



Belize

BRIEF (Input Paper): Comparative Analysis of Returnable Containers Act

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The objective of this document is to identify areas for possible amendment for the “Returnable Containers Act, Chapter 328:01, revised edition 2011” in Belize. For this purpose, the expert team from Caribe Circular reviewed various acts and regulations related to returnable containers from within and outside the region.

1 Introduction

As part of the German government supported regional initiative Caribe Circular, executed by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), one objective of the cooperation with the partners in the participating countries is to review the existing legislation in place in supporting the shift towards a circular economy.

In line with this objective, this document is meant as reference for the Department of Environment, Belize to review the Returnable Containers Act, 328:01, revised edition 2011 for possible areas for further amendment.

For this purpose, an expert team under the Caribe Circular reviewed existing literature on successful design of Container Deposit Scheme as well as further regulations from within as well outside the Caribbean region pertaining to the governing of returnable containers. The results of this comparative analysis are presented herewith.

While section 2 section offers a brief overview of different design options for Container Deposit Schemes (CDS), section 3 outlines the parameters reviewed in the different Acts and describes the scope and content, comparing the same with the Returnable Containers Act, 328:01 in Belize.

Section 4 summarises those areas which may warrant particular attention (i.e. recommendations).

Section 5 provides an overview of the legislation which have been reviewed for this study.

2 Background

Container Deposit Schemes (CDS), such as the Returnable Containers Act, 328:01 are one kind of so-called "Product Stewardship Schemes" and the covered containers are usually related to beverages (bottles or cans) (Leney et al. 2022). CDS can take several different forms but they are generally set up to increase and facilitate recycling, to enable accurate disposal, to collect funds to finance both, and to avoid littering by adding an immediate value to an otherwise discarded product (Leney et al. 2022). CDSs can be applied to beverage containers (as is the case in Belize) but also to other products that are hard or dangerous to recycle, such as assembled appliances (e-waste) or lead-acid batteries (Leney et al. 2022). There are different points at which the deposit can be charged, such as at the point of selling a product (as is the case in Belize), or at an earlier stage, e.g. when a product is imported or otherwise placed onto the market (Leney et al. 2022).

While the devil is in the detail, there are two overarching models of how to manage a CDS: via a special fund or a managing agency (Leney et al. 2022). Which of these overall models to follow, depends on local circumstances, such as the competitiveness of businesses, the market size, the existence of beverage producers within the country, to name but a few. The main difference between the two models is that they are either managed by the public sector (through a special fund), or by private sector entities (in form of a managing agency). While the former usually aims to relief and improve waste management systems, the latter helps companies to retrieve the products that they put on the market and to reuse or recycle them commercially (Leney et al. 2022).

With the Belize Returnable Containers Act, the authorities have aimed at a managing agency model:

What is needed under a CDS with a managing agency mode is primarily a regulation that obliges producers and importers of a certain product to operate a system under which such product will be bought back after its use (Leney et al. 2022). The idea behind a non-too prescriptive law is that industry will come up with an efficient way of pooling their resources to streamline their efforts in order to reduce costs. Two parameters that need to be in place in order for a CDS to function are to define the products that are covered by the regulation and a target for how much of a products need to be recovered (Leney et al. 2022). The target recovery rate functions as a means to push industry to come up with ideas to make it easier for consumers to return the containers (Leney et al. 2022). It is furthermore advised to set the price of the refund and to ensure that penalties for non-abiders are severe enough to be offsetting

(Leney et al. 2022). One of the pitfalls of the managing agency model is that it requires businesses to cooperate, which can be difficult in countries with few but highly competitive market participants (Leney et al. 2022).

Success factors	Met?	Belize Act
Clearly defined products that are covered	yes	<ul style="list-style-type: none"> - “beverage” = carbonated soft drinks, beer and other malt products; - “beverage container” = glass, metal, aluminium, steel, or plastic bottle, or beer can, of less than one gallon (or 3.8 litres).
Recovery target	no	-
Refund-rate	yes	Depending on the size and material of the container: <ul style="list-style-type: none"> - plastic containers of up to 0,5 litre = 5 cents (0,024 USD) - plastic containers of more than 0,5 litre = 10 cents (0,048 USD) - glass, metal, aluminium, steel = 15 cents (0,072 USD)
Significant penalties	Yes	<ul style="list-style-type: none"> - Up to 500 Belize Dollars (241,57 USD) and/or up to 6 months imprisonment for first convictions - For continuing offences: additional 500 Belize Dollars and/or additional 3 months imprisonment for every additional day of committing the offense

In order to design a CDS that is targeted at the right products and that fits in with the national circumstances, it is advisable to study what the main targets for a CDS should be (i.e. for what sort of containers), how much of such containers can be feasibly collected, and the amount of the deposit and of refund (which does not have to be equal) (Leney et al. 2022).

3 Comparison of different schemes

Legislation from countries from within and outside the region were selected which are of comparative market size governing returning containers and related deposits. As an exception, also legislation from Germany was included. In the countries under review, such regulations are referred to also as container-deposit legislation, container-deposit scheme, deposit-refund system or scheme, deposit-return system, or bottle bill). Similar to the Returnable Containers Act, 328:01, Belize, these cover requirements pertaining to the collection of a monetary deposit on beverage containers (refillable or non-refillable) at the point of sale and/or the payment of refund value to the consumers. When the container is returned to an authorized redemption centre, or retailer in some jurisdictions, the deposit is partly or fully refunded to the redeemer.

3.1 Country specific aspects

The subsection highlights parameters that are covered in the regulations of the countries reviewed but are not specified in the Returnable Containers Act, 328:01, Belize. These examples aim to showcase the variety of ways to design a deposit scheme and are not prescriptive for Belize.

3.1.1 Barbados

Though the Returnable Containers Act in Barbados has many similarities with the one of Belize, there are some crucial points present in the former, which were not taken up in the latter. Firstly, the Barbados Act covers more types of beverages, such as mineral water or soda water. Secondly the Act specifically mentions redemption centres. Third, while the Act of Belize demands distributors and dealers to collect a deposit, the Act of Barbados prohibits the sale of any beverage in a container, unless exempted from

the Minister through proving that the dealer or distributor “has in place a system for the recycling of beverage containers” (§ 3(2) a) or that a distributor or dealer can use such a system that is provided by a third party (e.g. a managing agency). Fourth, the Act in Barbados does not require a proof of purchase at the dealer where the container is to be redeemed (which makes sense, since this would not work at redemption centres).

Furthermore, in the 2019 amendment of the Returnable Containers Act” the term beverage container was replaced with the term “container” only. Container means a separate, sealed glass, metal, aluminium, steel or plastic bottle, can, jar, carton or other receptacle which may consist of other materials that are recyclable or reusable and is capable of holding 3.8 litres or less. This widens the scope of deposit coverage to containers other than for beverages.

3.1.2 Fiji

In Fiji, the Container Deposit Regulations (updated in 2011), lay out a so-called Product Stewardship Plan, which includes the establishment of a non-profit managing agency that is mandated by the state to operate the management of the Container Deposit Scheme. The deposit is paid by the producer to the managing agency, unless a producer uses refillable containers (§5 (3)). Additionally, the rights and responsibilities of different stakeholders are outlined:

- Producer, retailer or distributor
- Collection agency
- Processor (e.g. recyclers)
- Managing agency

All of these stakeholders are also mandated to participate in awareness raising (§5 (4)).

In line with the four success factors laid out in section 1 of this policy brief, the regulation also lays out

- 1) Clearly defined products (jar, carton, can, bottle made of glass PET or aluminium that was sealed by its manufacturer)
- 2) a schedule for increasing recovery targets (from 60% to 80% after three years after the date of implementation of the Act).
- 3) The different rates for
 - a. refund (different rates for containers up to one litre, 10 ct (0,045 USD), and of more than one litre, 8 ct (0,036 USD)) as well as the
 - b. deposit (20% higher than each of the refund schemes (§10))
 - c. handling fees (the difference between the two, allowing the managing or collection agency to cover expenses related to waste and recycling efforts in Fiji (§12)
- 4) And the exact penalties (§ 22)

3.1.3 Kiribati

In contrast to Fiji and Malta, the island state of Kiribati follows the model of a state-managed Special Fund. The so-called Waste Material Recovery Fund is managed by the Ministry of Finance and the money collected therein can only be spent for waste recovery. The deposit is solely paid by importers, since there are no container producers in Kiribati. This makes it comparatively easy for the Ministry of Finance (which also holds the customs office) to collect the deposit and feed it directly into the Special Fund, since it is automatically raised, once the specific tariff number for an item is entered electronically. Like Fiji, Kiribati keeps the difference between the deposit (5 ct USD) and the refund (4 ct USD) as a handling fee of 1 ct USD per can or PET bottle (there is no handling fee for lead-acid batteries). Kiribati has one central collection point and four remote ones, but no official collection from households. The scheme has thus created job opportunities for the informal sector who have set out to collect containers and lead-acid batteries from households and bring them to the collection points. The payment of refunds takes place first between the redeemer and the operator at the collection point, while the operator is reimbursed directly from the Special Fund. All collected materials are shipped abroad. The revenue of these sales goes back to the Special Fund and serves to finance the operating of the system (Leney et al. 2022).

3.1.4 Malta

The Maltese regulation outlines in detail the specific process under which a managing agency (here: “operator”) is to be contracted and under which requirements it should operate. As such, the law specifies e.g. that the managing agency under § 7. (1) (d) “assumes the collective extended producer responsibility on behalf of producers and retailers of single use containers”. It also explicitly mandates the use of reverse vending machines through which to handle the return and refund of containers and mandates the treatment of the collected material and the documentation thereof (§8 (1)). In terms of recovery targets, the law does not mention a specific target but directs towards a schedule and links the targets to EU Legislation (§9). The deposit itself is first paid to the managing agency upon entry of the market of a product by the entity responsible for the market entry and is passed-on throughout the supply chain (§ 15). Furthermore, §15 specifies that retailers who offer their premises as redemption locations and thus refund consumers for their returned beverage containers, will be reimbursed for the refund by the managing agency. § 16 regulates that containers that fall under the CDS shall carry a specific label, allowing for containers to be returned at a different place than where they had been bought, whilst also ensuring that no container from outside the system (e.g. a similar bottle from another country) is being refunded, for which no deposit has been paid. § 18 mandates retailers to a) provide a redemption location (on their own premises or at a shared location) and b) to accept any container under the scheme, regardless of whether the item has been sold by that retailer or not. The managing agency supports those retailers who have their own redemption locations by paying a handling fee. From § 19 onwards, the regulation lays out specific rules for refillable containers

3.1.5 Germany

The scheme covers beverage containers made of glass, aluminium, plastic with a size between 100 ml to 3 litres. The scheme and deposits also vary depending on the type of beverage. In general, the scheme covers beer, soft drinks (carbonated and non-carbonated), drinking water (aerated, non-aerated), mixed alcoholic drinks as well as juice (in PET bottles). In addition, the scheme also covers containers for food-items such as dairy products. From 2022, deposits have become mandatory on all non-refillable plastic beverage bottles and cans in Germany. Previous exemptions for fruit juices or mixed alcoholic beverages in cans or single-use plastic bottles were abolished. However, there is a transitional period for milk or milk products until 2024. This is a result of an amendment to the German Packaging Act, which the German Cabinet had approved.

The deposit refund scheme in Germany further differentiates between single-use and multi-use beverage containers. Single-use containers are subjected to a deposit of: 25 ct USD, while reusable containers may be subjected to a deposit between 8 – 15 ct USD, depending on the type of beverage as well as type of container.

A large portion of beverage containers covered under the scheme are collected at automatic reverse vending machine that are mainly located in the premises of supermarkets. The redeemer feeds the beverage containers into the machine and receives the deposit as a voucher at the end. The voucher can be either converted to cash or deducted from the shopping bill. At the reverse vending machines, there is usually no refusal to accepting containers regardless whether the container has been purchased at the specific dealer (supermarket). Main pre-requisite is that the containers need to bear a specific “recycle label” to be accepted by the machines.

The situation is different with smaller dealers (e.g. corner or neighbourhood shops) which may only accept containers of brands that they actual sell there.

3.1.6 Seychelles

Legislation governing the deposit system in the Seychelles is scattered across several Acts as well as memorandums of understanding (MoU) with different entities. This makes it very difficult to follow the exact reasoning of the law. Like Fiji, the Seychelles do not have domestic bottling companies or producers of aluminium cans, which makes it feasible to collect the deposit (here called “levy”) through customs on items that are imported into the country. The money raised thereby is directed into the Waste Management Trust Fund. Compared with Fiji, however, there are not just two rates (deposit and refund)

but different redemption rates across the entities involved: while for a PET bottle, 5 ct USD are paid as a deposit, 0,4 ct USD are kept to run the trust fund at government side, while an additional 1 ct USD are kept by the redemption centres to cover their operating costs. The consumer therefore only gets refunded 3,6 ct USD. These operational fees are even higher for aluminium cans (2,1 ct USD for government, 1,4 ct for the redemption centre), causing an even greater loss to the consumers (Lai A., Hensley J., Krütli P., & Stauffacher M. (eds.) 2016).

3.1.7 Türkiye (Turkey)

As part of the national “Zero Waste” project, a Deposit Return System has been introduced starting in 2022. During the first stage, the focus is on containers made of glass, aluminium and plastic (PET). The second stage will expand to containers such as “Tetra Pak” and Plastic (HDPE). All containers must be between 0.1L and 3L. The scheme covers the following beverages: Tea and coffee, carbonated soft drinks, energy drinks, milk, fruit and vegetable juices, drinking water (sparkling and non-sparkling), sports drinks and alcoholic beverages. The actual deposit rate has yet to be decided. The same will be likely defined at a flat rate between 1,3 ct USD and 2,7 ct USD.

3.1.8 Turks and Caicos Islands

Uncommonly, the islands of Turks and Caicos legislates their CDS through health legislation. Like in the Seychelles and Kiribati, a levy is collected through customs upon importing the containers. Another similarity with the Seychelles and Kiribati is the management of the deposit (here: “environmental levy”) and refund (through either a designated site for the collection of prescribed items of a recyclable nature” (§50 (1) b) or directly to consumers) are both managed through a state-led “Clean-up Fund”) § 51 (1). There is no precise mention of what happens to importers or local producers, distributors or retailers who do not comply with the scheme. However, the law sets out penalties for anyone who unlawfully deposits or leaves behind waste. The law does not set a target rate for recovery, nor does it specify what containers or materials are to be covered by the scheme.

3.2 Results of the comparison

Table 1 compares the provisions of the present Returnable Containers Act, 328:01 in Belize with the legal provisions of other countries, by naming examples from the countries above. It becomes apparent that there are some aspects that overlap with legislative provisions in other countries, such as provisions for denying to accept broken or severely damaged containers or the fact that containers that are produced for export (including for aircrafts and ships) are not covered by the deposit scheme. Other provisions, such as the scope of the Act, the collection of the deposit, the provisions for collection and redemption or the amount of penalties differ largely. This proves that there is a broad range of design options and every state should (re-)evaluate which provision serves their national circumstances best.

Table 1 – Comparison of parameters covered

Parameter	Present requirement in existing act	Comparative coverage in regulations reviewed
Types of containers covered	<p>Beverage” means carbonated soft drinks, beer and other malt products;</p> <p>“Beverage container” means the glass, metal, aluminium, steel, or plastic bottle, or beer can, used for containing one gallon (or 3.8 litres) or less at the time of sale of a beverage intended for use or consumption in Belize</p>	<p>In Barbados, the type of container was changed from “beverage container” to container. After this amendment, container refers any separate, sealed glass, metal, aluminium, steel or plastic bottle, can, jar, carton or other receptacle which may consist of other materials that are recyclable</p>

		or reusable and is capable of holding 3.8 litres or less.
	§ 2 (2) Beverage containers sold or distributed aboard aircraft and ships shall be considered as intended for use or consumption outside Belize	This is in line with most, if not all legislation and regulation, even when it is not specifically mentioned.
Point of paying the deposit	§ 3 (1) The deposit is collected by distributors and dealers at the time of sale or distribution	<p>In Malta, the deposit is paid upon market entry of a container and passed on across the supply chain. Furthermore, the deposit is collected by a managing agency (who is also responsible for redemption) in a separate fund.</p> <p>Other countries (in particular, where there is no domestic production of containers or beverages, such as Kiribati, Seychelles, and Turcks and Caicos), the deposit is collected in the form of a levy by customs at the point of imports.</p>
Setting of deposit and refund values	§ 3 (2) (see table 2)	See table 2
Acceptance of containers	<p>§4 (1): a redeemer needs to prove that the container he/she wishes to return was bought at the specific dealer.</p> <p>(2): a distributor shall accept and refund any beverage container of the “design, shape, size, colour, composition and brand sold by such distributor or dealer”</p> <p>(3): to comply with the above, each distributor shall direct a sufficient number of dealers or agents across the country to be accessible to the public.</p>	<p>Malta (among others) has a specific label printed on every container that falls under the scheme, thereby ensuring that only containers for which a deposit has been paid are being refunded.</p> <p>Furthermore, the Maltese law clearly mandates retailers to a) provide a redemption location and b) to accept any container under the scheme, regardless of whether the item has been sold by that retailer or not. Similar provisions are set in Fiji and in other regulations, in particular where there are collection centres, like in Barbados, Kiribati or Seychelles.</p>
Refusal to accept container	<p>§ 5 (1): containers that are not covered by the Act can be refused</p> <p>(2) containers that are broken, corroded, dismembered or in an otherwise non-returnable condition can be refused.</p> <p>(3) if the dealer has already refunded the redeemer for an article, the distributor needs to accept it likewise</p>	Such provisions are very common in the reviewed schemes.
Further regulatory reference		Exemptions for refillable containers: in order to encourage the use of refillable containers, instead of single-use ones, Fiji exempts these from the obligation to pay a

		<p>deposit. Along the same lines, Germany collects lower deposits for refillable glass bottles (8 ct USD) and for refillable plastic bottles (10 ct USD).</p> <p>Fiji strictly regulates that the used containers shall not be disposed of at landfills or be incinerated.</p>
<p>Consequences of non-compliance</p>	<p>§ 8: Up to 500 Belize Dollars and/or up to 6 months imprisonment for first convictions</p> <p>For continuing offenses: additional 500 Belize Dollars and/or additional 3 months imprisonment for every additional day of committing the offense</p>	<p>Fiji: minimum penalties of 2.225,5 USD</p> <p>Kiribati: max. 679,30 USD or max. 2 months of imprisonment</p> <p>Malta: penalties from 4.960,40 USD to 19.841,60 USD (§31 (1))</p> <p>Turk and Caicos: § 50 (2-4) focuses on disposal of waste, depending on the offence 500 USD – 2.000 USD</p>

3.2.1 Zooming in: Refund values across countries

Table 2 provides an overview of the refund value foreseen in the different legislations reviewed. For purpose of comparability all values have been converted into USD equivalents at prevalent rates on 06.09.2022.

It becomes apparent that the amount and the structure of the refund values differ across the different schemes, but not by much. The setting of prices does not follow a certain rule, but differs between states. Some differentiate between sizes of containers (as done in Belize, Barbados, and Turk and Caicos). In Germany, meanwhile, the deposit (and refund) vary across types of material: the deposit for aluminium cans and PET bottles are set at 25 ct USD, refillable plastic and glass bottles at 8-15 ct USD. The idea seems to be that lower deposits reduce the price of a more desirable (i.e. refillable) container. Fiji also follows this concept by excluding refillable containers from the scheme altogether.

Requiring a lower deposit for smaller containers, on the other hand, gives an incentive to buy smaller bottles, whereas it would be more environmentally sustainable to buy larger containers because it uses less material per ml of content.

It is, however, not a necessity to set different prices for different sorts of containers: In Malta, the price for all beverage containers (regardless of their material) is set at a minimum of 10 ct USD.

Another observation that is to be derived from taking a closer look at the refunding values, is that they can differ (i.e. be lower) than the deposit rates. As mentioned above, this is done in countries where part of the deposit is kept by the state or by the managing agency as a handling fee and/or to otherwise contribute to the running costs of the system.

Table 2 – Comparison of refunding values¹

Type of container	Country							
	Belize	Barbados	Fiji	Germany	Kiribati	Malta	Seychelles	Turk and Caicos
Plastic	2,4 ct ² 4,8 ct ³			15 ct ⁴				
PET bottle		5 ct	3,6 ct ⁵ 4,4 ct ⁶	25 ct ⁷	4 ct	10 ct	3,5 ct	5 ct ⁸ 10 ct ⁹
HDPE ¹⁰ and LDPE ¹¹ under 1 liter		2.5 ct				10 ct ¹²		
HDPE ¹⁰ and LDPE ¹¹ over 1 liter		5 ct						
Glass	7,2 ct		3,6 ct ⁵ 4,4 ct ⁶	8 ct ¹³ 15 ct ¹⁴		10 ct	1 ct	5 ct ⁸ 10 ct ⁹
• Beverage bottle		7.5 ct						
• Other glass containers		2.5 ct						
Metal		2.5 ct						
Aluminium			3,6 ct ⁵	25 ct		10 ct	3,5 ct	5 ct ⁸
• Cans			4,4 ct ⁶		4 ct			10 ct ⁹
Lead-acid batteries					5,00 USD			

¹ The values for Türkiye (Turkey) are yet to be set

² For every plastic beverage container with a capacity of or under 1/2 litre

³ For every plastic beverage container with a capacity of more than 1/2 litre

⁴ For reusable plastic bottles

⁵ For beverage containers of up to one litre

⁶ For beverage containers of more than one litre

⁷ For single-use plastic bottles (PET)

⁸ For any container below about ½ liters (16 oz.); partial refund system, where the levy is 8 ct USD.

⁹ For any container above ½ liters (16 oz.) partial refund system, where the levy is 13 ct USD

¹⁰ High-density polyethylene

¹¹ low-density polyethylene

¹² Explicit exclusion of HDPE)

¹³ For beer bottles

¹⁴ For other glass bottles

4 Conclusions and recommendations

From the comparisons of different schemes and elements thereof, it follows that some changes could also be made in Belize to make the system run more smoothly and be more widely used. This section of the brief aims at drawing attention to some specific areas, which may warrant further discussions and review. The recommendations focus on what is presently part of the act. It does not prejudice the efficiency or effectiveness of the scheme's operation.

1. Expand range of containers covered

The current scope of beverages and containers is rather limited, leaving several key products outside of the scheme and thus not adding value to incentivise their collection/recovery.

- In line with the moves in Barbados and Germany, it can be considered to change the types of containers covered and expand the scope beyond beverages only and also cover selected food containers.
- Even if this is not desirable, one could at least widen the scope of beverages to be in line with the former definition in Barbados, and to add “non-carbonated”, “mineral water”, and “soda water”. And to add “glass containers” and “glass beverage bottles”.

To this regard the corresponding definition would have to be included into current paragraph 2 of the Returnable Containers Act.

2. Rethink the acceptance of containers (i.e. points of collection)

The present formulation in paragraph 4 (1) states that a dealer has to accept any empty beverage containers sold by that dealer to the redeemer. This practice is not ideal, since it limits the options for redeemers to return their containers.

- It could be considered to expand the scope to any beverage containers regardless whether the same has been sold by the specific dealer. This may increase the recovery rate, particularly when point of sale and consumption are far from each other. See all of the above schemes as examples, while Malta, Germany and others have a specific label to prove that a container is covered by the scheme and demands acceptance (e.g. by reverse vending machines).
- More specifically, in line with a possible extended producer responsibility (EPR) concept, it would be desirable if dealers could reclaim refunds paid for any beverage containers (including those not sold by the dealer) from the manufacturer or distributor (see e.g. Germany or Fiji)

However, the reason for the current framing of § 4 (1) is likely, that the deposit is collected by the dealers. It is understandable that one dealer shall not be held liable for refunding when he/she has not received the deposit in the first place.

- The following points 3, 4, and 5 should be considered to facilitate this improvement further.

3. Centralise the management of the scheme

There is currently no provision of a single entity or agency to manage the CDS.

- It would be preferable that the deposit is collected by a managing agency or the state in a separate fund, as done in Fiji, Kiribati, Malta, Seychelles, and Turks and Caicos. As described above, a centralised management helps facilitating the re-distribution of the raised deposit among all participating retailers and redeemers (e.g. avoiding that one shop predominantly collects the deposits, while another predominantly redeems).

4. Make collection points for containers more accessible

The current system in Belize has a satisfactory number and distribution of redemption points (dealers), but has the abovementioned limitation of tying each container to its point of purchase.

- In order for the public to more easily participate in the scheme, collection points need to be easily accessible, both concerning the distance and distribution of collection points, as well as opening- or waiting hours. However, each collection system should be adapted to suit the local circumstances. In remote areas, for example, collection points can be mobile or only opened during specific days or hours (Leney et al. 2022). See e.g. the example of Kiribati, above.
- To facilitate efficient collection and redemption, official redemption and collection centres could be set up where containers could be collected in larger quantities. To avoid counting every single returned container, they could be measured by measuring baskets that hold a certain amount of bottles or cans, a practice that is employed successfully in Kiribati and other developing countries (Leney et al. 2022).

5. Re-organise the collection of the deposit

Currently, the deposit is collected by the dealers, which leads to the gap of capacity to redeem a consumer for a container that has been purchased from a different dealer.

- If a management agency is installed or if the state decides to manage the funds of the scheme, it is preferable that the deposit is paid upon market entry of a container (either post-production or at import) and passed on across the supply chain, thus lifting the burden of coordinating deposits and redemption off the dealers (see e.g. Malta, Fiji, Kiribati, Seychelles).
- A centralised collection of the deposit upon market entry would also ensure that imported containers are better covered by the scheme.

6. Set a target recovery rate

As mentioned above, the current Returnable Containers Act does not set a target recovery rate, to enable the Act's implementation, ideally in a fashion that is tailored to the national circumstances.

- By prescribing a target recovery-rate like in Fiji and Malta, industry (or a management agency employed by industry) will be forced to make returning containers easier and more accessible to consumers, if they want to reach the target rate.
- Such a target recovery rate would ideally increase over the time, e.g. starting by 60% of containers, and increase to 80% of containers in e.g. four years (see e.g. Fiji).

5 References

Acts and regulations reviewed

Country	Legislation
Barbados	The Returnable Containers Act, 1 June 1986, last amended 2019
Belize	Returnable Containers Act, 328:01; revision 2011
Fiji	Container Deposit and Recycling Program, enacted in 2011, in effect since Jan 2021
Germany	Ordinance on avoidance of packaging waste and German deposit legislation for single use (<i>Einweg</i>) deposit and multiple use deposit (<i>Mehrweg</i>)
Kiribati	Special Fund (Waste Material Recovery) Act 2004
Malta	Beverage Container Refund Scheme
Seychelles	Public Finances Act Section 8; Waste management Fund Notice 2007
Türkiye (Turkey)	No text available. Information retrieved from: https://www.bottlebill.org/index.php/current-and-proposed-laws/worldwide/turkey
Turks and Caicos	Chapter 8.04 Section 51: Public and Environmental Health Ordinance. "Clean-up Fund and environmental levy

Further Literature:

Lai A., Hensley J., Krütli P., & Stauffacher M. (eds.) 2016: Solid Waste Management in the Seychelles. USYS TdLab Transdisciplinary Case Study 2016.

Leney, Alice; Mayu Nomura and Faafetai Sagapolutele Uitime 2022: Container Deposit Schemes in the Pacific Islands. A Guide for Policy Makers: Japan International Cooperation Agency (JICA).