NSW CONTAINER DEPOSIT SCHEME - REVERSE VENDING MACHINE PROPOSAL

Ku-ring-gai Council

14th November 2017





REVERSE VENDIN

Container Deposit Scheme- Reverse Vending Machine

Exec Summary

Scheme Overview

- → Under the NSW Container Deposit Scheme (CDS), people will be able to return eligible beverage containers for recycling in exchange for a 10-cent refund. The CDS will commence from 1st Dec 2017 in NSW
- → The aim of the CDS is to reduce the volume of litter in participating states by 40% by 2020

RVM Overview

- → Network Operator will set up and run a state-wide network of collection points (depots and reverse vending machines)
- → A network of collection depots and reverse vending machines will open across NSW to receive empty beverage containers and deliver the 10-cent refund.
- → Tomra- Cleanway JV has been appointed by the NSW state government as the Network Operator for NSW

Proposal Overview

- → The network operator is responsible for installation of container collection kiosks and depots across the state of NSW
- → The Tomra-Cleanway JV is keen to work with landlords to execute these installations at suitable sites within NSW

Tomra reverse vending machines overview

ELEMENTS OF THE REVERSE VENDING SYSTEM



User communication



Recognition system



Sorting & processing



Data administration





Kiosk Video

https://tomra.23video.com/how-to-use-a-reverse-vending-machine**

**Video to display kiosk functionality only, model not available in Australia

- Each Kiosk has two machines with separate openings. One opening can accept glass and the other is for PET and Al Cans
- The machine will have options for charity donation, electronic financial redemption or a voucher redeemable in stores, upon deposit of the container
- A single kiosk is approx7.5m(l) x 2.5m (w) x 2.4m (h)
- Each Kiosk will be monitored remotely by Tomra, in real time

The benefits of installation of RVM Kiosks

The Benefits to you

Positive Environmental and Social Profile

- Enhancing the sustainability leadership profile
- Opportunity to link to local or national charities via RVM customer donations, creating positive brand trust
- Use RVMs as a promotional and marketing platform (via RVM screen, receipts etc)

Additional Customer and Tenant Sales

- Drive traffic to the centres and their retail tenants
- Generate additional spending
- Differentiate from other centres to generate new customers and increase customer loyalty
- Data management and collection incl. reporting to you

New income streams and reduced costs

- Base rent per annum for 5 years
- Reduction in waste volumes and costs



- NSW alone represents a deposit money flow of AUD 350m annually;
 - Refund to consumers
 - Funds to be re-spent

The Business Proposal

BUSINESS PROPOSAL OVERVIEW

You provide:

- Space for the Technology
- Staff time to do a light clean as needed for the consumer-facing part of the system and handle unplanned stops (e.g. receipt paper change)
- Power

You receive:

- All the benefits of having an attractive redemption service on-site.
- Reduction in waste and associated removal costs
- Base Rent for parking spaces / locations provided

TOMRA provides

- Technology and housing
- Service and maintenance of the equipment
- Data management incl. reporting to Scheme Coordinator and your shopping centre
- Marketing and promotion platform
- Cleaning of the equipment
- Consumables
- 4G internet connection

The Kiosk maintenance and site service

Kiosk Machine Maintenance

- Kiosks will be cleaned internally regularly and also as needed
- Kiosk voucher rolls will be replaced regularly
- Depending on kiosk and truck size, Tomra's transport partner Cleanaway will ensure your venue has adequate visitation via a remote monitoring system
- The truck visitation will be kept to minimum during peak trading hours

Kiosk Site Maintenance

- Tomra will work with the Council to ensure light maintenance and cleaning agreements are in place (estimated 10 mins of labor time per day or as required)
- Pedestrian and customer safety will be ensured

Support and Issue resolution

- Tomra have a helpline contact centre available between 8am -10pm weekdays
- Metro response time (5 hours)
- Regional response time (12 hours)

Kiosk location: Considerations

We have considered safety, truck movements and customer convenience while selecting a suitable location for the Kiosk in the car park

All site requirements will be established during an extensive physical site audit, such as power requirements

Where site readiness works are required, such as temporary removal of barriers for installation or permanent removal of any physical barriers, Tomra will ensure that landlord's approval has been obtained

Tomra will work with the Council management to communicate any installation disruptions to customers

Tomra will provide relevant insurance and liability coverage

The site will be responsible to provide power (240v/ 10AMP) to the Kiosk

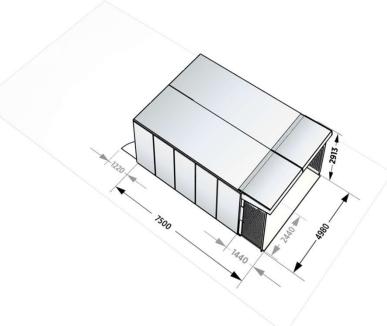
Kiosk location selection -

Proposed location of the KIOSK S2

- 4 x Tandem parking spaces required
- Cleanaway have confirmed their truck can navigate through the car park
- Loading time is approximately 15 minutes
- Truck weight is 5000 kg with estimated payload of 1000kg
- Site works identified so far:

Power to Kiosk

Cordoned off area for approximately 6 hours



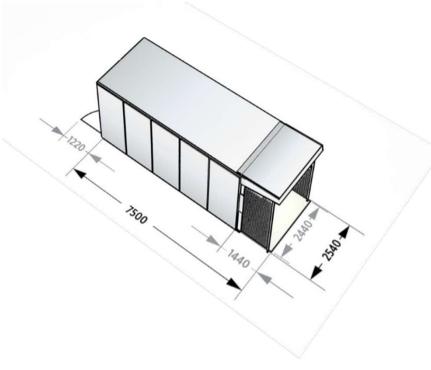
Kiosk location selection -

Proposed location of the KIOSK S1

- 2 x Tandem parking spaces required or 5 parallel spaces if set as landscape position.
- Cleanaway have confirmed their truck can navigate through the car park
- Loading time is approximately 15 minutes
- Truck weight is 5000 kg with estimated payload of 1000kg
- Site works identified so far:

Power to Kiosk

Cordoned off area for approximately 6 hours



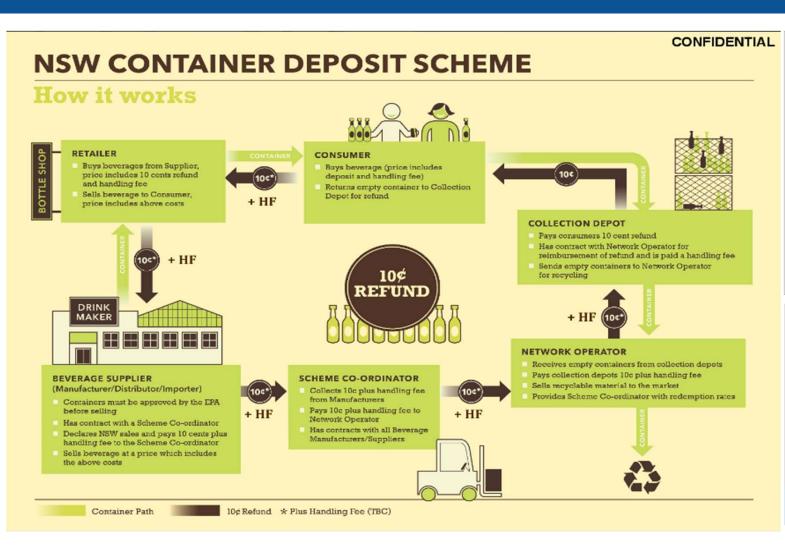
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Next steps

- Agree and confirm terms and conditions through license agreement
- Installation date eta Present site installation and readiness plan to landlord
- Agree communication plan for Council and customers

Appendix Slides

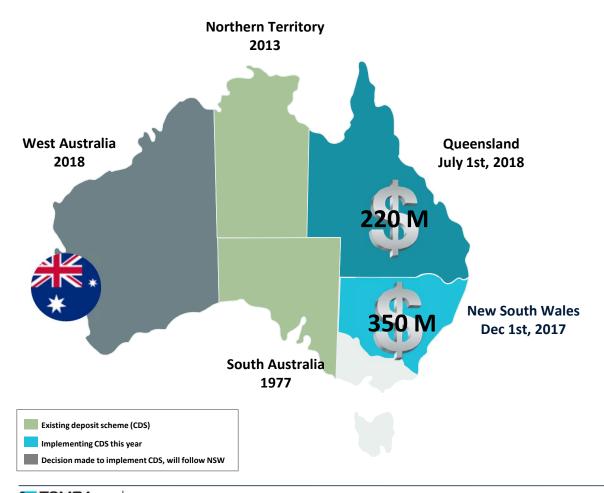
Container deposit Scheme Overview



- The state of NSW has been divided into zones for the purposes of the scheme
- → A single Network Operator will be appointed in each of the regional zones (1-6), and 3 to 5 **Network Operators will be** appointed in the Metro zone (7).
- → It is estimated that the vast majority of containers (82%), and therefore cost, is in the metropolitan zone.



Container deposit Scheme in Australia. Most states have announced their interest to roll out the scheme



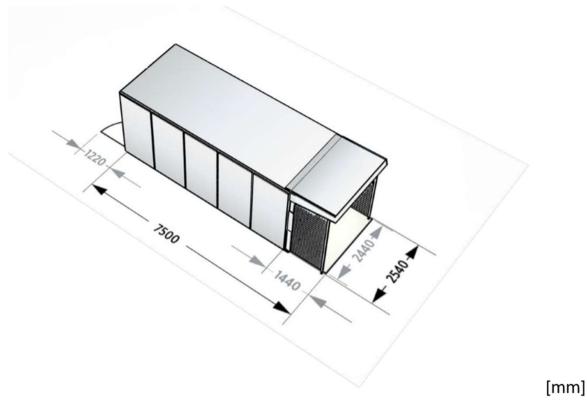
Key Facts NSW CDS scheme:

- Going live December 1, 2017
- 10 Cents refund
- **Scheme goal:** reduce littering by **40%** by 2020
- Convenience is key to "World Class Scheme" promised by ex-Premier Mike Baird
- Beverage suppliers (incl. own labels) have to finance the scheme
- Services to the scheme will be compensated for (handling, transport, processing, compaction, data)
- Containers covered by the scheme:
 - 150ml to 3l
 - Cans, PET, Glass, HDPE and LPB (Liquid Paper Board)
 - Some exemptions apply

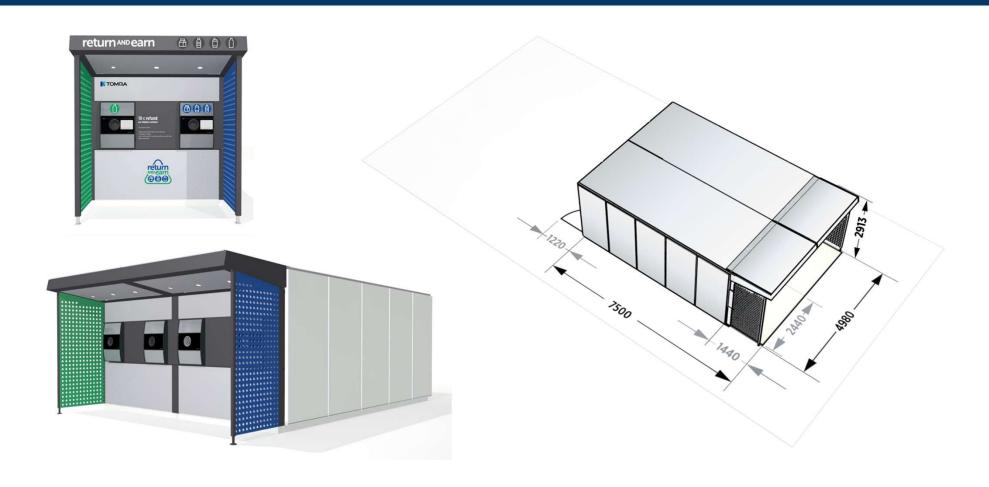
Appendix D: S1 - Single 20ft RVM Kiosk



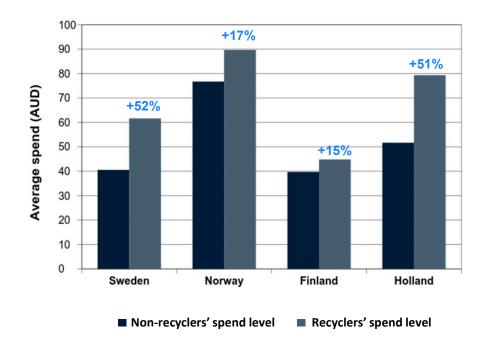




Appendix E: S2 Double 20ft RVM Kiosk



DEMONSTRATED INCREASE IN CUSTOMER VISITS AND SPEND



- Two large independent studies in Europe* demonstrate that shoppers returning containers for their deposits spend more than average
- Further, the extra spend (from AUD5 in Finland to AUD26 in Holland) represents a significant multiple of the average value of deposits redeemed

Same studies find:

- 10% of shoppers in Sweden usually spend the deposit refund on something extra that they would not otherwise purchase
- There is a very high level of recycling participation by shoppers
 - **88%** (Sweden), **96%** (Holland), **98%** (Finland), **99%** (Norway)
- At any time the % of shoppers returning containers is also high
 - **8.4%** (Sweden)
- Redemption facilities influence consumers' store choice
 - 14% of shoppers return containers at a store they don't usually shop at (Sweden)



^{*} Survey of 8,500 shoppers at 70 supermarkets (Movement Research & Consulting); Survey of 8,500 shoppers at 71 supermarkets (TNS Gallup)

FAQ's

· Cleaning of kiosk area.

- It is the responsibility of the venue management to ensure the surrounding area (front / exterior) of the kiosk is kept clean. We estimate this would take approximately 10mins each day. We would recommend placing a rubbish disposal in the vicinity of the kiosk.

Who do we contact if there are mechanical issues with the kiosk?

- Tomra have a helpline contact centre available between 8am -10pm weekdays.
- Metro response time (5 hours)
- Regional response time (12 hours)

When / how often will my bins be emptied

- depending on kiosk and truck size, Tomra's transport partner Cleanaway will ensure your venue has adequate visitation via a remote monitoring system

• Do we require insurance / liability?

- Tomra will provide the relevant liability coverage.

Who will provide the installation of power to the kiosk?

- It will be the responsibility of the venue to provide power (240v) to the kiosk.



FAQ's

- How much time will be required to install the kiosk?
 - Approximately 5 hours when power access is in place
- Redemption options. Can we change the listed redemption partners?
 - Yes, Tomra uses a remote online monitoring system that offers the flexibility to change redemption partners.
- Power consumption. What is the estimated power consumption cost?
 - Tomra estimates a consumption rate of approximately \$500 / year for a single container Kiosk.
- What advertising will undertaken?
 - The 3 key stakeholders (Tomra, NSW Gov, Scheme coordinator) will be conducting extensive advertising via a variety of networks including digital, media, political and social media.

RVM Kiosk Power Summary	Per 20' module (2 RVMs)	
		Hours /day
RVM related equipment		
Idle power (kW)	0.09	20
Max power (kW)	0.57	4
Days pa	363	
Power consumption pa (kWh)	1481	
Additional electrical consumption		
		kwh/
lighting (LED) +timer	0.072	day
		kwh/
CCTV cameras (x 3)	0.54	day
electric fan	0.768	kwh/ day
Days pa	365	
Power consumption pa (kWh)	504	
TOTAL Power		
consumption pa (kWh)	1985	
Estimated Cost /kWh	0.25	
Total Cost	\$	
pa/module (AUD)	496	



