# NSW CONTAINER DEPOSIT SCHEME BUSINESS STAKEHOLDER BRIEFING

2 April 2015

#### **Agenda**

- 9.00 9.05: Welcome Jennifer Hughes, Partner, Baker & McKenzie
- 9.05 9.30: The Politics of Container Deposits & What We Know Jeff Angel, National Convenor, Boomerang Alliance
- 9.30 10.00: A NSW Legislative Model: Jennifer Hughes, Partner, Baker & McKenzie
- 10.00 10.15: Automation and Opportunities for Stakeholders Markus Fraval, CEO Revive Recycling
- 10.15 -10.30: Morning tea
- 10.30-11.30: Stakeholder Impacts/Outline of a CDS Hub & Spoke Model Dave West, National Policy Director, Boomerang Alliance
- 11.30 Panel: Chuck Riegle (Tomra USA), Susan Collins (Container Recycling Institute), Dave West, Jennifer Hughes, Markus Fraval
- 11.30- 11.50: Opening remarks Chuck and Susan
- 11.50 1.15: 5 key topics (approx. 10 mins on each)
  - Impacts on costs and spending sales drops, price rises, using rvms to improve customer loyalty and spending etc.
  - ➤ Refund Scheme Vs traditional deposit schemes (including the importance of targets and penalties for individual bottlers), cash flows (the payment after the effect so funding will require an advance payment of some type), etc.
  - The use of RVMs and linkages to retailers bar coding, fraud prevention, convenience zone type arrangements, redemption at retail stores.
  - Participation of existing municipal and C&I systems ways to redeem by weight (that works), typical impacts on existing recycling collections, problems experienced elsewhere e.g. California.
  - Governance and finance Independent coordinator (similar role to Rhenus in Germany); stakeholder board, non-profit company.
- 1.15 1.30: Summation and Close





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Environment Minister Stokes released the following to key stakeholders in December 2014 as part of their consultation. It is the best public source of information to understand the proposed scheme. BA updates are shaded below the Government point.

# NSW GOVT Design Principles for a State Based Container Deposit Scheme (December 2014)

Beverage suppliers would be obliged to add a fixed amount, being the deposit, to the price of each regulated beverage container and to provide a refund for that amount to anyone who returned the empty container to an authorised collection point. In order to target away-from-home litter and recycling, the scheme would only apply to glass, aluminium and plastic beverage containers of sizes commonly consumed away-from-home.

BA has subsequently addressed that liquid paperboard and asceptic containers are also used for beverages – we are confident the government understands that inclusion within the scheme would be based on beverage types, not material types.

There would be several options for returning containers, including:

- 1. Redeem the container through a reverse vending machine (RVM) which would predominantly be located in public spaces.
- 2. Take the container to a Community Recycling Centre (CRC).
- 3. Continue to place their containers in their kerbside recycling system. The containers would be captured and redeemed, with the refund off-setting the cost of council waste services, which households pay through their rates.
- 4. Give their containers to a local school or charity (who would then take the containers to either an RVM or CRC).

The scheme would look to minimise handling costs and reduce the risk of fraud (from claiming the refund on the same container more than once) through the use of reverse vending machines (RVMs) and automated collection depots.

For suppliers to gain approval to supply beverages in regulated containers, their containers would need to meet labelling and recyclability requirements. The suppliers would also be obliged to enter into a contract with the Refund Coordinator (RC), an independent body that would be set up under contract with the government to manage the scheme.

The contract between the Government and the RC would include strong governance, transparency and reporting requirements, as well as targets for resource recovery and public access. Failure to meet these targets would attract financial penalties to encourage compliance.

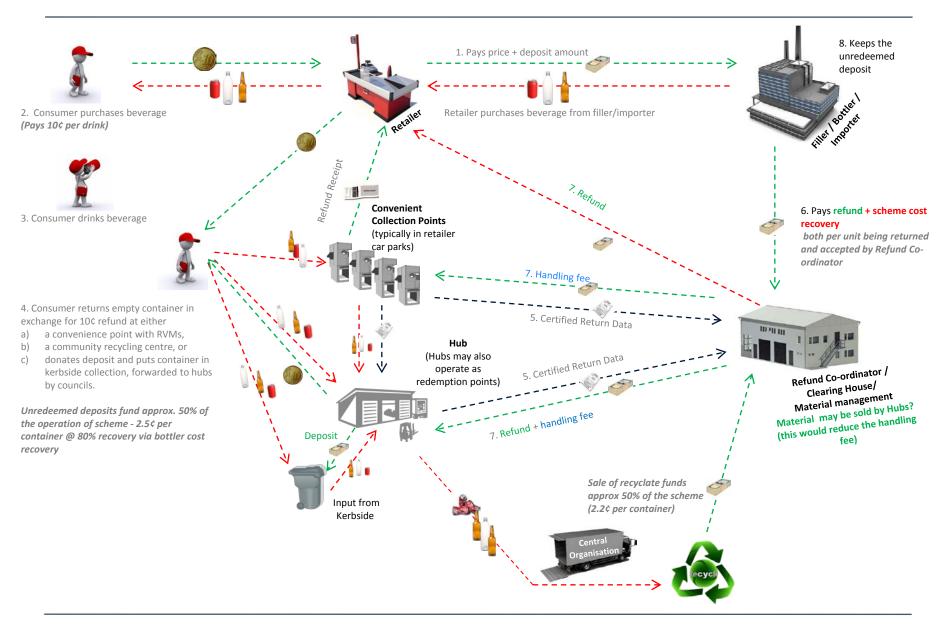
The supplier would retain the deposit, so there would be no pool of unredeemed deposits to manage.

The scheme essentially would be a pay-as-you-go operation, with suppliers only being asked to pay for the number of containers returned for a refund (plus handling costs), instead of the full deposit on every single container going into the market. Handling costs would be minimised through automation, and Government funding of infrastructure.

The collection network would be made up of a hub and spoke system, with RVMs in convenient places and the collected containers being brought back to aggregation points (hubs) before being dispatched to recyclers.

BA has briefed Government on the need for an RVM to have a relationship to a retailer to handle money and which may encourage consumer spending of the refunds on groceries.

## **BA MODEL – NSW ADAPTATION**



### The Boomerang Model

#### **Update of Proposed Scheme**

Dave West - March 2015



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The recent DRIS undertaken by the Standing Council on Environment & Water (SCEW) attempted to model the Boomerang Alliance's proposed scheme to address beverage container waste and litter. While a reasonable attempt was made many of the scheme's key features and benefits were NOT included in the assessment. Having reviewed the analysis we have made a number of changes to the scheme aimed at reducing the costs further and also to minimise any household budget considerations. This briefing seeks to outline the structure and key aspects of our model to ensure that when a state analysis is undertaken it is expanded to assess these features.

- 1. Refund: 10¢ per container. Constitutional limitations mean the NSW Government cannot levy a deposit nor keep any unredeemed funds. The legislation will require bottlers to pay a 10¢ refund and who may use their unredeemed deposit value to offset handling costs. The refund may be increased in later years as government sees fit to maximise system performance.
- **2. Scheme Coverage:** All beverages consumed in NSW (including imports; milk and wine) that are over 100mL and under 3L. Milk and juice could be deferred to limit at home consumer price impacts during the start-up phase.

#### 3. Indicative Performance Indicators and Targets:

By End of Year 1		By End of Year 2	By End of Year 3		
Recovery Target – Metal	70%	75%	80%		
Recovery Target - Glass	55%	60%	65%		
Recovery Target – PET	55%	60%	65%		
Recovery Target - Other	55%	60%	65%		
Efficiency Target (overall cost per container recovered excluding deposit) * see p6 table for net result	4.8¢	4.5¢	4.2¢		
Service Target (Proportion of population who can redeem at their shopping point)	75%	85%	95%		

The scheme will need these targets to be reflected by the bottler. Bottlers should face penalties that equate to the unredeemed deposit benefit if they fail to reach their target (this stops profiteering caused by deliberate under performance).

<u>4. Governance of Scheme</u>: The scheme will be governed by a non-profit body (the Central Organisation or CO herein) with a board of directors comprising key stakeholders. Its role includes scheme cost recovery from the bottlers.

#### **BA recommends:**

An Independent Chair & Company Secretary (appointed by the government) and representatives from the industry supply chain; collection stakeholders; and the community sector. The Chair should have no pecuniary interest related to the food and grocery, packaging or recycling sector. Community representatives and the 2 independent roles are the only positions that should be remunerated for their services and should reflect a realistic payment for the time and effort expected of independent directors.

All revenues earned from the sale of scrap, payment of handling fees and redemptions would be processed via a quarantined quasi-government fund administered by the secretariat and governed by the CO board. Penalties should be used to cover any shortfalls from the fund.

The priorities of the CO are to administer the fund and audit payments and receipts. The secretariat and these services can be housed within the CO itself.

The day to day duties administering the scheme would be undertaken by a private sector contractor to the CO, whose duties are explained in detail below.

The suggested composition of the Board for the Central Organisation is:

- Independent Chair (appointed by Government)
- Gov't appointed Company Secretary (doesn't vote)
- Supply Chain Representatives:
  - o The Australian Food & Grocery Council



- o The Australian Council of Recyclers
- o The Australian Packaging Council
- o Retailers
- Collection Stakeholders:
  - Collection points representative (ie, RVMs);
  - o Representative of the "hubs";
  - A representative of local government;
  - o Waste Management Association of Australia.
- The Community Sector:
  - o Boomerang Alliance
  - o The Australian Consumers Association
  - Total Environment Centre
  - o Clean Up Australia

#### 5. Summary of System Logistics Process:

Under the BA approach, all collection points are required to collect and sort material into 7 material splits (PET; HDPE, Aluminium, between 1 and 3 colours of glass (depending on local markets), LPB (incl. asceptics) and/or other (steel, and possibly LPB depending on glass sort requirements)) and produce a voucher (known as the refund receipt) for the consumers redemption at an identified retailer located nearest to the redemption point.

Volume repeat customers (e.g. C&I recovery, kerbside etc. will also be able to redeem via an EFT transfer) via delivery to the hub.

There are 2 types of redemption points focussed on recovering the containers consumed by the general public (the CRIS models this component based on 'at home consumption' but it should be noted that these centres also deal with the away from home component of consumption that is not in the domain of the C&I sector). The first is known as the Convenience Point. This collection point is established adjacent to any major beverage retailer via proposed regulations to ensure consumers can redeem containers and is directly linked to the supermarket for easy redemption via a voucher system. These collection points are the core network.

The second type of public redemption point is known as a sub-depot and is established via a partnership with the local hub – these types of depots are more likely to focus on shopping and lifestyle areas where major shopping centres are not operating e.g. a high street retail strip; sporting or public arena. It is not envisaged there will be many of these points; they are simply defined for circumstances where the network requires another collection point where there are no major shopping centres but high volumes of consumer traffic.

C&I and kerbside recycling services may participate in the scheme but operate within their own network of redemption points (the Hubs). These sectors are expected to deliver materials to the Hub; who on sell to reprocessors on the basis they collect the material from the Hub – eliminating transport costs for around 33% of all containers redeemed. Redemption via Hubs receive a lower handling fee (estimated at 2.7- 3.1¢ per container) reflecting the high volume / high speed redemption processes available. Much of this infrastructure already exists but not in any organised logistics chain.

Transport (other than in rural and remote communities) is limited to a single trip between a redemption point and the nearest Hub; which consolidate all recovered materials, and manage the collection and sale of these materials to the reprocessor. Transport costs from the redemption point to the Hub are borne by the Co-ordinator.

A simple flow chart outlining the model is attached.

#### 6. Obligations of Stakeholders (Roles & Responsibilities):

**Government.** Government performs following functions:

- o Passes legislation and enacts regulations to enable the operation of the scheme;
- Establishes the non-profit company that will act as the Central Organisation, establishes the company's constitution and rules, and selects the board of directors;
- Sets system parameters incl. refund values, targets, and other charges (if at some time in the future there
  are insufficient funds via unredeemed deposits collected, the sale of scrap material,<sup>1</sup> and interest earned by
  the fund);
- o Enforce penalties in case of non-achievement, and provide sanctions on industry if targets not met (directly or via CO) e.g. fines, eco-taxes, diversion of unredeemed + higher industry contributions;

¹ although may allow direct sale from other participants where efficiency gains available



- o Prosecutes companies which do not form agreements with CO, implement their obligations, or misreport sales figures etc. (ie fraud safety net);
- Authorises the distribution of any surplus interest earned from the CD Fund (over and above monies
  reserved against future costs and contingencies) to encourage further recycling, litter abatement or value
  adding of materials collected within the scheme.

<u>The Central Organisation & Co-Ordinator.</u> The Central Organisation and their appointed Co-Ordinator are responsible for the overall management and governance of both the scheme and the fund. The Central Organisation (CO) is committed to authorising all actions and duties necessary to meeting:

- a) the recovery targets established;
- b) setting and meeting community service standards;
- c) providing the highest standards of efficiency.

#### The CO performs following functions:

- o Oversees and approves the distribution of funds collected via the scheme;
- o Appoints & oversees the performance of the system co-ordinator;
- o Audits system and ensures fraud is properly controlled;
- o Mediates any disputes between stakeholders;
- o Sets handling and other fees payable for service provision;
- Recommends to government whether there should be any material specific admin fees charged to bottlers or importers of beverages;
- o Establishes labelling and point of sale consumer education requirements;
- o Reports non-compliance and recommends to government what action should be applied;
- o Reports on system performance to government and the public;
- o Co-Ordinates promotion of the scheme and undertakes community regarding the scheme;
- o Registers and contracts (using a standard contract) with each filler/importer;
- Registers and contracts with each qualifying redemption point (transparent criteria / conditions specified by government and legislation – e.g. location requirement, min standards);
- o Becomes default owner of recovered material (although may allow direct sale from other participants where efficiency gains available).

The Co-Ordinator is appointed by the board to oversee the day to day running of the scheme. To eliminate any potential conflict of interest the Co-Ord must not participate in the operation of any redemption point NOR may it purchase any recovered material. Their organisation MAY operate the transport system. The Co-Ord (under the supervision of the CO) performs the following functions:

- o Approves beverage containers for sale within the market and whether they will or will not be subject to a refund (i.e. interprets the legislation);
- o Approves the proposed labelling on any bottler and promotion in store at major retailers;
- o Manages the network of collection points necessary to achieve the targets, service and system efficiency standards agreed between the CO and Government;
- o Provides all clearing house functions i.e. manages the day to day administration of all data, physical material flows and financial transactions;
- o receives from the bottler/importer the payment of refunds and (if required) any material specific admin fee required to cover net costs along with auditable sales data;
- o Pays handling fees based on barcode-based data files (matching the physical material collected);
- o Pays retailers for any refunds made (also based on barcode-based data files);
- Puts in place logistics arrangements to compaction / baling / transport of materials;
- o Negotiates the sale of recovered materials;
- o Provides barcode information covering all legislated containers to all system participants;
- o Overseas the compliance with scheme rules and regulations from each party (individual bottler/importer. retailer; redemption points etc.) and recommends penalties for non-compliance.

<u>The Bottler.</u> The Bottler is defined as the first person or company to sell packaged beverage products within the Australian supply chain i.e. either the entity which first fills a container with a beverage within Australia or imports a packaged beverage product from overseas. The Bottler's obligations are:

- To apply for all beverage containers they sell to be approved within the scheme and provide the barcodes of said containers to Co-Ord (who will in turn provide to all system participants);
- Not sell any packaged beverage without approval;
- Pay the deposit to the CO at the earliest Australian point of sale in the supply chain, together with a material-specific admin fee (if required by the CO at some point in the future);
- o Provide auditable sales data to the Co-Ord at the time the deposit is paid;



- Ensure all approved containers carry clear labelling regarding the payment of the deposit;
- o Ensure the refund and any other charges are clearly and separately identified on sales invoices.

<u>The Retailer</u>. Retailer obligations under the scheme are limited to major retail operations (defined as organisations which primarily sell groceries and/or packaged beverages with a total floor space of more than 1,200 square metres) and are subject to the following obligations:

- Should there be no redemption point located within 200 metres of the edge of the building housing said retailer (the convenience zone) the retailer may:
  - Operate a redemption point themselves; or
  - Contract a third party to provide a redemption service within said convenience zone; or
  - Be obliged to secure a minimum 60 square metres of hard stand (outdoor) area (with access to utilities) for a redemption point to be established;
- Each major retailer must form an arrangement with a redemption point located within the convenience zone so that consumers may redeem their refund receipts at the store;
- o Refunds may be made by way of a credit against purchases OR cash BUT retailers must be prepared to refund cash if the consumer insists upon it;
- Retailers must clearly show both any charges from the bottler that are passed on to the consumer and any redemption refunds made, as separate line items on the shopping receipt;
- The retailer must display approved signage at each cash register highlighting what containers are subject to the scheme and information identifying the nearest redemption point.

Note: Rollout of Convenience Points will be staged over time to reflect the service targets established at the beginning of this document (see point 3 Performance Indicators & Targets)

#### **Retailers Incentive:**

In lieu of any rental payment for property; retailers who comply with these obligations receive an incentive payment of up to 0.25¢ per container refunded via their store. If there are 800 redemption centres this would represent an average fee per redemption centre of \$10,500 p.a.

**Redemption Points.** It is important to note that in all instances the barcode is the default basis for redemption within this scheme and this information is fundamental to protect system integrity. Collection points are only paid handling fees on the provision of BOTH the physical material and a data file identifying the redemption of approved containers.

Where high volume redemption from sectors such as C&I recovery are made it is expected that the Hub will record bar code information through the use of electronic information capture via certified bulk barcode readers.

Where necessary, this requirement may be waived by the CO to allow weight-based redemption (based on average weights) or alternate processes in specific limited instances on a case by case basis where efficiencies are improved and the Co-Ord is satisfied that sufficient fraud protection is available. One example of this form of redemption would be materials captured via kerbside recovery (where materials have been crushed on collection) and the use of agreed weights and measures can be substituted for bar code data.

There are four points of approved redemption (Hubs, Convenience Points; Sub-Depots or kerbside collectors). Each has its own obligations and fee structure:

- Hubs have a number of functions. Their direct role in the redemption process are:
  - The approved point where containers recovered via kerbside operators can redeem the containers they have recovered;
  - The licensed redemption point for C&I and C&D sector redemption (both by collecting themselves and/or via collection of existing recycling collectors);
  - Licensing sub-depots in public places (e.g. recreational venues, high street shopping etc.).

The obligation of the Hub (as a redemption point) is to:

- Be approved for operation by the system co-ord and comply with any rules the CO publishes;
- o Identify and record bar code data to verify that redeemed containers are legitimate;
- o Collect approved containers and make redemption via EFT transfer;
- Devalue (i.e. destroy the container) the redeemed container and keep records of same;
- Where circumstance prohibit the use of the bar code for data verification (i.e. for kerbside recovery or collection of containers recovered in a remote or isolated location), A hub may apply to the co-ordinator to replace the bar code as a method of verification with an alternative so long as the co-ordinator is satisfied that: fraud can be managed; the process is auditable and the Hub bears any additional costs to operate;
- o If a Hub also wishes to provide a redemption service to the general public from its premises it must also register a sub-depot to do so.



- Convenience Points are depots designed for the redemption of containers from the general public. A Convenience Point is established via a contractual arrangement with a major retailer and will generally be located in the shopping centre of major retailers and shopping centres containing major retailers. Convenience Points may be manually operated or automated (using Reverse Vending Technology). The obligations of a Convenience Point are as follows:
  - o Register and gain approval to operate by the Co-Ord and comply with any rules issued by same;
  - o Collect approved containers and provide an a refund receipt for redemption at partnering retailer;
  - o Identify and record bar code data to verify that redeemed containers are legitimate;
  - o Devalue (i.e. destroy the container) the redeemed container and keep records of same;
  - o Provide convenient and timely access to their local Hub for the collection of recovered containers along with all necessary data in a format approved by the co-ordinator.
- Sub-Depots are redemption points established to service locations where there are high volumes of containers consumed or opportunities for significant levels of redemption but do not have a depot established via the rules establishing convenience collection points (i.e. no major retailer). Sub-Depots are most likely to be located at high street locations (e.g. train stations or service stations); schools; at major entertainment/sporting venues; or major lifestyle and leisure hubs (e.g. beachfront strips; national parks). In this instance the depot works under a sub-contract relationship with a local Hub and is paid the same handling fees that a convenience point would receive unless they are unable to provide bar code data for verification, in which case 0.02¢ will be subtracted from their fee and paid to the Hub. The Obligations for a Sub-Depot are:
  - Be approved for operation by the Hub and be registered as a sub-depot with the CO;
  - o Identify and record bar code data to verify that redeemed containers are legitimate OR comply with such record keeping as required by the Hub and approved by the Co-Ord;
  - o Provide convenient and timely access to their local Hub for the collection of recovered containers along with all necessary data in a format approved by the co-ordinator;
  - o Provide consumers with cash redemption or have an arrangement in place with a retailer located within 50 metres of sub-depot that will allow redemption for cash.
- Kerbside Operators are existing MSW services that operate door to door waste and recycling services. These services will continue to collect containers that are eligible for refund. All Kerbside Operators will be able to participate in the CD scheme. Kerbside Operators obligations under the scheme are:
  - To be registered as redemption point with the Co-Ord;
  - Establish an arrangement with an approved Hub and have an agreed audit process that has been approved by the Co-Ord;
  - o To deliver collected materials to the Hub in a manner and timing agreed by the Hub;
  - O To accept that redemption will be via an agreed formulae of weights and measured based on a formula published by the Co-Ord;
  - o To allow the co-ord or hub access to their premises and records for the purposes of audit.

Kerbside Operators receive the value of the refund (forfeited by the consumer) but ARE NOT paid a handling fee.

- **7. Funding:** The legislation and regulations to establish the scheme would create revenues from a number of sources to pay for operation:
- Sale of recyclate collected (2.2¢ using CRIS data)
- Approval of bottles and licensing fees for depots (value not calculated)
- A small administration charge of around 1.5-2.65¢ per container on producers and importers of beverages. This is offset by unredeemed refunds (worth 2.5¢ if 80% of all containers are recovered).
- **8. Revenue & Costs:** Based on the analysis of the CRIS and our refinements, we have sought industry advice to update the modelled costs of the scheme. The range of costs and revenues the scheme is likely to attract are as follows:



	Scenario A: Optimistic Costs			Scenario B: Pessimistic Costs		
Aspect of Operation	¢ container	% of redemption	Weighted ¢/container	¢ container	% of redemption	Weighted ¢/container
Scheme Earnings						
Unredeemed Deposits		80%	2.5		80%	2.5
Sale of Recovered Containers			2.2			2.2
Interest Earned			0.5			0.5
Sub Total Revenue			5.2			5.2
Less Scheme Costs						
Co-Ordinators Fees	-0.05	100.00%	-0.05	-0.07	100.00%	-0.070
C&I Handling Fees (hub)	-2.7	23.70%	-0.6399	-3	23.70%	-0.711
Large Convenience Point Handling Fees	-2.7	14.80%	-0.3996	-3.1	14.80%	-0.4588
Medium Convenience Point Handling Fees	-3.65	45.50%	-1.66075	-4.2	45.50%	-1.911
Small Convenience Point Handling Fees	-4.4	7.40%	-0.3256	-5.1	7.40%	-0.3774
Remote Location Handling Fees	-6	1.40%	-0.084	-6	1.40%	-0.084
Kerbside Recovery:	0	7.10%	0	0	7.10%	0
Compaction Fee:	-0.4	69.20%	-0.2768	-0.4	69.20%	-0.2768
Crushing and Baling Fee:	-0.2	92.90%	-0.1858	-0.25	92.90%	-0.23225
Retailer Incentive:	-0.2	67.80%	-0.1356	-0.4	67.80%	-0.2712
Consolidation Fee:	-0.1	100.00%	-0.1	-0.1	100.00%	-0.1
Transport to hub	-0.4	69.20%	-0.2768	-0.5	69.20%	-0.346
Transport (rural & remote)	-0.8	1.40%	-0.0112	-1	1.40%	-0.014
Sub- Total Cost:			-4.14605			-4.852
Deficit / Surplus			1.05395			0.34755

#### 9: Glossary of Terms

CRIS – The Consultation regulatory Impact Statement issued by the Standing Council on Environment and Water SCEW – Standing Council on Environment & Water; joint council of state, territory & federal environment ministers Central Organisation (CO) – a not for profit corporation responsible for the overall management of the scheme System Co-Ordinator (Co-Ord) – A logistics company awarded the contract to manage the day to day operation Hub – a central depot that links to a nearby network of redemption points and assists in the co-ordination of the system at a regional level and undertake the redemption from the C&I and MSW sector

**Convenience Point** – the primary redemption point for the scheme; established via 'convenience zone' regulations **Sub-Depot** – Any redemption point established outside of the convenience zone rules

Remote Location - Redemption Points operating in remote areas of Australia

Handling fee – The fees paid to redemption point for the recovery and recording of returned containers

**Compaction Fees** – paid to either the redemption point for the value added function of compacting redeemed containers to reduce transport costs

**Crushing & Baling Fee** - paid to the hub for the value added function of crushing and baling containers in preparation for sale as scrap materials

**Retailer Incentive** – fee paid to retailers (in lieu of rental) in compensation for their obligations under the scheme **Co-Ordination Fees** – fee paid to the Co-Ord for management of the system

**Consolidation Fees** – fees paid to the Hub for management of the sale of scrap and transport function

Admin Fees – fees charged to bottlers to cover scheme costs should it operate at a shortfall in the future