



# Return and Earn: NSW recycling success story



An initiative of



An aerial photograph of a group of surfers in clear, turquoise water. The surfers are scattered across the frame, some standing on their boards and others in the water. The water's surface is textured with ripples and reflections. In the bottom left corner, there is a semi-circular pattern of white dots. In the bottom right corner, there are two overlapping semi-circular areas with diagonal white stripes. Two large, overlapping circles are positioned in the upper right: a dark blue one on top and a green one below it, both containing text.

Minister's  
foreword  
Page 2

Introduction  
Page 4

Clever design  
drives great  
results  
Page 8

How the  
scheme works  
Page 9

Partnering with  
business and  
generating industry  
innovation  
Page 13

Sharing the wins  
with consumers,  
councils and  
charities  
Page 18

The community  
is informing  
the success of  
the scheme  
Page 20

Turning  
waste into  
commodities  
Page 24

# Minister's foreword

When the NSW Government introduced a container deposit scheme as a litter reduction initiative in 2017 we knew it would be successful. We could not have imagined just how successful.

The people of NSW have embraced Return and Earn – three-quarters of us have participated, 4 billion containers have been returned and we have achieved our aim of reducing drink container litter, leaving our parks, rivers and streams much cleaner and healthier as a result.

Importantly, the benefits of the Scheme have gone well beyond litter reduction – we have seen \$10.4 million provided in revenue to the not-for-profit sector, job creation in the recycling industry and for social enterprises, economic benefits for small businesses, and a clean stream of material collected that is boosting our domestic industry.

Return and Earn is a great example of how smart government action can reduce costs, create jobs and shift public behavior. It's a model for how community engagement in litter reduction and recycling could be driven nationwide.

We want to see Return and Earn become even more successful and effective as we move towards a more circular economy, where communities, industry and government work together to reduce waste and recycle more, to create a more sustainable future for us all.

**Matt Kean MP**  
Minister for Energy and Environment

*Zara, Noah and Brody Gers of the Gers Bottle Project with NSW Energy and Environment Minister Matt Kean at the opening of the new Return and Earn machine at Westfield Hornsby, June 2019. Photographer Amanda Long.*





# return AND earn

BY TOMSA | CLEANUP

Glass

## HOW TO CLAIM YOUR 10c REFUND

Cartons  
Plastic  
Cans

RETAIL FUND	RETAIL REFUND	DONATE YOUR REFUND

### ELIGIBLE DRINK CONTAINERS:

# The Return and Earn scheme in New South Wales has been a phenomenal success story.

Conceived as a litter reduction initiative, this unique container deposit scheme (CDS) has now collected more than 4.86 billion containers in just over two years.

Return and Earn has made NSW the market leader in CDS within Australia. The scheme redemption rate continues to rise year on year with the rolling 12-month average at 65 per cent<sup>1</sup>. The most recent quarter, January to March 2020, had a redemption rate of 73 per cent.

Excitingly, this partnership of government and the beverage and recycling industries provides strong evidence that a true circular economy can become a reality in NSW.

Return and Earn has fundamentally shifted people's behaviour and thinking around litter and waste. For the first time, the NSW community is seeing litter as a valuable commodity for reusing and recycling, not as waste.

<sup>1</sup>12-month rolling redemption rate as at March 2020 calculated using total collection volumes through the network and kerbside recycling against net eligible container supply volumes (gross supply volumes less exports).





## Government and industry working together

The scheme's success is due to the partnership between NSW Government and industry which drives great results.

NSW Government designed the scheme and fulfills the role of scheme regulator.

In an example of extended-producer responsibility in action, the beverage industry is an essential partner funding the scheme and, through scheme coordinator Exchange for Change, are responsible for coordinating, promoting and administering the scheme. Exchange for Change is a joint venture of five of Australia's beverage companies, who together have more than 40 years of experience managing container refund programs in Australia.

Other important industry participants are the waste and recycling industry. TOMRA Cleanaway, a joint venture of the leading international CDS and recycling technology business and Australia's largest waste management company, runs the network of return points and collect the containers for recycling.

The scheme's success is also due to the smart, customer-focused scheme design. While there are differing CDS models worldwide and within Australia, NSW's model has proven to be highly successful in rapidly achieving objectives by aligning stakeholders' responsibilities with their commercial operations.

NSW has encouraged its industry partners to deliver innovation. Smart technology drives a proactive, data-rich network that responds quickly to consumer demand in real time.



## Valuable, green commodity

Importantly, the Return and Earn model has been highly effective in generating community interest in recycling and making the scheme fun and accessible for families and kids.

Community participation has enabled the collection of clean streams of materials, creating valuable commodities and the right conditions for a circular economy.



## Sharing the benefits

The benefits of good environmental management are being shared around, through rewarding consumers for recycling, providing opportunities for councils to reduce the cost burden of litter management, and the ability for the community to make charitable contributions when redeeming containers.

Return and Earn improves NSW's sustainability, provides a reliable supply of materials for recycling and is affordably delivered for the State.

# Return and Earn: At a glance

Figures listed correct as at March 2020 unless otherwise noted.



## Scheme performance

More than

**4.86 billion containers**

collected since the scheme commenced in December 2017. This includes more than 3.4 billion drink containers through the network and 1.4 billion containers through kerbside recycling.<sup>2</sup>

Over **40 million containers** are collected per week through the network.

<sup>2</sup> Volume provided through kerbside recycling unadjusted for any Refund Sharing Agreements between MRFs and local council.



## Costs and benefits

More than

**\$427 million refunds paid<sup>3</sup>**

More than

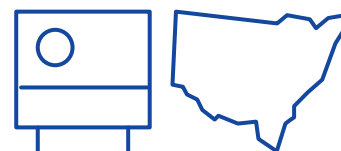
**\$10.4 million paid to NFPs and community groups via fees and donations**



## Jobs

**Around 700 direct jobs created within the network alone.**

<sup>3</sup> Total value of refunds from scheme commencement to March 2020 paid via network operator and material recovery facilities, adjusted for refund sharing agreements.



## Scheme coverage and efficiency

**635 return points**

available across all NSW.

**One return point for every 12,618 NSW residents**

Reverse vending machines (RVMs) are cleared regularly, making machines available

**95% of the time.**

**78% of participants live within 5 kilometres of a return point.<sup>4</sup>**

<sup>4</sup> Kantar Public December 2019 Consumer Research





## Community

**86% of NSW adults**

support Return and Earn and 59% of NSW adults have used the scheme.<sup>5</sup>

Some **600 NSW schools**

are supported by automated depots who provide a collection service.

More than **\$1 million in fundraising donations**

raised via RVM donations alone, since the beginning of the scheme, sharing the benefits across society.

More than **430 community groups and charities**

have been direct beneficiaries as official donation partners listed on RVMs.

In 2018-19, the scheme has helped reduce the volume of eligible drinks container litter across the state:

**73%** of containers returned through the network operator, TOMRA Cleanaway, and **23%** through kerbside council programs.

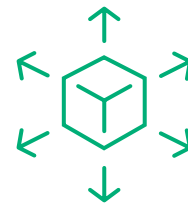


Circular economy

**265,000 tonnes of materials recycled**

and processed for commodity trading in domestic and international markets.

About half the plastic, and 90% of the glass sold by the network operator TOMRA Cleanaway is used for domestic bottle-to-bottle manufacturing, with the balance exported.



Beverage industry participation

Expanding network of **888 suppliers** currently participate in the scheme.

Suppliers' commitment to providing solutions has played a crucial role in the scheme's success.

<sup>5</sup> Kantar Public December 2019 Consumer Research



## Clever design drives great results

The NSW Government has designed a scheme to address beverage container litter with a model that will stand the test of time, is reliable for citizens and industry, as well as cost effective but which delivers big wins for the people and the environment of NSW.

Key principles are to ensure the scheme operates affordably as a cost recovery model and avoids design pitfalls that risk making Return and Earn ineffective in driving participation.

Following moves by China to stop accepting lower quality co-mingled and contaminated recyclable materials and more recently, India's announcement to ban plastic waste imports, the challenge of managing recyclable waste in Australia has deepened.

The NSW Return and Earn scheme has created a high volume of clean, separated material which is highly valued by local recycling companies. This is helping create a viable local recycling industry reducing Australia's reliance on exporting recyclable waste.

Before NSW introduced the Return and Earn scheme, more than 160 million drink containers littered our streets, beaches, waterways and parks. Drink container litter made up 44 per cent of the volume of litter in the state and cost more than \$162 million a year to manage.

# How the scheme works

The scheme has been designed as a cost recovery model. This means beverage suppliers only pay to cover the actual costs of the scheme and the funds collected from suppliers can only be used for container refunds and the cost of operating the scheme. All funds managed through the scheme coordinator are part of a closed financial loop, with all funds accounted for and reconciled. There is also an independent audit oversight.

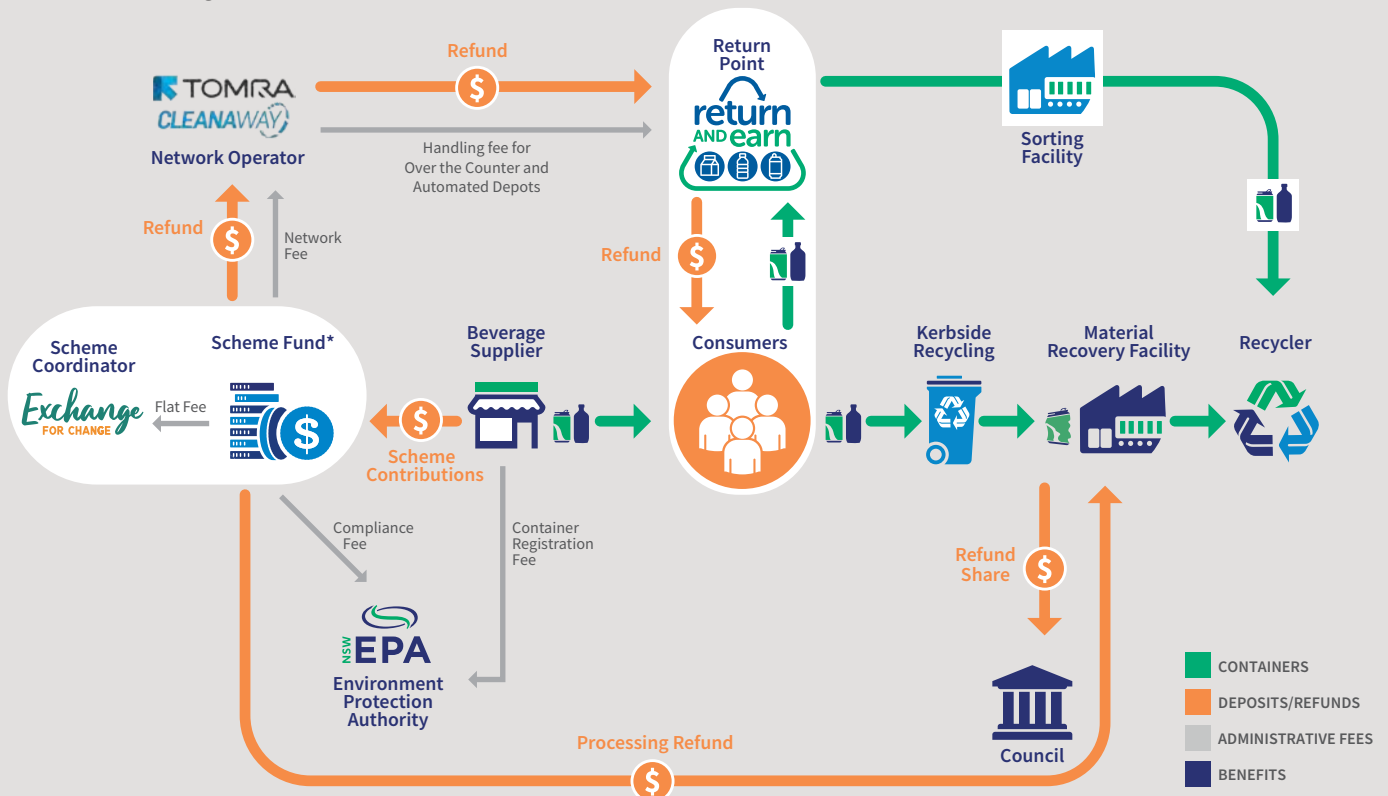
It is a self-funding model that rewards and encourages all participants and is a strong example of effective extended producer responsibility. Eligible containers include most beverage containers between 150 millilitres and three litres.

## Critical success factors

Good scheme design is the key to the success of Return and Earn. The five main success factors are:

1. The clever design of the partnership model that aligns operational roles with commercial incentives to drive great results.
2. A customer-centric network design makes it easy to participate, with return points widely available and convenient to access.
3. Partnering with business has generated industry innovation and cost-efficiency.
4. Data-rich technology is driving performance and responsiveness across the collection network.
5. The scheme shares the wins with everyone including consumers, councils and charities.

### How the funding model works



\*Managed by the scheme coordinator

# A partnership model



## NSW EPA Scheme Regulator

NSW Environment Protection Authority (EPA) is responsible for designing and developing the scheme, managing registration of all eligible beverage containers supplied in NSW and managing the obligations and performance of contracts with the scheme coordinator and network operator.

## NSW Beverage Industry

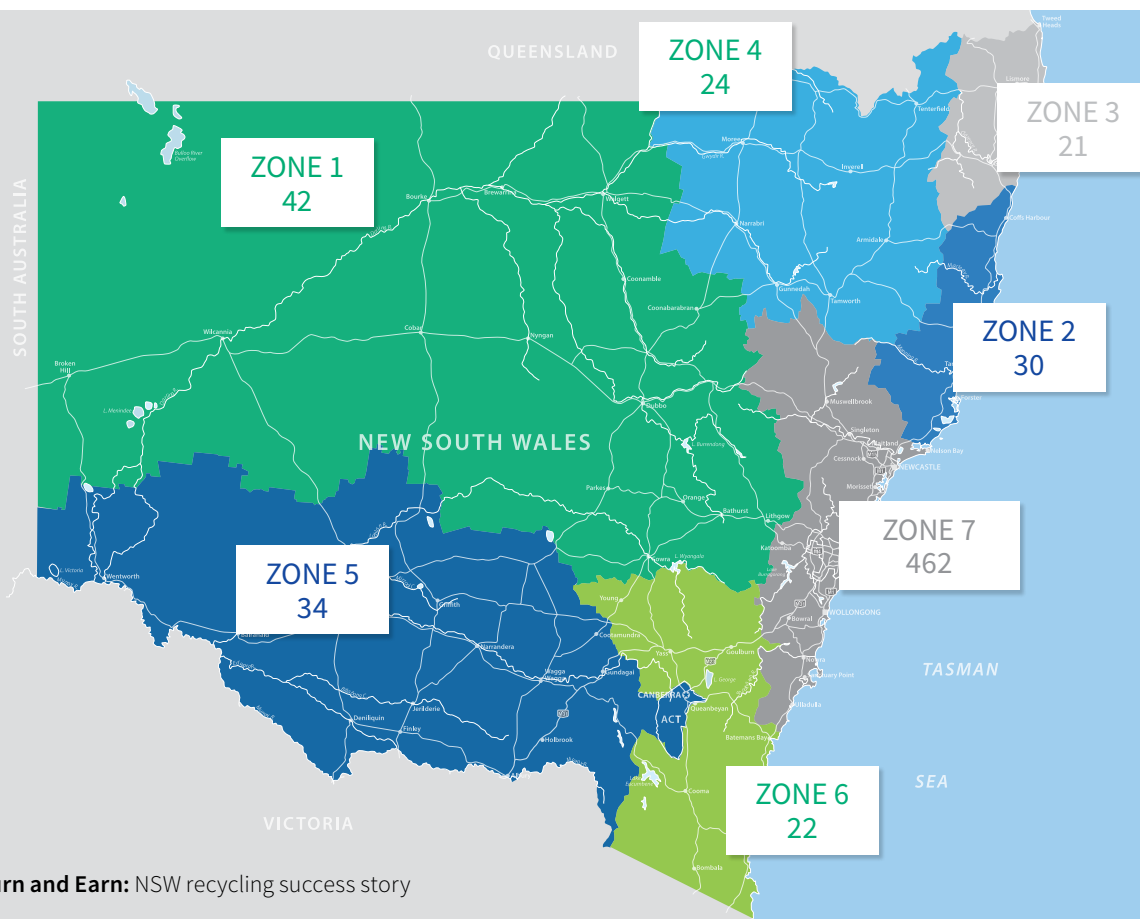
The success of the scheme is in no small part due to beverage suppliers who fund the Return and Earn program. Any businesses selling beverages in containers or giving them away as part of a promotion, whether manufacturers, distributors, wholesalers or retailers must enter a supply agreement with Exchange for Change and register any eligible containers.

## Scheme Operation

The NSW CDS is delivered through fee-for-service contracts:

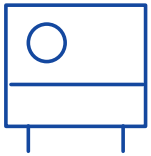
- **Exchange for Change, scheme coordinator:** is contracted to provide financial management, scheme auditing, fraud identification, verification, community education and marketing services. A key part of the scheme coordinator's role is to manage suppliers and ensure supplier funds are paid into the scheme.
- **TOMRA Cleanaway, the network operator:** is contracted to set up and manage a state-wide network of return points, as well as manage the logistics and sale of commodities to ensure all collected containers are recycled.
- **Material Recovery Facilities:** Local councils can arrange to share the container refunds with the material recovery facility (MRF) that collects and/or sorts household recycling. MRFs receive a refund on every eligible container they collect and/or source through the council kerbside recycling system. MRFs are required to negotiate a refund sharing arrangement with councils that supply their kerbside material.

### ✓ Number of return points in each zone in NSW – actual number at March 2020



## Customer centric design

Return and Earn has been designed to make it easy for the community to participate. This is driving strong participation rates.



**323 Reverse vending machines (or RVMs)**



**27 Automated depots**



**285 Over the counter collection points (OTCs)**

### Available, accessible customer choices

Customers have several choices and a wide variety of locations to return and earn. Reverse vending machines (RVMs) are unmanned return points providing highly convenient access and extended hours of operation. Automated depots are staffed and cater for bulk returns while over-the-counter collection stations further augment the network fulfilling local community access to the scheme. The vast majority of RVMs are open more than 100 hours per week, when and where people need them.

The model emphasises customer access and customer choice with a range of return point types, which also helps to manage commercial risk for the scheme's network operator through a diverse network with varied operational needs that can readily adapt to the environment to meet customer needs. They include:

- Some 323 **reverse vending machines** (or RVMs) which are reliable, automated and designed to enable citizens to quickly deposit their containers at convenient locations they are already visiting as part of their shopping habits.

- A total of 27 **automated depots** that are staffed and can take bulk deposits of more than 500 containers. A number of automated depots offer a collection service which has proven popular with many NSW schools, who use Return and Earn as a valuable fundraising activity.
- Some 285 **over the counter collection points** (OTCs). These are local businesses, such as corner stores and newsagencies. They accept small quantities (usually less than 100) of eligible containers over the counter in return for a cash refund and are an important part of the network, particularly in the space-limited inner city, and in small rural communities.

### Proximity

Highlighting the effectiveness of the community access principles inherent in the scheme's design, consumer research has found that proximity to a return point is a key driver of participation with 78 per cent of users living within five kilometres and citing this proximity as a reason to participate. The scheme design has ensured the network of return points has been delivered to provide equal access to all citizens across the state.

### It's easy – no paperwork

Participants do not need to complete any paperwork to use Return and Earn. This avoids a significant barrier in some interstate schemes that require participants to register before they can deposit containers.

People who use RVMs can choose to receive a refund to their PayPal account, receive a voucher to spend or swap for cash at a participating retailer or donate directly to a selected charity. At automated depots, citizens making returns can choose cash refunds, EFT or donation options.

### Quick resolution of issues

Complaints and issue resolution are handled efficiently through one call centre with a centralised 1800 phone number and email address. The Return and Earn website is also the key focal point for communication about the scheme. Citizen contact then guides the continuous improvements and innovation for the scheme.

## Job creation

The Cleanaway Container Sorting Facility at Eastern Creek operates seven days a week and employs up to 39 staff, with another 200 drivers required to collect containers. All up, Return and Earn has generated about 700 jobs in the recycling sector so far, with a large number of these jobs in regional NSW. However, the scheme provides significant opportunities for other job creation including among social enterprises like charities and local groups that set up automated depots, and small businesses that choose to become part of the scheme.



# Partnering with business and generating industry innovation

Return and Earn's industry partners are essential to the scheme's success. The success of the relationship comes down to the management structure. It balances environmental imperatives with commercial incentives. This has encouraged real innovation and made the scheme sustainable, reliable and affordable.

- The NSW Government is in a direct contractual relationship with both the scheme coordinator and network operator and has a high-level of involvement and interaction with these bodies. This includes right to audit, review performance and enforce service level improvements.
- As scheme coordinator, Exchange for Change is contractually obligated to ensure beverage suppliers are registered and compliant. This means all suppliers contribute to the scheme keeping costs reasonable and equitable, and Exchange for Change ensures scheme funds are conserved and well managed. Through a stringent audit regime, they verify that the network operator is only claiming containers that are redeemed and MRF operators are only claiming containers that have been recycled.
- TOMRA Cleanaway as network operator is driven commercially and contractually to provide high levels of community access to the scheme. Convenience, location, and proximity to retail redemption partners are all considerations of return point locations. TOMRA Cleanaway must ensure recycling outcomes are met through delivery of materials to authorised recyclers.

## State-of-the-art investment

NSW has benefited from the introduction of state-of-the-art sorting and processing infrastructure. Cleanaway's Eastern Creek Container Sorting Facility includes a \$7 million investment in plant and machinery, making use of TOMRA Sorting Solutions scanning technology to separate the various material streams.

TOMRA's optical sorting and reverse vending machine technology scans bottles from 360 degrees, taking one gigabyte of images per second. The speed and ease of these machines enables TOMRA to collect more than 40 billion containers through RVMs worldwide per year.

## Stability for MRF operators

More than \$114 million<sup>6</sup> in additional refunds have been claimed for containers collected through kerbside recycling since the scheme commenced, providing much needed revenue for MRF operators.

The ability for NSW MRFs to claim refunds has kept downward pressure on local government waste charges. Councils have also been able to negotiate refund sharing agreements with their local MRF to share in these refunds.

<sup>6</sup> Total amount paid to MRFs having refund sharing agreements in place with local councils, less sampling costs.

## Building a commodity market

Return and Earn has shown the true potential of recycling as a commodity market for Australia. The clean, source separated material is a highly valued commodity stream with great potential for recycling into new beverage containers and for other manufacturing uses.

Return and Earn has enabled some 265,000 tonnes of materials to be recycled and processed for commodity trading in domestic and international markets. Bales of aluminium cans are shipped overseas for smelting and remanufacturing into sheet metal, which can then be used to produce new beverage containers.

Meanwhile, about half the plastic sold by the network operator TOMRA Cleanaway is used for domestic bottle-to-bottle manufacturing, with the remaining half exported. A significant portion of glass is reprocessed domestically in NSW and South Australia to produce new glass bottles and glass packaging products.

These statistics show the potential power of the circular economy within Australia, when supported by harmonised government policy that delivers the volumes that would make domestic processing more attractive.

## Operational model

By separating the funding and operational roles, Return and Earn creates positive commercial tension and clarity of purpose. Each scheme partner has distinct drivers for cost efficiency, high consumer redemption rates, good citizen access and scheme integrity. The scheme coordinator is motivated to manage the scheme's costs efficiently while the network operator is motivated to increase participation and drive container returns across the board.

### Open tender

Choosing NSW's industry partners was critical: the scheme would only be successful with the right partners understanding NSW's objectives and being fully committed to the task. Accordingly, an open tender system was used to ensure the best proposals were brought forward. This maximised the likelihood of innovative ways of delivering Return and Earn, while also securing the highest levels of transparency for an important public initiative.



## Single network operator advantages

The single network operator functions as a head contractor to multiple sub-contracted organisations which provides advantages to all parties involved in the Return and Earn scheme and enabled over 300 businesses and social enterprises to participate as return point operators. It allows an intense focus on customer-centric design and is integral to the containment of costs under the full cost recovery design of the scheme. The network operator is incentivised to collect as many containers as possible, encouraging them to go beyond the minimum number of return points required under the contract. It is in the network operator's interests to provide a positive customer experience and increase participation to boost container volumes.

The model also allows economies of scale in the provision of automated machinery such as RVMs. This allows a greater number of these machines to be deployed at less cost to the scheme, helping keep costs down for scheme partners including beverage





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recycled.

### Centralised administration and accountability

The centralised administration provided by the scheme coordinator has multiple benefits. It enables a consistent approach to contracts and supplier relationships, clear and accountable financial management, and also allows end to end assurance and fraud minimisation.

### Small business, local and regional participants

Return and Earn offers an opportunity to smaller and local businesses to play a role collecting containers. Over-the-counter collection points have provided a commercial opportunity for these businesses. Automated depots have enabled independent operators including various charities (such as Vinnies, Hoxton Industries, REDI.E) to provide tailor-made services in response to the needs of their local communities. This generates the potential for local job creation and growth of these businesses' customer bases.

Relationships across the return point network are also very important. Return and Earn succeeds in achieving a balance between providing NSW citizens with a consistent customer experience no matter where they return containers through the scheme and enabling participating businesses to develop their return points to suit local needs and their own businesses. Whether in metropolitan NSW or the bush, Return and Earn gives everyone availability and access.

manufacturers. Convenient return points are the key customer interface for the scheme. After two years of scheme operation, the network operator has been able to demonstrate that RVMs are open to customers for an average of 105 hours per week, spread across the seven days. This in turn is leading to continued growth in the number of containers being returned for recycling.

In addition, the single network operator model reduces the costs of auditing all points of the Return and Earn circle. For example, the network operator return point network is underpinned by a single data platform allowing real time reporting, analysis and audit tracking.

The clean, uniform, recyclable material generated by the scheme and managed by one operator has advantages in the on-selling of materials compared with other CDS models where the role is devolved to many providers. The single operator allows for long term contracts and a critical mass to support a viable and sustainable recycling industry in Australia. This creates jobs in recycling in Australia in place of jobs in other countries when recyclable material is exported.

# Data rich technology driving performance across the network

Return and Earn's data-rich network of collection points enables the NSW Government to offer citizens a world class container deposit scheme with high levels of access backed by solid, reliable data.

The 320 reverse vending machines (RVMs) are the backbone of Return and Earn. Available during times aligned to retail redemption partner operating hours, RVMs are reliable, easy to use and represent more than half of all return points but account for a staggering 80 per cent of all bottles and containers returned.

## Proactive network management

Their popularity and ease of use means RVMs see a lot of foot traffic, which requires regular clearances to prevent downtime. This is achieved through a sophisticated live data network that allows TOMRA Cleanaway to monitor bin levels, ensure bins are cleared and deal quickly with technical faults.

As a result, Return and Earn's RVMs average above 95 per cent uptime for access. Proactive management means there are some 2,200 RVM clearances daily across NSW, backed by a fleet of more than 200 trucks.

## Identifying new return points

Collected data also helps identify the need for additional return points such as automated depots by monitoring the busiest return points with high individual bulk drop-offs and places with high foot traffic that may benefit from additional RVMs.

## Live availability

A live data feed is connected to the Return and Earn website and the myTOMRA App, helping NSW consumers find the nearest return point and access live return point status updates. Consumers can check whether their nearest RVM is open, almost full or outside operating hours.





The 323 reverse vending machines (RVMs)... are reliable, easy to use and represent more than half of all return points...and account for a staggering 80% of all bottles and containers returned.

### Generosity and giving

Citizens using RVMs can also choose to redeem digital vouchers or donate their container refund to a charity listed on the RVM or to any charity with a PayPal account who has signed up as a donation partner.

### Greater coverage

Boomerang Alliance notes that the NSW Government's approach to working directly with the network operator TOMRA Cleanaway has resulted in better than expected coverage, with one return point for every 12,618 people. Interstate schemes are understood to have less coverage, as few as one per 20,000 people. These results have only been possible because of Return and Earn's unique design features of convenience and incentivising the network operator to prioritise community access.

# Sharing the wins with consumers, councils and charities

The design of Return and Earn allows for benefits to be shared providing a financial incentive to individuals who recycle and reducing kerbside recycling charges for councils.

Return and Earn also provides an unprecedented new opportunity for social enterprises, community groups, sporting clubs, schools and charities to raise much-needed funds.

Stories about community fundraising, individual entrepreneurship and local community development abound. Return and Earn is fast becoming part of the fabric of community life in NSW. The scheme's objective is to ensure this is fast tracked and focuses on enabling individuals and groups to make the scheme their own and part of local ingenuity.

Participation and involvement in events such as the Australia Day Environmental Citizen Awards, Clean Up Australia Day and National Recycling Week, as well as partnerships with Keep Australia Beautiful, NSW Council of Social Service and Australian Association of Environmental Educators NSW are all good examples generating positive environmental, economic and social benefits and demonstrate the corporate social responsibility being delivered through Return and Earn.

## More than 430 beneficiaries

Return and Earn has delivered significant social benefits to the community with more than 430 community groups and charities becoming direct beneficiaries of Return and Earn donations through the RVM network alone since the scheme launched.

## More than \$1 million in donations

Since the launch of the scheme in 2017, more than \$1 million in donations has been raised through RVMs alone. Charities, schools, community and sporting groups can:

- Seek container donations from the community and redeem them for a refund at an approved return point.
- Apply to become a donation partner on reverse vending machines to receive donations from people using that machine.

## Rewards for social enterprises

Many community groups and individuals also use Return and Earn for informal fundraising or to supplement their income.

By participating in the network as return point operators, social enterprises such as St Vincent de Paul Society of NSW (Vinnies), Hoxton Industries, Citizen Blue and Resource Recovery Australia have returned benefits to their broader stakeholders. Vinnies alone has processed more than 78 million containers through its bulk deposit centres and over-the-counter collections at selected retail shops.

## Case study: Scouts NSW

Scouts NSW have been active participants in Return and Earn since the scheme began. Members have made a huge effort and actively collected containers to fundraise for their activities including the 2019 Jamboree. Scouts have also featured as a donation partner on reverse vending machines across NSW, enabling people to donate to them when returning containers at the machines.



## Case study: St Vincent de Paul Society of NSW (Vinnies)

Vinnies' involvement in Return and Earn has created a new business arm for the charity. There are now more than a dozen over-the-counter return points in Vinnies shops throughout western Sydney, the Illawarra and Shoalhaven, as well as bulk processing sites in Unanderra, South Nowra, Wagga Wagga, Dubbo, Cardiff and Penrith. Vinnies' involvement in Return and Earn has created more than 30 extra jobs, training opportunities for disadvantaged people, and a new income stream to help with their valuable work in the community.



Hundreds of people and groups across NSW are already using Return and Earn to fundraise and clean up our environment.

# The community is informing the success of the scheme

Community support has proven to be an essential ingredient in the Return and Earn success story.

There is clear evidence that the community has taken the scheme to its heart: the first billion containers were collected in the first twelve months, the second billion was collected in nearly half the time seven months later, and just past the scheme's second anniversary, the three billionth container through the return point network milestone was reached.

Return and Earn has done this by pursuing a deliberate strategy of making the scheme easy to access, easy to use and open to all including community, school and charity participation.

## Community research

Research to understand and respond to customers and the community has been integral to the Return and Earn success story.

The most recent research findings from December 2019 are highly encouraging and indicate Return and Earn is continuing to build support.

### Key findings

Concerns about the environment are top of mind for almost one in four NSW residents<sup>7</sup>. There is broad community awareness of the importance of recycling and concerns about material going to landfill. There is confidence the material is being recycled.

As many as 70 per cent of those surveyed said they had considered recycling outcomes while one third said they had consistently changed their behaviour to ensure positive recycling outcomes.

**Awareness of the scheme is high.** Nine in ten NSW residents were aware of the Return and Earn scheme in December 2019. Media reporting of the scheme was positive or neutral in nine out of every ten stories at the time of this review.

**Support for the scheme is growing.** 86 per cent of NSW residents support Return and Earn.

**Advertising successfully raised people's awareness that return points are open 7 days a week.** More than nine in ten are now aware that this is the case.

**People are sorting and separating their recyclables at home.** Most have a dedicated space where they store recyclable Return and Earn eligible containers. This demonstrates there is an opportunity to improve in-home separation of recyclable materials.

**Participation in the scheme is increasing.** It is up from 48 per cent in December 2018 to 59 per cent in December 2019. It is significantly higher among parents and those who have seen Return and Earn advertising. People not participating in Return and Earn believe they continue to recycle using other available methods, for example council collections.

The NSW Government, the scheme coordinator and the network operator are using this data to further develop customer experience improvements for Return and Earn consumers.



**86% of NSW residents support Return and Earn.**

<sup>7</sup> Kantar December 2019 Return and Earn consumer research results



Community support has proven to be an essential ingredient in the Return and Earn success story.



# Return and Earn donation partners

## Our current donation partners

Every six months a new set of schools, charities, community and sporting groups feature on reverse vending machines across NSW. They are Return and Earn donation partners and people returning containers can choose to donate their refunds to them. So far more than 430 donation partners have shared in more than \$1 million of refunds.



## Bottles for the Bush

As a result of the drought and bushfires sweeping through our regional communities, Rural Aid is working hard to supply much-needed food, hay and water to those in need to support them through this tough time.

To assist them, Return and Earn and TOMRA partnered with Rural Aid for the Bottles for the Bush appeal.

Launched in November 2019, the original goal of Bottles for the Bush was to raise \$250,000 nationally. This target was reached only weeks into the campaign, and a new target of \$500,000 by the end of February 2020 was set. The appeal was a great success, raising \$512,000 nationally, including a staggering \$468,000 of donated container refunds contributed by NSW Return and Earn participants.

The next major appeal announced by TOMRA and Return and Earn is the Cans for Koalas appeal, which aims to raise \$250,000 for WWF-Australia's Wildlife and Nature Recovery Fund. Each eligible bottle or can donated will help local wildlife recover from the devastating impact of the recent bushfires.

# Partnering with schools and the education sector



## Federation of Parents and Citizens Associations of NSW

In March 2019, Return and Earn joined exhibitors which provide goods, services and/or resources to P&C Associations, public schools, students and school communities at the NSW P&C Federation 2019 Conference. The NSW P&C Federation's network comprises approximately 1,800 member P&C Associations in NSW. The NSW P&C Federation provides Return and Earn with additional promotion through the P&C Journal, a quarterly publication with a distribution of more than 6,000 copies and over 2,000 readers of the online version.



## Australian Association for Environmental Education NSW Chapter

Return and Earn sponsors the Take Me Outside NSW program, Sustainable Schools NSW and the biannual NSW Environmental Education Conference. This partnership enables Return and Earn to be credibly integrated into key programs on campus, in curriculum and through culture; as well as AAEE NSW playing a key advocacy role for the scheme. With over 4,000 members, AAEE NSW is the largest chapter of the eight jurisdictions nationally and has coverage across 75 per cent of all schools in NSW.



## Cleanaway Know Waste and Keep Australia Beautiful NSW Enviro Mentors Programs

Students across the state are receiving education about Return and Earn through these programs. With a great reach to schools in different council areas, both programs have engaged with over 160 schools in NSW driving engagement with the next generation of recyclers. Cleanaway's Know Waste program alone has engaged more than 12,000 students over the last two years.



# Return and Earn advocacy partners



## Keep Australia Beautiful Awards

Return and Earn sponsors the Keep Australia Beautiful NSW Sustainable Cities and Sustainable Communities – Tidy Towns Awards. The Return and Earn Litter Prevention Award category offers for each award a \$5,000 prize to community groups, schools and charities who have worked to reduce litter and encourage recycling. In 2018 two groups were awarded in the inaugural Return and Earn category for the Sustainable Cities Awards and an additional six groups took out the Sustainable Communities Tidy Towns Awards.

The success of Return and Earn is made possible by community engagement and the support of our partners.



## Australia Day Council – NSW Environmental Citizen of the Year Award

The NSW Environmental Citizen of the Year Awards, sponsored by Return and Earn, was launched in 2019 and recognises individuals and organisations for championing litter reduction and environmental initiatives in their local communities. Nominees may be recognised for work such as: preserving the environment and/or using the Return and Earn scheme to fundraise for a meaningful cause.



## Clean Up Australia

Linking Return and Earn and Clean Up Australia, through the Advocacy Partner program, provides an association with the largest community participation event in Australia and the opportunity to support environmental activism and education about the social and environmental benefits of the scheme. This year, Return and Earn supported Clean Up Australia Day at three different locations.

*Four year old recycler Jonathan English, winner of the Return and Earn Litter Prevention Award for Individuals at the Keep Australia Beautiful NSW 2019 Tidy Towns Awards.*



# Turning waste into commodities

How can NSW build on the success of Return and Earn? Return and Earn is part of the long-term solution to address the management of recyclable waste in NSW. It has successfully diverted container waste from landfills and litter in the environment. It has done this by capturing these valuable resources and establishing in NSW a credible and reliable source of clean recyclable materials to meet growing demand in Australia and overseas.

Importantly, the scheme clearly demonstrates that it is possible to turn waste into a highly valued resource with the right policy and the right design. The formula for success that Return and Earn represents can be summarised as:

- Drive participation through convenience and easy access
- Let industry partners innovate
- Smart design that enables consumers, councils, and charities to share in the benefits.

However, a circular economy is only possible if we can continue to drive changes in personal behaviour. This requires leadership from Australian governments.

Looking at the future, there is real potential for this model of partnerships and producer-led responsibility to help deliver the NSW Government's Circular Economy Strategy. This potential is currently being explored through development of the NSW 20-Year Waste Strategy, as a whole-of-government initiative which sets out a long-term strategic direction for communities, industry and all levels of government to work together to build resilient services and markets for waste resources.



## New way of working

The success of the NSW CDS provides great opportunity for local cross value chain collaboration by ensuring certainty in the availability of quality feedstock for recycling. In February 2020, Pact Group Holdings, Cleanaway Waste Management and Asahi Beverages announced plans to jointly develop a \$45 million plastic pelletising facility in NSW which when operational will process up to 28,000 tonnes of CDS material and other recyclables for the production of food and beverage packaging.

## Triple bottom line

As a litter reduction initiative, Return and Earn encourages correct disposal of drink containers which were previously a common litter item.

Additional ticks for the economic and environmental bottom lines are achieved when recycled containers become part of the circular economy, extending the use of existing materials, reducing reliance on natural resources while stimulating the domestic recycling economy. The scheme has also delivered big wins for the community with community groups, charities, councils and schools all sharing in the benefits and new employment opportunities arising out of the scheme.



## The formula for success:

- Drive participation through convenience and easy access
- The right policy settings enabling industry development and innovation
- Smart design that enables everyone to share in the benefits.

## Considerations

Government setting the policy objectives and enabling industry partners to innovate has been central to the success of Return and Earn. Innovative scheme design and responsive, data-driven management are what has enabled NSW to drive high redemption rates.

Realising a circular economy requires the right conditions and incentives for government, industry and the community to succeed. Return and Earn has put NSW on the right path by creating a platform for a circular economy enabling:

- continued growth in community engagement to ensure scheme materials are collected
- the waste management industry to grow and have the confidence to invest in innovations to improve the collection and sorting of scheme materials
- access to a reliable and clean stream of commodity materials to promote the development of domestic processing capability for recycled high quality food grade packaging
- access to affordable recycled packaging made in NSW for suppliers, creating value and return on investment.

## Getting the balance right

Cost-efficiency, fairness and inclusion are important goals that provide social licence for container deposit schemes. NSW's experience suggests that commercial innovation and social equity can live side by side if the policy settings are right.

Return and Earn has attracted extraordinary participation levels, enabling it to collect very high waste volumes and achieve critical environmental outcomes for NSW. It is profitable, it has created jobs and shifted public behaviour about the value of waste as a commodity that is good for Planet Earth. The scheme has huge public support and it has clear, in-built community and charitable outcomes. It has achieved all this affordably, efficiently and within a very short timeframe. While a program of continuous improvement will always occur, we believe Return and Earn has got the balance right.

## Strengths of the NSW Container Deposit Scheme

Experience in NSW over the past two years indicates there are some useful learnings worth the consideration of other jurisdictions that are either looking at implementing a container deposit scheme or seeking to optimise their existing scheme.

The deliberate focus on convenience and access in NSW does appear to have driven high participation rates and high collection volumes. Collection logistics and effective brand and marketing have also been highlights in the NSW model.

They include:

- **MAXIMISING VOLUMES**

NSW has been able to use its scheme design to maximise collections from what is the nation's largest potential waste stream, accounting for approximately 45 per cent of all litter volume or more than 160 million littered drink containers a year in NSW alone. Economic analysis undertaken by the NSW EPA indicates that over the next 20 years, the scheme is expected to result in almost 11 billion fewer drink containers ending up in landfill and millions saved in the cost of litter collection, transport and processing. This means NSW can now leverage its volumes to ensure reliable product supply.

- **COST & EFFICIENCY**

A number of factors have been identified in the scheme design that help to make Return and Earn more efficient in terms of costs and operations.

For example:

- Return and Earn features central and localised return points which deliver collection efficiencies.
- Automated counting and verification of containers at RVMs and automated depots using the latest technology allows compacting of containers for transport, enabling more efficient transport of collected materials. Containers are collected by the network operator for processing based on demand, which is more efficient compared to schemes where the return point operator is required to store uncompacted containers until a buyer is found.
- The advantage in Return and Earn's single operator is the efficient and effective management of on selling of materials. It also provides opportunities for long-term contracts that support investment in new local reprocessing.

- **COLLECTION CONVENIENCE**

NSW has been responsive to demographics in rolling out its 634 collection points and has enabled a range of collection point types, including RVMs with long opening hours located at retail premises, to give citizens maximum convenient access.

- **PUBLIC FUNDING**

Return and Earn is funded by the beverage industry, in a successful example of an extended producer responsibility initiative where, through the scheme, the beverage industry is ensuring the responsible waste management of their products.

- **SUPPLIER PAYMENTS MODEL**

Return and Earn's approach to payments is an agile and responsive supplier-based model. The NSW Government and Exchange for Change identified price stability, administrative effort, reduced complexity and improved transparency, as key priorities for revising the pricing and contribution approach that would address concerns from industry. A new simplified pricing and contribution approach uses actual supply volumes and a 12-month fixed price per material type to determine each supplier's contribution.

- **FUNDRAISING**

Return and Earn offers a variety of opportunities for fundraising, which means the scheme adapts flexibly to the local community's needs and priorities. This in turn drives greater inclusion and participation. There are exclusive arrangements with more than 430 charities participating in the scheme, many of which have been able to supplement their activities as a result of participation. There is also a provision for charities to connect to national initiatives such as the drought relief initiative Buy a Bale.

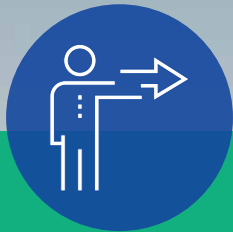
- **MARKETING**

Community awareness is an important ingredient in Return and Earn's success to date. Community research indicates that Return and Earn's brand and marketing approach has hit the mark with the NSW community. Brand awareness of Return and Earn is high and feedback from the community indicates that Return and Earn's highly recognisable signage and brand have played an important role in driving awareness and participation.

## What's next for Return and Earn

- Support opportunities for local processing of Return and Earn materials.
- Work with beverage industry to reduce and eliminate non recyclable packaging.
- Use technology to enable consumers visibility of the entire container journey from manufacture through to recycling and reprocessing.
- Work with other jurisdictions to harmonise the administration of schemes across states.





## A future where waste is a resource, not a problem

Due to its design, Return and Earn has been hugely successful in NSW. With container deposit schemes either in or planned for all States and Territories, there is now an opportunity for national cooperation that will accelerate progress towards realising the vision of a circular economy.

Cooperation between states and territories and application of the Return and Earn model could maximise gains at all points along the CDS value chain. For example, there could be a national approach to working with beverage suppliers on the use of recycled content in their containers.

The Return and Earn model has provided a valuable stream of clean recyclable material. Applying this formula nationally could generate viable volumes of this commodity to generate new jobs and reduce our reliance on virgin materials. For example, many new jobs could be generated if aluminium cans were recycled within Australia rather than being exported to international markets as is currently the case.

Recycling aluminium cans uses just 5 per cent to 10 per cent of the energy needed to mine bauxite and make aluminium from virgin material.

Government collaboration could foster a market for recycled materials, secure a high quality supply of quality, clean materials and create the environment for industry partners that allows innovation.

This in turn could generate the local processing and manufacturing capacities needed if Australia is to have a true circular economy.

The challenge is there but so too is the opportunity. Return and Earn provides a template and a benchmark for a world class container deposit scheme that delivers positive, effective action towards the creation of a circular economy for the nation to follow.





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