



Food Waste Reduction Good Practice Guide for **Market Sector**

Food Wise Hong Kong Campaign

Summary of Good Practices

Wet market (food market) and supermarket are some of the commercial and industrial enterprises involving in food business. This Guide is to provide practical tips for the relevant stakeholders of the market sector, comprising wet market and supermarket, to avoid and reduce food waste. The good practices for the market sector to :

- **M**anage food waste are to
- **A**void it,
- **R**educe it and
- in-**K**ind donate it, as well as
- **E**ducate stakeholders to cherish food, before
- **T**reating the unavoidable food waste for transforming it into useful resources.

Overview of good practices recommended for the market sector to manage food waste is tabulated as follows :

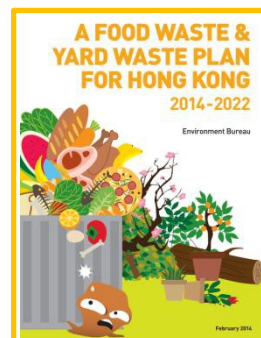
		Merchants/ Operators	Customers	Management Companies	Cleaning/ Collection Contractors
	Avoidance & Reduction	<ul style="list-style-type: none">• Avoid over-procurement and over-stocking• Properly store food and inspect storage devices• Give big discounts to food that are close to the expiry date to sell them instead of dispose of them	<ul style="list-style-type: none">• Judiciously procure food, particularly food close to or shortly past the “sell-by” and “best before” date and/or with imperfection• Thoughtfully shop and select food to avoid/reduce risk of contamination and package damaging	<ul style="list-style-type: none">• Raise merchants’ and customers’ awareness to avoid/reduce food waste• Educate and encourage practices to avoid/reduce food waste	

	Merchants/ Operators	Customers	Management Companies	Cleaning/ Collection Contractors
Food Donation	<ul style="list-style-type: none"> • Donate surplus food to food donation NGOs • Observe and adopt safety and good hygiene practices for donated food 	<ul style="list-style-type: none"> • Show support to those market stalls and supermarkets engaging in food donation activities 	<ul style="list-style-type: none"> • Facilitate merchants to participate in food donation activities • Connect interested merchants and NGOs to facilitate surplus food donation 	<ul style="list-style-type: none"> • If applicable, facilitate food donation activities through provision of logistical services
Food Waste Recycling	<ul style="list-style-type: none"> • Separate food waste at-source to facilitate food waste recycling 	<ul style="list-style-type: none"> • Show support to those market stalls and supermarkets practicing source separation of food waste 	<ul style="list-style-type: none"> • Facilitate merchants to participate in food waste recycling • Provide on-site food waste collection point(s) and/or treatment facility(ies) 	<ul style="list-style-type: none"> • Provide food waste collection and recycling services • Provide training to staff for proper separation, collection and recycling of food waste
Post-Recycling Usage/ Disposal			<ul style="list-style-type: none"> • Facilitate use of recycled products (e.g. compost and/or animal feeds, etc.) produced from food waste 	<ul style="list-style-type: none"> • Arrange use of recycled products (e.g. compost and/or animal feeds, etc.) produced from food waste • Properly dispose of non-separable food waste

This Guide will be subject to refinement/revision as if necessary.

Preamble

1. Hong Kong faces an urgent problem in waste management. The *Blueprint for Sustainable Use of Resources 2013 – 2022*¹ and *A Food Waste & Yard Waste Plan for Hong Kong 2014 – 2022*², published by the Environment Bureau of the HKSAR Government in May 2013 and February 2014 respectively, have articulated the seriousness of the problem and mapped out the strategies, targets and actions to tackle the solid waste and organic waste (namely food waste and yard waste) problems.
2. Of the approximately 9,000 tonnes of municipal solid waste (MSW) that is thrown away at landfills everyday, some 40% are made up of “putrescibles”³, which are various types of organic waste that decompose and create odour. It is mainly made up of food waste (around 90%) but includes some other waste, such as yard waste and personal care cotton products.
3. Food waste constitutes the majority of putrescible waste. Food waste is any waste, whether raw, cooked, edible and associated with inedible parts generated during food production, distribution, storage, meal preparation or consumption of meals.
4. In 2012, Hong Kong people threw away about 3,300 tonnes of food waste every day, with about three quarters came from households (around 2,500 tonnes) and a quarter from food-related commercial and industrial (C&I) sources (around 1,100 tonnes).
5. Prevention and reduction of food waste to landfills has multiple direct and indirect benefits. It will help to reduce various resource use associated with food production, cut greenhouse gas (GHG) emissions, recover useful resources from food waste, reduce the social cost of handling and treating food waste, and better utilize the capacity of landfill and waste-to-energy facilities.
6. **Everyone consumes food – at home, at work or dining out – so each one of us can play an active role to reduce food waste at source. C&I enterprises involve in the food business, and institutions/companies provide food and/or staff meals could also play an active role to reduce food waste.**



1. <https://www.eeb.gov.hk/sites/default/files/pdf/WastePlan-E.pdf>
2. <https://www.eeb.gov.hk/sites/default/files/pdf/FoodWastePolicyEng.pdf>
3. Monitoring of Solid Waste in Hong Kong – Waste Statistics for 2012, https://www.wastereduction.gov.hk/sites/default/files/resources_centre/waste_statistics/msw2012_eng.pdf

Purpose of this Guide

7. Wet markets (food markets) and supermarkets are some of the many C&I enterprises involving in food business. The aim of this Guide is to provide practical tips for the relevant stakeholders of the market sector (comprising wet markets and supermarkets) to make a contribution to avoid and reduce food waste. Apart from contributing to the environmental protection, the practices in this Guide could help in saving of running cost and caring of the needy in society.



Purpose of this Guide (continued)

8. Food waste should best be managed according to the hierarchical importance shown in figure 1 below. The most important step in reducing food waste is to avoid creating it from the outset. After avoiding food waste generation through prevention, reduction and surplus food donation, food waste should better be recycled to transform it to other useful resources such as energy, compost (nutrients for plants) and animal feed.
9. You reap what you sow. A small contribution from you will provide a **BIG** help to all of us in tackling the waste problem, with a view to reducing impact on our environment.

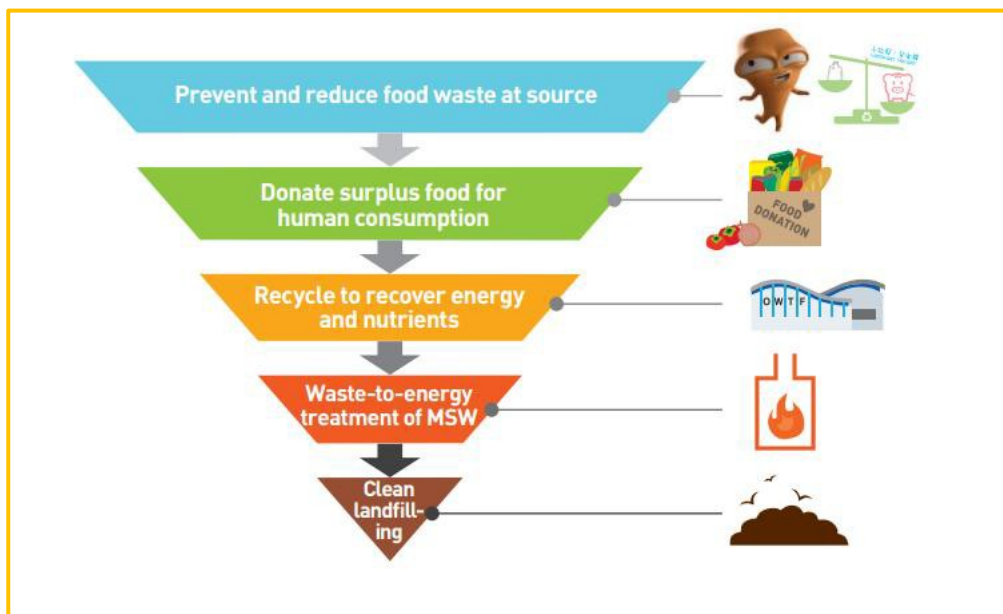


Figure 1 - Food Waste Management Hierarchy

Food Waste Generation and Problem in the Market Sector

10. This Guide covers only the following types of markets:- wet markets and supermarkets. In Hong Kong, major wet markets are run/managed by the Food and Environmental Hygiene Department (FEHD), Housing Department (HD) and The Link Real Estate Investment Trust (Link REIT). For supermarkets, they are all privately run, varying from chain-store type to niche type.
11. Currently (as at 2013), there are some 200 wet markets run/managed by the FEHD, HD and Link REIT. Lists of these wet markets are appended in Appendix A for reference.
12. For supermarkets, there are more than a dozen of various brands such as AEON, Citysuper, Jusco, ParknShop, ThreeSixty, Uny, Wellcome and 759 Store operating the chain-store supermarkets (food markets) in Hong Kong. ParknShop⁴ and Wellcome⁵ has nearly 300 outlets each.



4. Park n Shop Store Locator <https://www.pns.hk/en/store-finder>

5. Wellcome Store Locator <https://www.wellcome.com.hk/en/d/vSOBQHEF8NAhB5P.html>

Food Waste Generation and Problem in the Market Sector (continued)

13. All wet markets and supermarkets do sell food which may be raw food, cooked food, dry-packaged food, veggie, fruit, dairy product and/or beverage, etc. Unsold food will have a high potential to become food waste⁶.
14. Main reasons of food get unsold in wet markets and supermarkets may include :
 - expiry date is past;
 - food is contaminated or spoiled;
 - package is damaged;
 - over-stocking / over-supply;
 - change of market demand /customer requirements; and
 - re-allocation of space for new products
15. Apart from unsold food, food waste may also be generated in wet markets and supermarkets due to various reasons. For wet markets and supermarkets supplying cooked food, food trimmings and residues in preparing the cooked food and plate scrapings and leftovers in serving the cooked food may become food waste.
16. Detailed food waste statistics for food waste produced by different sectors are not available. However, with reference to the organic waste study/survey by EPD in 2008, a broad-brush estimate revealed that food waste arising from wet markets and supermarkets may account for some 10 – 20% of that coming from the C&I sources.



6. Food waste may include :

- | | |
|--|---|
| <ul style="list-style-type: none">- Rotten fruit and vegetables;- Fish and poultry organs and intestine, meat trimmings and residues;- Fruit and vegetable peelings, cores, pips, garnishes;- Meat, fish, shellfish shells, bones- Food fats, sauces, condiments;- Soup pulp, Chinese medicinal pulp; | <ul style="list-style-type: none">- Egg shells, cheeses, ice cream, yogurts;- Tea leaves, teabags, coffee grounds;- Bread, cakes, biscuits, desserts, jam;- Cereals of all types e.g. rice, noodles, oats;- Plate scrapings and leftover of cooked food, raw or cooked leftovers;- Food past its use-by-date; and- Pet food, etc. |
|--|---|

Existing Guides and Practices to Handle Food Waste in Market Sector

17. Below is a collection of some existing guidelines and practices to avoid, reduce and handle food waste in the market sector.

Guideline for Prevention and Source Separation of Food Waste – Wet Market—(by Greeners Action)

18. Greeners Action, a non-governmental organisation (NGO), has prepared a guideline in 2012 to help wet market stakeholders (merchants, property management companies, cleaning contractors and food waste collectors) to prevent and separate food waste. Food waste prevention or reduction can be achieved through better procurement, storage and use of food. Source separation of food waste can be achieved through cooperation between and among stakeholders, with a view to recycling food waste to produce other useful materials (e.g. compost, animal feed, etc.). The Guideline is appended in Appendix B for reference.

Help Your Supermarket Cut Food Waste—(overseas (USA) reference)

19. The captioned article provides tips to help cut supermarket food waste and is reproduced in Appendix C for reference. It provides advice on how supermarket customers can help reduce supermarket food waste. The advice includes urging food donation and shopping and buying food judiciously, etc.

Food Recovery NGOs

20. There are a number of NGOs collecting or rescuing unsold edible food in wet markets and supermarkets for donating to the needy in society. The Friends of the Earth (HK) (FoE) has facilitated the formation of “Food Donation Alliance” and produced a list of “Organizations Participating in the Food Donation Alliance⁷”. Some wet market tenants and supermarket operators have already taken the initiative to donate their unsold food through the food recovery NGOs.

Food Waste Composter at Tai Shing Street Market

21. As a pilot project, FEHD is managing a contract to convert on-site food waste collected at Tai Shing Street Market in Wong Tai Sin for composting. FEHD’s on-site

7. https://www.foe.org.hk/FileUpload/Editor/food_bank_alliance.pdf

Existing Guides and Practices to Handle Food Waste in Market Sector (continued)

composting contract for the Tai Shing Street Market lasts for two years (1.12.2012 to 30.11.2014). The composter contractor is responsible for providing, installing and maintaining the composter machine as well as for collecting and utilizing the compost produced in an appropriate way. After collecting food waste from the market stalls and separating it at source daily, the existing market management contractor will put the recyclable waste into the composter. Every day, about 50 kg of recyclable waste (mainly vegetables and fruits) is collected, producing about 5 kg of compost. The pilot project suggests that the challenges will include finding suitable space for the installation and operation of the composter – the machine itself requires some space to operate (about 3000 mm (L) x 1100 mm (W) x 2700 mm (H)) and odour will be generated during the process. In this case, an ozone generator is required to be provided at the site to remove the unpleasant odour. Frequent cleaning of the working area is also required to maintain environmental hygiene.

22. Some photos about this pilot project are appended below for reference.



(A) The composter is placed at the basement of Tai Shing Street Market



(B) Recyclable food waste collected from the market stall tenants is mainly vegetables and fruits



(C) Finished product (the compost) is being stored in covered containers before collection by the composter contractor at a frequency of twice per week.

Existing Guides and Practices to Handle Food Waste in Market Sector (continued)

Food Waste Composting Machine at Tai Yuen Market and Lok Fu Market

23. Both Tai Yuen Market and Lok Fu Market, managed by the Link REIT, have installed a composting machine (size: about 245cm(L) x 85cm(W) x 170cm(H)) since October 2013. Some operational details of the composting machines at these two premises are given below:

Daily Capacity:	100kg
Location:	<ul style="list-style-type: none"> • Refuse Room (Tai Yuen Market) • Stock room outside the market (Lok Fu Market)
Processing Time:	About 20hrs – 24hrs
Finished Product:	Soil richer, apply to Tai Yuen Market's roof farm
Operator:	Appoint housekeeping company to do the recyclable waste (mainly vegetables & fruits) collection and separation

24. Diagrammatical indication of the composting machine to recycle food waste is given below :



Food Waste Management in Market Sector

– Recommended Good Practices

25. The food waste management hierarchy (Figure 1 above) outlines the recommended approach to develop good practices for proper management of food waste in the market sector. Successful implementation of the good practices in the market sector relies on the concerted efforts of various stakeholders, including merchants/business operators, customers, property management companies, and cleaning/food waste collection contractors, etc.
26. An overview of good practices recommended for the market sector to manage food waste is tabulated below.

	Merchants/ Operators	Customers	Management Companies	Cleaning/ Collection Contractors
Avoidance & Reduction	<ul style="list-style-type: none">• Avoid over-procurement and over-stocking• Properly store food and inspect storage devices• Give big discounts to food that are close to the expiry date to sell them instead of dispose of them	<ul style="list-style-type: none">• Judiciously procure food, particularly food close to or shortly past the “sell-by” and “best before” date and/or with imperfection• Thoughtfully shop and select food to avoid/reduce risk of contamination and package damaging	<ul style="list-style-type: none">• Raise merchants’ and customers’ awareness to avoid/reduce food waste• Educate and encourage practices to avoid/reduce food waste	

Food Waste Management in Market Sector

– Recommended Good Practices (continued)

	Merchants/ Operators	Customers	Management Companies	Cleaning/ Collection Contractors
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Post-Recycling Usage/ Disposal			<ul style="list-style-type: none"> • Facilitate use of recycled products (e.g. compost and/or animal feeds, etc.) produced from food waste 	<ul style="list-style-type: none"> • Arrange use of recycled products (e.g. compost and/or animal feeds, etc.) produced from food waste • Properly dispose of non-separable food waste

Food Waste Management in Market Sector

– Recommended Good Practices (continued)

Avoidance and Reduction

27. Merchants and operators of wet markets and supermarkets can avoid or reduce generation of food waste through :-
- better planning/procurement process to avoid or reduce over-procurement and over-stocking;
 - carrying out of food waste audit to understand better the customers' preference and types of overdue/expired food, etc., with a view to reducing recurrence of over-procurement and over-stocking;
 - regular inspection of the expiry date of stored food and storage venues/devices for food, with a view to reducing the expired and/or spoiled food; and
 - arrangement of discounted sales for food nearing their “sell-by” /expiry dates and/or with imperfection.
28. Customers can help avoid or reduce generation of food waste through :-
- judicious procurement of food, particularly food close to or shortly past the “sell-by” and “best before” date which is an indication of quality rather than safety of food;
 - choosing and procurement of food with imperfect package or visual appearance; and
 - careful shopping and selection of food to avoid/reduce risk of contamination and package damaging.
29. Management companies of wet markets and shopping malls (in which supermarkets are located) can help avoid or reduce generation of food waste through :-
- raising merchants' and customers' awareness to avoid/reduce food waste by means of in-mall/in-market communications (e.g. publicity, posters and leaflets, etc.);
 - disseminating and sharing information to educate food waste avoidance/reduction good practices to customers, merchants/operators and management staff (e.g. promotional leaflets/videos, seminars/briefings/information kits to merchants/operators and management staff, etc.); and
 - encouraging merchants/operators to participate in food waste reduction programmes and activities.



Food Waste Management in Market Sector

– Recommended Good Practices (continued)

Food Donation

30. Merchants and operators of wet markets and supermarkets are encouraged to arrange in-kind donation of their unsold food to the needy for the sake of caring both the people and environment. Merchants and operators are obliged to observe and ensure that the donated food is safe and edible. Lists of charitable organizations (food recovery NGOs) which are collecting unsold food (raw and/or cooked) from wet markets and supermarkets for donating to the needy and the “Food Safety Guidelines for Food Recovery”, promulgated by the Centre for Food Safety. Some food donors and food recovery NGOs have well established their in-house food donation guidelines and agreement to address the food safety and liability matters. Samples of in-house food donation guidelines are given in Appendix D for reference.
31. Management companies and contractors are also encouraged to facilitate food donation activities. Apart from the communicational and educational tools as mentioned in paragraph 29, management companies can help connect the interested merchants/operators and charitable organizations to encourage and facilitate food donation. Whereas applicable and provided that food safety is safeguarded, contractors may facilitate food donation by providing logistical services.
32. Market force is considered as a key driver for food donation. Customers can through their patronage to show support to (or urge) those market stalls and supermarkets engaging in food donation activities.



Food Waste Management in Market Sector

– Recommended Good Practices (continued)

Food Waste Recycling and Post-recycling Handling

33. Food waste can be recycled to produce other useful materials such as compost and animal feed. List of food waste collectors and recyclers is available at https://www.wastereduction.gov.hk/en-hk/industry-support/hong-kong-collector-recycler-directory?search_api_fulltext=&Material%5B%5D=%2Fen-hk%2Findustry-support%2Fhong-kong-collector-recycler-directory&f%5B0%5D=material%3A1994
34. Merchants and operators of wet markets and supermarkets can help food waste recycling by practicing at-source separation. Guidelines for source separation of food waste are given in Appendix B, which include :-
- arrangement of designated bins for collecting food waste;
 - separation of recyclable food waste from other non-organic recyclable/non-recyclable materials such as plastic, utensils, foamed polystyrene containers, aluminium foil containers, paper tray liner, cups and lids; and
 - drainage of excess water from food waste, etc.
35. Management companies and cleaning contractors can facilitate or actually practise food waste recycling. Guidelines for food waste recycling are given in Appendix B, which include :-

Management Companies

- provision of food waste collection and recycling services through contractual arrangements with the cleaning contractors;
- setting up of necessary and appropriate facilities and devices (e.g. centralised food waste collection point(s), food waste bins, etc.) to facilitate food waste collection;
- whereas possible, setting up of on-site food waste treatment facilities to facilitate in-situ food waste recycling; and
- provision of communicational and educational tools, such as publicity posters and training kits/seminars, to educate and encourage relevant stakeholders to participate in food waste separation, collection and recycling.

Cleaning Contractors

- provision of timely and hygienic food waste collection services;
 - provision of either on-site or off-site food waste recycling services;
 - provision of suitable training to staff on food waste separation, collection and recycling; and
 - good communication with/provision of feedback to management companies to facilitate/improve food waste collection and recycling.
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Food Waste Management in Market Sector

– Recommended Good Practices (continued)

Food Waste Recycling and Post-recycling Handling (continued)

36. Similarly, market force is considered as a key driver for food waste recycling. Customers can through their patronage to show support to those wet markets and supermarkets engaging in food waste separation, collection and recycling.
37. Upon recycling to transform food waste to other useful materials such as compost and animal feed, management companies and cleaning contractors shall arrange usage of these recycled products. Compost may be used on-site for green areas and garden spaces at wet markets and supermarkets, or off-site for organic farms and/or green areas of nearby institutions. Supermarkets and management companies may also consider giving away the compost to their customers.



Summary

38. In conclusion, for the market sector's food waste, the good **M**anagement practices are to **A**void, **R**educe and in-**K**ind donate it, **E**ducate stakeholders to cherish food, before **T**reating the unavoidable food waste for transforming it to other useful resources.



List of Appendices

Appendix A - List of Wet Markets in Hong Kong run/managed by :

- Food and Environmental Hygiene Department
- The Link REIT

Appendix B - Guideline for Prevention and Source Separation of Food Waste – Wet Market (2012, by *Greener Actions*)

Appendix C - Help Your Supermarket Cut Food Waste (*Overseas (USA) Reference*)

Appendix D - In-house food donation guidelines by

- Food Angel by Bo Charity Foundation
 - Wellcome Company Limited
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Appendix A

List of Wet Markets in Hong Kong run/
managed by :

- Food and Environmental Hygiene
Department
 - The Link REIT
-

List of FEHD Wet Markets

Please refer to the following website for the updated list:

https://www.fehd.gov.hk/english/pleasant_environment/tidy_market/Markets_CFC_list.html

List of Wet Markets Managed by Link REIT

Please refer to the following website for updated list: <https://www.linkhk.com/en/shop/?cid=5&did=&scid=>

Appendix B

Guideline for Prevention and Source Separation of Food Waste – Wet Market (2012, *by Greener Actions*)

Guideline for Prevention and Source Separation of Food Waste – Wet Market (by Greener Actions)



綠 領 行 動 G R E E N E R S A C T I O N

Website 互聯網網址: www.greeners-action.org Email 電郵地址: info@greeners-action.org Fax 傳真號碼: 3010 8426

給街市建議避免產生和源頭分類廚餘的指引：

Guideline for Prevention and Source Separation of Food Waste – Wet market

於街市進行廚餘分類和回收，需要商戶、街市管理公司、負責清潔的承辦商及廚餘收集公司緊密配合，才能確保廚餘回收的流程暢順。以下是一些給街市各單位的指引：

The successful and smooth implementation of food waste separation and recycling in wet market would rely on the collaborative efforts from merchants, property management, cleaning contractor and food waste collection company. Guidelines for stakeholders of wet market are stated as follows:

採購/入貨：

Procurement:

- 應避免過量採購
- Avoid over-purchasing
- 根據顧客的喜好和選擇而採購，能避免囤積太多而造成浪費
- Procure according to customers' preference and prevent overdue of goods
- 定期記錄每日賣剩的食物的資料，有助對症下藥
- Record leftovers regularly to manage procurement

食物儲存：

- Food Storage:定期（如：每星期檢查一次）檢查冰箱與儲存室的食物之使用期限
- Inspect the expiry date of the food both in the refrigerator and store room regularly (e.g. conduct inspection once a week).
- 當發現食物期限將至，可以低價出售或將過多的食材/食物捐贈給食物銀行或社區廚房
- Donate the surplus food to food bank or community kitchen, or sell at discount when the food is going to expire.

善用食物：

Better use of foods:

- 將過多的食物及早捐給社區廚房，或其他慈善團體營運的食物銀行
- Donate the surplus food to food bank or community kitchen when the food is going to expire.
- 下欄的食物，如牛骨、豬骨可捐給有需要的人士
- Donate food leftovers (e.g. bones)
- 重用廚餘，如一般桔仔只會剝其外皮曬乾做陳皮，可考慮將桔仔肉造成果醬或其他食物
- Reuse food waste, for examples, dry up tangerine's peel or stir its flesh to be processed ingredients

有關「綠領行動」

「綠領行動」(Greeners Action)原名「綠色學生聯會」，意思是推動青年人成為未來環保領袖，令香港達至一個環保新領域；本會是一個註冊環保組織及慈善機構，稅務檔案編號為 91/8885。本會於 1993 年成立，現由大學生及不同專業的在職青年義務組成，旨在向社會宣揚、推廣環保訊息，讓更多年青人關注環保問題。

過去，本會曾與地球之友共同舉辦多年「綠色希望」環保訓練營，同時為中學生舉辦環保活動，提高年青一代的環保意識。近年，本會積極推的工作包括推行「無膠袋日」、「報紙不要袋」、「小學午膳安排問題運動」、「有衣食運動」及「碳粉匣及噴墨水匣回收運動」，藉此將有關訊息帶給市民大眾及有關部門，以引起他們的關注。有關本會詳情，可瀏覽網頁：www.greeners-action.org。



綠 領 行 動

G R E E N E R S A C T I O N

Website 互聯網網址: www.greeners-action.org Email 電郵地址: info@greeners-action.org Fax 傳真號碼: 3010 8426

街市管理公司的配合:

Co-operation of wet market's management company

- 若有外判清潔承辦商，可於簽合約時要求清潔承辦商提供廚餘回收的服務
- Require cleaning contractor to provide food waste recycling service in contract terms
- 街市應安排每 50 檔或 8000 平方尺最少 3 個適當而方便的位置擺放 240 公升廚餘桶
- Set up 240L food waste recycling bins at least 3 convenient locations per 50 shops or 8000 square feet area.
- 面積較小的街市可選擇容量較少的 120 公升廚餘桶，但不減少廚餘桶的數量
- Set up 120L food waste recycling bins in smaller size wet market, but not to reduce total number of food waste recycling bins
- 廚餘桶底部宜有輔助輪方便移送，而附有腳踏可方便控制桶蓋的開合
- Food waste recycling bins shall be equipped with wheels and step control for opening of bin's cover to facilitate transportation and collection of food waste
- 廚餘桶應有別於一般垃圾桶，以方便識別，並且貼上可回收廚餘的標籤
- Proper labeling shall be provided to food waste recycling bins
- 於開始實行初期舉辦簡介會，以鼓勵及說服商戶參與
- host briefing sessions in early stage of implementation to encourage and persuade merchants to participate
- 於街市當眼處張貼海報提醒商戶、清潔員工和市民廚餘回收的步驟
- Put up posters in prominent areas to remind merchants, cleaning staff and the public about steps in food waste recycling

員工/街市清潔員工的培訓:

Staff/ cleaning staff training:

- 街市的承辦商可為所有員工提供培訓，讓員工瞭解廚餘減量、源頭分類及回收廚餘的重要性
- Provide on-job training to all staff of cleaning contractor on the significance of food waste avoidance, source separation and recycling.
- 培訓員工分辨可回收的廚餘和如何將廚餘分類
- Provide training to staff on types of recyclable food waste and how to carry out source separation.
- 清潔員工於收集垃圾時須配合或協助商戶，同時收集廚餘及將已滿的廚餘桶推往指定地方待收集公司前往收集
- When cleaning garbage of shops, cleaning staff should collect food waste and deliver it to designated collection points at the same time.

有關「綠領行動」

「綠領行動」(Greeners Action)原名「綠色學生聯會」，意思是推動青年人成為未來環保領袖，令香港達到一個環保新領域；本會是一個註冊環保組織及慈善機構，稅務檔案編號為 91/86665。本會於 1993 年成立，現由大學生及不同專業的在職青年義務組成，旨在向社會宣揚、推廣環保訊息，讓更多年青人關注環保問題。

過去，本會曾與地球之友共同舉辦多年「綠色希望」環保訓練營，同時為中學生舉辦環保活動，提高年青一代的環保意識。近年，本會積極推的工作包括推行「無膠袋日」、「報紙不要袋」、「小學午餐安排問題運動」、「有衣食運動」及「碳粉匣及噴墨水匣回收運動」，藉此將有關訊息帶給市民大眾及有關部門，以引起他們的關注。有關本會詳情，可瀏覽網頁：www.greeners-action.org。



綠 領 行 動

G R E E N E R S A C T I O N

Website 互聯網網址: www.greeners-action.org Email 電郵地址: info@greeners-action.org Fax 傳真號碼: 3010 8426

源頭分類和廚餘回收的流程:

Source separation and food waste recycling procedure:

- 街市內可回收的廚餘包括: 菜莖、水果、果皮、肉類、魚鱗、魚鰓、骨頭等
- Recyclable food waste in wet market includes: vegetables, fruits, peels, meats, fish scales, gills, bones, etc.
- 避免將不可回收的物料(如: 塑膠袋、膠製容器、即棄餐具、發泡膠容器、錫紙容器、墊盤紙、紙杯和杯蓋)投入廚餘桶中
- Avoid putting non plastic products, disposable utensils, foamed polystyrene containers, aluminium foil containers, paper tray liner, cups and lids.
- 廚餘應盡量瀝乾水份
- Drain excess water of food waste
- 於收集廚餘時, 商戶可安置一個較小型的廚餘桶/竹籬於檔內垃圾桶或砧板旁
- Merchant can set up a relatively small food waste recycling bin or bamboo baskets beside garbage bin or chopping block to collect food waste.
- 一般街市的承辦商會安排清潔員工每天數次到每個檔口逐一收集垃圾, 清潔員工應同時收集廚餘, 並分開不同的垃圾桶/回收桶收集
- Cleaning company should arrange cleaning staff to collect shops' garbage individually several times a day, meanwhile, cleaning staff should collect food waste with separated food waste recycling bin.
- 較小規模的街市, 當小廚餘桶達 6-7 成滿後, 商戶須自行將廚餘棄置在設置於街市內最近的廚餘收集桶, 再由清潔承辦商的員工於每天營業時間結束後, 將盛滿的廚餘桶送至上落貨區, 待廚餘收集公司於即日的稍後時間運走廚餘, 避免廚餘過夜影響衛生
- In a small wet market, when the small-sized recycle bins are 60-70% full, merchant should transfer the food waste by themselves to the closest food waste recycling bins for cleaning staff to transfer fully loaded bins to the pick up/drop off point for removal afterward. Arrange daily collection of food waste to avoid hygiene problem due to overnight storage.

廚餘的處理辦法

Food waste disposal and handling

- 廚餘的處理方法是回收作堆肥、動物飼料或送往日後的「有機資源回收中心」
- Food waste could be recycled to produce compost or animals feed, or delivered to the future Organic Waste Treatment Facilities for treatment.
- 街市亦可考慮自行設置小型廚餘處理機將已源頭分類的廚餘進行即場處理
- Wet market may also consider installing small-scaled waste treatment machines to treat their source separated food wastes on site.

— 完 —

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過去,本會曾與地球之友共同舉辦多年「綠色希望」環保訓練營,同時為中學生舉辦環保活動,提高年青一代的環保意識。近年,本會積極推的工作包括推行「無膠袋日」、「報紙不要袋」、「小學午餐安排問題運動」、「有衣食運動」及「碳粉匣及噴墨水匣回收運動」,藉此將有關訊息帶給市民大眾及有關部門,以引起他們的關注。有關本會詳情,可瀏覽網頁: www.greeners-action.org。

Appendix C

Help Your Supermarket Cut Food Waste
(*Overseas (USA) Reference*)

Help Your Supermarket Cut Food Waste

The average U.S. food store sends to the landfill more than 1,300 pounds of food waste per employee per year, according to a [2006 study](#) looking at waste management practices typical of different industry groups.

Supermarkets employed about 2.5 million people in 2008, according to the U.S. Bureau of Labor statistics. That means about 3.25 billion pounds of food waste from supermarkets was sent to the landfill in 2008, or the weight of more than 200,000 elephants.

“Right now, the supermarket mindset is to always have more than enough. And, if that’s the case you’re always going to have stuff that you’re throwing out, or hopefully donating or composting,” says Jonathan Bloom, author of “American Wasteland: How America Throws Away Nearly Half of Its Food.”

SEE: Bloom’s Tips for Reducing Food Waste in 10 Minutes

There are things we as consumers can do to help our local grocery stores cut back on sending food to the landfill. Even changing our shopping habits and expectations can make a difference.

1. Urge your supermarket to donate to a food bank

“We grow food to feed people. It’s pretty simple. Let’s get the excess food to people who need it,” says Bloom. Most supermarkets donate food, but it’s a question of what kinds of food and how often. For example, breads, and in-store cupcakes and muffins are often donated.

“Which are not really the healthiest foods, which are not what we need in terms of getting hungry people the right kinds of nutritional items,” he says.

Grocery stores may not be inclined to donate more nutritious food like produce, meat, dairy and cheese. They may worry about a lawsuit when donating these more perishable foods. However, the [1996 U.S. Good Samaritan Food Donation Act protects supermarkets from liability when donating food and grocery store products to non-profit organizations for distribution to those in need.](#)

Alfalfa’s Market Inc. in Boulder, Colo., for example, donates some fresh produce items and excess orders of frozen meat to local food banks that the managers don’t think will sell by the expiration date.

“And, that’s a huge thing because supermarkets throw away so much meat. They just have excess inventory,” says Sonja Tuitele, communications personnel for Alfalfa’s Market Inc.

Despite the Food Donation Act, some grocery stores still may be hesitant to donate more food items in general, because they don’t want shoppers to be discouraged by how much food they are giving away, Bloom says. As a shopper, you can show local supermarkets that you support the donation of more food of all kinds, and begin the process by contacting a local food bank.

2. Don’t be quick to judge a food by its label

Although there are some foods we need to be cautious with, it’s generally true that food labels — especially “sell by dates”— are an indication of quality, not safety, says Martin Bucknavage, the senior food safety extension associate at Penn State University.

“It’s hard to make really clear lines between what’s good and what’s not good. So, we try and come out with some basic parameters that you can work with,” he says.

We generally want to stick by expiration dates, especially with baby food where there can be nutrient loss, Bucknavage explains. But, we have more leeway with “sell-by” and “best-if-used-by” dates. Stores generally try to get rid of all foods nearing their sell-by date, because generally those foods won’t sell. Yet, a customer can still get a lot of value out of products beyond the sell-by date.

READ: UK Wants to Cut ‘Sell-By’ Date on Food

Food in glass jars, like balsamic vinegar, and packaged food, like cereal can last months — sometimes years — beyond the sell-by date. However, use more caution if you buy items like sliced deli meats, poultry, and seafood, on, or close to the sell-by date, Bucknavage says. Freeze these items, or use them immediately.

Check out [stilltasty.com](https://www.stilltasty.com) for more information on how long your “favorite food and beverage” will stay “safe and tasty.”

3. Jump on the sales

Often supermarkets will discount food items nearing their sell-by date, or items the supermarket has an excess of, says Bucknavage.

“That’s a perfect situation that works well for everyone,” says Bloom. The store gets a little more revenue than they otherwise would, you reap the benefits financially and the store isn’t throwing out as much.

During the last few hours that Alfalfa’s Market Inc. is open, for example, the supermarket sells the bread baked that day for half price.

“So, it’s still high quality baked fresh in the store, but for a fraction of the price,” Tuitele says.

Buying discounted items and being outspoken to store leadership is one way to get your supermarket to have items on sale and produce less food waste.

4. Shop thoughtfully

Contamination is another reason supermarkets have to throw out food. Consumers can help to reduce waste by minimizing contact and cross contact.

Look at prices before you bag up two pounds of peaches, or before you request the pasta salad from the prepared foods department. Because it may be contaminated, anything that a shopper bags and does not buy is likely to be thrown out. Supermarkets opt for safety.

“You have to be careful,” says Bucknavage. “Don’t damage the product when you’re in the store.”

A product with the label ripped off, refrigerated items placed in a non-refrigerated section, and misplaced produce are all items that are likely to be thrown out. Also, try to avoid cross contact of foods and serving utensils used in self-service bars. At a salad bar that serves nuts, for example, there is the potential for allergen contamination.

5. The inconvenience of self-service bars

Ensuring that food from the self-service bars is eaten is especially important. Due to state and local health codes, food from hot bars and salad bars cannot be donated, even under the U.S. Good Samaritan Food Donation Act.

Additionally, food from the self-service bars can’t be repurposed by the prepared foods department, and meats and oils can’t be composted. So, food from hot bars and salad bars is highly likely to end up in the

trash at the end of the day. Also, some supermarkets do not allow their employees to eat the food from the hot bars after the store is closed to customers.

Consider letting your supermarket know you would rather have less “prepared food options” at the end of the day and that you would rather see the employees eat the food than see the food get dumped in the trash.

Alfalfa’s Market Inc., for example, lets their employees enjoy food that can’t be donated, or repurposed as an “employee meal.”

“If we know it’s something that we’re going to throw away, we’d rather have our employees sample it and try it and get to know all the food, so they can better communicate with our customers than throw it in the trashcan,” Tuitele says.

6. Choose imperfection

Damaged egg cartons, bruised apples, out-of-season labels and other “imperfect goods” are likely to be cast aside.

“It has nothing to do with the food itself. It’s just superficiality,” says Bloom.

Buying those “quirky items” will communicate to the store manager that appearance doesn’t have to trump taste when it comes to food, Bloom explains.

Additionally, suggest that your supermarket’s prepared foods department use those imperfect items. For example, Whole Foods Market looks at the produce that may not sell and creatively comes up with recipes, says Kate Lowery, communications personnel for Whole Foods Market.

“So, if it’s not the most beautiful apple you’ve seen there may be another treatment for it, there may be another use for it.”

Appendix D

In-house food donation guidelines by

- Food Angel by Bo Charity Foundation
 - Wellcome Company Limited
-

In-house Guidelines on Food Donation (by Food Angel)**Food Angel Working Guidelines****Food Donation Guideline**

A Food Angel member will be happy to meet with you to discuss options and to train your staff on our donation procedures. Food Angel has strict food safety guidelines for the food that we accept. We gratefully accept perishable and prepared foods maintained in safe temperature zones and chilled or frozen before being donated. Donated food must be provided by a regulated or licensed food business, such as a restaurant, caterer, wholesaler or bakery.

Prepared Foods

Preferred Packaging: Packaged separately, securely closed, avoid spillage
Storage Conditions:** Chilled, 4°C or less; frozen, -18°C or less

Non-Acceptable Conditions*:**
 Mixing food types; exposed in room temperature

Prepared Foods: Sandwiches

Preferred Packaging: Wrapped in clear plastic, wrap or foil
Storage Conditions:** Chilled, 4°C or less

Non-Acceptable Conditions*:**
 Mixing food types e.g. meats and side dishes

Baked Goods: Fresh or day-old bread and/or bagels

Preferred Packaging: Must use designated Food Angel container
Storage Conditions:** Cool, dry area

Non-Acceptable Conditions*:**
 Stale/hard

Prepackaged Foods: Perishables

Preferred Packaging: Packaged separately, securely closed
Storage Conditions:** Chilled, 4°C or less

Non-Acceptable Conditions*:**
 Opened, punctured, bulging or damaged packaging

Prepackaged Foods: Non-perishable (mislabelled-ok with proper notification)

Preferred Packaging: Packaged separately, securely closed
Storage Conditions:** Cool, dry area

Non-Acceptable Conditions*:**
 Opened, punctured, bulging or damaged packaging

Frozen: Vegetables, Meat, Poultry, Fish

Preferred Packaging: Packaged separately, securely closed
Storage Conditions:** Frozen, -18°C or less

Non-Acceptable Conditions*:**
 Defrosted or damaged packaging, severe freezer burn

Chilled: Meat, Poultry, Fish (Fresh)

Preferred Packaging: Original packaging, clear plastic wrap
Storage Conditions:** Refrigerated at all times, 4°C or less

Non-Acceptable Conditions*:**
 Strong odor, discoloration

In-house Guidelines on Food Donation (by Food Angel)



Fresh Produce: Whole

Preferred Packaging: Bag, carton, or Food Angel container
Storage Conditions:** Cool, dry area

Non-Acceptable Conditions*:**
 Significant decay

Beverages: Perishable

Preferred Packaging: Securely closed bag, carton, or Food Angel container
Storage Conditions:** Chilled, 4°C or less

Non-Acceptable Conditions*:**
 Alcohol not accepted

Beverages: Non-Perishable

Preferred Packaging: Bag or carton
Storage Conditions:** Cool, dry, unopened

Non-Acceptable Conditions*:**
 Opened, punctured, bulging

Types NOT Accepted:

Dairy Products
 Cooked Tofu Products
 Cooked Seafood
 Sashimi; Salads; or Cold Cuts from Buffets

Collection & Delivery

- All food donation collected will be delivered to our central kitchen or agreed designated location within 2 hours.
- Delivery of meal boxes is on agreed fixed schedule between Food Angel and Charity Partner.

Handling of Food Donation

- Food Angel Kitchen staffs and volunteers follow a strict set of food safety guidelines and procedures when handling all food donations.
- All food are cooked or reheated to over 80°C to minimize bacterial hazards.
- All fresh produce not used for meal boxes will be given away in packets to the beneficiaries at recipient center along with the meals served.
- All hot meals must be served within 1 hour upon arrival at the recipient center. All un-served hot meals must be disposed of after the 1 hour limit.

In-house Guidelines on Food Donation (by Wellcome Company Limited)



GUIDELINES ON FOOD DONATION

Objectives

Since 2012, Wellcome has started a food donation program as part of its environmental and community initiatives. The program aims to reduce food surplus and at the same time, to offer support to the needy in a sustainable manner.

Internal guidelines on handling donated food items

Criteria :-

- Food shall be in sound condition free from spoilage or contamination and shall be safe for human consumption.
- Food shall be obtained from approved sources that comply with the applicable laws relating to food and food labelling. Food prepared in a private home shall not be used.
- Storage condition : in cool and dry place.
- Shelf life – short shelf life items with at least 14 days from the stated expiry date on product labels.
- Conduct visual check on food items and discard immediately any food items that are damaged or in unacceptable condition.

Recommendation / Guidelines for NGOs and food recipients on handling donated food items

- Separated area shall be assigned for storage of donated food items.
 - First-in-first-out principle shall be adopted to distribute donated food items to NGOs.
 - All donated food items shall be properly labelled with product information, quantity and expiry date.
 - Containers for donated food items shall be cleaned and covered for protection from any potential cross contamination between food items.
 - Donated food items shall be stored in a cool and dry place (suggested storage temperature : 10 – 27°C).
 - Donated food items shall be consumed according to the expiry date stated on the product label.
-

Acknowledgment

This Good Practice Guide is produced through the concerted efforts of the members of the Food Wise Hong Kong Steering Committee and its working group (Market Sector), who have shared their insightful views and practical experience in developing the Guide.

Contact Us

Suggestions, comments and enquiries on this Good Practice Guide are welcome. Please email your views to the Secretariat of the Food Wise Hong Kong Campaign at foodwisehk@epd.gov.hk.

Disclaimer

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