

Retailer Guidelines under the Extended Producer Responsibility (EPR) Scheme for E-Waste

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1 Introduction to the Retailer Guidelines

1.1 Purpose

This document is aligned with and serves as a guidance to the Resource Sustainability Act (RSA) and its subsidiary legislations.

This document aims to provide guidance on:

- ❖ The implementation of the Extended Producer Responsibility (EPR) scheme for E-Waste
- ❖ Retailer's Obligations under the RSA
- ❖ Guidelines to handle E-Waste
- ❖ Useful links

2 Implementation of the EPR scheme for e-waste

2.1 Overview

The Ministry of Sustainability and the Environment (MSE) and the National Environment Agency (NEA) will be implementing a regulated e-waste management system from 1 July 2021. The system is built around the EPR approach where Producers of regulated products are made physically and/or financially responsible for the collection and treatment of their end-of-life regulated products.

The RSA was gazetted on 4 October 2019 to give legislative effect to the e-waste management system. Under the EPR scheme, one Producer Responsibility Scheme (PRS) Operator will be appointed by NEA to maximise economies of scale given Singapore's small market. On 11 February 2021, ALBA Group was awarded the tender for the license to operate the PRS for a period of 5 years, from 1 July 2021 to 30 June 2026.

2.2 Stakeholders under the EPR scheme for e-waste

The following stakeholders play important roles to ensure the success of the EPR scheme:

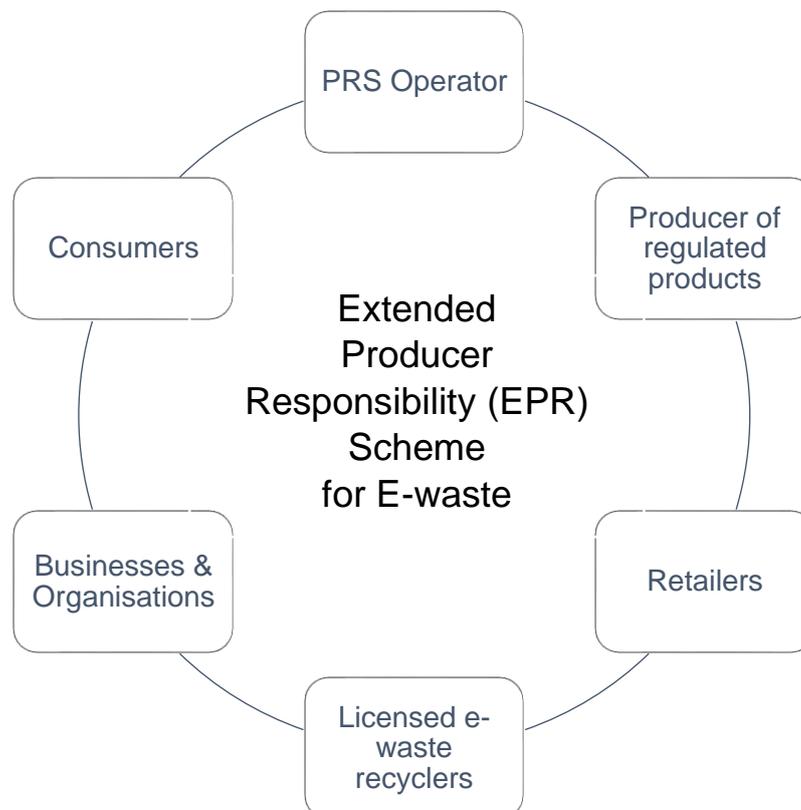


Figure 1: EPR Stakeholders

2.3 Types of regulated products

These regulated products are distinguished into consumer and non-consumer product based on their product definitions:

1. Regulated Consumer Products
2. Regulated Non-consumer Products



Table 1: Regulated Products

Regulated Product Category		Regulated Product Types
ICT Equipment		Printer
		Computer
		Desktop Monitor
		Laptop
		Tablet
		Router
		Modem
		Wireless Access Point
		Set-top Box
		Switches
		Network Hub
		Mobile Telephone
Large Appliances	Large Household Appliances	Refrigerator
		Air-conditioner
		Television
		Washing Machine
		Dryer
	Electric Mobility Devices	Personal Mobility Devices
		Electric Mobility Scooter
		Power Assisted Bicycle
Battery		Portable Battery
		Industrial Battery
		Electric/Hybrid Vehicle Battery
Lamp		Lamps/Tubes/Bulbs
Solar PV Panel		Solar PV Panel

Note 1: Regulated products are distinguished into consumer or non-consumer products based on its definition rather than the type of transaction (e.g. B2B or B2C) or who the regulated products are sold to. You may refer to the product definitions at <https://go.gov.sg/prod-def-sl> or by scanning the QR code below



2.4 Distinguishing Criteria between Consumer and Non-Consumer Products

The sections below contain the distinguishing criteria for the various regulated consumer product types to assist Retailers in identifying if a regulated product is a consumer or non-consumer product. Please write in to NEA at e-waste@nea.gov.sg if you require clarification on distinguishing between a consumer or non-consumer product.

2.4.1 ICT Equipment

Table 2: ICT Equipment

Regulated Product	Consumer	Non-Consumer
Printer	Weight of 20 kg or less	Weight of more than 20 kg
Computer & laptop	All other computer or laptop	i. Built-in smart card reader ii. Thin-client computer or laptop
Tablet	All tablets	-
Server	-	All servers
Desktop Monitor	All desktop monitors	-
Mobile Phone	All mobile phones	-
Router	All other routers	EMC Class A routers
Switches	EMC Class B switches	EMC Class A switches
Network Hub	8 or fewer ports	More than 8 ports
Wireless Access Point	-	All wireless access points
Modem	All modems	-
Set-top Box	All set-top boxes	-

2.4.2 Large Appliances

Table 3: Large Appliances

Regulated Product	Consumer	Non-Consumer
Television	All large appliances	-
Air-Conditioner		
Washing Machine		
Dryer		
Refrigerator		
Electric Mobility Device		

2.4.3 Battery

Table 4: Battery

Regulated Product	Consumer	Non-Consumer
Portable Battery	All portable battery	-
Industrial Battery	-	All industrial battery
Electric Vehicle Battery	Electric vehicle battery designed to be used with a motor vehicle mentioned in rule 19 (a), (b), (c), (d), or (e) of the Road Traffic (Motor, Vehicle, Driving Licences) Rules	Electric vehicle battery designed to be used with a motor vehicle mentioned in rule 19 (f), (g), or (h) of the Road Traffic (Motor, Vehicle, Driving Licences) Rules

2.4.4 Lamp

Table 5: Lamp

Regulated Product	Consumer	Non-Consumer
Lamp	<p>Consumer lamp means a specified single-phase lamp that is —</p> <ul style="list-style-type: none"> a. an incandescent lamp with an Edison screw or a bayonet lamp cap, of 25W or above but not exceeding 100W; b. a compact fluorescent lamp with integrated ballast, with an Edison screw or a bayonet lamp cap, of up to 80W; c. a compact fluorescent lamp without integrated ballast, with a G24d lamp cap, of up to 80W; d. a linear, double-capped, fluorescent lamp with a tube diameter of 16 mm (T5) or 26 mm (T8) and with a length of 0.5 m and above but not exceeding 1.5 m, of up to 80W; e. a circular fluorescent lamp with a tube diameter of 16 mm (T5) or 29 mm (T9) and with a lamp diameter of 8 inches and above but not exceeding 16 inches, of up to 80W; f. an LED lamp, with an Edison screw or a bayonet lamp cap, of up to 80W; or g. an LED lamp designed as a direct replacement for a lamp described in paragraph (c) or (d) without requiring any internal modification of the luminaires, of up to 80W; 	<p>A specified single-phase lamp that is an incandescent lamp with a power rating of above 100W</p>

2.4.5 Solar PV

Table 6: Solar PV Panel

Regulated Product	Consumer	Non-Consumer
Solar PV Panel	-	All solar PV panels

3 Are you a Retailer obligated under the RSA?

3.1 Definition of a Retailer

Pursuant to section 2(1) of the RSA, a person is a retailer if the person carries on a trade or business of supplying any regulated goods or regulated product to consumers.

A person who fits the above definition is considered an obligated retailer regardless if the person owns a physical retail outlet in Singapore or supplies regulated products to consumers via direct online sales or through an e-commerce platform.

3.2 Obligations of a Retailer

3.2.1 Free Takeback during Delivery

Pursuant to section 14 of the RSA, where a Retailer supplies a regulated consumer product to a consumer, and in the course of such supply, delivers, or causes the delivery of, the regulated consumer product to any premises specified by the consumer, the consumer may require the retailer to collect from the premises, and dispose of, another regulated consumer product that is of the same class or type as the supplied product. This obligation applies regardless of the brand of the discarded product, and where the product was originally purchased from.

The Retailer must, at the time of the delivery or such other time as may be agreed between the person and the Retailer, collect the regulated consumer product from the premises and must not demand or require the person to pay any consideration for the collection and disposal of the regulated consumer product.

If a time to collect the person's regulated consumer product cannot be agreed between both the person and Retailer, the Retailer must provide free takeback during the delivery of the new regulated consumer product.

The Retailer may charge a service fee when providing the free takeback service for large household appliances (LHA) only under certain situations, as shown below, but not limited to:

- a. Additional resources required to transport the LHA meant for disposal, through the use of a staircase from a higher or lower floor in the consumer's household.
- b. Additional resources required to dismantle the LHA in a consumer's household (does not apply to air-conditioners).

The Retailer is advised to be transparent about these additional charges upfront (i.e. specifying these charges before purchase is made) and keep the necessary document in the event of an audit.

3.2.2 In-store Collection Service for Large Retailers

Pursuant to section 15 of the RSA, a Retailer who owns or occupies any premises with a floor area of or more than 300 sqm (also known as “Large Retailer”), from which any designated regulated consumer product (ICT Equipment, Portable Battery, Lamp) is supplied, is required to accept designated regulated consumer products (applies to only the same class or type of consumer product as that supplied at those premises) that are brought to a Retailer’s premises for disposal.

This in-store collection service can be in the form of:

- a. Provision of at least one of the PRS Operator’s receptacle
- b. Manned collection service

All E-Waste collected through option (b) must be stored in a part of the retail outlet that is not publicly accessible. Retailer shall not require a consumer to purchase a product from them before allowing the consumer to dispose of their e-waste through options (a) and (b) nor request the consumer to demonstrate that he/she had purchased any product from their store previously.

A large Retailer must segregate E-Waste collected through option (b) before handing over to the PRS Operator (e.g. Battery to be separated from lamps and ICT equipment, Bulbs to be separated from ICT equipment and battery, Lamps to be separated from battery and ICT equipment)

If a large Retailer opts to provide their own receptacle, the receptacle must have the same capacity and physical specifications as the receptacle used by the PRS Operator. You may write in to NEA at e-waste@nea.gov.sg to request for these specifications.

A large Retailer must display the following information in a prominent location within any premises owned or occupied by the large Retailer that is required to offer the in-store collection service:

- a. every type of collection service offered at those premises (i.e. receptacle and/or manned collection service); and
- b. the types of regulated consumer product that are accepted for disposal at those premises.

The ways to communicate the above information should be done via visual means either through:

- a. Banners or posters in the shop; or
- b. Placards, Standees; or
- c. Directional prints on the floor; or
- d. Signages

3.2.3 Disposal of E-Waste collected

All E-Waste collected under 3.21 and 3.22 must be presented to the PRS Operator or a person designated by the PRS Operator to receive the E-Waste.

For large Retailer that opted to design their own receptacle, the collection and disposal of the E-Waste collected from these receptacles are subjected to the PRS Operator's terms and conditions.

Note: To view the RSA, please access <https://go.gov.sg/rsa> or scan the QR code below:



Note: To view the Retailer SL, please access <https://go.gov.sg/retailer-SL> or scan the QR code below:

The Retailer's Responsibilities Under the E-Waste Extended Producer Responsibility (EPR) Scheme

E-waste Bins



Retailers of consumer electrical and electronic equipment with floor area 300m² and above must have in-store collection points (e-waste bins or over-the-counter) for small consumer e-waste*

Over-the-counter Collection



1-for-1 Take-back



Retailers must provide 1-for-1 take-back of the consumer's old regulated consumer product at no cost, upon delivery of a new product

Retailers must hand the collected e-waste to the PRS Operator for recycling



For more information, please visit <https://go.gov.sg/e-waste>



* E.g. Mobile phones, laptops, light bulbs and batteries. Types of products accepted will correspond to types of products retailed.

For more information, please visit www.nea.gov.sg

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June 2021



3.3 Scenarios for takeback during delivery

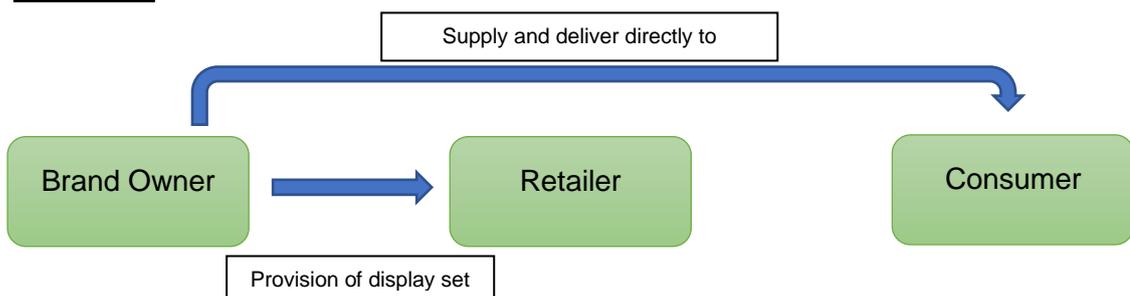
The following scenarios are guidelines for Retailer to ascertain if a Retailer is required to provide takeback service during delivery. All scenarios and the respective outcomes apply regardless if the delivery was done via the Retailers' own in-house logistics or outsourced to a 3rd party logistics provider.

Scenario 1



In scenario 1, if the Retailer is the owner of the regulated consumer product, the Retailer is responsible to provide the takeback service during delivery.

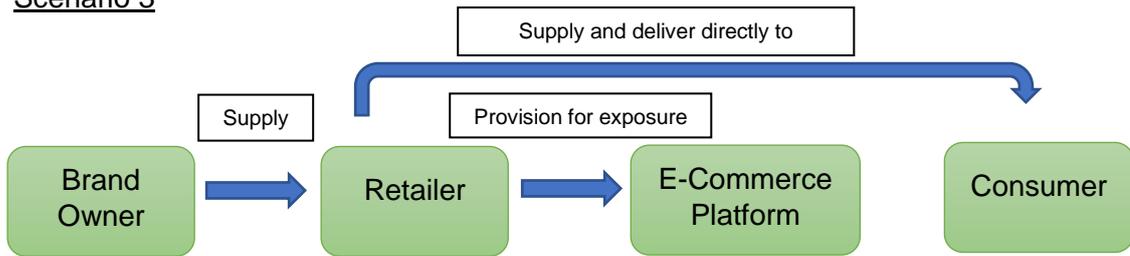
Scenario 2



In scenario 2, Brand Owner provides a display set of the regulated consumer product for display at the Retailer's retail outlet.

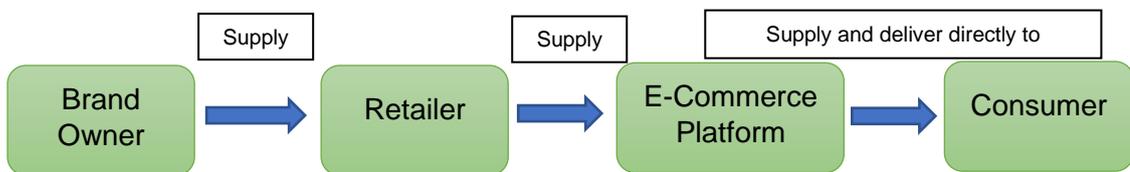
The consumer orders the regulated consumer product via the Retailer, but the product is supplied and delivered directly by the Brand Owner. The Retailer is not responsible to provide the takeback service during the Brand Owner's delivery.

Scenario 3



In scenario 3, if the Retailer is the owner of the regulated consumer product and has placed the product on an e-commerce platform for exposure, the Retailer is responsible to provide the takeback service during delivery as the Retailer still retains ownership of the product.

Scenario 4



In scenario 4, if the Retailer has supplied the product to an e-commerce platform, the Retailer is not responsible to provide the takeback service during delivery as the Retailer no longer retains ownership of the product when the product is sold to the consumer via the e-commerce platform. The e-commerce platform is responsible to provide the takeback service during delivery.

4 Guidelines for handling of E-Waste

The guidelines serve to advise Retailer on proper and safe handling of e-waste.

Guidelines were jointly prepared with ALBA E-Waste Smart Recycling, the appointed Producer Responsibility Scheme Operator.

4.1 Takeback during Delivery

A Retailer is strongly encouraged to ensure that the person(s) carrying out the takeback service wears the necessary Personal Protective Equipment when handling the e-waste (e.g. cut-resistant gloves, work boots), unless stated otherwise (e.g. premises/home owner requires person to remove their shoes before entering the unit).

The followings are guidelines for the takeback of E-Waste during delivery:

- a. Large Household Appliances (LHA)
 - i. To avoid damage to refrigerators and air-conditioners so as to prevent release of refrigerant gases such as CFC, HFS, HCFC etc. and to prevent spillage of oils (mineral or synthetic oil) and other emissions
 - ii. Good body posture and lifting techniques for bulky e-waste. Use carts, dollies, and boxes with handles to move equipment if required.
 - iii. For more detailed guidelines on handling specific LHA equipment, please refer to the attached document in Section 5
- b. Lamps
 - i. To avoid breakage of the lamp of any type (i.e. fluorescent, incandescent, LED)
 - ii. If lamp is broken, equip yourself with Personal Protective Equipment (PPE) and carefully place items into an airtight or sealable plastic cover/bag. Label the plastic cover/bag with the contents of the bag – the type of E-Waste.
 - iii. Fixture of the lamps and lampshade do not fall under regulated consumer product and do not need to be collected
- c. ICT Equipment
 - i. Retailer to advise that the consumer is responsible for backing up or transferring any data; deleting data on the hard disk and any other storage devices in the products; and removing any removable media, before the ICT equipment is handed over to the retailer.
 - ii. Retailer to advise the consumer to perform a factory reset of their ICT equipment before handling it over to ensure that data is properly sanitised
 - iii. For more detailed guidelines on handling specific ICT equipment, please refer to the attached document in Section 5.
- d. Battery
 - i. Exposed ends are to be taped up (applies to lithium-ion battery)
 - ii. If the battery is leaking, equip yourself with Personal Protective Equipment (PPE) and carefully collect the leaking battery in a leak-proof container. Label the container with the contents.

- iii. If the battery is bloated, tape up the exposed ends. Carefully place the bloated battery into a plastic cover/bag, seal them and place them separately in a fireproof container (e.g. metal bucket with sand or any vermiculite material). Bloated batteries are to be stored separately. Fireproof container is to be placed in an area away from fire hazards and clearly marked as a flammable hazard. Notify the PRS Operator immediately for safe collection. Do not deposit them into the E-Waste bin.

A Retailer does not need to provide takeback service for a regulated consumer product if it is exposed to chemical or biological agents, or other hazardous substances (e.g. human or animal blood, human or animal bodily fluids or semi-liquid materials, substances not integral to the original new equipment or otherwise associated with normal office or household environments etc), or other materials that are deemed a threat to public health or the environment.

A Retailer is advised to keep records of rejected collections (e.g. a picture of the contaminated E-Waste) and the Retailer's reason for rejection.

Retailer to advise that once a consumer hands over the regulated product to the retailer and has acknowledged that it is meant for the retailer to take back, the consumer may not request for the regulated consumer product to be returned at any other timing.

For take-back services from Retailer, the Retailer can provide details (e.g. name, address, contact number of the consumer) to a third-party logistics provider (or PRS Operator) to arrange for pick-up services.

4.2 Manned Collection Service

A Retailer is strongly encouraged to ensure that the person(s) carrying out the manned collection service wears the necessary Personal Protective Equipment (e.g. cut-resistant gloves) when handling the e-waste.

The following are guidelines for the collection of E-Waste over a manned collection service:

- a. Lamps
 - ii. To avoid breakage of the lamp of any type (i.e. fluorescent, incandescent, LED)
 - iii. If lamp is broken, equip yourself with Personal Protective Equipment (PPE) and carefully place items into an airtight or sealable plastic cover/bag. Label the plastic cover/bag with the contents of the bag – the type of E-Waste and place them in the appropriate inlet of the e-waste bin.
 - iv. Fixture of the lamps does not fall under regulated consumer product and does not need to be collected

- b. ICT Equipment
 - i. Retailer to advise that the consumer is responsible for backing up or transferring any data; deleting data on the hard disk and any other storage devices in the products; and removing any removable media, such as disks, CDs or SD cards, before the ICT equipment is handed over to the retailer.
 - ii. Retailer to advise the consumer to perform a factory reset of their ICT equipment before handling it over to ensure that data is properly sanitised
 - iii. For more detailed guidelines on handling specific ICT equipment, please refer to the attached document in Section 5.

- c. Battery
 - i. Do not remove batteries that are a component of another product.
 - ii. Exposed ends are to be taped up (applies to lithium-ion battery)
 - iii. If the battery is leaking, equip yourself with Personal Protective Equipment (PPE) and carefully collect the leaking battery in a leak-proof container. Label the container with the contents and place them in the appropriate inlet of the E-Waste bin.
 - iv. If the battery is bloated, tape up the exposed ends. Carefully place the bloated battery into a plastic cover/bag, seal them and place them separately in a fireproof container (e.g. metal bucket with sand or any vermiculite material). Bloated batteries are to be stored separately. Fireproof container is to be placed in an area away from fire hazards and clearly marked as a flammable hazard. Notify ALBA immediately for safe collection. Do not deposit them into the E-Waste bin.

A Retailer does not need to provide takeback service for a regulated consumer product if it is exposed to chemicals or biological agents or other hazardous substance (e.g. human or animal blood, human or animal bodily fluids or semi-liquid materials, substances not integral to the original equipment or otherwise associated with normal office or household environments etc.), or other materials that are deemed a threat to public health or the environment.

A Retailer is advised to keep records of rejected collections (e.g. a picture of the contaminated E-Waste) and the Retailer's reason for rejection.

Retailer to advise that once a consumer hands over the regulated product to the retailer and has acknowledged that it is meant for the retailer to collect for recycling, the Retailer is under no obligation to return the e-waste to the consumer.

A Retailer is under no obligation to accept, through the manned collection service, non-regulated products or regulated products class or type that are not sold at their store.

4.3 Storage of E-Waste

All E-Waste should be stored in a manner to prevent any hazardous or toxic substance in the E-Waste from threatening the health or safety of any person and causing pollution of the environment. The following guidelines are meant to aid Retailers in complying with section 15 of the RSA:

- a. All E-Waste should be stored in a room that has an impermeable surface and protected from the weather.
- b. The room should not contain any potential fire hazards as certain E-Waste (e.g. lithium-ion battery) are flammable hazards.
- c. E-Waste should be stored in a maximum dimension of 1m x 1m x 1m.
- d. Heavy E-Waste should always be stored at the bottom
- e. An aisle space is required between storage sections for an employee to walk through to allow for inspection.
- f. Containers storing hazardous E-Waste should be labelled with the words “Hazardous E-Waste”
- g. Room should always be locked to prevent the public from accessing the stored E-Waste

5 Useful links

- Resource Sustainability Act

<https://go.gov.sg/rsa>

- Product Definitions

<https://go.gov.sg/prod-def-sl>

- Retailer Subsidiary Legislation

<https://go.gov.sg/retailer-sl>

- Guideline for Handling Specific Products by ALBA E-Waste Smart Recycling



Retailer Take-Back
Guidelines 21.05.2020

6 Iterations

- 8 September 2021
 - Section 3.2.1
Added in situations where the Retailer may charge consumers during the free takeback delivery service of LHA.
 - Section 3.2.2
Added in a requirement that disallows Retailer to charge consumer, or require consumer to show any proof of purchase from the retail outlet, for the disposal of e-waste in their large retail outlet.
 - Section 4.2
Added clarity on the last paragraph.