

# A Citizen's Guide to Disposing E-Waste in Singapore



# Outline

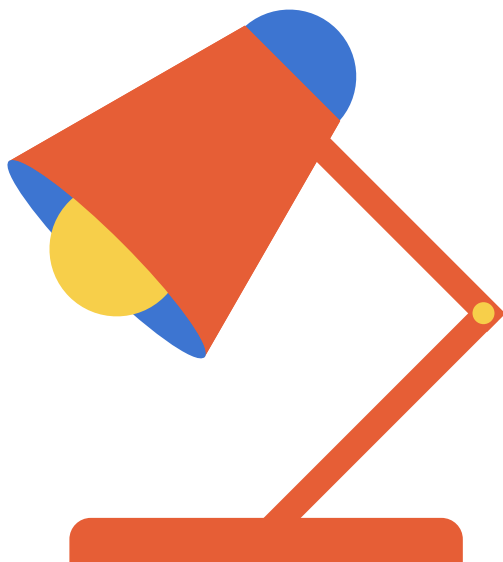
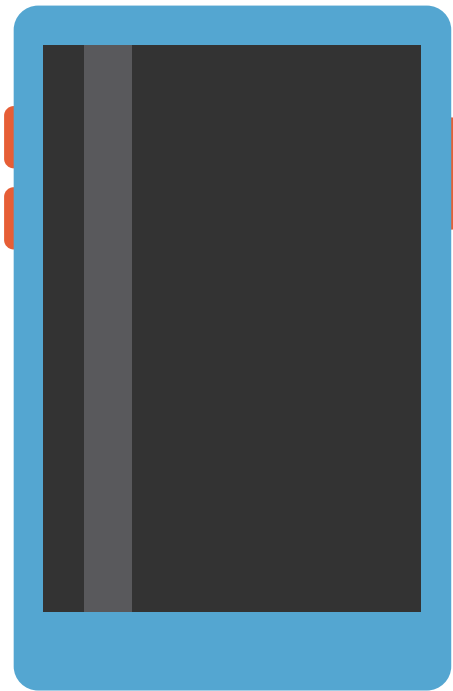
- 1. What is E-Waste and why is it a problem?**
- 2. E-Waste we produce**
- 3. How do I get rid of my E-Waste?**
- 4. System of E-Waste Management in Singapore**
- 5. E-Waste Management, Technology & Sustainability**
- 6. Resources**

# What is E-Waste?

Electronic waste, or E-Waste, includes all the forms of electric and electronic equipment that have lost their value and function or do not satisfy user needs. The rapid growth in technology and innovation has made electronics an important part of modern life.

This also means that discarded electronic and electrical equipment have become an important part of the waste generated globally.

Approximately 47 per cent of global electronic waste, which is equivalent to 53.6 million tonnes (Mt), was generated in Asia in 2019. This is an estimate, based on studies we conducted between 2016 and 2017.



## Know Your E-Waste

*These are the three broad categories of E-Waste generated in Singapore according to the National Environment Agency.*

PRODUCT CATEGORY	PRODUCT TYPE
<b>Infocomm Technology ICT EQUIPMENT</b>	Printers
	Personal Desktop Computers / Monitors / Laptops
	Mobile Phones / Tablets
	Routers / Modems / Set-top boxes
<b>Large Appliances</b>	Refrigerators
	Air-conditioners
	Washing Machines
	Dryers
	Televisions
	Electric Mobility Devices
<b>Other E-Waste</b>	LED / Fluorescent / Incandescent Bulbs and Tubes
	Portable Batteries

# The Social & Environmental Impacts of E-Waste

## NEGATIVE IMPACTS OF MISHANDLING E-WASTE

### SOCIAL

Informal E-Waste recycling methods, if done without the necessary skills to recycle E-Waste safely, may discharge chemical compounds which are harmful to the health of the people involved.

Long-term exposure to these compounds can affect the nervous system, kidneys, bones, hormonal balance and reproductive system.

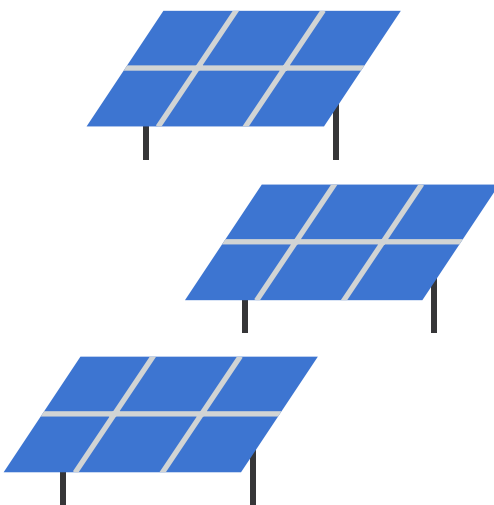
### ENVIRONMENTAL

E-waste recycling is important to recover valuable materials from electronics which can be turned into new products. By recycling these materials, we save energy and water, reduce pollution and emissions and save our ecosystem.

## POSITIVE IMPACTS OF PROPER RECYCLING

### ENVIRONMENTAL

Helps fight climate change and conserves our planet's finite resources.

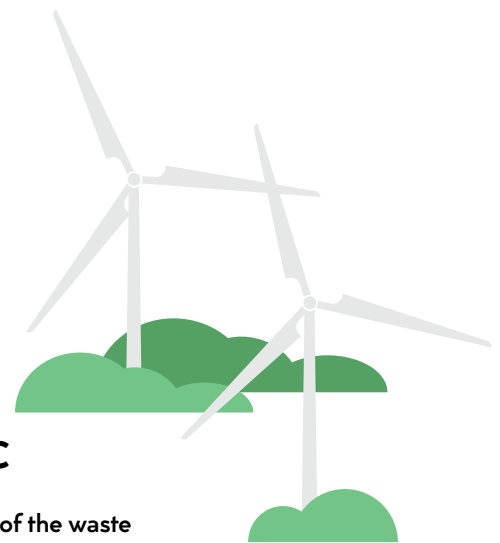


### SOCIO-ECONOMIC

Keeps valuable resources out of the waste stream, ensures harmful substances are not released into the environment which may affect the health of people and the planet.

Reduces strain on SG's waste disposal facilities and frees up land for better quality of life for residents.

Grows our green economy and local employment opportunities.

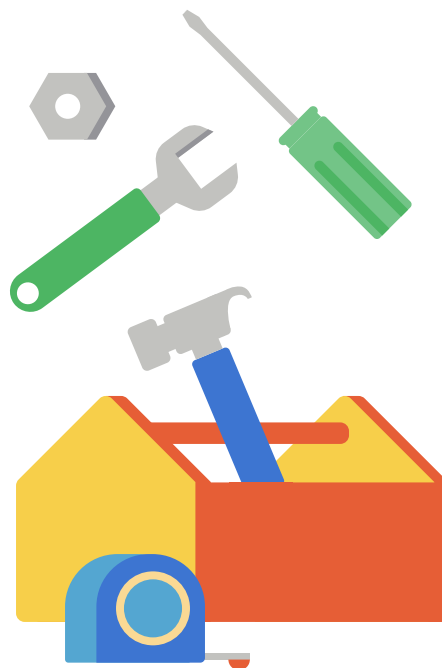


# What To Do With Your E-Waste?

There are several ways you can manage your electronic waste. The following guide provides effective strategies that can be used to manage broken, old and outdated electronic items in your household.

Starting with reducing your waste altogether, the guide explains how to repair, re-use, re-sell and finally recycle E-Waste in Singapore.

The report also includes people and organisations you can reach out to for managing your electronic waste in the best way possible!



## Reduce

The best way to reduce E-Waste is to not generate it!

You can do this by buying only what you need, making prudent purchases and elongating product life by regular maintenance of your electronics.

While new trends and upgrades are always tempting and sometimes necessary, sticking with your old device for as long as you can is an easy way to reduce your environmental footprint.

Some consumers prefer purchasing products that are easily repairable and are manufactured responsibly so that they can reduce the waste they produce and get one-step closer the Zero-Waste Lifestyle!

## Repair

The second easiest way to avoid electronic waste is to not create it!

If your device is malfunctioning or not working, there's a chance you can find an easy fix to it. By using services of local businesses, large equipment sellers and local groups, you can get your equipment back to shape.



*Repair Kopitiam runs as a community repair meet-up. People meet at a designated space to repair simple items such as broken electrical appliances, torn clothes, wobbly chairs and even engage in responsible e-waste disposal together, guided by volunteer Repair Coaches.*





## Reuse

The third line of defense in the battle to reduce E-Waste is re-use. If you need to buy a new device, consider donating or re-selling your old equipment for those who can continue to benefit from it.

Pre-owned electronic items can be sold after refurbishment. Trade in your old electronics and receive their value at Cast-for Trash stations set up by Public Waste Collectors in Singapore. You can also trade, sell or purchase your items through the following organizations:



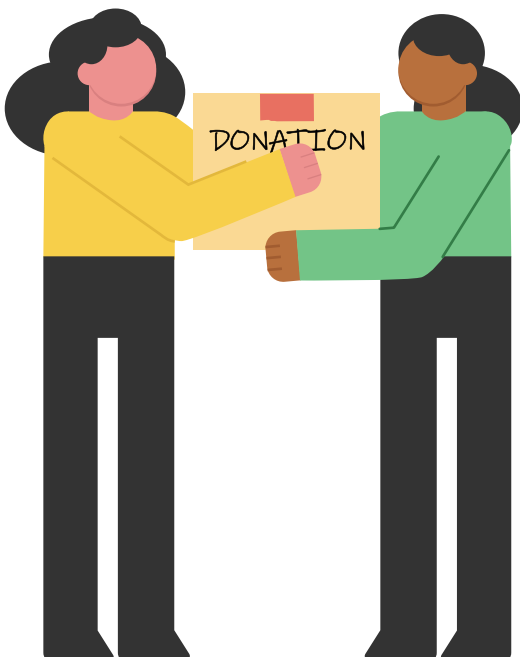
## Recycle

E-waste contains valuable materials which includes precious metals, base metals, glass and plastic. It also contains hazardous materials which need to be recycled responsibly to minimise danger to the environment and people handling it.

Ultimately all electronic products need to be recycled in order to deliver the most positive environmental and social impact. The way you can recycle your electronic waste is by responsibly disposing your electronics at the designated locations, which can be found using the link below.



You may find out more about where to recycle your E-waste by scanning this QR code or through this [link](#).



## Alternatively

You can also consider donating your used electronic devices through reliable channels in Singapore. If the electronics are working condition and aren't significantly outdated, they can be donated to charity instead of being thrown away.

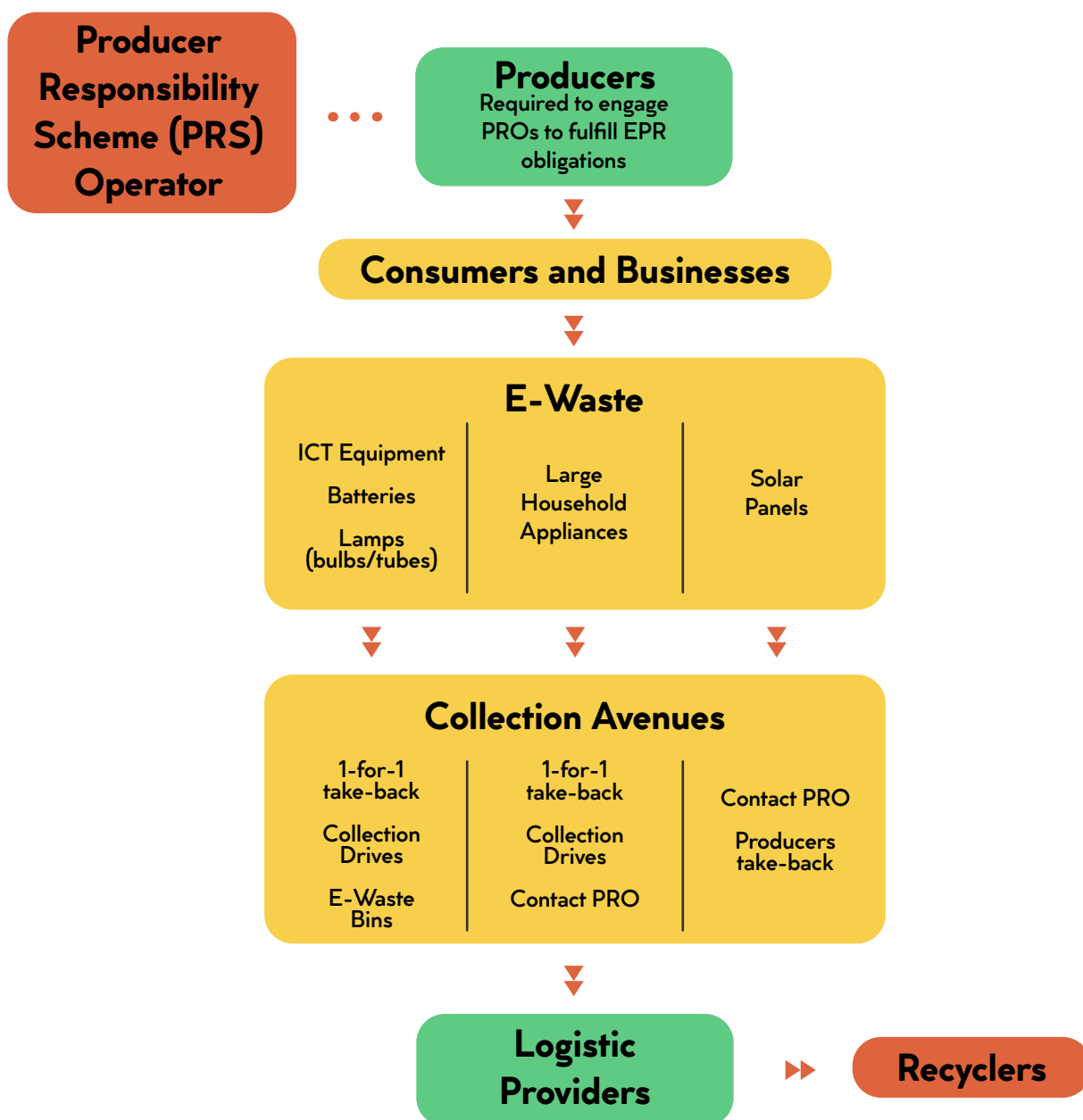
While many non-profit organisations don't have the resources to repair damaged devices, some that specialize in electronics may accept items in need of repair. Consider donating your electronic items to the following organisations:



# E-Waste Management System by 2021

An Extended Responsibility (EPR) approach where producers are responsible for the collection and proper treatment of E-Waste.

The regulated e-waste management system will be based on the Extended Producer Responsibility (EPR) approach, where producers bear the responsibility for the collection and treatment of their products when they reach end-of-life. This EPR system will be implemented through the Resource Sustainability Act (RSA), administered by the NEA.



The logistics providers will be contracted by the PRS operator or the producers (the PRS operator and producers may decide to use their own logistics infra to support E-Waste transport).

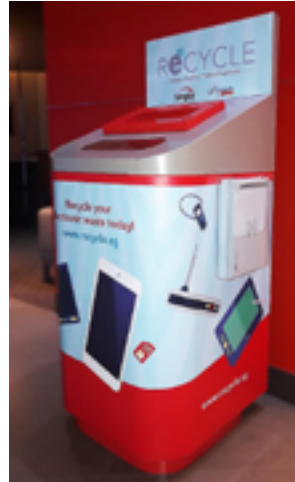
# Common Types of E-Waste Bins in Singapore



## Project Homecoming - Joint-Brand Ink & Toner Cartridge Recycling

Ink and toner cartridges

Photo: Ministry of Sustainability and the Environment



## Singtel x SingPost ReCYCLE:

Most electronic products; must be able to fit through the 220mm x 80mm slot of the bins. To reduce the risk of short-circuits and creation of fire hazard, please tape the ends or wires of rechargeable batteries before recycling them.

Photo: SingPost



## Shell-Metalo E-waste Recycling Programme

Most electronic products; must be able to fit through the 500mm x 225mm slot of the bins. To reduce the risk of short-circuits and creation of fire hazard, please tape the ends or wires of rechargeable batteries before recycling them.

Photo: Metalo International



## RENEW (Recycling Nation's Electronic Waste)

Most electronic products; must be able to fit through the 470mm x 120mm slot of the bins. To reduce the risk of short-circuits and creation of fire hazard, please tape the ends or wires of rechargeable batteries before recycling them.

Photo: Koh Mui Fong/Today



## M1 E-waste Drop-Off point Programme

From April 2017, M1 has been a supporter of the National Environment Agency's electronic waste (e-waste) recycling initiative. E-waste bins are available in our offices and M1 Shop retail outlets, to enable staff and customers to conveniently and responsibly dispose of their e-waste.

Photo: M1

# Who will recycle the waste?

There are multiple recyclers in Singapore that can process electronic waste and are listed with the relevant authorities.

We have selected some key recyclers that provide services to individuals and companies to process their E-Waste. You can click here to see the complete list: <https://www.nea.gov.sg/docs/default-source/our-services/waste-management/collectors-traders-and-recyclers-directory.xlsx>

## Large Appliances

### Cheng Hwa Trading Pte Ltd

Mr Lin ZiHan

HP: 9101 9494

Fax: 6844 8789

Website: [www.chenghwascrapaircon.com](http://www.chenghwascrapaircon.com)

Email: [sales@chenghwascrapaircon.com](mailto:sales@chenghwascrapaircon.com)

[chenghwatrading@hotmail.com](mailto:chenghwatrading@hotmail.com)

### Vemac Services Pte Ltd

Mr Kenny Huang

Tel : 6467 3990 / 6467 3994 / 9459 5237

Email : [kennyhuang@vemacservices.com](mailto:kennyhuang@vemacservices.com)

Website: [www.vemacservices.com](http://www.vemacservices.com)

### Gee Hoe Seng Pte Ltd

Tel: 6844 1323

HP: 9666 1758

Fax: 6844 6155

Email: [eric@ghs.sg](mailto:eric@ghs.sg)

Website: [www.ghs.sg](http://www.ghs.sg)

### Gain City

#### Customer Service

Tel: +65 6222 1212

Email: [feedback@gaincity.com](mailto:feedback@gaincity.com)

Website: <https://www.gaincity.com/ewaste/.recycle-aircon/>

### Sin Hong Poh Metal Trading

Tel: +65 8779 8020

Website: [https://sinhongpoh.com/e-waste\\_disposal/](https://sinhongpoh.com/e-waste_disposal/)

Email: [admin@sinhongpoh.com](mailto:admin@sinhongpoh.com)

## IT Equipment & Parts

### Sustainable Asset

#### Management Solutions Pte Ltd

Florence Choo

Tel: 6911 8180

HP: 9138 2294

Fax: 6911 8181

Website: [www.samsolu.com](http://www.samsolu.com)

Email: [florence.choo@samsolu.com](mailto:florence.choo@samsolu.com)

### Do-Yi Enterprise

Francis Lee, PBM

Mobile: 9859 1202

Tel: 6659 6862

Website: [www.do-yi.com](http://www.do-yi.com)

Email: [doyi\\_enterprise@yahoo.com](mailto:doyi_enterprise@yahoo.com)

## Lamps

### Global Lamp Recyclers

Tel: +65 6898 4294

Fax: +65 6898 4294

E-mail: [sales@lamprecyclers.com.sg](mailto:sales@lamprecyclers.com.sg)

Website: <https://lamprecyclers.wixsite.com/globallamprecyclers>

### IKEA

Website: <https://www.ikea.com/sg/en/customer-service/>