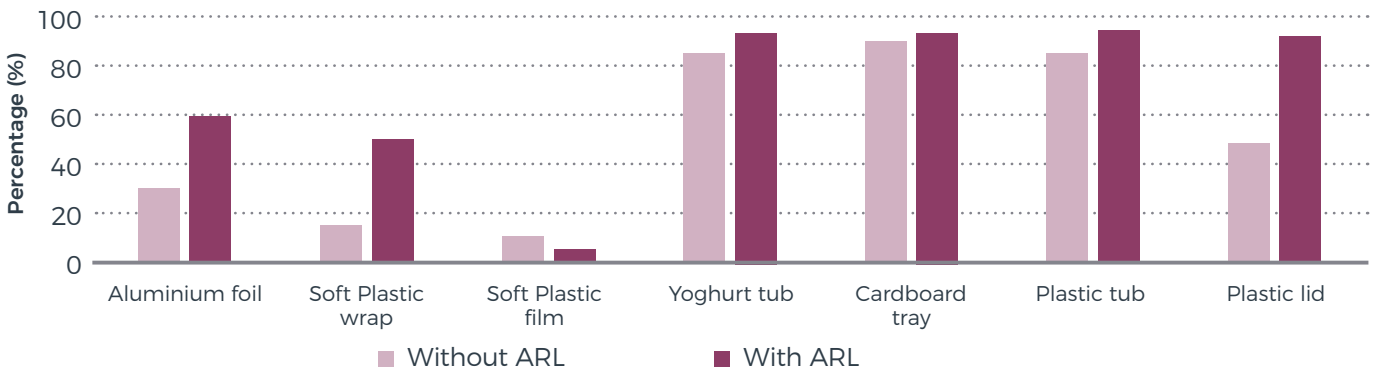


Figure 12 – Percentage (%) of consumers who know how to dispose of different packaging formats with and without the ARL in Australia and New Zealand.

# IMPACT 1:

Awareness of soft plastics collection is not increasing as rapidly as ARL awareness rates. Without the presence of the ARL on-pack, only 1 in 5 consumers identified that soft plastic packaging should be taken back to store, where it can be collected and recycled by soft plastics recovery programs. Reflecting the high rates of soft plastics contaminating recycling, roughly the same proportion still believe that soft plastics should go in kerbside recycling.

The proportion of Australian consumers correctly noting that soft plastic packaging needs to be returned to store to be recycled increases to 50% with an ARL on-pack. For a similar format, a soft plastic film, the numbers remain below 20% regardless of whether an ARL is present. In New Zealand, the figures are similar, exposing a challenge in ensuring consumers read the ARL

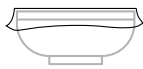
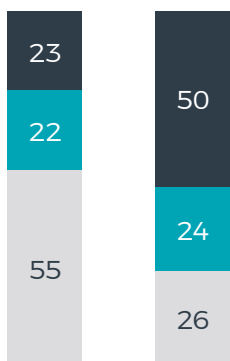
instructions and are knowledgeable about the available soft plastics recycling programs.

Awareness of alternative collection for soft plastics has improved slightly within Australia. In 2019, only 29% of consumers had ever returned their soft plastics, with this increasing to 41% by 2021. In New Zealand, this statistic sits consistently around 30%, however it is important to note the New Zealand Soft Plastics Recycling Scheme has been operating for only six years and in that time experienced operational disruptions due to the COVID-19 pandemic. The data also suggests there is less accessibility for soft plastics collection points in suburban or rural regions of New Zealand. 53% of inner-city respondents answered that they would be likely to return their soft plastics if aware of a collection point, but only 39% of rural consumers responded in the same way.

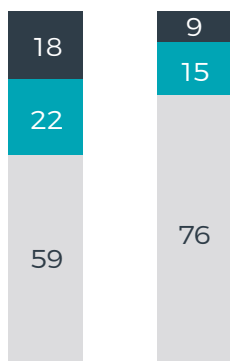
## Australia



Soft plastic wrap



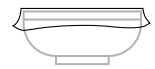
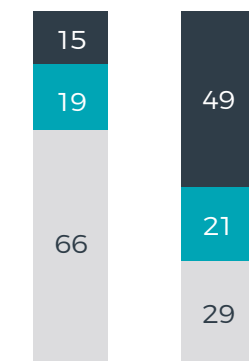
Soft plastic film



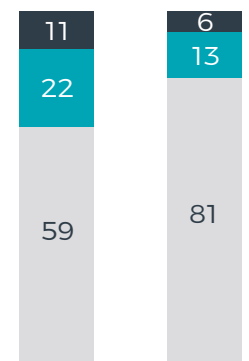
## New Zealand



Soft plastic wrap



Soft plastic film



■ Take it back to the store ■ Recycling bin ■ General waste bin

Figure 13 - A comparison of how consumers in Australia and New Zealand indicated they would dispose of two soft plastic packaging formats with and without the ARL.

## IMPACT 1:

Three quarters of Australians agree that the ARL is a great idea and a similar amount agree that the ARL is easy to understand. This has remained consistent since 2018. The ARL is also supported in New Zealand, where more than three-quarters of consumers think it is a great idea. This is expected to continue with the New Zealand Government announcing in 2021 that the ARL was the preferred labelling option for recycling in New Zealand.

The reporting data from APCO Members and the research conducted for the Consumer Insights Report highlights the areas of most potential for strengthening the ARL's impact:

- Confusion remains around the Conditionally Recyclable ARL. Undertaking further consumer education would support the correct interpretation of this classification to ensure consumers correctly follow the ARL's instructions when recycling.
- Brand owners should look to communicate to their consumers about Conditionally Recyclable logos to ensure they are followed for their specific packaging types and complement the education provided by APCO.
- Brand owners should continue to seek redesign where possible to achieve fully recyclable packaging that consumers interpret as clear recyclability information.
- Awareness of soft plastics collection in both Australia and New Zealand needs to increase for consumers to follow the instructions to return these packaging formats to collection points. Increased education around this option will drive uptake of recycling through these streams.
- Consumer education should be delivered across multiple channels – Planet Ark, APCO, waste industry, governments and brand owners. This will ensure the greatest reach.

## **IMPACT 2:** **Resource recovery from the waste stream is maximised**

Impact 2 focuses on understanding how consumers engage with and follow the ARL instructions when disposing of their packaging. This is tracked using the following indicators:

- 2.1 The kerbside recycling stream includes less contamination from non-recyclable packaging**
- 2.2 The kerbside residual waste stream includes less recyclable packaging**
- 2.3 Packaging components displaying the ARL end in the correct stream**
- 2.4 The kerbside organics stream includes less non-compostable packaging**

APCO will undertake bin audits to determine the percentage of consumers who dispose of packaging with the ARL correctly as a measure of behaviour change. It also seeks to understand if there is less contamination in kerbside recycling from non-recyclable packaging and if less recyclable packaging is in the general waste bin.

APCO are currently developing a bin audit methodology which will be used to capture this data over the coming years. The first year of data will be collected in 2023.

## IMPACT 3:

# The ARL Program supports continual improvement of packaging design to increase recyclability and meet the 2025 Targets.

Impact 3 focuses on continual improvement of packaging that results in increased recyclability and achievement of the 2025 Targets. This is tracked using the following indicators:

### 3.1 APCO Members change their packaging design based on the ARL Program

### 3.2 Overall recyclability of products displaying the ARL increases

To support organisations in designing packaging to be recyclable, feedback is provided for assessments conducted within PREP. This includes information as to why a component is not recyclable and the cause, such as the shape, size or colour of the packaging. Keeping Members informed with up-to-date information about the recoverability of their packaging, including what elements may be inhibiting material value, is a key driver towards innovation in packaging design. This is crucial for Members looking towards the 2025 Targets.

The data from annual ARL Reporting measures the ARL's impact by evidencing changes in packaging design and overall recyclability of products on the market in Australia and New Zealand. In 2021, more than 149,000 SKUs were assessed through PREP, and over 18,000 (12.73%) of these with product design changes to improve recyclability. These design changes could have improved formats from being Not Recyclable to Conditionally Recyclable, Recyclable with Lost Value or Recyclable. These changes were implemented by 111 organisations across Australia and New Zealand, an increase on the 82 organisations actioning packaging design change in 2020.

As 2025 approaches, industry solutions are sought for challenging Not Recyclable components. We expect to see a continuous increase in packaging assessed through PREP and design changes implemented. Design changes will also be subject to the technology and resources available to enable these changes, and drivers for change such as the 2025 Targets, and legislated problematic and unnecessary single-use plastic packaging bans.

In Australia, there was a spike in the number of SKUs labelled with the ARL, however there was a decrease in the percentage of components labelled as 'Recyclable'. It is not possible to attribute this to any one factor, however as organisations continue to apply the ARL, there is a push to improve recyclability for those formats identified as Not Recyclable. Organisations may not have the opportunity to shift or update packaging designs immediately once assessed, instead seeking solutions for the future after labelling. This has been witnessed across packaging formats where alternatives may not yet exist but where organisations still want to provide consumers with the right packaging disposal information.

Many APCO Members have also made public commitments to apply the ARL over the next few years, driven by government targets and internal sustainability strategy. In total, 363,815 components of packaging were labelled with the ARL, with 48.81% labelled as Recyclable, 11.28% labelled as Conditionally Recyclable and 39.91% labelled as Not Recyclable, as recorded by Members in their 2021 ARL Reports.



# IMPACT 3:

## Australia

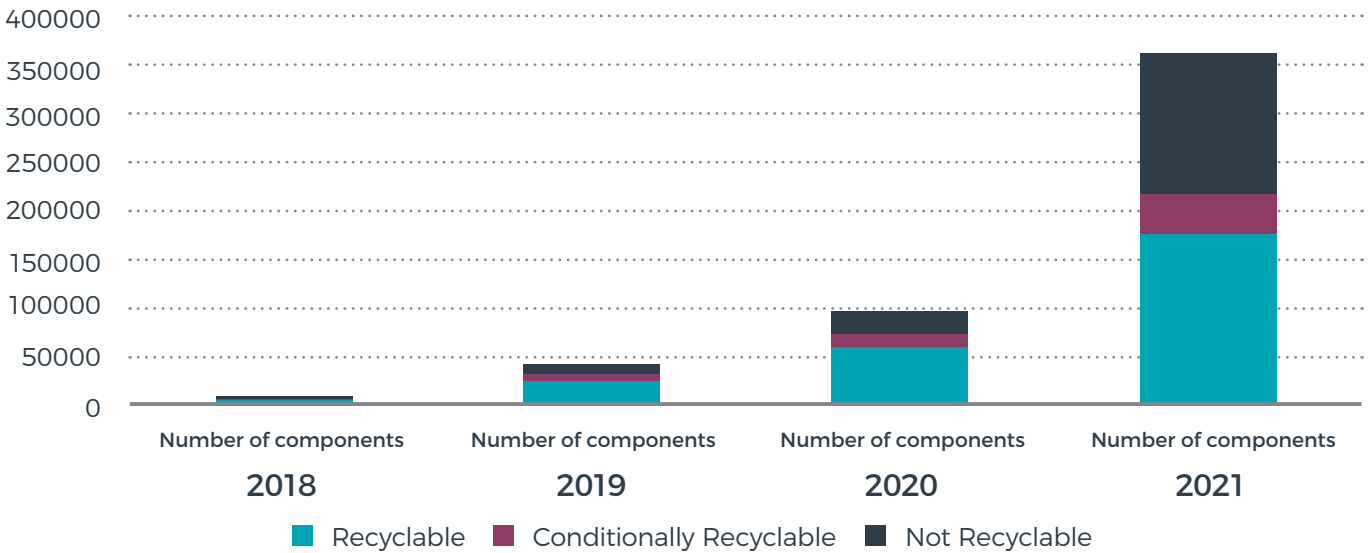


Figure 14 - Number of packaging components labelled with the ARL in Australia from 2018 to 2021, broken down into Recyclable, Conditionally Recyclable and Not Recyclable.

In New Zealand, we have also seen a marked increase in the number of SKUs labelled with the ARL, with 72% of components labelled as Recyclable. This is an increase on the 61% of recyclable components in 2021. Of the remaining

components, 5.33% were labelled as Conditionally Recyclable and 22.59% were labelled as Not Recyclable. Data for 2018 was not collected for the separate markets and has been attributed to Australia only.

## New Zealand

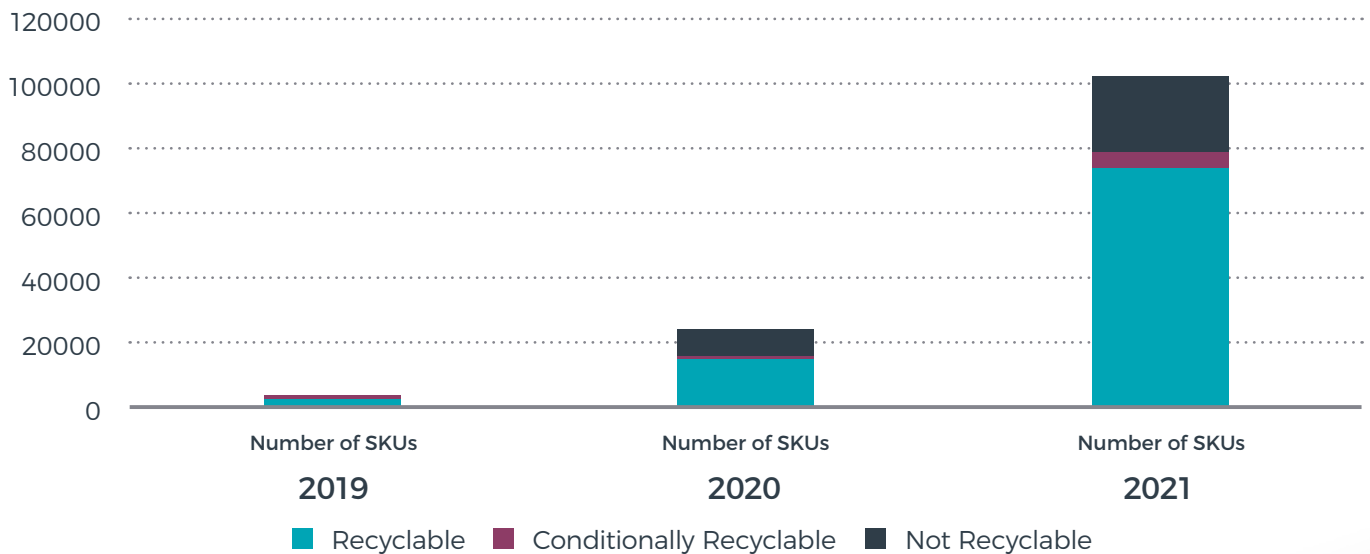


Figure 15 - Number of packaging components labelled with the ARL in New Zealand from 2019 to 2021, broken down into Recyclable, Conditionally Recyclable and Not Recyclable.

# CONCLUSION

The ARL is progressing in both Australia and New Zealand across the three core impacts of increasing recognition and understanding by consumers, maximising resource recovery, and continually improving the recyclability of packaging design. There are also many opportunities for the ARL to grow its impact in these areas. These can be broadly categorised as:

- **Continuing education**
- **Improving data collection**
- **Providing design support**

## CONTINUING EDUCATION

The Conditionally Recyclable logo has the potential to improve recycling outcomes for difficult to recycle materials. It provides instructions for packaging that need specific properties (such as shape) to be sorted for recovery by a MRF or where MRFs will not accept the material and an alternative collection solution is available. However, consumer awareness of the logo and the importance of the associated instructions can be improved. This would minimise contamination of kerbside recycling bins and maximise resource recovery. Consumers would better understand why following these instructions are required, and what other pathways for recovery for packaging are available. As part of continuing education for the ARL, there is significant potential for collaboration between brand owners, APCO and governments to engage consumers. This brings shared value as consumers understand and appreciate the engagement of brands and governments in these issues, whilst improving recovery outcomes across communities.

## IMPROVING DATA COLLECTION

There is also significant potential to improve data collection to better understand the impacts of the ARL. APCO is currently developing a bin audit methodology to be rolled out in 2023. These audits will deliver greater clarity on the impact of the ARL in reducing contamination and increasing resource recovery. Audits will also provide an important role in market surveillance of compliance by brands, ensuring the ARL Program remains robust, supporting existing ARL auditing and compliance.

## PROVIDING DESIGN SUPPORT

Finally, APCO can play a significant role through PREP and the ARL to bring industry together to address problematic packaging. As highlighted in [Our Packaging Future](#), 14% of packaging materials are not recyclable by design. While education on design can occur through PREP and material specific Quickstart Guides produced by APCO, there is an opportunity to bring industry together to work on problematic materials where alternatives may not be known.

The ARL Program within APCO has had a significant impact across Australia and New Zealand. As work continues towards the 2025 Targets, there are many opportunities for the label to grow and continue to improve consumer behaviour, packaging design and resource recovery.