

2022 PRIMARY
PACKAGING
ANNUAL PROGRESS REPORT

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Introduction

Primary packaging is the packaging that immediately surrounds our beverages. It includes plastic bottles, glass bottles, aluminium cans, aseptic fibre packs (e.g. juice boxes) post mix bag-in-box (BIB) and pouches, as well as caps and ancillary items including cups and lids.

We use a substantial amount of primary packaging to sell our products. Some of this packaging can have negative impacts on our environment. For example, packaging that is not recyclable can contribute to overstressed landfills and environmental pollution. Leakage of plastic packaging into oceans, waterways and land can have adverse health impacts on ecosystems, including organisms and humans. Primary packaging is also a major contributor to our Scope 3 greenhouse gas emissions.

We are committed to making more sustainable packaging choices, engaging policymakers on related regulation, partnering with public and private organisations and investing in recycling systems.

We have three main goals to improve our performance:

1. By 2025, 100% of our primary packaging will be technically recyclable
2. By 2030, our primary packaging will be made of 50% recycled material
3. By 2030, we will collect and recycle one bottle or can for each one we sell

Transparency on this critical topic drives our progress and ensures we remain accountable.

In this report, we provide detailed information on the amount of primary packaging we use, whether it can be recycled and whether it is actually being recycled. Because the ability to recycle our products largely depends on the systems available to consumers in the markets in which we operate, we also describe how the collection and recovery systems work in our markets and whether waste is exported for recycling.

For more information about our overall approach to sustainable development, please see our [Sustainable Development Report 2022](#).

2022 DETAILS ON PRIMARY PACKAGING

Chinese Mainland

	Is it technically recyclable?	Percent of recycled content	Collection & recovery rates	Is there domestic recycling infrastructure?	Is it exported for recycling?
Returnable Glass Bottle (RGB)	Yes	40%	95%	Yes	No
Non-returnable Glass Bottle (NGB)	Yes	30%	30% [3]	Partial	No
PET (Water)	Yes	0%	95% [1]	Yes	No
PET (Rest)	Yes	0%	95% [1]	Yes	No
Carboy (PC)	Yes	0%	95%	Yes	No
Aseptic fibre pack	Partial	0%	15% [3]	Partial	No
Tin	Yes	0%	0%	No	No
Aluminium Can	Yes	3.2% [4]	99% [2]	Yes	No
Post mix BIB	No	0%	0%	No	No
Pouch	Not sold in Chinese Mainland				

 Material changes versus 2021

- Note:
- The loss in collection and recovery of RGB and Carboy is due to breakage, unacceptable scuffing or loss by customers.
 - Percentage of recycled content for RGB is the figure for cullet in our system, whereas for NGB is the industry average in Chinese Mainland.
 - NGBs are provided to a glass recycler for crushing. After crushing, the cullet is used in one of three ways:
 - As a casting flux for smelting cast steel and copper alloys, covering the molten metal to prevent oxidation;
 - Pre-processed, melted and recycled to produce glass containers, glass fibres and other glass materials; or
 - As a raw material to make glass products, as adding cullet in appropriate amounts helps glass to melt at a lower temperature.
 - Cullet is popular because the cost of washing and sterilising RGBs is currently similar to producing new bottles.
 - Currently, food-grade packaging in the Chinese Mainland cannot contain recycled material, including recycled PET.
 - Carboys in the Chinese Mainland are made from polycarbonate plastic (PC) which is classified as type 7 plastic.
 - We do not produce or sell products packaged in pouches in the Chinese Mainland.
 - The world's most sophisticated deposit systems with extended producer responsibility (EPR) mechanisms only achieve 80-90% collection rates, so the accuracy of the PET and aluminium can recovery rate data in the Chinese Mainland may be questionable.

[1] Collection and recovery rates taken from China Beverages Industry Association (CBIA).

[2] Collection and recovery rates taken from report published by China National Research Institute of Food & Fermentation Industries Co., Ltd. (NFI).

[3] Collection and recovery rates confirmed by China Resources Recycling Association (CRRA).

[4] The recycled aluminium is from scrap from the manufacturing process, and not from post-consumer Used Beverage Cans (UBC).

Hong Kong SAR

	Is it technically recyclable?	Percent of recycled content	Collection & recovery rates	Is there domestic recycling infrastructure?	Is it exported for recycling?
Returnable Glass Bottle (RGB)	Yes	60%	83% [3]	Partial	Yes
Non-returnable Glass Bottle (NGB)	Not sold in the HKSAR				
PET (Water)	Yes	94% [1]	11% [4]	Yes	No
PET (Rest)	Yes	6%		Yes	No
Carboy (PC)	Yes	0%	95% [5]	Yes	No
Aseptic fibre pack	Partial	0%	N/A [6]	Partial	No
Tin	Yes	0%	66% [7]	No	Yes
Aluminium Can	Yes	6% [2]		No	Yes
Post mix BIB	No	0%	N/A [8]	No	N/A
Pouch	Yes (since May 2022)	0%	11%	No	No

Material changes versus 2021

- Note:
- The loss in collection and recovery of RGB and Carboy is due to breakage, unacceptable scuffing or loss by customers.
 - Following the implementation of Operation National Sword on January 1, 2018, the Hong Kong SAR can no longer export baled PET to the Chinese Mainland.
 - All aseptic fibre packs are Forest Stewardship Council (FSC)-certified.
- [1] PET water bottles are made from 100% rPET, except for our 4.8L and 5L bottles. 4.8L and 5L bottles include 0% recycled content.
 [2] rAl is used in our 330ml base can only.
 [3] Actual RGB reuse data of our bottling plant in the Hong Kong SAR.
 [4] With reference to the 2021 Monitoring of Solid Waste in the Hong Kong SAR, the recovery rate for plastic bottles has been computed using the quantity of plastics being recycled divided by the quantity of waste plastics sent to landfill or recycled.
 [5] The collection rate equals the recovered rate for Carboy (PC). Used Carboy (PC) which are no longer suitable for refilling are sent to Kingway Development HK Limited through our contract cleaner.
 [6] MilMill is a recycler for aseptic fibre packs, but due to their stipulations around collection (e.g., the packs must be cut open, washed and dried), very few post-consumer aseptic fibre packs are actually recycled in the Hong Kong SAR.
 [7] With reference to the 2021 Monitoring of Solid Waste in the Hong Kong SAR, the Tin and Aluminium recovery rate has been computed using the quantity of non-ferrous metals recycled divided by the quantity of non-ferrous sent to landfill or recycled.
 [8] No available data.

Lightweighting and reusable design

● New ultra reusable glass bottle

The new ultra RGB is 1/3 lighter than the old RGB bottles. Except for Coca-Cola and Coca-Cola No Sugar, all other flavours use a generic design to optimise reuse operations and stocking. Only clear glass bottles are used to enhance potential recycling value.



Taiwan Region

	Is it technically recyclable?	Percent of recycled content	Collection & recovery rates	Is there domestic recycling infrastructure?	Is it exported for recycling?
Returnable glass bottle (RGB)	Yes	50% [1]	96.8% [2]	Yes	No
Non-returnable glass bottle (NGB)	Not sold in the Taiwan Region				
PET (Water)	Yes	0%	100%	Yes	No
PET (Rest)	Yes	0%	100%	Yes	No
Carboy	Not sold in the Taiwan Region				
Aseptic fibre pack	Partial	0%	69%	Yes	No
Tin	Not sold in the Taiwan Region				
Aluminium can	Yes	0%	88%	Yes	No
Post mix BIB	No	0%	88%	No	No
Pouch	Not sold in the Taiwan Region				

Material changes versus 2021

Note:

- The loss in collection and recovery in RGB is due to breakage, unacceptable scuffing or loss by customers.
- We do not produce or sell products packaged in pouches in the Taiwan Region.
- The Taiwan Region announced in May 2022 that “businesses that manufacture or import physically reprocessed PET ester pellets for use as food containers may submit an application for safety assessment review to the competent authority, and those who pass the review can reprocess rPET pellets raw materials for the manufacture of food utensils, containers, and packaging.” That is, rPET can be used for food containers.
- Collection and recovery rates are calculated based on 2021 data from the Taiwan Environmental Protection Administration (EPA) using the formula “recycling volume/generation volume” as the 2022 generation volume breakdown was not available by the time this report was prepared.

[1] In 2022, the recycled content of RGB has increased from 25% to 50% as the RGB is purchased from another supplier (TAIWANGLASS).

[2] In order to reflect the actual recycling rate of SCCT’s RGBs in the Taiwan Region, the source of statistical data has changed from official data from the Taiwan government to the actual RGB reuse data of our bottling plant in the Taiwan Region from 2022, which is also the direct cause of the increase in recovery rate.

U.S.

	Is it technically recyclable?	Percent of recycled content	Collection & recovery rates	Is there domestic recycling infrastructure?	Is it exported for recycling?
Returnable glass bottle (RGB)	Not sold in the U.S.				
Non-returnable glass bottle (NGB)	Yes	26%	40%	Varies by state	Unknown
PET (Water)	Yes	24% [2]	30%	Varies by state	No
PET (Rest)	Yes	25.6%	30%	Varies by state	No
Carboy	Not sold in the U.S.				
Aseptic fibre pack	Not sold in the U.S.				
Tin	Not sold in the U.S.				
Aluminium can	Yes	72% [1]	49%	Varies by state	No
Post mix BIB	No	0%	0%	No	No
Pouch	Not sold in the U.S.				

 Material changes versus 2021

Note:

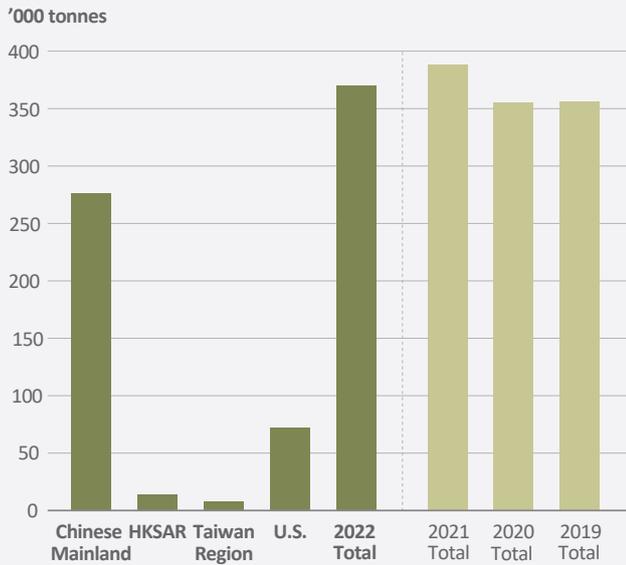
- The loss in collection and recovery in RGB is due to breakage, unacceptable scuffing or loss by customers.
- We do not manufacture glass packaging in the U.S., but we do sell NGBs.
- Coca-Cola Beverage Sales and Service (CCBSS) is the source for recycled content.
- [Western Container Corporation](#) (WCC) is the source for recycled content of PET.
- The U.S. national average recovery rate from the American Beverage Association (ABA) is the source for the recovery percentage.
- We do not produce or sell products packaged in pouches in the U.S..
- In the U.S., carboys, tin and pouches are not used as primary packaging.

[1] Information taken from CCBSS.

[2] Dasani bottled water in 20 oz is packaged in 100% rPET. In 2022, Niagara case pack water was manufactured by an external party, and zero rPET was used.

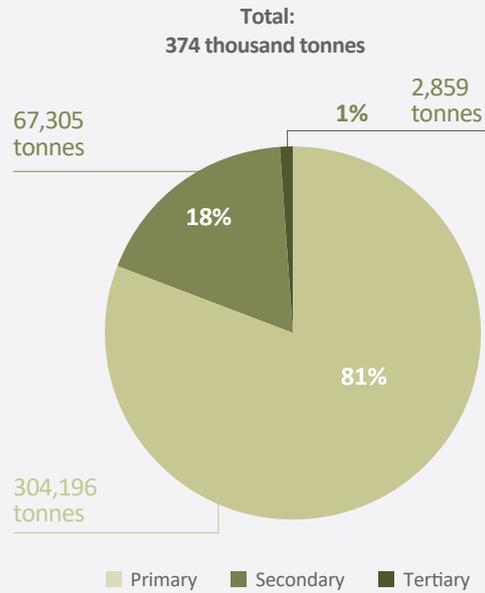
Packaging by Market, Type and Weight

Total packaging by market 2022



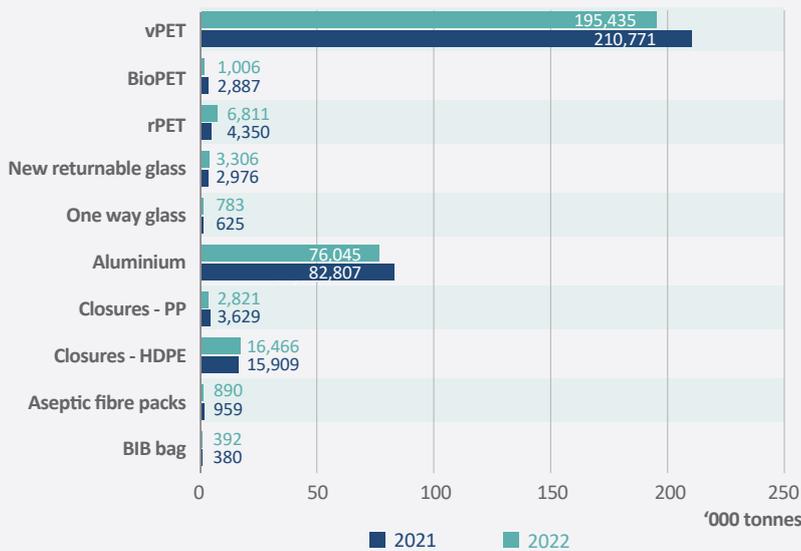
Note:
During the reporting period, we recalculated the total amount of packaging used in the Chinese Mainland in 2021, 2020 and 2019.

Weight of packaging produced by Category 2022

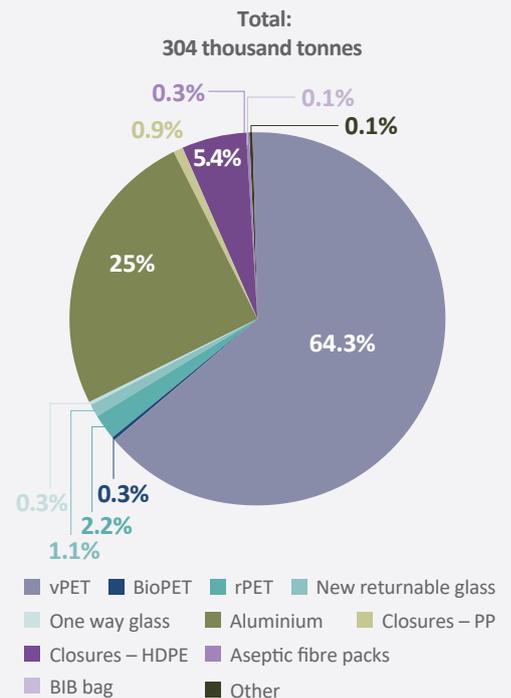


Note:
Primary packaging contains 11% recycled content – this refers to rAL in the U.S., Chinese Mainland and HKSAR, rPET in the HKSAR and U.S., recycled content of returnable glass bottles in the Taiwan Region, Chinese Mainland and HKSAR, and one way glass bottles in the Chinese Mainland.

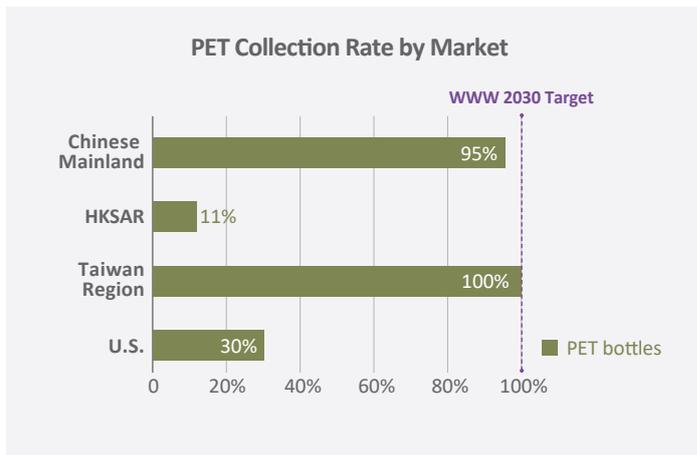
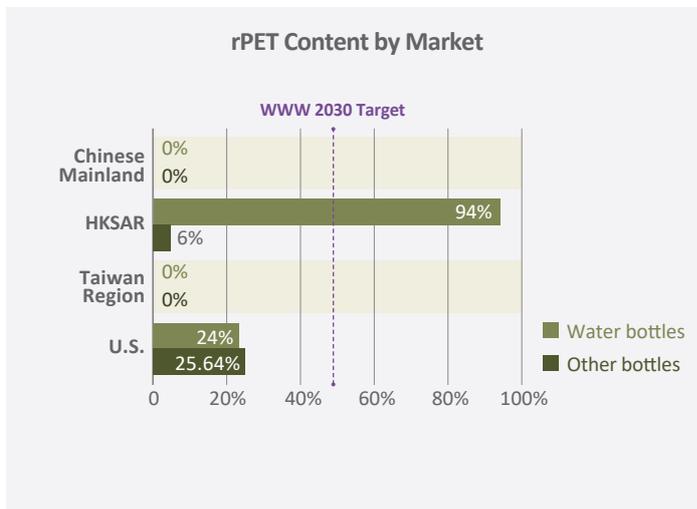
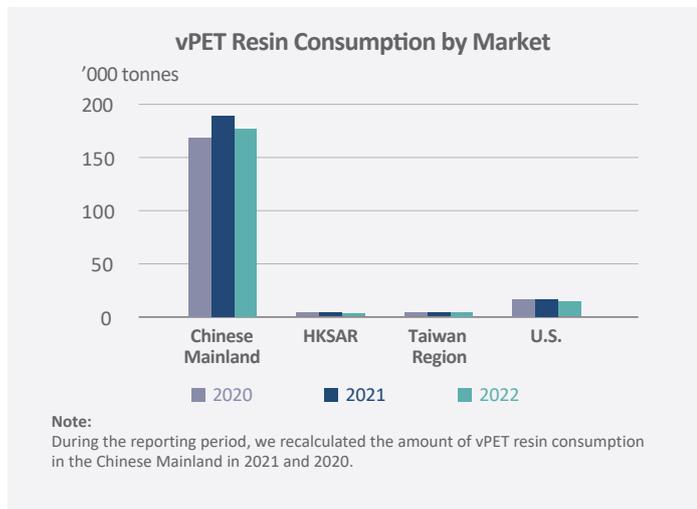
Materials used for Primary Packaging and Breakdown by Type and Weight



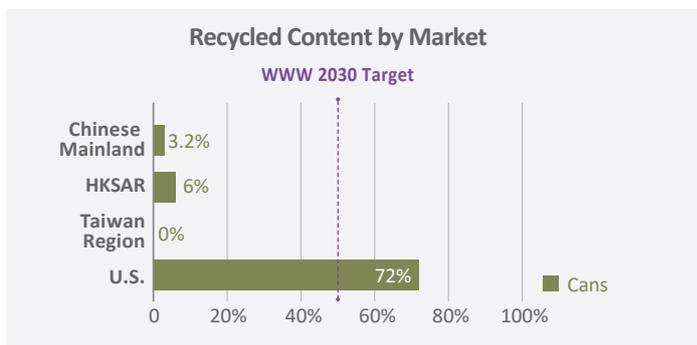
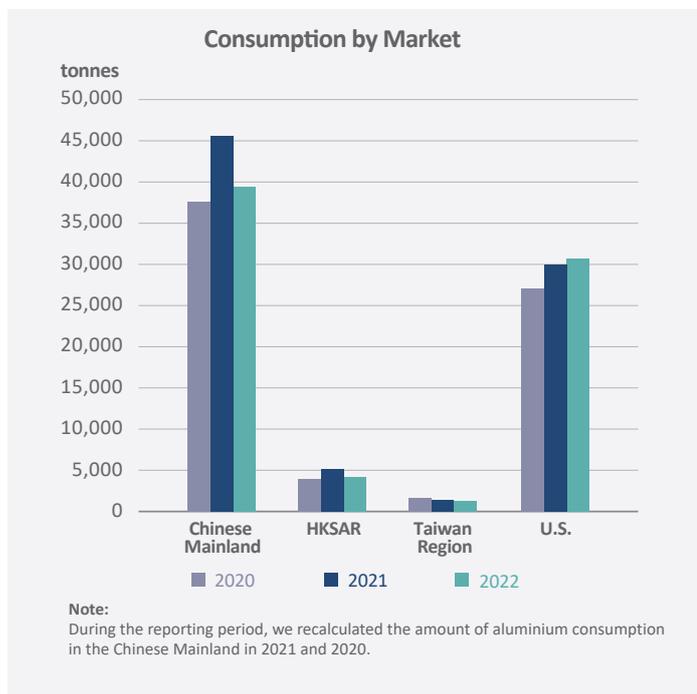
Note:
During the reporting period, we recalculated the amount for primary packaging used in the Chinese Mainland in 2021.



Snapshot: PET



Snapshot: Aluminium



DETAILS ON THE SPECIFICS OF HOW THE COLLECTION AND RECYCLING SYSTEMS WORK BY MARKET

Chinese Mainland

Currently the Chinese Mainland does not have a standardised EPR legislation covering the country. Driven by the intrinsic value of recyclable materials, informal and formal sectors pull waste which is considered to be recyclable from the municipal solid waste (MSW) stream.

However, there is a transition from the informal to the formal handling of MSW across the country. In November 2020, the National Development and Reform Commission (NDRC) and Ministry of Housing and Urban-Rural Development (MOHURD) of the People's Republic of China issued instructions regarding a domestic garbage separation scheme. The document states that the first batch of 46 pilot cities including province-level municipalities, provincial capitals and cities specifically designated in the state plan, will roll-out compulsory domestic garbage separation schemes. The document then states that in a further five years, it expects domestic garbage separation, collection, transportation and treatment systems at other prefectural-level cities to be established.

Referencing the 14th Five-Year Plan, one chapter is dedicated to "Promote Green development, stimulate harmonisation of human being and nature" (推动绿色发展，促进人与自然和谐共生). This chapter addresses "Promoting garbage sorting and separation measures, embrace overall reduction of waste and to develop recycling infrastructure" (推行垃圾分类和减量化、资源化。加快构建废旧物资循环利用体系). These developments indicate macro-forces will enable more primary packaging to be collected and professionally recycled.

The current landscape for the recycling of primary packaging is as follows:

- Recycling infrastructure for PET (mechanical recycling where the rPET flake and or pellet is the end product) is common and often done on a large scale (e.g. 100,000 tpa plants) with modern equipment. The majority of rPET flake or pellet tends to go to in-country garment manufacturers as polyester feedstock.
- Glass is generally crushed into cullet and used in-country in further glass manufacturing and/or as a casting flux in some types of metal production.
- UBC, made from aluminium, tend to be crushed, baled and sent to in-country aluminium smelters, where the recycled aluminium tends to be re-worked into a number of new non-food grade high-density polyethylene (HDPE) manufactured products.
- HDPE, like PET fits into a well-established in-country mechanical recycling network. The recycled HDPE (rHDPE) pellets are then re-worked into a number of new non-food grade HDPE manufactured products.
- Paper and cardboard go to well established paper recyclers.

Hong Kong SAR

The MSW in the Hong Kong SAR largely goes to two landfills via a network of transfer stations which further compact the MSW leading to the more efficient haulage of waste. The Hong Kong SAR has no wet or dry Material Recovery Facilities (MRFs), meaning that recyclables are pulled from the waste stream due to their intrinsic value and or because of some of the programs mentioned below. Due to the Hong Kong SAR's size and current waste infrastructure (which is focused on landfilling), little professional recycling capability exists. As such collection and recovery rates for primary packagings are low, and like all markets getting verifiable data in a timely manner on collection, recovery and recycling rates is challenging.

In 2013, the Environmental Protection Department (EPD) published a [Blueprint on the Government's waste strategy for 2013 to 2022](#). The blueprint was updated in early 2021 under the title of "[Waste Blueprint for Hong Kong 2035](#)". The document sets out vision of "Waste Reduction • Resources Circulation • Zero Landfill", which describes the strategies, goals and measures to tackle the challenge of waste management up to 2035. More recently, the EPD released in 2021 the [Hong Kong's Climate Action Plan \(2050\)](#), setting out various strategies and actions to achieve carbon neutrality before 2050, including measures for waste reduction.

The [Producer Responsibility Scheme](#) (PRS) in the Hong Kong SAR is a key policy tool in the Hong Kong SAR's waste management strategy. Enshrining the principle of "polluter pays" and the element of "eco-responsibility", the PRS concept requires relevant stakeholders including manufacturers, importers, wholesalers, retailers and consumers to share the responsibility for the collection,

recycling, treatment and disposal of end-of-life products with a view to avoiding and reducing the environmental impacts caused by such products at the post-consumer stage.

To date, the Hong Kong SAR has a PRS for plastic bags; a PRS on an array of electronic goods (fridges, TVs, washing machines etc.); a PRS on glass bottles (to be implemented in phases in the first half of 2023); and a possible disincentive under a MSW landfill tipping fee. There is at least a 18-month preparatory period to prepare for the implementation of the MSW after the Legislative Council approved the MSW charging bill, hence this disincentive is possibly years away from being effective); a proposed PRS for beverage plastic bottles ([PPRS](#)) on a market-basis is expected to be presented to the Legislative Council in 2023; and lastly the EPD is running a pilot with 120 Reverse Vending Machines.

In addition, the EPD now runs the Three Colour Bin system, with over 2,000 bins in total located on street pavements and mostly for paper, plastic bottles, and metal, and will at some stage take on responsibility for all waste collection from the refuse collection points and a number of Community Recycling Centers (from Food and Environmental Hygiene Department) – but even after this sensible re-organisation, volumes of post-consumer primary packaging generated from these programs is low with high contamination.

That being said, a professional PET and HDPE recycling plant ([New Life Plastics Limited](#)) has been built in Tuen Mun at the EcoPark, and has commenced operations. Swire Coca-Cola holds a 33% equal share in this business.

Taiwan Region

In the Taiwan Region the management of MSW falls under an umbrella of legislation which focuses on incentives, charges and fines, which result in influencing behaviour to deliver high collection, recovery and recycling rates for soft drink primary packagings – and many other recyclables.

Glass, paper, cardboard, metal cans and plastics are collected in a single waste stream. Individuals bring their recyclable items to public recycling trucks or to the recycle collectors (free of charge), while general waste requires individuals to pay under the Pay As You Throw (PAYT) scheme. Citizens failing to comply with mandatory waste separation for a second time face penalties of over NT\$1,200 – 6,000 (US\$40 – 200).

The EPR scheme is led by the Government. Producers and Importers putting packaging into the market pay contributions (every 2 months) directly to the

Government-led Central Recycling Fund, which is managed by the Environmental Protection Administration (EPA). This Fund then supports the collection and recycling infrastructure, which survives from this EPA funding and the proceeds from selling of the processed recyclables. The recycling infrastructure across the Taiwan Region is owned by a number of different recycling companies.

Industry is involved in the determination of the contribution (recycling levy) through their participation in the multi-stakeholder Fee Rate Review Committee.

As an example the PAYT scheme in Taipei including New Taipei City (since 2000) requires residents to purchase designated garbage bags (3L = NT\$ 21 for 20 bags) for waste disposal while incentivising the source separation of recyclable materials, as these are exempt from this obligation.

The current Government subsidies to recycling plants for different materials are shown as below:

Kg	Government subsidy (NT\$)
AL	1
Glass	2.1
Tetra/Combi	6.64
PET	4.5

Source: Laws & Regulations Database of The Republic of China
<https://law.moj.gov.tw/LawClass/LawAll.aspx?pcode=00050014>

Below are the recycling amounts paid to the EPA by different material:

Recycling	
PET bottles	NT\$ 8.50/kg
Tin cans	NT\$ 1.64/kg
Aluminium cans	NT\$ 1.00/kg
Glass bottles	NT\$ 2.00/kg
Aseptic paper packs	NT\$ 6.42/kg

Other containers

Formed polystyrene (PS)	NT\$ 69.83/kg
PS	NT\$ 11.64/kg
Polyvinyl chloride (PVC)	NT\$ 87.00/kg
Polypropylene (PP)/Polyethylene (PE)	NT\$ 7.00/kg
Paper/Fibers	NT\$ 5.40/kg

U.S.

Currently the U.S. does not have standardised EPR legislation covering the country. Each State tends to manage its MSW in a different way. Generally the country is landfill-focused with poor collection systems feeding an assortment of MRFs which vary in quality. Although the EPA in the U.S. calculates the national recycling rate for different materials (including packagings) on an annual basis, the market is lacking a reliable ability to compare the recycling rates of a common set of containers and packaging materials (CCPM) within or across all states due to conflicting measurement methodologies¹.

The market for recyclables tends to be driven by the pricing of paper and cardboard, which dominates the volumes of recyclables being managed. In the past two years, the prices for recyclables have had a turbulent time due to Operation National Sword by the Chinese Mainland and now the [Basel Convention](#), so the export driven market has fundamentally changed.

Only one State in which we operate (Oregon) has a Deposit Return System (DRS) for USD 0.10 per container. The [Oregon Beverage Recycling Cooperative](#) (ORBC) operates this DRS and has branded it as BottleDrop®. In Washington State, some collection is done curbside and collection tends to be dominated by the trash haulers with mild success in collecting meaningful volumes of quality recyclables, including post-consumer primary packaging of soft drinks in urban areas, and very limited success in more rural areas of the State.

Recycling infrastructure for PET (mechanical recycling where the rPET flake and or pellet is the end product) is not well established across the country (same applies to HDPE), but there does seem to be greater impetus today for plants getting funding for operations. This may be due to greater awareness of the issue, the increasing demand for rPET, and the need for fast-moving consumer goods companies to demonstrate their transition from linear to circular models of operations.

Glass when it is separated, is recycled by the glass foundries.

UBC tends to be crushed, baled and sent to the aluminium smelters (i.e. Novellis in Kentucky), where the recycled aluminium tends to be re-worked back into sheet for the re-manufacturing of soft drink and beer aluminium cans.

Paper and cardboard are largely exported with some volume going to well established State side paper recyclers.

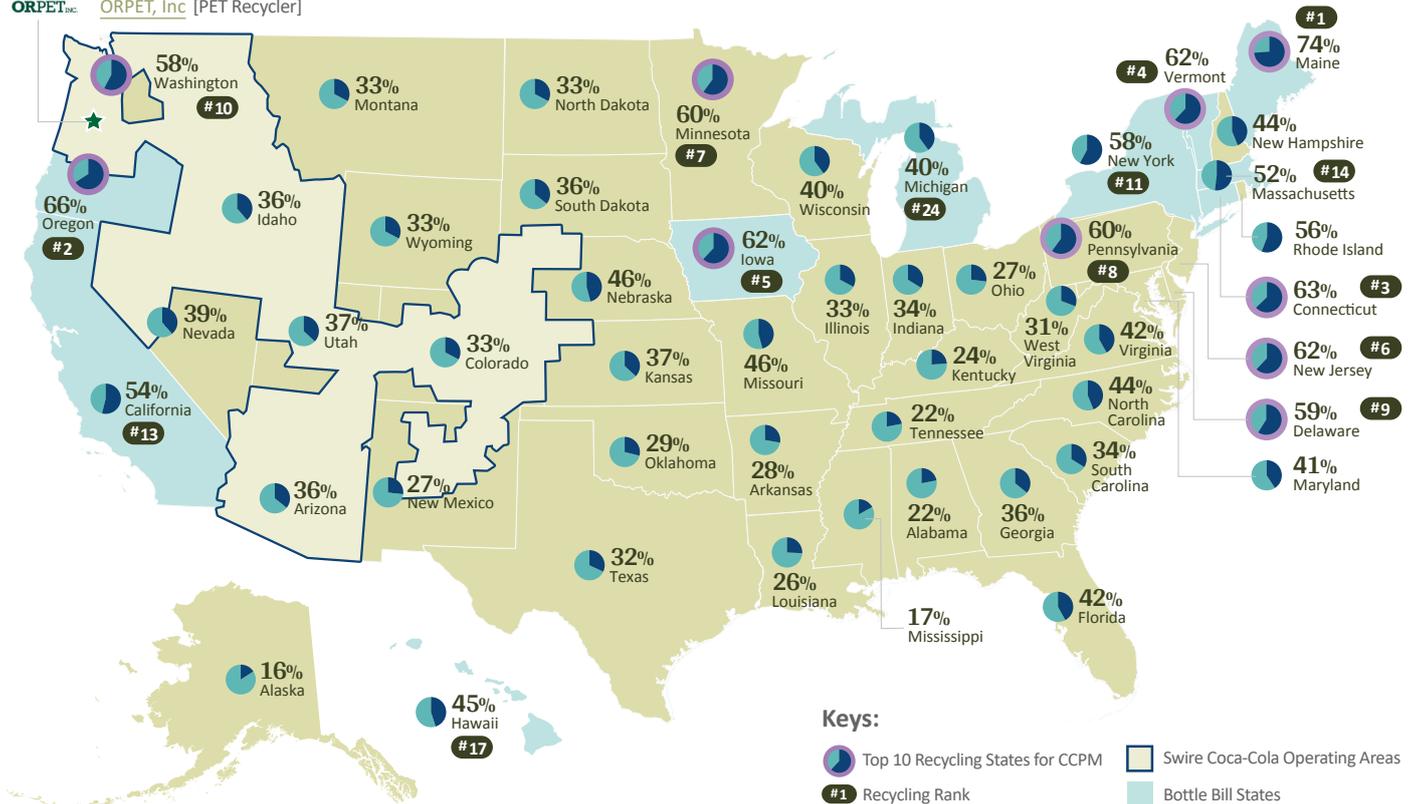
Colorado passed an EPR bill in 2022. Details of the bill are still being worked out. Looking forward, it would seem that certain States – for example Washington – are looking to write legislation around EPR and DRSs, but the speed at which these will progress is unknown.

1. Environmental Protection Agency. <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/advancing-sustainable-materials-management>

State-by-State Overview of Common Containers and Packaging Materials Collection Rates Listed according to CCPM Recycling Rank



ORPET, Inc [PET Recycler]



	Recycling rate*	Bottle bill	Recycling legislation
Maine	72%	✓ Yes	✗ No
Vermont	62%	✓ Yes	✓ Yes
Massachusetts	55%	✓ Yes	✗ No
Oregon**	55%	✓ Yes	✗ No
Connecticut	52%	✓ Yes	✗ No
New York	51%	✓ Yes	✗ No
Minnesota	49%	✗ No	✗ No
Michigan	48%	✓ Yes	✗ No
New Jersey	46%	✗ No	✗ No
Iowa	44%	✓ Yes	✗ No

* Recycling rates include glass to aggregate and landfill cover.
 ** In Oregon, where we operate, has a DRS in place.

Takeaway from Eunomia:

A Deposit Return System (DRS) for beverage containers is necessary to achieve CCPM recycling rates greater than 70%. Policy that requires a DRS delivered under the principles of target-based EPR, either as a standard policy or part of wider EPR policy for all packaging and paper products, will deliver the highest recycling rates.