

PRACTICAL GUIDES ON PACKAGING REDUCTION AND MANAGEMENT

SUPERMARKETS AND GROCERY STORES SECTOR



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About this Guide

Image credit: South China Morning Po



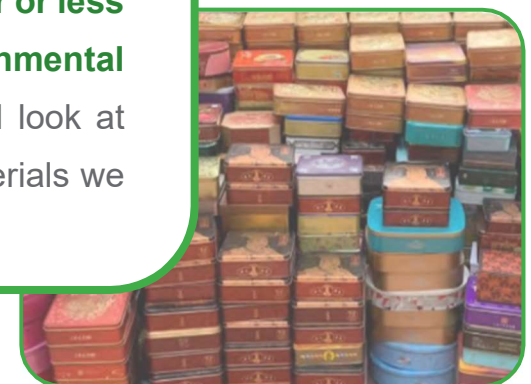
The importance of packaging is multi-faceted. From containing and protecting the products at the point of manufacturing and all the way through the supply chain to the retail stores or customers, as well as attracting people to purchase a product and providing product information, packaging has been playing an indispensable role in business activities and our daily lives.

Yet, many of these packaging are intended to be used only once or a limited number of times before disposal. In Hong Kong, environmental problems caused by excessive packaging using different materials have been a growing concern. With raising public awareness in environmental protection, **customers are demanding more for products with simpler or less packaging.** Therefore, it is high time to rethink how we could **balance various environmental criteria of packaging with other functional and commercial considerations** and look at ways of tackling the problem of excessive packaging and reducing the amount of materials we are using to strive towards the goal of carbon neutrality and achieving sustainability.



Image credit: ASDA

Image credit: am730



In May 2013, the former Environment Bureau (now known as Environment and Ecology Bureau) unveiled “Hong Kong: Blueprint for Sustainable Use of Resources 2013 – 2022” **promulgating the vision of “Use Less, Waste Less”** through various initiatives in policies and legislation, social mobilisation and investing in infrastructure with a view to tackling waste challenges from a resources circulation perspective.



Building on the blueprint released in 2013 and the momentum of previous efforts in waste reduction and recycling, the former Environment Bureau further announced the “Waste Blueprint for Hong Kong 2035” in February 2021, **putting forward a more aggressive vision of “Waste Reduction • Resources Circulation • Zero Landfill”**.

Apart from Hong Kong China, other countries/ regions are also working in unanimous efforts in recent years to promote waste reduction, in particular on packaging management. Examples include:

**European
Union (EU)**

Requiring member states to provide data on packaging waste generation and recovery since 1994 (latest amendment in 2018), and to comply with essential requirements for all packaging placed on the EU market, for the sake of regulating the responsibility of the producer for packaging materials and cutting down on packaging waste.

Germany

Requiring any party who places packaged products on the market to pay a fee for the recycling of their packaging waste since 2019 through registering and buying a packaging license for the product.

Singapore

Requiring producers of packaged products that are imported or used in Singapore to report yearly packaging data (including materials, weight and form of packaging) and to develop and implement 3R (reduce, reuse, recycle) plans for packaging. First report shall be submitted by 31 March 2022.

To support the vision and in view of the waste challenge in Hong Kong, it is imperative for the Government, businesses, and the general public to **join forces and work together in the pursuit of simple packaging, waste reduction at source, and promulgating green business and consumption.**

The use of excessive packaging, especially single-use plastics for fresh produce including fruits, vegetables, bread and cooked food, is an industry-wide practice among local supermarket chains. While shopping for groceries at supermarkets is a daily routine of many Hong Kong citizens, supermarkets and grocery stores should play a key role in tackling waste problem. It is very

crucial **for supermarkets to reconsider the necessity of different packaging and avoid non-essential packaging,** by minimising packaging of fresh produce, urging suppliers to avoid unnecessary packaging materials and providing more unpacked options for customers. In addition, reducing the use of raw materials and making use of recycled, durable or reusable materials in packaging can help towards reducing the company's carbon footprint.



How to use this guide?

- + This guide provides practical tips to trade practitioners of the supermarkets and grocery stores on **how to avoid and reduce packaging consumption and achieve sustainable packaging management** in their daily operations.
- + This guide also offers guidance and reference, with tailor-made templates, for supermarkets and grocery stores to prepare packaging reporting and **disclose packaging data in a harmonised structure so as to identify areas of improvement beyond their current practices**. This is in response to the requirements of the Hong Kong Exchanges and Clearing Limited (HKEX) on the Environmental, Social, and Governance Report (ESG Report) of the listed companies for financial years commencing on or after 1 July 2020.
- + With this guide, trade practitioners should be able to have a general picture on the sustainable packaging trend in both Hong Kong China and other places. To get geared up as a responsible company with sustainability placed at the heart of business, trade practitioners should grasp the opportunities to put in place meaningful packaging reduction and management measures. **While demonstrating the corporate commitment to social responsibility, it would help trade practitioners in capturing business opportunities and at the same time safeguarding and enhancing the wellbeing of both the customers and society.**

- + **Packaging:** Any products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer. Packaging mainly comprises primary packaging, secondary packaging, tertiary packaging and service packaging.
- + **Primary packaging:** Packaging conceived so as to constitute a sales unit to the final user or consumer at the point of purchase.
- + **Secondary packaging:** Packaging conceived so as to constitute at the point of purchase a grouping of a certain number of sales units whether the latter is sold as such to the final user or consumer or whether it serves only as a means to replenish the shelves at the point of sale. It can be removed from the product without affecting its characteristics.
- + **Tertiary packaging:** Packaging conceived so as to facilitate handling and transport of a number of sales units or grouped packaging in order to prevent damage during physical handling and transportation.
- + **Service packaging:** Packaging conceived so as to facilitate the delivery of sales units and for the containment of sales units at point of sale.
- + **Packaging waste:** Any packaging or packaging material that the holder disposes of.
- + **Biodegradable:** Any material that will decompose back to its basic elements (e.g. water, carbon dioxide and biomass) through the action of micro-organisms over time.
- + **Compostable plastic:** A subset of biodegradable plastics, defined by the standard conditions and timeframe under which they will biodegrade.

Scope and Classifications of Packaging

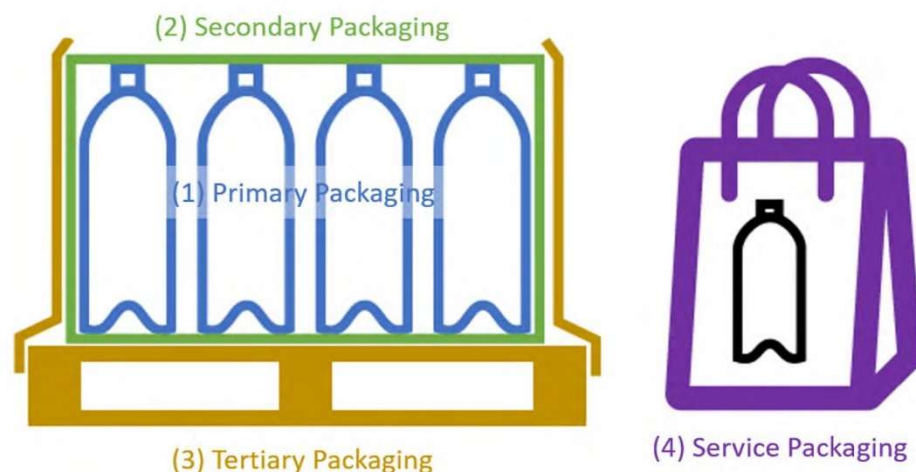
in Supermarkets and Grocery Stores Sector

With reference to the common definitions of “packaging” adopted worldwide, the forms of packaging can be classified into 4 broad types, namely, primary, secondary, tertiary and service packaging. These 4 levels of packaging form are categorised by the use and purpose of the packaging.

There are different kinds of packaging materials used by supermarkets and grocery stores in Hong Kong. The packaging helps maintain the product quality and integrity and facilitates the handling of the product in an efficient manner. **Paper, wood and plastics are the most commonly found packaging materials** being used by supermarkets and grocery stores as they are economical, light weighed, versatile, and protective in nature.

In supermarkets and grocery stores, packaging of different types may be applied for maintaining the hygiene of food and beverage items, as well as products storage and transportation. These packaging generally include:

- **(1) primary packaging** such as plastic bottles, glass jars, metal cans, paper cartons, etc.
- **(2) secondary packaging** such as cling wrap, corrugated paper and shrink film used to bundle-pack beverage bottles, plastic trays of individually packed products, etc.
- **(3) tertiary packaging** such as cardboard, stretch film, plastic crates, wooden pallets, cushioning material, etc.
- **(4) service packaging** such as plastic shopping bags, takeaway containers, etc.



In most circumstances customers have no choice to refuse the excessive packaging. In this regard, the Plastic Shopping Bag (“PSB”) Charging Scheme implemented since 2009 has provided a direct economic disincentive to both consumers and the retail sector to reduce the excessive use of PSBs (i.e. service packaging). Moreover, the producer responsibility schemes (PRSs) on Glass Beverage Containers has been fully implemented on 1 May 2023 and the Environmental Protection Department is also working on the PRS on Plastic Beverage Containers progressively, which are anticipated to create a circular economy and to provide practicable solutions in source separation, collection logistics, proper treatment and recovery outlets for these primary packaging.

While the aforementioned trade-specific packaging serves important functions from supermarkets and grocery stores perspective, adopting suitable green business practices would be an effective mean in reducing the generation of packaging waste at source. **This practical guide aims to enhance public education and offer tips to the trade practitioners of the supermarkets and grocery stores on the prevention, reduction, reuse, and recovery of packaging, with a view to facilitating the integration of the corporate ESG goals into their business.**

The following shows examples of different types of packaging generated by supermarkets and grocery stores:

/ paper

Product suppliers usually use **corrugated paper boxes for packing of individual products** to facilitate storage, transportation and distribution. When the corrugated paper boxes could no longer be used or reused, they would usually be collected for recycling due to their high recycling value.

Example: Corrugated paper box



Ease of recycling: HIGH



Environmental impacts

Manufacturing of paper may cause deforestation, high energy consumption that leads to high carbon emissions, wastewater discharge that leads to water pollution.

/ plastics

Plastic packaging is often **single-used**. Supermarkets and grocery stores use plastics packaging to cover and protect goods because it is lightweight and water resistant. Whenever possible, plastic packaging should be arranged for proper recycling.

01

PET

(Polyethylene terephthalate)

Example: Distilled water/ fresh juice container



Ease of recycling: HIGH



Image credit: Freepik

02

PE-HD

(High Density Polyethylene)

Example: Flat-top bag for fresh fruit, meat, seafood or frozen food, personal care container



Ease of recycling: HIGH



Image credit: Jun Rong

03

PVC

(Polyvinyl Chloride)

Example: Food and beverage packaging (e.g. meat tray)



Ease of recycling: LOW



Image credit: Freepik

04

PE-LD

(Low Density Polyethylene)

Example: Cling wrap for food, stretch film for goods transportation



Ease of recycling: MEDIUM



Images credit: Freepik



PP
(Polypropylene)

Example: Disposable fruit/ food container,
disposable bottle cap



Ease of recycling: MEDIUM



Image credit: Freepik



PS
(Polystyrene)

Example: Disposable cup lid, cutlery, foam
food container



Ease of recycling: LOW



Image credit: Amazon



O
(All other resin and multi-
materials not otherwise
defined)*

Example: Products made from polylactic acid
plastic (PLA) and biodegradable plastic, etc.



Ease of recycling: LOW



Image credit: Retail Resource

**Businesses should be cautious on the application of biodegradable plastics as their degradability and composability depend on specific conditions in practical environment. It is still premature to pursue biodegradable and compostable plastics as packaging alternatives at this stage, as they may eventually harm the wildlife and ecosystems if treated improperly without suitable recycling and treatment infrastructures. For such reason, while some other places' experiences of these applications are cited in this Guide as reference, this has no implication on the suitability in the context of Hong Kong China.*



Environmental impacts

Most plastics are made from fossil fuels. Extraction of fossil fuel may lead to deforestation or fossil fuel leakage, the process is energy-intensive that leads to high carbon emissions, marine and soil contamination caused by microplastics, burning of plastics leads to toxic substances and air pollutant emissions.

/ metal

Semi-rigid aluminum trays can be found in supermarkets with bakery products or cooked food.

Example: Aluminium foil pan/ tray for cooked food



Ease of recycling: HIGH



Image credit: Freepik



Environmental impacts

Raw material mining may lead to deforestation, biodiversity loss or soil erosion, the processing is energy-intensive that leads to high carbon emissions.

/ glass

Glass is one of the recyclable materials which is mostly used as primary packaging for food and beverage products.

Example: Wine bottle, glass jar



Ease of recycling: HIGH



Image credit: IKEA



Environmental impacts

When considering their contribution to climate change through energy use and damage from mining, the total environmental impact of glass bottle is much higher than that of plastic bottle if it is disposed of after a single use, which is a common phenomenon.

/ wood

Pallets are used for **bulk transportation of boxes of products**. Boxes of the products are placed and stacked on the pallet, then wrapped to fix position to reduce damage.

Example: Wooden pallet



Ease of recycling: HIGH



Image credit: Freepik



Opportunity for reuse

Wooden pallets and other wooden packaging can be reused after basic repairment. At the end of their lifespan, most wooden packaging can be recycled as energy source through heating, landscape mulch, animal bedding, soil enhancement, wood particle board or pressed wood pallets.

/ composite

In supermarkets and grocery stores, there are many types of **packaging items made from composite materials**, such as the paper container with inner layer coated with LDPE for food, soup and drinks, paper bag with aluminium foil and absorbent meat pads made by LDPE or PLA and paper.

Example: Paper container with inner layer coated with LDPE for food, absorbent meat pad



Ease of recycling: LOW



Images credit: Freepik.com



Environmental impacts

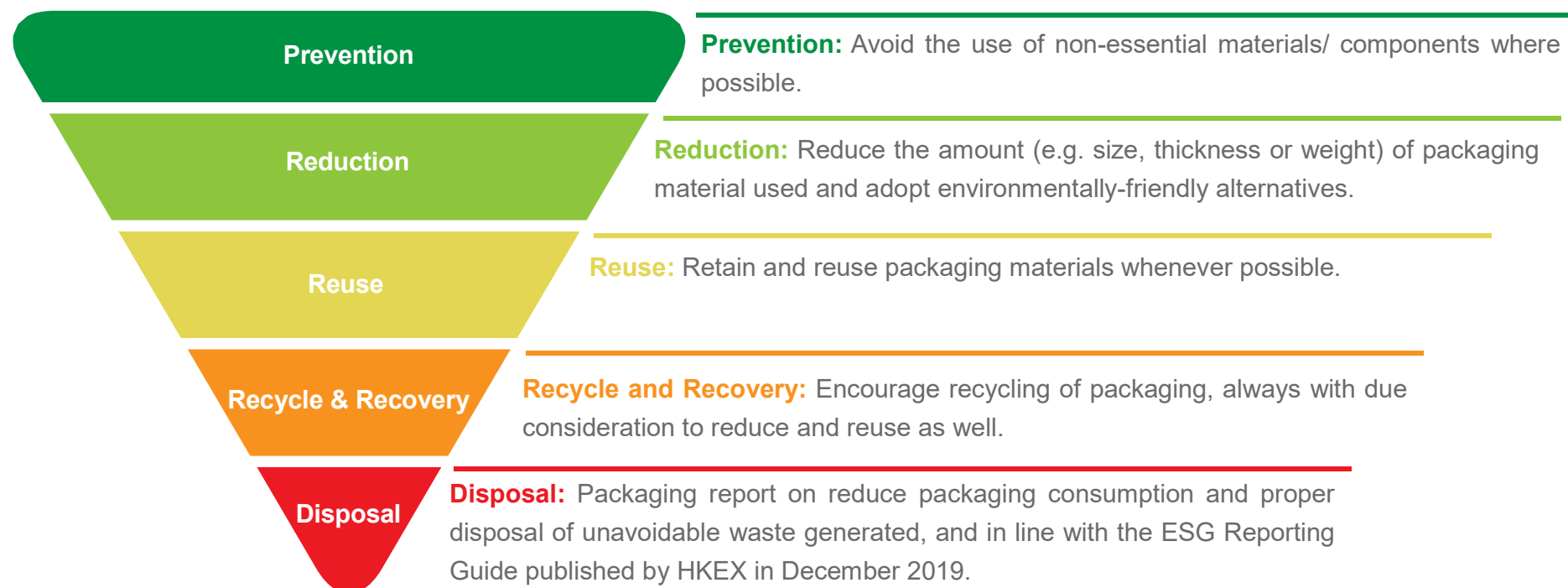
Burden on landfill due to low recyclability, other impacts depend on the materials composed of and could be similar to the impacts mentioned above.

Practical Tips for Achieving Sustainable Packaging



Waste management hierarchy in application

The “waste management hierarchy” is a globally recognised conceptual framework designed to guide and prioritise waste management decision and is a useful tool to consider different strategies for reducing packaging. Different levels of the hierarchy are interlinked and may affect each other and should not be viewed in isolation. **Measures moving up along the waste hierarchy would save costs, raw materials, natural resources and energy and reduce the overall impact on the environment.**



With reference to the waste management hierarchy, some practical tips for reducing packaging consumption and generation of packaging waste are set out below to assist supermarkets and grocery stores in balancing the benefits amongst environmental protection, cost reduction, corporate image, as well as expectations from customers and other stakeholders. A summary checklist of practical tips is given in **Appendix 1**.

1 Prevention – Avoiding/ Eliminating non-essential packaging

It is not unusual to see local supermarkets providing free service packaging such as single-use plastic bags for loose fruits, vegetables, frozen food, etc. It is also common to see fruits and vegetables packed with layers of primary packaging such as cling wrap and plastic tray which are non-essential and over-functional. This is not only a waste of our valuable materials, but may also lead to higher costs and reputational damage.

Therefore, local supermarkets are suggested to **review the packaging strategies to eliminate or avoid the use of packaging materials**, for

example, selling food in loose form and setting up a packaging-free corner for selected products. Local supermarkets could also make reference to the traditional mode of food retailing practised by the old-fashioned grocery stores and wet markets, in which packaging-free products are easily found.

/ supermarkets are suggested to review the packaging strategies to eliminate or avoid the use of packaging materials



Image credit: Shing Hing Tai



Image credit: Link Asset Management Limited



Image credit: Fat Kee Noodle



Image credit: 永昌盛

Table 1:
Examples of potential packaging-free products

- ✓ Packaging for decorative purpose (e.g. box for fruit, plastic leaf on takeout sushi)
- ✓ Product with a hard protective shell/ hardy surface (e.g. coconut, melon)
- ✓ Product with natural skins that is commonly sold loose (e.g. apple, pear, dragon fruit, kiwi, orange, mango, root vegetables, broccoli, eggplant)
- ✓ Product with long shelf life (e.g. grain, bean)
- ✓ Imported product in its original form
- ✓ Packaging with multiple layers (e.g. soup pack)
- ✓ Local product and own-brand product

In addition to preventing non-essential packaging at source, it is of equal importance to **avoid/ minimise packaging of local products and the use of single-use plastic packaging materials** such as polystyrene (PS)/ expanded polystyrene (EPS) food containers and cups, polyvinyl chloride (PVC) trays and composite plastics. In addition, businesses should avoid using plastic shopping bags during sales and should allow customers to choose not to use plastic bags or to specify the quantity required in placing an online order. If plastic shopping bags are provided upon request by customers, businesses must comply with the regulations of the Plastic Shopping Bag Charging Scheme.



Image credit: Biocoop

When evaluating the necessity and suitability of packaging, local supermarkets could make reference to Table 1 to select products which contain non-essential packaging and do not require additional packaging. For products which **match at least one of the following criteria**, local supermarkets should consider **selling them in loose form or reducing the non-essential packaging layer(s)** as far as practicable.



Image credit: Pick n Pay

While the store-front operation uses a remarkable amount of packaging, local supermarkets **should not overlook the packaging consumption of their controllable back-end operations**, such as in-store warehouses, distribution warehouses, fresh food centres, and fleets.

For instance, the transport of fresh/ refrigerated food should be handled by temperature-controlled trucks to avoid the use of EPS containers. Overuse of stretch film could often be prevented when appropriate care is given to the logistics operations. If a certain level of protection is required during the transfer and delivery of goods, bulk packaging should be prioritised.



Experience to learn

+ Hong Kong China

- A leading supermarket chain has launched a trial of packaging-free fruits and vegetables at 3 stores in the local universities since May 2019. In 2021, the trial has been extended to 10 stores which reduced importing prepacked fruits and vegetables. An annual saving of over 90,000 plastic trays from those trial stores was recorded. They have also launched a “Share Your Bag” scheme at 20 stores to encourage customers to reduce the use of plastic shopping bags. Customers could wash the used bags and leave them at the share station in the stores for others to reuse. Around 15% reduction in the plastic shopping bags usage was observed when comparing 2021 with 2019.
- Several supermarket chains provide monetary incentives for customers who bring their own containers in the food corner/ restaurants.
- Several supermarket chains provide reusable shopping bags for sale near checkout station to encourage the use of reusable shopping bags.



Image credit: PARKnSHOP Hong Kong



Image credit: PARKnSHOP Hong Kong



Image credit: YATA Hong Kong



Experience to learn

+ United Kingdom

- A supermarket chain has removed single-use plastic wrappings from some loose products (such as fruits and vegetables), bakery and produce aisles, saving 489 tonnes of plastics annually. They have also stopped packing selected vegetables with plastic trays such as tomatoes, carrots, and asparagus.
- Several supermarket chains have removed packaging including expanded polystyrene, PVC and non-detectable black plastics while some have pledged to go extra mile by halving the volume of plastic packaging they use by 2025.



Image credit: Sainsbury's

+ Japan

- A supermarket chain has implemented a “Stop Free Shopping Bag Programme” to avoid numerous plastic packaging, which helped reduce the use of 2.7 billion plastic bags in 10 years.

+ New Zealand

- A supermarket chain has launched a “Food in the Nude” programme and cooperated with suppliers to reduce most of the single-use plastic packaging for fruits and vegetables across the supply chain.



Image credit: Stuff Limited

+ Singapore

- Four major supermarket chains have teamed up with the government and business sector to launch “One Less Plastic Campaign” to encourage customers to use reusable shopping bag, which features a bar code to keep track of its use.



Image credit: The Straits Times

+ The Netherlands

- A supermarket chain has stopped offering free plastic bags for fruits and vegetables.

2

Reduction

(i) Redesigning packaging

Through redesigning the packaging, supermarkets can minimise materials used, thus reducing resource consumption and packaging waste.

When it comes to redesigning packaging, **parameters including weight, dimension, thickness, volumetric efficiency, materials, etc. should be carefully considered.**

Some might have the mis-conception that using more packaging material can help ensure product integrity and safety. In fact, **packaging reduction needs not be at the expense of product protection.** With adequate stress tests on the packaging and communication with trading partners/ customers on the packaging requirement, the optimum amount of packaging allowed by the specification could be worked out and employed.

/ packaging reduction needs not be at the expense of product protection

Apart from that, with an **innovative mindset in packaging design** such as by using dual-function components (e.g. printing directly onto the packaging/ product through laser labelling system to avoid the need for separate labels), packaging minimisation could be achieved.



Image credit: Marks & Spencer



Several questions to be considered

- + Have I fully understood the packaging need of my trading partners/ customers?
- + Considering all the packaging options and comparing with other similar examples, have I over-packaged my products, which deliver little functional and marketing benefits, but possibly cost more?
- + Have I over-packaged my products solely due to the reason that it has long been our operational practice/ habit, but possibly not always necessary?
- + Could I use fewer packaging materials while maintaining its function, e.g. thinner recyclable plastic tray for fresh fruit, without sacrificing the product protection?



Experience to learn

+ Hong Kong China

- A leading supermarket chain has signed up to the “New Plastics Economy Global Commitment” since 2020, which is a global treaty that brings key stakeholders united for a vision of circular economy for plastics. As part of this, they are committed to reducing the weight of their plastic packaging.



Image credit: A.S. Watson Group

+ United Kingdom

- A supermarket chain has redesigned to reduce the plastic packaging of steaks, hence reducing the use of plastics by 70%.



Image credit: Sainsbury's

+ Sweden

- In response to customer demand for less packaging, some supermarket chains have adopted laser technology to print the labels directly on the surface of fruits and vegetables with product information.



Image credit: ICA Gruppen

+ Japan

- A leading supermarket chain has made product containers lighter and thin-walled, reducing the amount of packaging by 7.1%.

(ii) Using environmentally-friendly alternatives of packaging materials

Supermarkets should always keep in mind that single-use plastics are not the only option available for packaging. Single-use plastic packaging **could be replaced with alternatives made of more environmentally-friendly materials such as packaging with recycled content. This helps reduce carbon footprint** as recycled materials generally require less energy and resources than virgin materials in the manufacturing process, and thus less greenhouse gas emissions. It is increasingly common around the world to include a certain proportion of recycled materials into packaging, such as paper cartons consisting of recycled fibres.

New developments in recycled content packaging have significantly improved the quality and application of packaging, such as safety standards for food contact. By making a balance between market considerations and promoting sustainable packaging, supermarkets are suggested to **continually review new packaging improvements and seek to increase the use of recycled content in the packaging** whenever applicable to Hong Kong's context.

Supermarkets should **replace the use of single-use packaging materials with those of higher recyclability** such as paper and metal, if packaging is necessary.

Priority should also be given to products with lightweight refill packs which are merchandised alongside more robust parent packs, **especially for the own-brand products of local supermarkets**. Not only could the cost be reduced as less packaging material would be used, but the customers could also be incentivised to choose the refill option through a lower retail price.

/ it is increasingly common around the world to include a certain proportion of recycled materials into packaging



Experience to learn

+ Hong Kong China

- A supermarket chain uses plant/ animal-based dyes for its own-brand products such as organic tea drink series. They also provide own-brand reusable shopping bags for sale which contains 50% of recycled polypropylene (PP).
- A leading supermarket chain has been replacing plastic packaging with more sustainable materials where possible, and banning PVC so that no problematic or unnecessary plastic packaging shall be used by 2025. They have also set a target to achieve 20% recycled plastic content (7% currently) in their own-brand products by 2025.



Image credit: AEON Stores Hong Kong

+ United Kingdom

- In order to achieve its goal to halve the overall plastics use by 2025, a supermarket chain has worked with a green group since 2021 to recycle plastics collected from the coast into packaging for strawberry and fresh fish, removing nearly 500 tons of plastics from entering the ocean annually.

+ Australia

- A leading supermarket chain has already modified the packaging of more than 550 products for the sake of packaging reduction as in 2021. They are committed to making 100% of their own-brand products recyclable, reusable or compostable by 2023 and to use an average of 60% recycled material in packaging by 2025.

Supermarkets generate a lot of primary and service packaging on-site which may ultimately be disposed of as packaging waste while packaging from the other parts of the supply chain should not be overlooked. Therefore, **evaluating the packaging performance of vendors (including importers) should be integrated into the green procurement policy** of a company. To reduce the packaging usage at source, local supermarkets should review, negotiate, and request their upstream suppliers (including importers) to select products with simple, minimal packaging or certified for eco labeling at source. Besides, they should also be required to improve volumetric efficiency, simplify the design, and maximise the use of environmentally friendly alternatives for packaging. Given the stronger bargaining power of supermarkets with their own-brand products' suppliers, it is relatively easier to engage them on bulk offering and packaging reduction as a starting point. Supermarkets may as well **give preference to logistics suppliers who can provide durable, reusable or recyclable tertiary packaging.**

/ evaluating the packaging performance of vendors (including importers) should be integrated into the green procurement policy

Table 2:

Action items for green supply chain management on packaging reduction

A. Communicate the ESG commitment to the following upstream suppliers:

- ☒ Manufacturers/ growers/ distributors
- ☒ Manufacturers of own-brand products

B. Provide guidelines/ trainings to the staff of self-operated:

- ☒ Distribution warehouse
- ☒ Fresh food centre
- ☒ Logistics service

C. Set tender specifications with sustainable packaging requirements for third-party service provider:

- ☒ Distribution warehouse
- ☒ Fresh food centre
- ☒ Logistics service



Experience to learn

+ Hong Kong China

- An internal task force has been set up by a leading supermarket chain to review the different types of plastic packaging for raw and fresh products. They have also developed a “Sustainable Packaging Guideline” to support internal development teams and suppliers in implementing sustainable packaging strategies such as expanding on products made partially or wholly of recycled plastics.

+ Australia

- A leading supermarket chain has published a list of problematic and preferred packaging materials for its suppliers to refer to and encourage the adoption of environmentally-friendly packaging. The list has also been used to guide their own packaging decisions.
- Another supermarket chain has applied the “Sustainable Packaging Guidelines” developed by the Australian Packaging Covenant Organisation when designing and manufacturing the packaging for their own-brand products, including non-food, grocery, chilled and fresh produce.

Image credit: Zalora

+ Singapore

- In order to foster the sustainable use of resources in packaging along the supply chain and to familiarise companies with the Mandatory Packaging Reporting requirements, the “Packaging Partnership Programme” was launched by the Singapore Manufacturing Federation and the National Environment Agency in March 2021. With the participation of various relevant industries such as manufacturers, importers, and service providers, supermarkets could leverage the programme which enable the exchange of best practices in sustainable packaging waste management.



Image credit: Amazon

Image credit: Amazon

3

Reuse

Installing refillable stations

It is common to see supermarkets in foreign countries have been installing refillable stations for food, oil and cleaning products where customers are required to bring their own containers to fill the products. It is **the easiest and most economical way for the public to reuse both plastic and glass bottles as well as to cultivate the habit of reuse** resulting in packaging waste reduction.

Although some refillable grocers have been opened locally in recent years to support this initiative, it is still uncommon in large supermarket chains where they could have stronger influence on the

public. Supermarkets are encouraged to **set up refillable stations in phases by embedding this concept in new and larger branches first** and gradually implementing it in older branches given that a smooth operation is maintained. **Customers could be incentivised** to choose the refill option and bring their own reusable container and purchase according to their demand.

With reference to supermarkets of all scales operating refillable station, the following products listed in Table 3 are recommended to be the starting products of refillable stations.

Table 3:

Recommended starting products of refillable station

| | |
|---|---|
| Cleaning/ personal care product | Ethanol, laundry and dish detergent, shower gel, liquid handwash, shampoo and conditioner, etc. |
| Dry food | Rice, pasta, cereal, nut, dried fruit, coffee bean, tea, dried herb and spices, snack, seed, ingredient, etc. |
| Long shelf-life/ easy to store product | Vinegar, oil, etc. |



Image credit: Co-op



Image credit: ASDA

/ supermarkets are encouraged to set up refillable stations in phases by embedding this concept in new and larger branches



Experience to learn

+ Hong Kong China

- Several local lifestyle grocery stores have taken the lead to offer zero-waste refillable items such as home cleaning supplies, personal care items and dry food such as nuts.
- A leading supermarket chain has launched instore refillable station at 2 stores for customers to bring in their bottles, jars and containers to purchase personal care items.
- A supermarket chain has launched instore refillable station for customers to purchase rice using their own containers with monetary incentives provided.



Image credit: Lively Life / green queen



Image credit: Slowood



Image credit: FRESH Rice Zone / Openrice



Image credit: Ecostore Hong Kong / PARKnSHOP Hong Kong

Many supermarkets and grocery stores of all scales from different parts of the world have installed/ started trials of refillable stations, where customers can bring their own or purchased reusable containers to fill the products they buy at the stations. Some supermarkets and grocery stores may choose to start with their own-brand products for easier implementation in the initial stage.



Image credit: green queen



Image credit: Aldi



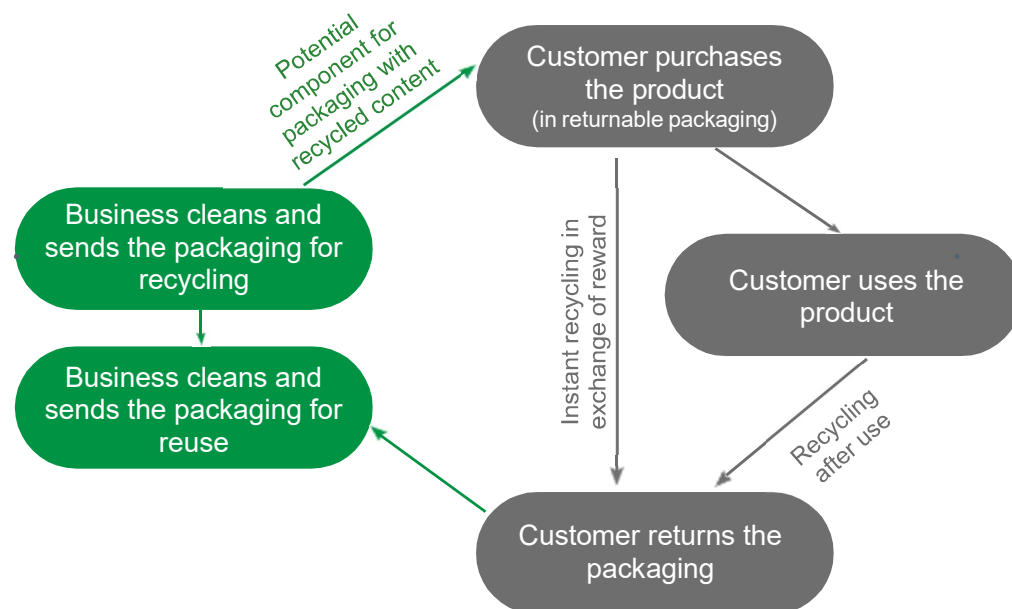
Image credit: Woolworths

4

Recycling and Recovery

Setting up recycling facilities

While recycling facilities are quite popular across the territory, it is relatively uncommon to find one in a supermarket. **Setting up suitable recycling facilities is a good way to draw sustainability awareness and bring circular economy into the business practice directly in collaboration with the customers.** Not only could customers be given the opportunities to recycle their unwanted packaging materials at the supermarket instantly, but regular customers could also be encouraged to bring their recyclable packaging from their homes to supermarkets for reuse and recycling.



In fact, by setting up suitable recycling facilities in supermarkets, business can improve brand loyalty and demonstrate its commitment to environmental protection.

/ setting up recycling facilities is a good way to draw sustainability awareness and bring circular economy into the business practice



Do you know...?

Building Environmental Assessment Method (BEAM) Plus is one of the most widely used green building rating scheme in Hong Kong. It facilitates companies to reduce environmental impacts and improve environmental quality in their buildings.

Local supermarkets located in new buildings/ shopping centers/ malls are advised to **liaise closely with the building owner/ property management company** to set up in-store/ on-site packaging recycling facilities for plastics, paper, metal and glass bottle with a view to improving the sustainability performance of their leased premises.



Experience to learn

+ Hong Kong China

- A leading supermarket chain collects empty wine bottles at their wine retail stores with collection rate reaching over 100 glass bottles per month.
- Most of the supermarket chains collect used cardboard internally for recycling.
- Some supermarket chains have set up Tetra Pak recycling bins and reverse vending machines to collect beverage cartons and plastic beverage bottles for recycling. Ad-hoc items such as metal mooncake tins are also be recycled.



Image credit: YATA Hong Kong



Image credit: YATA Hong Kong



Image credit: AEON Stores Hong Kong



Image credit: A.S. Watson Group

+ United Kingdom

- A lot of supermarket chains have set up collection points for customers to recycle clean plastic film packaging (e.g. plastic-wrapped bakery goods) and shopping bags.

+ Australia

- To create a convenient recycling hub for customers, a leading supermarket chain has set up recycling bins to collect soft plastics across their 1,000+ supermarkets.

+ Japan

- A supermarket chain has installed recycling bins at stores to collect paper cartons, food trays, aluminium cans, PET bottles, etc. which collected over 23,800 tons of recyclables in the year of 2017.

With reference to the waste management hierarchy, apart from the above experience to learn, the following example also shows how local supermarkets can start considering ways to reduce packaging consumption and generation of packaging waste. This can help relieve the waste disposal burden of landfills.



Prevention:

- + Could you consider not to use decorative plastic leaves?

Reuse, Recycle and Recovery:

- + Could you set up recycling facilities to collect used plastics from customers for reuse/ recycling?
- + Could you use packaging with on-pack recycling labels or add on-pack recycling labels to encourage customers to recycle?

Reduction:

- + Could you reduce the use of virgin materials through redesigning packaging (e.g. carefully considering the parameters of the packaging)?
- + Could you reduce the size of the absorbent meat pad?
- + Have you checked to see whether it is possible to include recycled content in the packaging (e.g. plastic tray)?

Guidance for Packaging Reporting and Management

While it is anticipated that the sustainable packaging initiatives suggested in previous chapters would help local supermarkets in identifying existing gap and potential opportunities to packaging reduction, we understand that some packaging exists for a practical reason as certain level of packaging is necessary and vital to business operation. Therefore, it is high time for local supermarkets **to explore ways in managing these unavoidable packaging in a more systematic manner.**

With reference to experience in other places and in line with the ESG Reporting Guide published by HKEX in December 2019, packaging reporting is an effective mean to facilitate gathering of information by companies for **self-review and identifying opportunities for reducing packaging consumption and packaging waste generation**, which may help companies to

minimise unnecessary cost. Also, **investors and other stakeholders are more willing to allocate capital in sustainable investments** and thus expecting more information from companies on how they manage ESG related risks, including how to minimise non-essential packaging.

In this chapter, a step-by-step guidance will be provided to assist companies to disclose their packaging consumption in their ESG Reports, Sustainability Reports or Annual Reports in a more systematic and standardised manner. To be an environmentally- responsible industry practitioner, it is advisable for companies to follow the guidance in **reporting the quantities of different types or forms of packaging materials consumed under a specific period of time.**



Do you know...?

Under the requirement of HKEX, Hong Kong listed companies are required to report on ESG matters on an annual basis and regarding the same period covered in their Annual Reports. Under Section Aspect A2: Use of Resources - KPI A2.5 of the “Appendix C2 (formerly known as Appendix 27) ESG Reporting Guide” published by HKEX, companies are required to disclose information on total packaging material used for finished products. The information required to comply is:

+ Total packaging material used and intensity

+ If possible, issuers should provide a breakdown of materials by type

Step-by-step guidance for packaging reporting and management

i Define reporting boundary

- i Companies should firstly determine the scope for packaging reporting, it would be a better approach to follow the reporting period and boundaries of their ESG Reports, Sustainability Reports or Annual Reports.

It is important that packaging materials consumed in different operating units, e.g. distribution centres, fresh food centres, warehouses, etc. should be included and reported.

- ii When defining the sources of packaging consumption within the reporting boundary, products made of any materials of any nature to be used for the protection, handling, and delivery from producers/trading partners to end customers should be taken into account. On the other hand, the already-added packaging of inbound items from other places should not be included in the reporting scope.

Therefore, packaging generated from the following operation points should be measured:

ii Identify source of packaging consumption

Packaging filled/ consumed at the point of sale

(e.g. cling wrap/ plastic bags of fruits and vegetables)



Image credit: Freepik

Primary and secondary packaging consumed for self-manufactured own-brand products

(e.g. bakery products)



Image credit: Freepik

Packaging filled/ consumed at self-managed warehouse/ distribution centre/ logistic services

(e.g. carton boxes, wooden pallets, bubble wraps, sealing tapes)



Image credit: Freepik

Packaging filled/ consumed at self-managed fresh food centre

(e.g. plastic trays for fresh products)



Image credit: Freepik



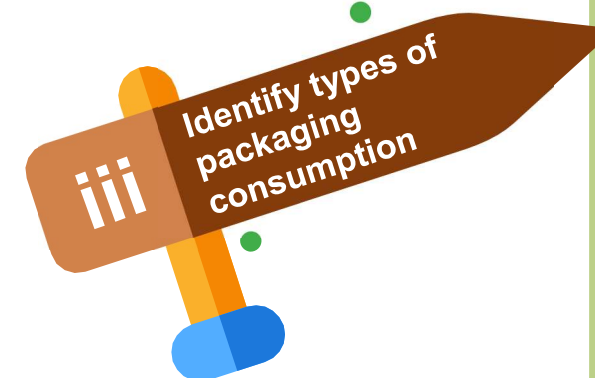
Scenario of reporting scope

Company A imports peaches packed in their original carton boxes and delivers them to the fresh food centre for processing. The peaches are repacked and wrapped by fruit protective nets and put into plastic containers individually. The containers are then wrapped together with cling wrap by the staff and sent to supermarket stores for sale. Part of the well-conditioned carton boxes from other places were reused for local transport from their fresh food centre to supermarket stores. Some extra corrugated paper boxes were used to group the peaches for storage and distribution as well.

For Company A, they should report the quantity/ weight of the fruit protective nets, plastic containers and cling wrap used, while the original carton boxes containing the peaches from other places will not be counted. However, the additional corrugated paper boxes used for local transport should also be reported.

Table 4:
Commonly found packaging materials and forms

| | | |
|-----------------------------|--|--|
| Paper/ cardboard | <ul style="list-style-type: none"> Paper shopping bags for food/ dry goods Corrugated paper boxes for delivery Logistics and protective packaging (e.g. carton boxes, cartons carriers) | <ul style="list-style-type: none"> Cardboard Other paper packaging |
| Plastics | <ul style="list-style-type: none"> Shopping bags Flat-top bags for fresh/ frozen products/ bakery products Beverage containers Plastic trays/ containers for fruit, drinks, cooked food and fresh products Fruit protective nets Polyfoam trays/ boxes | <ul style="list-style-type: none"> Labels/ stickers (e.g. fruit stickers, recycling labels) Cling wrap Logistics and protective packaging (e.g. packaging peanuts, bubble wraps, sealing tapes etc.) Other plastic packaging |
| Metals | <ul style="list-style-type: none"> Beverage containers Aluminium foil Metal trays | <ul style="list-style-type: none"> Food cans Other metal packaging |
| Glass | <ul style="list-style-type: none"> Beverage containers | <ul style="list-style-type: none"> Other glass packaging |
| Wood | <ul style="list-style-type: none"> Wood pallets Crates | <ul style="list-style-type: none"> Logistics and protective packaging Other wood packaging |
| Composite | <ul style="list-style-type: none"> Beverage cartons Packs/ sachets | <ul style="list-style-type: none"> Absorbent meat pads Other composite packaging |
| Others | <ul style="list-style-type: none"> Decorations for food (e.g. artificial leaves for sushi) | <ul style="list-style-type: none"> Containers/ bags with mixed content |



iii Packaging is ubiquitous in supermarket operations. It facilitates the handling of products and protects products from the point of manufacturing all the way through the supply chain to end customers.

To fit different natures of products and functions, there are wide varieties of packaging and the most commonly found packaging materials and forms are listed in Table 4.

iv

**Data collection,
estimation and
calculation**

iv

Data collection is an important step and requires collaborative efforts. Companies should establish strong collaboration with relevant departments and stakeholders to collect accurate and reliable data for reporting propose.

To understand the quantities of different forms of packaging materials consumed within the reporting period, companies may adopt the following two approaches.

1

Approach 1: Data obtained from procurement and inventory record

The following data should be obtained for calculation of packaging consumption:

| Items | Description | Data source |
|----------|--|---|
| A | Quantity of each type of packaging materials/ forms at the beginning of the reporting period | Stock-taking exercise, inventory report, etc. |
| B | Quantity of each type of packaging materials/ forms procured /received during the reporting period | Purchase orders/ reports, invoices from suppliers, import/ delivery records, etc. |
| C | Quantity of each type of packaging materials/ forms remained at the end of the reporting period | Stock-taking exercise, inventory report, etc. |

$$[\text{Total consumption amount of each type of packaging materials/ forms} = A + B - C]$$

2

Approach 2: Data obtained from the packaging materials used on sold products

- + Calculate the average weight of packaging per stock keeping unit (SKU) then multiply by the total number of products sold during the reporting period with reference to sales record.
- + Companies should identify components of the packaging according to different materials and forms, and record the weight of each material and form.

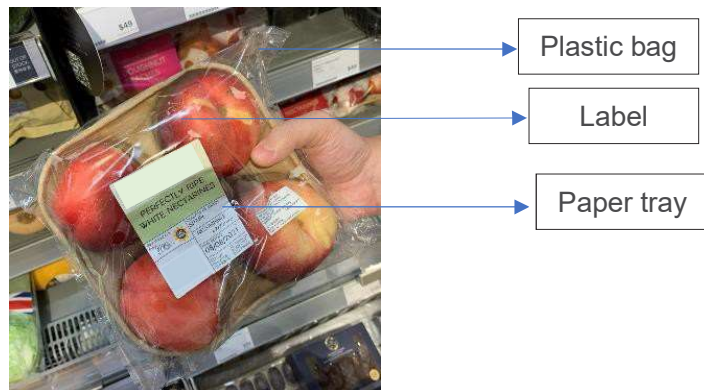
Example (1): Steak packed into plastic tray with cling wrap



| <i>Product name/ code</i> | <i>Packaging material</i> | <i>Packaging form*</i> | <i>Weight of the packaging material per unit of product (g)</i> | <i>Number of products sold during the reporting period</i> | <i>Total quantity of packaging consumed (kg)</i> |
|-------------------------------|---------------------------|----------------------------|---|--|--|
| | | | (A) | (B) | (C) = (A) x (B) / 1,000 |
| Steak | Plastics | Plastic tray | 5 | 2,000 | 10 |
| | | Cling wrap | 1 | | 2 |
| | | Artificial decorative leaf | 0.1 | | 0.2 |
| | Composite | Label | 1 | | 2 |
| | | Absorbent meat pad | 3 | | 6 |
| Sub-total | | | | | 20.2 |

* Companies can select appropriate items to report, subject to data availability

Example (2): Peaches packed into plastic bag



| <i>Product name / code</i> | <i>Packaging material</i> | <i>Packaging form*</i> | <i>Weight of the packaging material per unit of product (g)</i> | <i>Number of products sold during the reporting period</i> | <i>Total quantity of packaging consumed (kg)</i> |
|----------------------------|---------------------------|------------------------|---|--|--|
| | | | (A) | (B) | (C) = (A) x (B) / 1,000 |
| Peaches | Plastics | Plastic bag | 5 | 10,000 | 50 |
| | | Label | 1 | | 10 |
| | Paper | Paper tray | 5 | | 50 |
| Sub-total | | | | | 110 |

* Companies can select appropriate items to report, subject to data availability

- v Calculating the packaging consumption data helps engage your stakeholders to learn about the environmental commitment of your companies. Companies can consider reporting the total packaging materials used during the reporting period or the intensity of packaging material use^{note}.

Breakdown of packaging materials consumed by type (e.g. plastics, paper, metals) would be more preferable. This will establish the data for comparison, benchmarking and drive actions on packaging reduction. For samples of packaging reporting templates, please refer to **Appendix 2**.

Note:

Intensity of packaging material use = PA/U

PA = Total packaging materials used (in weight)

U = Company specific metrics (e.g. units of product, production volume, monetary units such as revenue or sales)

V Reporting and disclosure

6

Tips on publicity and customer education

Most of the packaging materials can be recycled if they are made from single material. However, some customers are not used to recycling while others do not know the correct way to do so. Supermarkets are suggested to **use packaging with on-pack recycling labels** to give customers clear illustration on the correct way of recycling. The on-pack recycling labels should be as informative and as clear as possible. Providing tips and guidance to customers on proper handling of common packaging materials is a measure that aims to raise the public awareness, level of knowledge and motivation in package recycling. Supermarkets can adopt different ways to convey such information, for instance at shops, via mobile applications,

or social media. In addition, trainings and guidelines on identifying the recycling labels should also be provided to frontline staff to ensure their informed actions.

To cultivate a “plastic-free” culture and to promote simple packaging for fresh products and other different goods, supermarkets can **implement own educational campaigns or collaborate with NGOs** for disseminating environmental messages, e.g. to promote the initiative of “Bring-Your-Own-Bag/ Containers”; and organise workshops and provide guidelines for frontline/ warehouse staff on packaging reduction at source.

/ supermarkets are suggested to use packaging with on-pack recycling labels



Image credit: On-Pack Recycling Label (UK)



Image credit: Planet Ark (Australasian Recycling Label)



Experience to learn

+ Hong Kong China

- Several supermarket chains have collaborated with NGOs on “Bring-Your-Own-Bag/Containers” activities.



Image credit: Green Sense
Image credit: AEON Stores Hong Kong

+ United Kingdom

- A German-based supermarket chain has started a trial in their Scotland stores by applying “Eco-Score Labelling” with the criteria of the ingredients, packaging and sourcing to over 50 of their own-brand products, hoping to help customers to make more sustainable purchasing decision.



Image credit: Lidl G

+ Australia and New Zealand

- The major supermarket chains have adopted the “Australasian Recycling Label” on their own-brand products to help customers develop positive and effective recycling behaviour.

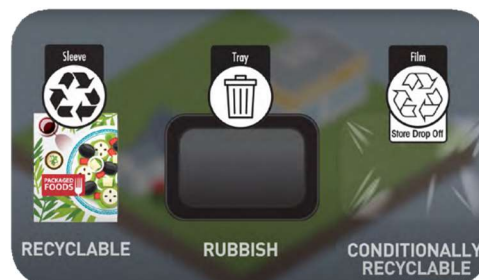


Image credit: Australian Packaging Covenant Organisation

+ South Africa

- Some major supermarket chains have teamed with an international NGO to standardise and simplify recycling labels on packaging. This project could motivate supermarket chains to clarify the recyclability of certain plastic packaging and help customers easily identify whether the packaging can be placed in a recycling bin.

Frequently Asked Questions

The following frequently asked questions are designed to assist trade practitioners with answers about packaging reduction, reporting and management.

Q1 Why is packaging reporting important?

Packaging waste constitutes significant part of Municipal Solid Waste (MSW) in Hong Kong and has caused increasing environmental concerns. To achieve waste minimisation in the territory, local companies should share the responsibility towards sustainable packaging waste management. On the other hand, customers and investors are increasingly concerned about company's environmental and financial responsibility, packaging reporting would be an important initiative for companies to gather information for self-review, thereby identifying areas of improvement beyond current practices.

Q2 Is packaging reporting mandated by law?

Packaging reporting is not mandatory at this stage. However, in order to facilitate companies in gathering information for self-review and identifying areas of improvement to achieve sustainable packaging waste management which may help companies to minimise unnecessary costs. We strongly encourage companies to practise packaging reporting on an annual basis for self-assessment.

Q3 Which types of packaging should be covered in the packaging reporting of our company?

Companies should identify their own scope of operations at different venues (e.g. factory, warehouse, retail shops, etc.) and identify the packaging materials consumed by their companies for reporting, including primary packaging (e.g. paper bags, plastic bottles) of self-manufactured own-brand products and secondary packaging (e.g. cling wrap) added to the product at the point of sale.

Q4 We found some of the packaging materials challenging to maintain an accurate inventory for reporting, what could we do?

We understand that the operational challenges of stock-taking different types of packaging from all sources. Therefore, companies are advised to report as many types and forms of packaging as practicable (use estimation if needed) generated from the following operation points: 1) Packaging filled/ consumed at the points of sale, 2) Primary and secondary packaging consumed for self-manufactured own-brand products, 3) Packaging filled/ consumed at self-managed warehouses/ distribution centres/ logistic services, and 4) Packaging filled/ consumed at self-managed fresh food centres.

Q5 Where shall we disclose our packaging data?

For Hong Kong listed companies, you shall disclose your packaging consumption data on your ESG Report under the requirement of HKEX. For non-listed companies, you are also encouraged to disclose your packaging data on your website or your ESG/ Sustainability/ Annual Report.

Q6

We found some of the sustainable packaging initiatives challenging to implement, what could we do?

Businesses are suggested starting with a trial/ in phases and progressively expand for wider impacts.
As a key stakeholder in achieving packaging reduction, the government will continue to collaborate with the retail trade for implementing practical measures to promote and encourage reducing the use of plastic packaging materials. Think big, start small!

Q7

The original packaging materials of the goods of our trading partners/ customers are out of our control, what could we do?

Businesses are suggested communicating with their trading partners/ customers and collectively explore solutions for minimising use of packaging materials while maintaining the necessary level of protection for handling and shipping. If you have your own-brand product lines, you are encouraged to communicate closely with your product suppliers or manufacturers on improving the packaging design and reducing packaging waste generation to a minimum.

Q8

We wish to recycle the packaging waste generated from my operations, what can we do?

Businesses should identify suitable outlets for recyclable materials. For large businesses, it is suggested to set up suitable recycling facilities at their retail points and engage a recycler to collect different types of recyclables regularly for proper recycling.

Please find more on the Hong Kong Collector/ Recycler Directory:

https://www.wastereduction.gov.hk/en/quickaccess/vicinity.htm?collection_type=collector&material_type=all&district_id=0

1 Packaging Reporting and Management

Hong Kong China

- + **How to Prepare an ESG Report – A Step-by-Step Guide to ESG Reporting – HKEX**
https://www.hkex.com.hk/-/media/HKEX-Market/Listing/Rules-and-Guidance/Environmental-Social-and-Governance/Exchanges-guidance-materials-on-ESG/step_by_step.pdf

Other Places

- + **Guidance for the compilation and reporting of data on packaging and packaging waste – European Commission**
https://apambiente.pt/sites/default/files/_Residuos/FluxosEspecificosResiduos/ERE/Guidance_for_the_compilation_and_reporting_of_data_on_packaging.pdf
- + **Guide on Mandatory Packaging Reporting – National Environment Agency of Singapore**
<https://www.nea.gov.sg/docs/default-source/default-document-library/mpr-resource-slides-as-of-24-march-2021772abdb897c84ae0955da370215eeb74.pdf>

2 Packaging Reduction and Management

Hong Kong China

- + **Hong Kong Collector/ Recycler Directory – Environmental Protection Department, HKSAR**
https://www.wastereduction.gov.hk/en/quickaccess/vicinity.htm?collection_type=collector&material_type=all&district_id=0
- + **Waste Blueprint for Hong Kong 2035 – Environment and Ecology Bureau, HKSAR**
https://www.eeb.gov.hk/sites/default/files/pdf/waste_blueprint_2035_eng.pdf

Other Places

- + A Guide to Evolving Packaging Design – Waste & Resources Action Programme**
<https://www.proseworks.co.uk/Downloads/Wrap-design-guidance.pdf>
- + Design Guidelines for Sustainable Packaging – Sustainable Packaging Coalition**
https://s3.amazonaws.com/gb.assets/SPC+DG_1-8-07_FINAL.pdf
- + Directive 94/62/EC of 20 December 1994 on packaging and packaging waste – European Parliament and Council**
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31994L0062&from=EN>
- + Packaging Partnership Programme (with packaging benchmarks) – National Environment Agency of Singapore**
<https://www.nea.gov.sg/programmes-grants/schemes/singapore-packaging-agreement>
- + Reuse – rethinking packaging – Ellen MacArthur Foundation**
<https://ellenmacarthurfoundation.org/reuse-rethinking-packaging>
- + Sustainable Packaging Guidelines – Australian Packaging Covenant Organisation**
<https://apco.org.au/sustainable-packaging-guidelines>

Appendix 1 – Summary Checklist on Practical Tips for Supermarkets and Grocery Stores

The following is a quick start of key practical tips for the supermarkets and grocery stores sector to consider in achieving sustainable packaging. This list is non-exhaustive and is prepared based on the best practices collected locally and from other places.

| Summary Checklist on Practical Tips for Supermarkets and Grocery Stores | | | | |
|---|---|-----|----|---|
| Practical Tips | | Yes | No | Follow-up Actions if the answer is “No” |
| Prevention | | | | |
| 1. | Setting up packaging-free corner to practise selling selected fresh fruits and vegetables in loose form (e.g. apple, orange, kiwi, banana, dragonfruit, lemon, broccoli, carrot, potato, bell pepper, eggplant, onion and ginger etc.). | | | |
| 2. | Avoiding packaging of local products. | | | |
| 3. | Avoiding packaging of products with hard protective shell/ hardy surface (e.g. coconut, melon, pineapple and cucumber etc.). | | | |
| 4. | Avoiding multiple layers of packaging for cleaning/ personal care products (e.g. shampoo, conditioner, laundry liquid and detergent etc.). | | | |
| 5. | Avoiding the re-packaging of imported products. | | | |
| 6. | Reducing packaging consumption (e.g. stretch film, EPS containers) of controllable back-end operations through careful planning. | | | |
| Reduction | | | | |
| 7. | Redesigning traditional packaging and using thinner and lighter packaging materials with adequate stress tests. | | | |
| 8. | Exploring the use of creative packaging/ innovative technology (e.g. laser technology) to enhance packaging recyclability and reduce the use of materials. | | | |
| 9. | Replacing single-use packaging with alternatives containing recycled content. | | | |

| Practical Tips | | Yes | No | Follow-up Actions if the answer is “No” |
|------------------------------------|---|-----|----|---|
| 10. | Maintaining close dialogue with product suppliers/ manufacturers to simplify the packaging design. | | | |
| Reuse | | | | |
| 11. | Providing refillable stations in new/ larger branches. | | | |
| 12. | Incenting customers to choose the refill option and encouraging them to bring their own containers. | | | |
| 13. | Offering rental service of bags to customers who forget to bring their own bags. | | | |
| Recycling and Recovery | | | | |
| 14. | Setting recycling facilities in backend operation areas and retail stores to recycle unwanted recyclable packaging (e.g. recycling bins, reverse vending machines, etc.). | | | |
| 15. | Arranging regular material collection services for different recyclables. | | | |
| Packaging Reporting and Management | | | | |
| 16. | Performing statistical analysis and recording the total packaging materials used on a yearly basis. | | | |
| 17. | Publishing waste reduction plans and achievements in companies' ESG/ Sustainability/ Annual Report. | | | |
| Publicity and Customer Education | | | | |
| 18. | Strengthening employee trainings on packaging reduction at sources. | | | |
| 19. | Using packaging with on-pack recycling labels to facilitate recycling by end customers. | | | |
| 20. | Organising education/ environmental campaigns to raise public awareness. | | | |

Remark:

As a general principle, excessive and non-essential packaging should be avoided as far as practicable. In case the use of packaging materials is unavoidable, careful considerations should be adopted in choosing the suitable packaging to reduce waste generation. In addition, it is worth understanding that reuse and recycling could extend the life of packaging. The supermarkets and grocery stores, therefore, should support recycling of various packaging materials with a view to encouraging their staff and customers to develop green habits.

Appendix 2 – Packaging Reporting Templates

Report templates on types of packaging materials consumed during the reporting period: (Approach 1)

| | | | | |
|-------------------------------|------|--|----|--|
| Company: | | | | |
| Venue: | | | | |
| Business Nature of the Venue: | | | | |
| Reporting Period: | From | | To | |

Data obtained from procurement and inventory record

| Packaging material | Packaging form* | Quantity of packaging in storage at the beginning of the reporting period (tonnes) | Quantity of packaging purchased/ obtained during the reporting period (tonnes) | Quantity of packaging in storage at the end of the reporting period (tonnes) | Remarks | Total quantity of packaging consumed (tonnes) |
|--------------------|----------------------------|--|--|--|--------------|---|
| | | (A) | (B) | (C) | | $(D) = (A) + (B) - (C)$ |
| Plastics | e.g. Cling wrap | 40 | 60 | 20 | made of HDPE | 80 |
| | e.g. Plastic trays | | | | | |
| | e.g. Fruit protective nets | | | | | |
| Sub-total | | | | | | |
| Paper | | | | | | |
| | | | | | | |
| | | | | | | |
| Sub-total | | | | | | |
| Metal | | | | | | |
| | | | | | | |
| | | | | | | |
| Sub-total | | | | | | |

| Packaging material | Packaging form* | Quantity of packaging in storage at the beginning of the reporting period (tonnes) | Quantity of packaging purchased/ obtained during the reporting period (tonnes) | Quantity of packaging in storage at the end of the reporting period (tonnes) | Remarks | Total quantity of packaging consumed (tonnes) |
|--|-----------------|--|--|--|---------|---|
| | | (A) | (B) | (C) | | (D) = (A) + (B) - (C) |
| Glass | | | | | | |
| | | | | | | |
| | | | | | | |
| Sub-total | | | | | | |
| Wood | | | | | | |
| | | | | | | |
| | | | | | | |
| Sub-total | | | | | | |
| Composite | | | | | | |
| | | | | | | |
| Sub-total | | | | | | |
| Others | | | | | | |
| | | | | | | |
| Sub-total | | | | | | |
| Grand Total (PA) | | | | | | |
| Company specific metrics (e.g. units of product, production volume, monetary units such as revenue or sales) (U) | | | | | | |
| Intensity of packaging material use = PA/U | | | | | | |

* Companies can select appropriate items to report, subject to data availability

Report templates on types of packaging materials consumed during the reporting period: (Approach 2)

| | | | | |
|-------------------------------|------|--|----|--|
| Company: | | | | |
| Venue: | | | | |
| Business Nature of the Venue: | | | | |
| Reporting Period: | From | | To | |

Data obtained from the packaging materials used on sold products

| Product name/ code | Packaging material | Packaging form* | Weight of the packaging material per unit of product (g) | Number of products sold during the reporting period | Total quantity of packaging consumed (kg) |
|--|--------------------|--------------------------------|---|--|---|
| | | | (A) | (B) | (C) = (A) x (B) / 1,000 |
| e.g. Peaches | Plastics | Plastic bag | 5 | 10,000 | 50 |
| | | Label | 1 | | 10 |
| | Paper | Paper tray | 5 | | 50 |
| Sub-total | | | | | 110 |
| e.g. Steak | Plastics | Plastic tray | 5 | 2,000 | 10 |
| | | Cling wrap | 1 | | 2 |
| | | Artificial decorative leave | 0.1 | | 0.2 |
| | | Label | 1 | | 2 |
| | Composite | Absorbent meat pad | 3 | | 6 |
| Sub-total | | | | | 20.2 |
| | | | | | |
| | | | | | |
| | | | | | |
| Sub-total | | | | | |
| Grand Total (PA) | | | | | |
| Company specific metrics (e.g. units of product, production volume, monetary units such as revenue or sales) (U) | | | | | |
| Intensity of packaging material use = PA/U | | | | | |

* Companies can select appropriate items to report, subject to data availability

Appendix 3 - A “Step-by-Step” Self-Assessment Tool to Sustainable Packaging Management

The following self-assessment tool helps trade practitioners in the supermarkets and grocery stores sector to understand their packaging portfolio along the supply chain and business cycle so as to identify the scope for packaging management and assess the factors that they could consider in working out improvement options to reduce packaging.

| A “Step-by-Step” Self-Assessment Tool to Sustainable Packaging Management | | | |
|---|----------|-----------------------------|---|
| Instruction for completion | | | |
| Step 1: Review your current packaging and practices against the below guiding questions. | | | |
| Step 2: Check if they are relevant to your business and packaging? Consider if there are any additional questions you would like to include. | | | |
| Step 3: Consider which responsible parties (e.g. within your business or supply chain) could provide the information to complete your packaging reviews. | | | |
| Step 4: Consider if better improvement opportunities are available, or could be further explored. | | | |
| Step 5: Identify opportunities to reduce your packaging and packaging waste. Develop an action plan and track your progress. | | | |
| A. Questions for Sustainable Packaging Tips | | | |
| Guiding Questions | Y/ N/ NA | Who is responsible for? | Timeline/ targets/ progress update |
| <div style="border: 1px solid red; padding: 5px; text-align: center; color: red;">Sample Question</div> <p>Could any components/ layers of the packaging be eliminated, e.g. eliminating cling wrap and plastic tray for fresh fruits and vegetables?</p> | Yes | Company Procurement Manager | <p>1. Early April - To assess the feasibility with District Operation Manager and Senior Merchandiser (Basic Grocery)</p> <p>2. Early April - To decide with District Operation Manager on which selected retail stores will be participating</p> <p>3. Mid April - To provide briefing to respective Store Managers and frontline staff by District Operation Manager</p> <p>4. Early May - Implementation</p> <p>5. Early July - Evaluation</p> |
| Prevention - Avoiding/ Eliminating non-essential packaging | | | |
| Does the packaging (all levels together) use the minimum amount of material to maintain the necessary level of protection, safety and hygiene for the product? Could any components/ layers of the packaging be eliminated, e.g. eliminating cling wrap and plastic tray for fresh fruits and vegetables? | | | |

| Guiding Questions | Y/ N/ NA | Who is responsible for? | Timeline/ targets/ progress update |
|---|-------------|----------------------------|------------------------------------|
| Is the packaging produced in-house? If not, is there a procedure to specify the packaging material requirements jointly with suppliers? If so, have steps been taken to reduce packaging use (including those being used in controllable back-end operations) to a minimum? | | | |
| Could the above changes be implemented in phases, e.g. launching packaging-free trial programme for gradual improvement? | | | |
| <i>// Add rows for other ideas applicable to your business in eliminating non-essential packaging //</i> | | | |
| Reduction - Redesigning packaging | | | |
| Have you fully understood the packaging need of your trading partners/ customers so that opportunities for packaging reduction could be identified? | | | |
| Could you redesign traditional packaging and use thinner and lighter packaging materials? Have you conducted adequate stress tests to ensure product safety is maintained with just-enough packaging? | | | |
| Could you explore the use of creative packaging/ innovative technologies (e.g. laser technology) to enhance packaging recyclability and reduce the use of materials? | | | |
| <i>// Add rows for other ideas applicable to your business in redesigning packaging //</i> | | | |
| Reduction - Using environmentally-friendly alternatives of packaging materials | | | |
| Could you eliminate the use of hard-to-recycle packaging, e.g. foam trays or platters? | | | |
| Could you adopt relatively-easy-to-recycle packaging (e.g. PET) for unavoidable packaging? | | | |
| Could you adopt recycled materials (e.g. recycled plastics) as packaging materials? <i>[N.B. For food contact packaging, it is important to ensure the use of recycled content meets the requirements of relevant food contact legislation.]</i> | | | |
| Could you include a higher percentage of recycled content in your packaging? | | | |
| Are there any opportunities to use sustainable materials that have been certified as being from responsible sources, e.g. by Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certification (PEFC)? | | | |
| Could you give priority to local suppliers when sourcing environmentally-friendly packaging materials so as to reduce carbon footprint along the supply chain? | | | |
| <i>// Add rows for other ideas applicable to your business in using environmentally-friendly alternatives of packaging materials //</i> | | | |

| Guiding Questions | | Y/ N/ NA | Who is responsible for? | Timeline/ targets/ progress update |
|--|--|-------------|----------------------------|------------------------------------|
| Reduction - Green supply chain management | | | | |
| Manufacturers/ Growers/ Distributors | | | | |
| Have you maintained close dialogue with your stakeholders on optimising packaging design and specification? For example, is there a procedure to specify the packaging material requirements jointly with the manufacturers/ growers/ distributors? | | | | |
| Could you partner with consumer goods/ food and beverage brands from other places on sustainable packaging initiatives to demonstrate collaborative efforts? | | | | |
| If you have your own-brand product lines, are there any opportunities for the product suppliers to improve the packaging design (e.g. volumetric efficiency, simplifying the design and maximising the use of recycled content in primary and secondary packaging, and improving recyclability) or have steps been taken to reduce packaging waste to a minimum? | | | | |
| // Add rows for other ideas applicable to your business in influencing manufacturers/ growers/ distributors on sustainable packaging // | | | | |
| Distribution warehouse/ Fresh food centre/ Logistics service | | | | |
| Self-operated | Have you provided guidelines/ trainings to support your staff in implementing sustainable packaging strategies? | | | |
| | Have you established an internal task force to review the packaging strategy regularly? | | | |
| | Have you identified any feasible ways for packaging reduction and management? | | | |
| Third-party service provider | Have you set tender specifications with sustainable packaging requirements for your third-party service provider? | | | |
| | Have you provided guidelines to support/ oversee your third-party service provider in implementing sustainable packaging strategies? | | | |
| | Is the packaging consumption data available from your third-party service provider for your internal monitoring? | | | |
| | Considering your previous answers, are there any opportunities to further engage with your third-party service provider in packaging reduction and management? | | | |
| // Add rows for other ideas applicable to your business in managing back-end operations/ influencing your operators for back-end service on sustainable packaging // | | | | |

| Guiding Questions | Y/ N/ NA | Who is responsible for? | Timeline/ targets/ progress update |
|--|----------|--|------------------------------------|
| Reuse - Installing refillable stations | | | |
| Could you operate refillable stations at your retail stores? If the packaging is returnable, can it be made collapsible or reduced in volume? | | | |
| Could you start with a trial on loose-sale products, e.g. dry food products, oil, cleansing products, and personal care products? | | | |
| Could you start in phases by installing refillable stations in new retail stores first and gradually extend the concept to existing retail stores? | | | |
| // Add rows for other ideas applicable to your business in installing refillable stations // | | | |
| Recycling and Recovery - Setting up recycling facilities | | | |
| Could you set up recycling facilities in backend operation areas and retail stores to recycle unwanted packaging, e.g. recycling bins, recycling cages? | | | |
| Could you start installing recycling facilities in new retail stores first and progressively extend to existing retail stores? | | | |
| // Add rows for other ideas applicable to your business in establishing a collection system // | | | |
| Tips on publicity and customer education | | | |
| Could you use packaging with on-pack recycling labels to facilitate recycling by end customers? | | | |
| Could you provide tips and guidance to customers on the proper handling of packaging materials generated, e.g. at shops, via mobile applications, or social media? | | | |
| // Add rows for other ideas applicable to your business in raising public awareness, level of knowledge and motivation in package recycling // | | | |
| B. Questions for Packaging Reporting | | | |
| Guiding Questions | Y/ N/ NA | Who could provide you on this information? | Timeline/ targets/ progress update |
| Note 1: Refer to "Guidance for packaging reporting and management" for the non-exhaustive list of packaging materials and forms Note 2: All packaging being filled/ consumed 1) at the point of sale, 2) at/ by the self-operated facilities/ service, and 3) for self-manufactured own-brand product lines, should be included in the reporting scope if available | | | |
| Could you identify the reporting period? | | | |
| Could you define the boundary and activities in your company related packaging reporting? | | | |

| Guiding Questions | Y/ N/ NA | Who could provide you on this information? | Timeline/ targets/ progress update |
|--|----------|--|------------------------------------|
| Could you identify the packaging materials and forms that should be reported for the operation in your company? | | | |
| Are there any records of packaging quantity in storage at the beginning of the reporting period? (e.g. stock-taking record) | | | |
| Are there any purchase records of packaging during the reporting period? (e.g. receipt and delivery note) | | | |
| Are there any records of packaging quantity in storage at the end of the reporting period? (e.g. stock-taking record) | | | |
| Could you identify ways to obtain/ estimate the packaging materials used on each self-manufactured own-brand product? | | | |
| Could you identify the company specific metrics for calculating the intensity of packaging material use? (e.g. units of product, production volume, monetary units such as revenue or sales) | | | |
| // Add rows for other ways you can identify the source of packaging consumption // | | | |

C. Checklist for Packaging and Packaging Waste Reduction Plan

| Guiding Questions | Y/ N/ NA | Implementation details | Status/ achievements |
|--|----------|------------------------|----------------------|
| You have now identified several opportunities to reduce your packaging and packaging waste. You should develop an action plan and track your progress. | | | |
| Could you identify any opportunities to reduce your packaging and packaging waste? | | | |
| Have you assessed the scope of your reduction plan (e.g. start with 3 new retail stores)? | | | |
| Have you set any time-bound goals/ targets on packaging consumption, recycling rate of packaging waste or other packaging-related issues (e.g. 30% reduction of plastic tray consumption compared to previous reporting period)? | | | |
| Have you planned any actions to achieve the abovementioned goals/ targets? | | | |
| Have you assigned roles and responsibilities to your team(s) for the abovementioned goals/ targets and actions? | | | |
| Have you developed any monitoring and evaluation mechanisms to track the progress? | | | |
| Have you set a regular interval to evaluate and modify your reduction plan if the progress is not satisfactory? | | | |
| // Add rows for other opportunities you identified to reduce your packaging and packaging waste // | | | |