

Know about Waste Reduction and Recycling

Topic : Going to School — School Life

Learning time : 35 minutes



GREENGOAL

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Primary 1

Lesson Plan

Learning objectives



Skills

1. To propose various waste reduction methods using the concept of 4R principles



Knowledge

1. To understand common domestic waste and waste separation
2. To understand the sources of waste and principles of waste reduction
3. To understand common recyclables and recycling facilities

Learning objectives	Time	Teaching flow	Teaching materials
	3 MINS	Lead-in / Motivation <ul style="list-style-type: none"> • Teacher can show the photos of domestic waste from the slides • Teacher can ask the students if they have ever seen domestic waste in the photos and how they would handle it 	PowerPoint slides
1 To understand common domestic waste and waste separation	10 MINS	Topic demonstration Investigative activity 1 Understanding common domestic waste and waste separation <ul style="list-style-type: none"> • Students can work in groups of four and teacher can distribute domestic waste pictures and recyclables cards to each group and guide them to distinguish various types of waste (including recyclables and non-recyclables) • Teacher can invite student groups to share their results of waste separation, and describe various types of common domestic recyclables Recyclables cards (10 types): <i>Paper, Plastics, Metals, Glass bottles, Rechargeable batteries, Fluorescent lamps and tubes, Regulated electrical equipment (REE), Small electrical appliances, Beverage cartons and Food waste</i>	PowerPoint slides

Investigative activity 2

Understanding the sources of waste and principles of waste reduction

(Students continue to work in groups)

- Teacher can give examples of waste produced in daily life (such as disposable disinfecting wipes) and guides students to think about and discuss the sources of waste generation

Other waste examples include:

Food / Product packaging, disposable tableware, food waste, waste electrical and electronic equipment, etc.

- Teacher can display the “Waste Management Hierarchy” in the slides and explain the 4R principles with examples

Waste management hierarchy

In the Waste Management Hierarchy, top priority is to reduce waste production, followed by reuse and recycle, with disposal being the least preferred option.

4R principles

1. Reduce:

- Minimise the use of unnecessary items or energy

For example: Bring your own bags to reduce the use of plastic bags

2. Reuse:

- Reuse items before they become waste

For example: Write on both sides of papers and reusing various types of plastic bottles

3. Replace:

- Use environmentally friendly items

For example: Replace single-use batteries with rechargeable ones

4. Recycle:

- Separate waste for recycling and turning them into different recycled materials items

For example: Recycle papers and turning it into recycled papers

- Teacher can invite student groups to list other examples of adopting 4R principles

Other examples include:

- Reduce the purchase and use of expanded polystyrene products
- Avoid the use of gift-wrapping paper
- Reuse clean shopping bags
- Bring own reusable water bottles for replacing bottled water, and replace paper towels with towels
- Donate old toys and clothes to charities or those in need

Investigative activity 3:

Understanding common recyclables and recycling facilities

- Teacher can display the recyclables cards from the slides, and explains that most of the common domestic waste can be recycled, in line with the "Recycle" principle
- Teacher can show examples of common recyclables in the slides and invites students to describe with examples

Types of recyclables and common examples are as follows:

1. *Paper: Newspaper, office paper, books, cardboards, etc.*
 2. *Plastics: Beverage bottles, personal care product bottles, cleansing liquid bottles, plastic bags, packaging materials, CDs / DVDs, disposable tableware, etc.*
 3. *Metals: Food cans, aluminium cans, mooncake cans, etc.*
 4. *Glass bottles: Sauce bottles, beverage bottles, food bottles, etc.*
 5. *Rechargeable batteries: Camera batteries, external chargers, etc.*
 6. *Fluorescent lamps and tubes: Spherical compact fluorescent lamps, spiral compact fluorescent lamps, straight fluorescent tubes, other shapes of fluorescent lamps, etc.*
 7. *Regulated electrical equipment (REE): Air-conditioners, dehumidifiers, refrigerators, washing machines, tumble dryers, printers, scanners, televisions, computers and monitors.*
 8. *Small electrical appliances: Hair dryers, vacuum cleaners, lamp sets, electric ovens, mobile phones, digital cameras, smartphones, etc.*
 9. *Beverage cartons: Milk cartons, juice cartons, etc.*
 10. *Food waste: Apple peelings and cores, bread crusts, fish bones, etc.*
- Teacher can display pictures of recycling facilities in the slides, introduce each type of facility, and ask students where they have seen such facilities before
- #### **Recycling facilities include:**
- (1) Recycling bins in housing estates / residential buildings
 - Located on floors or public places of housing estates / residential buildings to facilitate the residents to participate in recycling

- (2) **GREEN@COMMUNITY**
The Environmental Protection Department (EPD) has been expanding and enhancing the community recycling network, namely GREEN@COMMUNITY, to strengthen waste reduction and recycling support at community level through recycling facilities at three levels:
 - (a) *Recycling Stations*
 - Provide environmental education and recycling support
 - (b) *Recycling Stores*
 - Located near single-block buildings or in public rental housing estates with large population
 - (c) *Recycling Spots*
 - Mobile collection booths operating at fixed time and locations
- (3) **Smart Recycling Bins**
 - Located at some GREEN@COMMUNITY facilities, housing estates, villages, shopping malls, universities and government venue. Support 24-hour operation, measure and record the weight of recyclables automatically, and record electronic bonus points earned through recycling
- (4) **Kerbside Recycling Bins**
 - Mostly located in rural areas, collecting paper, plastic bottles and metals
- (5) **Food Waste Recycling Bins**
 - Located in all public rental housing estates, and public food waste recycling points to facilitate the public to recycle food waste

2
MINS

Conclusion

- Teacher can help students to recall the types of common domestic waste, the 4R principles, common recyclables and recycling facilities
- Teacher can instruct students to complete the worksheet at home (“Know about Waste Reduction and Recycling” Student Worksheet)

Extended Activity 1 (School activity):**Bring Your Own Lunch Waste Reduction Day****Extended
activity kits****Extended Activity 2 (School activity):****Inter-class Waste Separation and Recycling Competition****Extended
activity kits****Extended Activity 3 (Parent-child activity):****Understanding Community Recycling Facilities****Extended
activity kits**

Primary 1

Worksheet

Know about Waste Reduction and Recycling

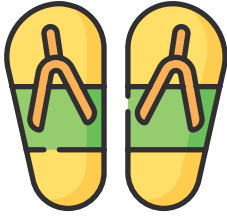
Student Worksheet

Name



1

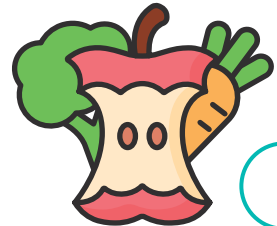
True or false: Write “√” for the recyclable domestic waste and “X” for the non-recyclable domestic waste in the brackets



Rubber slippers



Smartphone



Fruit and vegetable peels, cores



Compact fluorescent lamp



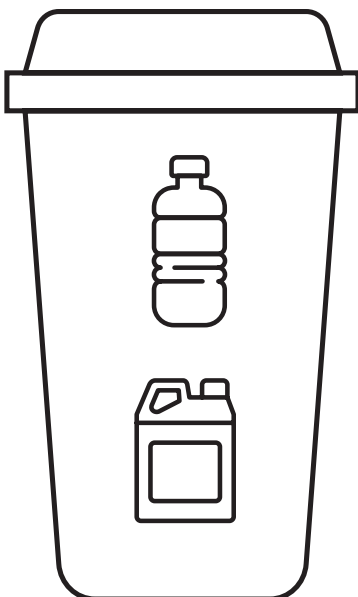
Single-use battery



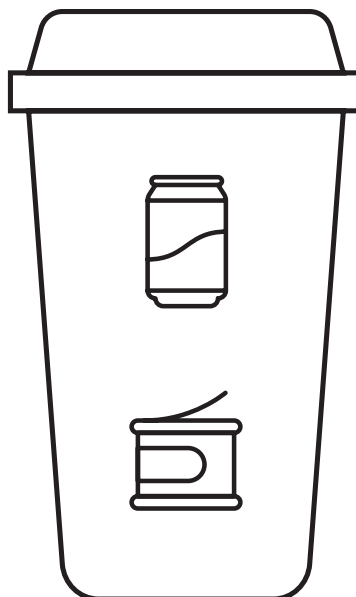
Disposable tableware

2

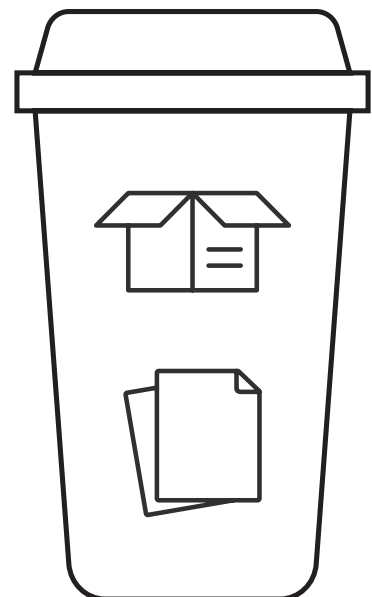
Colour: Colour the recycling bins to match the recyclables



Plastics recycling bin



Metal recycling bin



Paper recycling bin

3

Waste sorting: Write the corresponding letter of the waste in the appropriate category



A. Sauce bottle



B. Book



C. Aluminium can



D. Beverage bottle



E. Meat debris



F. Metal cookware



G. Rechargeable battery



H. Food residues



I. Compact fluorescent lamp



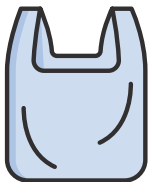
J. Fruits / Vegetables peelings and cores



K. Smartphone



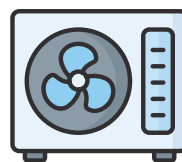
L. Milk carton



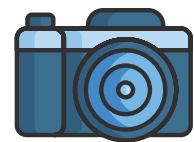
M. Plastic bag



N. Cleansing liquid bottle



O. Air-conditioner



P. Digital camera



Q. CDs / DVDs



R. Beverage carton



S. Refrigerator



T. Fluorescent tube (All types)



U. Newspaper

Paper

Metals

Plastic bottles

Other plastics

Glass bottles

**Fluorescent
lamps and tubes**

**Rechargeable
batteries**

**Small electrical
appliances**

**Regulated electrical
equipment (REE)**

Beverage cartons

Food waste

Primary 1

Extended Activity Kit

Bring Your Own Lunch Waste Reduction Day

Objectives

1. To encourage students and parents to prepare lunches following the 4R principles and prepare appropriate portions to avoid generating food waste
2. To remind students to use reusable tableware instead of disposable plastic containers and tableware, cultivating the habit of waste reduction at source

Activity Arrangements

Preparation

- Notify students and parents of the purpose and requirements of the activity through school notices

Purpose

- To raise students' awareness of environmental protection and waste reduction and together with their family members to practise waste reduction at source

Requirements

- Parents and students are suggested to purchase ingredients and prepare lunch together. In the process, students should be guided to bring their own shopping bags, choose ingredients with less packaging, and prepare lunch with appropriate portions
- Students must use reusable containers for their lunches and bring their own reusable tableware
(If a student forgets to bring his / her own tableware, the school should provide reusable tableware)

Conclusion

- Teacher can ask students whether they brought their own tableware, reminding them that bringing their own tableware can avoid using disposable ones, thereby reducing waste generation
- Teacher can ask students if they finished their lunch, reminding them that preparing appropriate quantity of food can avoid generating food waste

Time

Lunchtime during waste reduction day / school trip / Christmas party

Materials

1. Reusable containers
2. Reusable tableware

Remarks

1. School should communicate with parents in advance to understand if they can prepare their own lunch. If parents are unable to prepare lunch, the school can provide lunch services, choosing foods with eco-friendly packaging
2. Teacher can remind parents to use thermal containers when preparing lunch to reduce the risk of food spoilage

Inter-class Source Separation and Recycling Competition

Objectives

1. To strengthen students' understanding of source separation
2. To cultivate students' habits of waste separation and recycling
3. To encourage students to think of the ways to reduce waste generation

Activity Arrangements

Preparation

- Teacher can refer to the “Inter-class Source Separation and Recycling Competition Guide”
- Teacher can lead students to create paper, metals, and plastics recyclables collection containers using cardboards or plastic boxes (individual schools can add more categories of collection containers according to the resources availability). The teacher should ensure that the containers have clear labels, allowing students to identify and recycle properly
- Teacher can display “Source Separation and Recycling Information” or other suitable recycling guides in the classroom as a reference for students. The recycling guide should include illustrations and descriptions of each type of recyclable, helping students to understand the proper source separation
- Teacher can remind students to bring clean recyclables back to school before the competition

Activity flow

- Teacher can assign one or two students as “Environmental Prefect” to assist the inter-class competition, checking whether the recyclables brought by students are clean and recording the quantity or weight of recyclables on a datasheet
- Teacher can help students to weigh, separate and put the recyclables into appropriate containers and the “Environmental Prefect” can direct classmates on how to separate and recycle waste properly
- After the competition, the teacher should confirm each class's recycling data based on the datasheet and announce the preliminary results of each class
- Teacher can invite other class or subject teachers to cross-check the data from each class
- After verification, the final results will serve as the basis for assessment and will be announced during the award ceremony. Teacher can give appropriate rewards based on the results

Inter-class Source Separation and Recycling Competition

Activity Arrangements

Conclusion

- Teacher can distribute “Inter-class Source Separation and Recycling Competition Worksheet” to students to complete and help them to gain a better understanding that recycling extends beyond the three-colour recycling bins to also include food waste and glass bottle
- Teacher can ask students about their lesson learnt in participating in the activity, encouraging them to practise source separation habits in daily life

Time

1 lesson

Materials

- Source Separation and Recycling Information (See Poster I)
- Food Waste Recycling Information (See Poster II)
- Inter-class Source Separation and Recycling Competition Guide
- Inter-class Source Separation and Recycling Competition Datasheet
- Inter-class Source Separation and Recycling Competition Score Sheet
- Inter-class Source Separation and Recycling Competition Worksheet
- DIY cardboard / plastic box as recyclables collection containers
- Electronic balance

Remarks

This activity aims for students to complete the source separation and recycling by their own, while the teacher can provide assistance and tips but not directly helping the students to complete the source separation

Inter-class Source Separation and Recycling Competition Guide

Objectives

- To cultivate students' proper recycling habits (plastics, metals, and paper)
- To enhance students' attention on resource recovery, cultivating habits of waste reduction at source as well as source separation and recycling to instill a green lifestyle

Rules

- During the one-week competition period, each class should recycle designated items (plastics, metals, and paper) with the proper recycling procedures, and the class with the highest total recycling quantity will be awarded.



Assessment criteria

	Scoring indicators				
	5	4	3	2	1
Recycling bin	Recycling bins are properly labelled with clear text and icons	Recycling bins are properly labelled with clear icons	Two types of recycling bins are properly labelled with clear text and icons	One type of recycling bins is properly labelled with clear text and icons	Recycling bins are not properly labelled with text and icons
Source separation	All recyclables are properly cleaned and put in the correct types of recycling bins	Not all recyclables are properly cleaned, but all are put in the correct types of recycling bins	Recyclables are properly put in two correct types of recycling bins	Recyclables are properly put in one correct type of recycling bins	Recyclables are not put in the correct recycling bins
Weight of recyclables (Plastics)	Highest total weight	Second highest total weight	Third highest total weight	Fourth highest total weight	Fifth highest total weight
Weight of recyclables (Metals)	Highest total weight	Second highest total weight	Third highest total weight	Fourth highest total weight	Fifth highest total weight
Weight of recyclables (Paper)	Highest total weight	Second highest total weight	Third highest total weight	Fourth highest total weight	Fifth highest total weight

Reward setting

- Set up champions, first runner-up, second runner-up, and merit award
- Provide prizes and certificates depending on the actual situation of the school
- Deliver participation awards to all participating students as encouragement

Activity management

- The designated teacher (class teacher) is responsible for coordinating the recycling work of each class
- Teacher can provide necessary guidance and support according to the need in each class in a timely manner to ensure the competition runs smoothly
- Teacher can organise data collection and settlement and prepare for result announcement and award ceremony

Inter-class Source Separation and Recycling Competition Datasheet

Recyclables	Plastics (kg)	Metals (kg)	Paper (kg)
Monday			
Verified by teacher's signature			
Tuesday			
Verified by teacher's signature			
Wednesday			
Verified by teacher's signature			
Thursday			
Verified by teacher's signature			
Friday			
Verified by teacher's signature			

Total			
Verified by teacher's signature			

Inter-class Source Separation and Recycling Competition Score Sheet

Class

Date

Score

Scoring criteria	Scoring indicators					Score
	5	4	3	2	1	
Recycling bin	Recycling bins are properly labelled with clear text and icons	Recycling bins are properly labelled with clear icons	Two types of recycling bins are properly labelled with clear text and icons	One type of recycling bins is properly labelled with clear text and icons	Recycling bins are not properly labelled with text and icons	
Source separation	All recyclables are properly cleaned and put in the correct types of recycling bins	Not all recyclables are properly cleaned, but all are put in the correct types of recycling bins	Recyclables are properly put in two correct types of recycling bins	Recyclables are properly put in one correct type of recycling bins	Recyclables are not put in the correct recycling bins	
Weight of recyclables (Plastics)	Highest total weight	Second highest total weight	Third highest total weight	Fourth highest total weight	Fifth highest total weight	
Weight of recyclables (Metals)	Highest total weight	Second highest total weight	Third highest total weight	Fourth highest total weight	Fifth highest total weight	
Weight of recyclables (Paper)	Highest total weight	Second highest total weight	Third highest total weight	Fourth highest total weight	Fifth highest total weight	
Total Score						

Signature

Name



Inter-class Source Separation and Recycling Competition Worksheet

Matching: Connect the following types of recyclables with their corresponding coloured recycling bins.



•



•



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Understanding Community Recycling Facilities

Objectives

1. To enhance students' understanding that everyone is responsible to practise waste reduction
2. To guide students to observe and learn about the recycling facilities in their community
3. To raise students' awareness and enhance their understanding of recycling and waste management

Activity Arrangements

Preparation

- Teacher should print and distribute the following documents before the activity:
 - Observation Record Form
 - Parent Guide
 - Source Separation and Recycling Information
 - Introduction of Community Recycling Facilities

Observation Record Form

Teacher can encourage students to draw the observed recycling facilities (Recycling Bins in housing estates / residential buildings, Recycling Stations, Recycling Stores, Recycling Spots, Smart Recycling Bins, Food Waste Smart Recycling Bins, and kerbside recycling bins). Students should submit the completed "Observation Record Form" to the teacher in next lesson

Parent Guide, Source Separation and Recycling Information, and Introduction of Community Recycling Facilities

For parents' reference

Activity flow

- Parents can read the "Extended Activity Parent Guide" and "Introduction of Community Recycling Facilities" together with their child and visit nearby recycling facilities
- Parents can guide their child to identify different types of recycling bins. Based on the "Source Separation and Recycling Information", parents can also explain the usage of recycling bins and recycling icons
- Parents can guide their child to record what they have observed by taking notes or photos, and share their learning outcomes

Understanding Community Recycling Facilities

Activity Arrangements

Conclusion

- Teacher can invite students to present their “Observation Record Forms” and share their observations of the recycling facilities, and encourages other students to listen and think about any differences among various recycling facilities in the community

Time

1 hour

Materials

- Observation Record Form
- Parent’s Guide
- Introduction of Community Recycling Facilities
- Source Separation and Recycling Information (See Poster I)
- Food Waste Recycling Information (See Poster II)

Remarks

Taking into consideration of students’ safety, off-campus activities must be accompanied by their parents

Name



Observation Record Form

Draw the community recycling facilities you observed in the table below or attach a photo record.

Parent's Guide

1

Refer to the “Introduction of Community Recycling Facilities” and select a nearby recycling location to plan your route in advance.



2

Prepare “Source Separation and Recycling Information” (either electronic or printed) for your child’s use.



3

Take your child to visit one of the recycling facilities in the community, allowing them to observe the colours and shapes of the recycling bins and their corresponding recyclables collected.



4

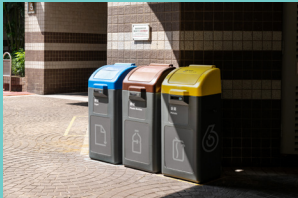
Guide your child in finding the corresponding colours and symbols of the recycling bins in the “Source Separation and Recycling Information” and explain the types of recyclables they represent.



5

Discuss with your child on how to separate the recyclables in daily life and educate them the proper way on clean recycling.

Introduction of Community Recycling Facilities



Recycling Bins in housing estates / residential buildings

The recycling bins set up under the Programme on Source Separation of Waste covered 2 700 housing estates and residential buildings, close to all residential premises in the territory. These recycling facilities are located on floors or public places of housing estates / residential buildings, enabling residents to participate in recycling.



GREEN@COMMUNITY

The Environmental Protection Department (EPD) has been expanding the community recycling network GREEN@COMMUNITY in the territory to strengthen community recycling support. 9 common types of household recyclables, including paper, metals, plastics, glass containers, rechargeable batteries, fluorescent lamps and tubes, regulated electrical equipment, small electrical appliances and beverage cartons are accepted and delivered to recyclers approved by EPD for proper treatment and turning into resources. As of August 2024, the GREEN@COMMUNITY comprises:

Recycling Stations

11 Recycling Stations for environmental education and recycling support.

Recycling Stores

77 Recycling Stores to specifically support residents living in clusters of residential buildings (including single-block residential buildings and “three-nil” buildings) and public rental housing estates to participate in separation at source and clean recycling. Except special occasions like certain festivals or inclement weather, the Recycling Stores are open all year round including Sundays and public holidays. Most of the Recycling Stores also allow nighttime self-service recycling, providing “convenient” recycling support to the community.

Recycling Spots

About 350 Recycling Spots have been set up at fixed time and locations around the territory, mainly near single block and “3-nil” residential buildings with inadequate waste recycling facilities.

Introduction of Community Recycling Facilities



Smart Recycling Bins

Smart recycling bins support 24-hour operation, measure and record the weight of recyclables automatically, and record electronic bonus (GREEN\$) points earned through recycling, thereby facilitate self-service recycling. Smart Recycling Bins are equipped with sensors and can transfer information and data through IoT network for effective monitoring, such as fill levels. Recyclable collection service providers may also be connected through communication network to transmit telematics data. When combined, these technologies provide a solution for real-time visibility into the status of recycling bins so they can avoid unnecessary pickups and optimize operations.

Smart Recycling Bins are set up at some of the Recycling Stations and Recycling Stores. The EPD is also installing Smart Recycling Bins at housing estates, villages, shopping malls, universities and government venue progressively.



Kerbside Recycling Bins

Currently, the EPD has put in place around 1 100 kerbside recycling bins in public places to facilitate the public to recycle the most common recyclables (i.e. paper, plastic bottles and metals).



Food Waste Recycling Bins

To enhance public participating in food waste recycling, the EPD has provided food waste smart recycling bins in all public rental housing estates in Hong Kong, while subsidising private housing estates and rural villages in installation of food waste smart recycling bins through different funding schemes. To support residents in single-block residential buildings, we have set-up public food waste recycling points at suitable locations, providing convenient recycling outlets for the public.

Relevant Webpages

Programme on Source Separation of Domestic Waste:

<https://www.wastereduction.gov.hk/en-hk/waste-reduction-programme/source-separation-domestic-waste>

Full lists of Recycling Stations, Recycling Stores, Recycling Spots:

<https://www.wastereduction.gov.hk/en-hk/waste-reduction-programme/greencommunity#locator>

Full lists of Recycling Stations, Recycling Stores, Recycling Spots and Smart Recycling Bin:

https://www.wastereduction.gov.hk/sites/default/files/srpv/Locations_of_Smart_Recycling_Bins.pdf

Map of Recycling Points:

<https://www.wastereduction.gov.hk/en-hk/recycling-map>

Food Waste Recycling Schemes and Collection Points:

<https://www.wastereduction.gov.hk/en-hk/waste-reduction-programme/food-waste-recycling-schemes>

Home Recycling One Stop Shop:

<https://www.wastereduction.gov.hk/en-hk/one-stop-shop>

Primary 1

Supplementary Information

Supplementary Information

1. Common domestic waste separation

The major component of municipal solid waste is domestic waste. Its quantity of disposal was 6 797 tonnes per day (tpd) (2.48 million tonnes) in 2022, which has decreased by 2.8% as compared to 2021.

Food waste (approximately 2 312 tonnes) is the largest category of disposed domestic waste (34.0%), followed by plastics at about 1 311 tonnes (19.3%).

Domestic waste average daily quantity (tpd) and percentage share by weight

	2020		2021		2022	
Glass	128	(1.9%)	129	(1.8%)	126	(1.9%)
- Glass bottles	118	(1.7%)	104	(1.5%)	103	(1.5%)
- Other glass	10	(0.1%)	25	(0.4%)	23	(0.3%)
Metals	117	(1.7%)	120	(1.7%)	118	(1.7%)
- Ferrous metals	91	(1.3%)	82	(1.2%)	73	(1.1%)
- Non-ferrous metals	26	(0.4%)	38	(0.5%)	45	(0.7%)
Paper	1 475	(21.5%)	1 321	(18.9%)	1 273	(18.7%)
- Cardboard / Newsprint / Office paper	490	(7.2%)	476	(6.8%)	445	(6.5%)
- Tetrapak	42	(0.6%)	45	(0.6%)	49	(0.7%)
- Others	943	(13.8%)	800	(11.4%)	780	(11.5%)
Plastics	1 318	(19.3%)	1 342	(19.2%)	1 311	(19.3%)
- Plastic bags	5.7	(7.8%)	552	(7.9%)	519	(7.6%)
- Plastic bottles	118	(1.7%)	127	(1.8%)	127	(1.9%)
- Plastic / Polyfoam dining wares	189	(2.8%)	140	(2.0%)	141	(2.1%)
- Others	474	(6.9%)	522	(7.5%)	524	(7.7%)
Putrescibles	2 656	(38.8%)	2 510	(35.9%)	2 424	(35.7%)
- Food waste	2 477	(36.2%)	2 342	(33.5%)	2 312	(34.0%)
- Yard waste	178	(2.6%)	167	(2.4%)	112	(1.6%)
Textiles	163	(2.4%)	252	(3.6%)	250	(3.7%)
Wood	71	(1.0%)	51	(0.7%)	31	(0.5%)
Household hazardous wastes (HHWs)	63	(0.9%)	92	(1.3%)	79	(1.2%)
Others	853	(12.5%)	1 177	(16.8%)	1 185	(17.4%)
Total	6 844	(100%)	6 992	(100%)	6 797	(100%)

Source: Environmental Protection Department

2. Source of waste

Hong Kong generates several different types of waste, and each has its own requirements for handling. The Environmental Protection Department (EPD) keeps regular statistics on each waste type, such as composition, quantity sent for disposal and quantity recycled.

Municipal solid waste (MSW)

Comprises solid waste from households, commercial and industrial sources. This excludes construction waste, chemical waste, clinical waste and other special waste. MSW is disposed of at landfills.

Food waste

The major constituent of the municipal solid waste in Hong Kong. It comprises waste produced during food production, processing, wholesale, retail and preparation, as well as after meal leftovers and expired foods. It is highly degradable which can easily cause odour and hygiene problems.

Construction waste

Includes waste arising from construction work such as construction, renovation, demolition, land excavation and road works. Through waste sorting and separation, inert material is used as fill in reclamation sites, when available. The non-inert portion of the waste still goes to landfills.

Chemical waste

Comprises substances specified under the Waste Disposal (Chemical Waste) (General) Regulation as posing a possible risk to health and / or the environment.

Clinical waste

Consists of waste generated from various healthcare, laboratory and research practices as defined in Section 2 and Schedule 8 of the Waste Disposal Ordinance. It should be managed properly so as to minimise danger to public health or risk of pollution to the environment.

Waste cooking oils (WCO)

Include oils abandoned from any cooking process for human consumption, regardless whether they have been used for their original purposes (e.g. grease trap waste, used cooking oil and unused cooking oil abandoned for reasons such as spoilage), other than those from households. WCO should be handled properly to promote recycling of local resources and prevent them from re-entering the food chain.

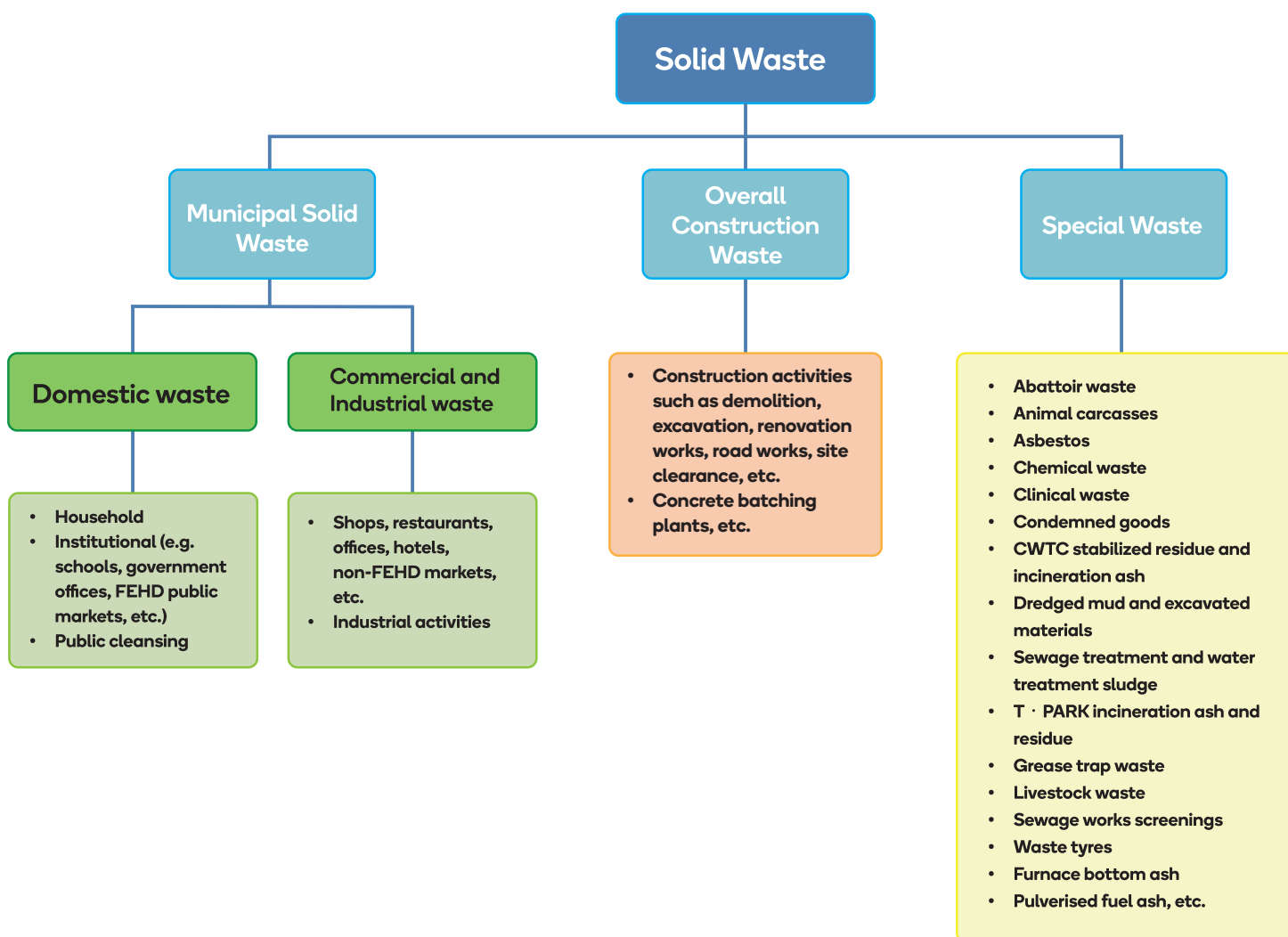
2. Source of waste

Special wastes

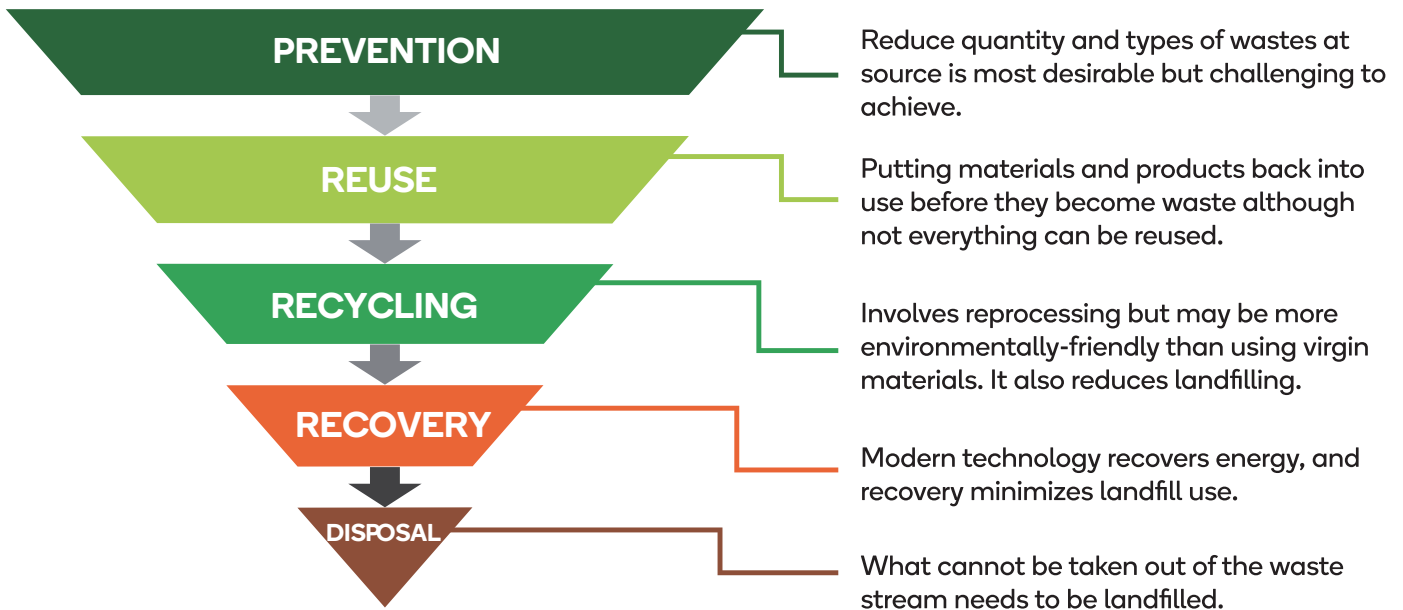
Include animal carcasses, livestock waste, radioactive waste, grease trap waste, sewage sludge and waterworks sludges. These wastes need to be treated separately. Arrangements are being developed for the proper treatment and disposal of these wastes, but more time is needed to address community concerns about such facilities.

Other solid waste

Comprises dredged mud and excavated materials disposed of at marine disposal sites.



3. Waste management hierarchy



Source: Environment Bureau

4. Common types of recyclables in Hong Kong

Recyclables	Recycling Steps	Examples of recyclables	Examples of non-recyclables
Paper	Tear off plastic tape and book covers made of composite materials (e.g. with plastic film), remove non-paper materials (such as paper clips, staples, etc.) and keep the paper dry before recycling	Newspaper, office paper, corrugated fiberboard (cardboard), textbooks, supplementary exercise books, school notes, used books	Thermal paper receipts, tissue wrap, baking paper, tracing papers, tissue, paper wipes
Plastics	Rinse and empty before recycling	Various types of beverage plastic bottles, personal care plastic bottles, cleansing liquid bottles, plastic bags, plastic tableware, plastic containers, plastic packaging materials, CDs/DVDs & cases, expanded polystyrene	Rubber / latex (e.g. slippers / flip-flops, balloons), silicon (e.g. collapsible food containers), plastic products with metals (e.g. suitcase), other composite materials (e.g. chips bags and instant noodles packaging bags with aluminium interior coatings, toothpaste tube, toothbrush, play clay, plastic tape, etc.), X-ray plastic films, video and cassette tapes
Metals	Rinse and empty before recycling	Tin cans, aluminium cans, and other metals (e.g. milk powder cans, Poon Choi containers, metal bread tongs, aluminium foil, etc.)	Compressed gas cylinders / aerosol cans, chemical containers, dangerous and sharp items (e.g. chopper)
Glass bottles	Rinse and empty before recycling	Beverage bottles, food and sauce bottles	Glass containers of chemicals, glass cooking and dining wares, mirrors, tempered glass, window glass, other glass construction materials, and non-glass materials (e.g. ceramics, crystals, etc.)
Regulated electrical equipment (REE)	Keep the item clean and tidy, organise cables, make an appointment with the Government's recycling service operator for a free door-to-door collection service by calling the hotline	Regulated electrical equipment (REE), including air-conditioners, refrigerators, washing machines, tumble dryers, dehumidifiers, televisions, computers, printers, scanners and monitors	Appliances exceeding the specified capacity limits

4. Common types of recyclables in Hong Kong

Recyclables	Recycling Steps	Examples of recyclables	Examples of non-recyclables
Small electrical appliances	Keep the item clean and tidy, organise cables	<p>General small household electrical appliances (e.g. electric fans, coffee machines, vacuum cleaners, hair dryers, microwave ovens, etc.)</p> <p>Other types of small electrical appliances (e.g. Bluetooth headphones, digital dictionaries, computer hard disks, game consoles, mobile / landline phones, USB cables, power cables and power strips / extension units, etc.)</p> <p>Lamp sets</p>	<p>electrical appliances for clinical use and personal care devices (e.g. electric shavers)</p> <p>(Note: If the small household appliances do not pose hygiene and disease transmission risks, for example, electric toothbrushes with brush heads removed, GREEN@COMMUNITY and downstream recyclers could still accept and recycle the items.)</p>
Rechargeable batteries	Cover the battery terminals with masking tape before recycling	Portable rechargeable batteries, such as Li-ion, NiMH and Ni-Cd contained in household equipment like mobile phones and notebook / tablets	Primary batteries (e.g. alkaline, zinc carbon, button cells, etc.), lead acid batteries and vehicle batteries
Fluorescent lamps and tubes	Reuse the packaging of new lamps to place the used lamps before depositing them in the collection box for recycling	Spent mercury-containing lamps generated from household, including compact fluorescent lamps, fluorescent lamps (straight tubes and other shapes), and high-intensity discharge (HID) lamps	Incandescent lamps
Beverage cartons	Remove non-beverage carton materials, rinse the recyclables and empty the content before recycling	Milk cartons, aluminium foil cartons, etc.	Oil-stained aluminium foil boxes that are difficult to clean (e.g., chip container)
Food waste	Remove non-food waste, drain liquid	Raw, cooked, leftover or spoiled food, including wheat & grains, fruits & vegetables, meat and residues etc.	Watery food, non-food waste materials, etc.

Source: Hong Kong Waste Reduction Website

5. Recycling facilities

回收設施 總有一種在附近 Recycling facilities nearby you

住宅樓宇

Single block and “3-nil” residential buildings

「綠在區區」支援居住在缺乏空間自設回收設施的住宅處所羣的居民參與源頭分類及乾淨回收

GREEN@COMMUNITY supports residents living in clusters of residential premises that lack space to set up recycling facilities to participate in source separation and clean recycling



屋苑/住宅大廈 Housing estates/ Residential premises

屋苑設置回收桶，方便居民進行源頭分類及乾淨回收

Recycling bins are installed in housing estates to facilitate residents to practice source separation and clean recycling



鄉郊地區

Rural areas

村民透過公共空間回收桶進行源頭分類及乾淨回收

Villagers practice source separation and clean recycling through recycling bins in public spaces



5. Recycling facilities



下載單張 /
尋找回收設施
Download leaflet /
Search recycling facilities



請即下載綠綠賞
手機應用程式
Download GREEN\$ App Now

香港減廢網站
Hong Kong Waste Reduction Website
www.wastereduction.gov.hk

6. Waste management infrastructure facilities for waste-to-energy / waste-to-resources in Hong Kong

T • PARK (Sludge Treatment Facility)

Adopts advanced incineration technology to treat up to 2 000 tonnes of sewage sludge from sewage treatment works each day

WEEE • PARK (Waste Electrical and Electronic Equipment (WEEE) Treatment and Recycling Facility)

Treats up to 30 000 tonnes of Waste Electrical and Electronic Equipment (Regulated Electrical Equipment) annually, turning them into valuable secondary raw materials

O • PARK1 (Organic Resources Recovery Centre Phase 1)

Adopts anaerobic digestion technology that can convert 200 tonnes of food waste into electricity each day

O • PARK2 (Organic Resources Recovery Centre Phase 2)

Adopts anaerobic digestion technology that can convert 300 tonnes of food waste into electricity each day

Y • PARK (Yard Waste Recycling Centre)

Equips with plant and equipment to screen, sort and treat the yard waste for transforming into various useful materials such as compost. Some wood materials will also be provided to relevant industries to support their operations

I • PARK (Integrated waste management facilities) (Anticipated to commence operation by 2025)

Adopts advanced incineration technology to treat 3 000 tonnes of municipal solid waste each day

資源分類和回收資訊

Source Separation and Recycling Information



回收種類 Recyclables	回收貼士 Recycling Tips	✓ 可回收 YES	✗ 不接受 NO
紙張 Paper	除雜質 Remove non-paper materials — 勿濕水 Keep dry	報紙 Newspaper 辦公室紙 Office paper 書刊 Books or magazines 紙皮 Cardboards	紙巾/抹手紙 Tissue paper or hand towels 熱感紙 Thermal paper 含有塑膠成分的紙張 Plastic-coated paper 相片 Photographs
金屬 Metals	清空及清潔 Empty & clean	鐵罐 Iron cans 全金屬煮食用具 Metal cookwares 鋁罐 Aluminium cans 其他金屬 Other metals	壓縮氣體罐 Aerosol cans 化學品容器 Chemical containers 琺瑯鑄鐵鍋 Enameled cast iron pots 易潔鑊 Non-stick pans
膠樽 Plastic Bottles	清空及清潔 Empty & clean	飲品樽 Beverage bottles 個人護理用品樽 Personal care bottles 清潔液樽 Cleansing product bottles	
其他塑膠 Other Plastics	清空及清潔 Empty & clean	膠袋 Plastic bags 包裝物料 Packaging materials 光碟 CDs or DVDs 即棄餐具 Disposable tablewares	橡膠 Rubber 矽膠 Silicone rubber 複合物料 Composite materials
玻璃樽 Glass Bottles	清空及清潔 Empty & clean — 輕放 Handle with care	飲品樽 Beverage bottles 醬料樽 Sauce bottles 食品樽 Food bottles	煮食容器/餐具 Cookwares or tablewares 化學品容器 Chemical containers 水晶/瓷磚 Crystals or ceramics
慳電膽及光管 Fluorescent Lamps & Tubes	妥善包好破損燈膽或燈管 Properly wrap broken lamps or tubes	慳電膽 Compact fluorescent lamps 高強度氣體放電燈 High-intensity discharge lamps 所有螢光燈管 Fluorescent tubes (All types)	鎢絲燈泡 Incandescent lamps
充電池 Rechargeable Batteries		便攜式充電池 Portable rechargeable batteries	一次性電池 Single-use batteries 汽車鉛酸電池 Vehicle lead acid batteries
小型電器 Small Electrical Appliances	整理電線 Tidy up cables — 輕放 Handle with care	一般小型家用電器(如電風筒、吸塵機、一般燈具、電焗爐、數碼相機、智能手機) General household appliances (e.g. hair dryers, vacuum cleaners, lamp sets, electric ovens, digital cameras, mobile phones)	
四電一腦 Regulated Electrical Equipment (REE)	整理電線 Tidy up cables	空調機 Air-conditioners 抽濕機 Dehumidifiers 雪櫃 Refrigerators 洗衣機/乾衣機 Washing machines or tumble dryers 打印機/掃描器 Printers or scanners 電視/電腦/顯示器 TVs / computers / monitors	免費上門回收服務 Free door-to-door collection service 2676 8888 / ☎ 6081 5096
紙包飲品盒 Beverage Cartons	剪開及清潔 Cut & clean — 去除膠蓋等塑膠部分 Remove plastic parts, e.g. plastic caps	鋁箔盒 Aluminium foil cartons 牛奶盒 Milk cartons	





廚餘

FOOD WASTE

廚餘回收資訊

Food Waste Recycling Information



環境保護署
Environmental
Protection Department



✓ 可回收 YES



穀物
Wheat & Grains



蔬果
Fruits & Vegetables



肉類
Meats



殘渣
Residues



其他
Others

生、熟、吃剩或變壞食物也是
「可回收廚餘」。

Raw, cooked, leftover or spoiled food is
'recyclable food waste'.

✗ 不接受 NO



非廚餘物質
Non Food Waste



過多水分
Watery Food

如不確定能否回收，請詢問工作人員
或避免放入廚餘桶。

If you have doubt, please ask staff or avoid
putting it into food waste bin.