# June 2022; Hong Kong Alternate PPRS for plastic beverage containers



#### Dear Stephen

Thank you for the opportunity to provide some input to the Hong Kong Government Producer Responsibility Scheme on Plastic Beverage Containers, Alternative Market Basis Scheme. I hope Reloop's global expertise on such schemes can be of value to you, and I would of course be happy to provide any additional advice or discuss etc at any time.

## MARKET BASED MECHANISMS

The proposed shift away from a government implemented scheme to more of a market-based Deposit Refund Scheme (DRS) is welcome and assuming the relevant government controls are put in place should meet the Hong Kong governments agenda to achieve high rates of recovery of used plastic beverage containers.

The critical features of best practice DRS are the governance arrangements, the deposit/refund value and the degree of convenience of the collection network for consumers.

Your proposal already outlines one of these important mechanisms, that is obligating retailers over a certain size (200sqm) to take back containers. This approach represents global best practice, making it easy for consumers to access their refund.

Ease of consumer access to their refund is not only important to institute high return rates but also to keep consumer scheme costs down. The most expensive DRS is one in which the consumer cannot readily access their refund (as this value is usually much higher than producer scheme fees).

The following outlines a number of questions stemming from the consultation paper and seeks also to make some recommendations to EPD for your consideration.

### DEPOSIT / REFUND VALUE

Should be set high enough to incentivise all consumers, achieve high rates of recovery and should be standardised across all eligible containers (not left to market players to determine). Reloop suggests starting at HK\$1.

The paper does not state what the refund value might be (except to say there is a reference to a previously proposed rate of HK0.10c).

Reloop previously detailed that 10cents is of insufficient value to drive consumer behaviour and the scheme would engage only the very-poor members of the community. This refund would also put HK's value at the lowest in the world. As HK is taking a leadership position on this issue in the Asian region, many countries are watching HK's policy decision for a steer to their own agendas.

I won't re-prosecute on the necessity of a meaningful deposit, though Reloop's analysis suggest this should start at HK\$1 to ensure the HK scheme is not simply ignored by consumers and has some level of future-proofing against inflation.

For this I note the New Zealand government, currently consulting on a DRS, are proposing to start their scheme at NZ0.20cents (HK\$1). They say:

Why a 20 cent refundable deposit is proposed<sup>1</sup>

<sup>&</sup>lt;sup>11</sup> https://environment.govt.nz/what-government-is-doing/areas-of-work/waste/container-return-scheme-reducing-waste-landfill/further-information-on-the-container-return-scheme/

The deposit level is one of the things we are seeking feedback on. Australian schemes have a consistent deposit level of AUD 10 cents, do not require retailers to take back eligible containers, and range between 48-78 per cent recovery. Australian officials have noted that an AUD 10 cent deposit level is low, and some are considering an increase to 20 cents. In comparison, high-performing international schemes, such as some of those in the European Union (EU) with return rates above 85 percent, have deposit levels equal to or greater than NZD 30cents (HK\$1.50).

The HK paper also seems to suggest different producers may apply different deposit levels or even develop alternate non-cash incentives. This could be very confusing for consumers. Reloop would suggest a HK\$1 deposit should be regulated, along with an agenda and schedule to build this value up over time to keep ahead of inflation.

### UNREDEEMED DEPOSITS

A valuable pool of funds to cover costs of the scheme.

Is EPD assuming a pool of 'unredeemed' deposits will be available to help fund the overall system costs?

This approach would likely require a centralised scheme coordinator, which is in any case an additional recommendation of this submission. The alternative would be to have individual producers accounting for consumers deposits unilaterally.

A pool of unredeemed deposits is a valuable financial base from which to help fund a DRS and builds on the notion of the polluter-pays, in that, consumers that do not seek to redeem their refund in effect cover the costs of the scheme.

### SCHEME OPERATORS

Contracted directly by retailers or an industry coordinated PRO

The paper suggests Scheme Operators (SO) being directly contracted by beverage suppliers and SO's collecting on behalf of these suppliers. Does this mean a SO contracted by Coca-Cola or Vitasoy etc would only be required to collect their own brands? If so, this could be difficult.

There was in addition mention in the paper of producers meeting individual recovery targets and 'self arranged recovery'. Targets are better met across the whole sector rather than being applied to individual producers.

It is likely to be more efficient for producers to collectively establish a Producer Responsibility Organisation (PRO) to manage the total scheme on their behalf. This PRO would then contract recyclers to undertake the requisite collection, logistic and processing tasks required by the system.

#### RETAILERS

HK achieving best practice by legislating retailer returns.

The proposal to obligate retailers to establish collection facilities is appropriate. This approach provides for a maximum of convenience for consumers. The current outline though has a suggestion

of individual producers being responsible for contracting SO's, and Reloop has recommended a more collective approach to this task, i.e. a PRO manages the scheme on behalf of all producers.

In addition, EPD has proposed retailers will have to establish collection facilities. It wasn't clear whether SO's would be designated regions whereby they could establish these retail return facilities, or some other mechanism would be applied?

Again, Reloop would suggest a PRO could support retailers to contract collection point service providers. In this case retailers themselves may collectively contract SO's approved by either the government or a PRO.

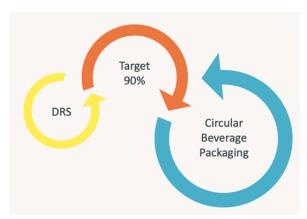
In relation to retailer handling fees, it's likely fee setting could be best established collectively between a retailer association and the PRO as these two parties likely have equivalent negotiating power.

## TARGETS AND PENALTIES

Target should be set at 90% within 2 years, with a penalty to double the deposit rate

Legislated targets are vital and should be accompanied by penalties that reflect the value to producers of under-performance. That is, poor performing schemes (such as those unfortunately established in my home country of Australia) result in both very low return rates — no Australian scheme collects over 77% and most are substantially below this — but also very low costs to producers. There is then a financial benefit for producers of suppressing return rates and the penalty must reflect this.

Reloop's analysis suggests a Norwegian style eco-tax model or a legislated doubling-of-the-deposit as representing best practice penalty regimes.

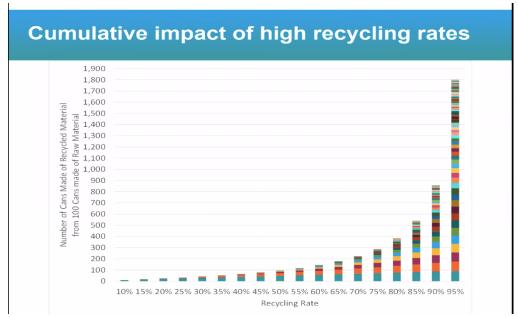


Reloop is managing a program to encourage all DRS globally to aim for 90%+ return rates. This agenda titled 'Target 90'<sup>2</sup> seeks to maximise the circular economy outcomes of beverage container return schemes.

Reloop would propose HK embed a 90% target, applied across the sector (not proposed for individual producers to 'trade' between low and higher performing operators).

Target 90 is not an arbitrary objective but rather based on the following analysis.

<sup>&</sup>lt;sup>2</sup> https://www.reloopplatform.org/wp-content/uploads/2022/06/Target90Report.pdf



This table demonstrates the exponential Circular Economy (CE) returns stemming from higher return rates. In effect a 75% DRS recycling rate amounts to each bottle placed on the market being recycled just three times (before being littered or landfilled), while a recycling rate of 90% results in a container being recycled 9 times and at 95% this rate is twice as much again at around 18times.

The CE bottle-to-bottle recycling outcomes grow exponentially between 90% and 95% recycling making it important the HK government establish parameters for a scheme achieving these best practice outcomes.

# **COLLECTION POINT TARGETS**

The paper suggests individual collection points may be required to meet specified targets. It's assumed this is aimed at guaranteeing retailers comply with the spirit of the scheme and establish collection facilities that perform well. Such a series of targets may however be difficult to implement and alternate mechanisms would be recommended.

#### FULLY FUNCTIONING FROM DAY 1

Consumers will expect access to their refunds from Day 1 of scheme commencement.

An effective DRS should very quickly reach its target level. The Lithuanian DRS achieved 92% within 18months of commencement<sup>3</sup>. HK should aim to mirror this kind of outcome rather than the outlined 40% by year 1  $\rightarrow$  75% by year 5.

Critical for this outcome is placing the consumer at the centre of the policy development process, which means having a fully functioning collection network available for consumers from Day 1. This both satisfies consumer expectations to receive their refunds and can lead to a more rapid achievement of return rate targets.

# **AUDITING**

Automated, barcode based auditing avoids fraud, disputes and ensures accuracy

<sup>&</sup>lt;sup>3</sup> https://www.openaccessgovernment.org/recycling-lithuania-deposit-system-exceeds-all-expectations/45003/

HK should adopt a best practice accounting model based on automation and individual counts rather than old-school weight-based auditing. This is important for accuracy and fraud prevention. HK should additionally base fees and refunds on per-container put to market, rather than based on producer volumes.

The paper appears to shift between manual/weight-based audits (4.15) and automated individual counts. Reloop would suggest every container recovered through the HK DRS should be individually accounted for via automated, barcode based counting.

Weight based auditing allows too much room for fraud and disputes between producers and SO's. E.g. weight-based auditing may allow for bales of containers to be shipped across the HK border (from a non-DRS region) for redemption in HK, creating both scheme expenses but also criminal behaviour broadly.

South Australia (the oldest DRS in Australia) has been burdened with long running disputes between Scheme Coordinators (called Super Collectors) and the collection point operators. These commercial disputes generated over the weight-based accounting 'factors' (equations). These factors are used to measure the states weight-based accounting.

For instance, a tonne of PET may have a factor of 13,000 containers applied. Light weighting of PET containers or changes in the per container volume (e.g. producers shifting from 500ml to 375ml containers) may however see this figure change over time to say 15,000 containers per tonne. A collector may have paid out refunds on 15,000 containers but having a set-factor of only 13,000 containers applied and thereby being underpaid 2000 containers refunds and handling fees per tonne. Such disputes could threaten the viability of the HK scheme.

All eligible containers should have a barcode applied to allow for automated counting, either at the point of consumer disposal or also via manual collection centres, e.g. small shops without an RVM and that may instead collect manually, would have their collected containers returned to a larger counting centre with automated facilities. This individual count approach also provides for very accurate accounting for producer invoicing and government control and reporting.

All accounting should be based on per-container rather than volume based. Some producers will put small containers to market and some will sell in larger formats. Under a volume based scheme all producers would pay the same, depending on volumes, advantaging those selling in larger formats.

## **REPORTING**

Adequate and timely reporting helps provide community trust in the scheme

EPD should look to include an open and transparent public reporting protocol, e.g. quarterly reports of sales and collection volumes (and other data) published on the PRO and EPD websites. This will build greater community trust in the scheme.

A database of scheme container flows should be established by the PRO and made available to the government.

END