



GUIDELINE FOR REDUCING SINGLE-USE PLASTICS IN FOOD DELIVERY AND TAKEAWAY – SHORT VERSION FOR RESTAURANTS AND CAFÉS



GUIDELINE FOR REDUCING SINGLE-USE PLASTICS

IN FOOD DELIVERY AND TAKEAWAY –
SHORT VERSION FOR RESTAURANTS AND CAFÉS

Imprint

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Developed by

Pollution Control Department
Advantage Consulting Company Limited

Thank you

Government sector

- Department of Deputy BMA
- Department of Environmental Quality Promotion
- Department of Health
- The Government Public Relations Department
- Environmental Research Institute, Chulalongkorn University
- Thailand Institute of Packaging and Recycling Management for Sustainable Environment, Federation of Thai Industries
- IVL Swedish Environmental Research Institute

Manufacturing sector

- PTT Global Chemical Public Company Limited
- Bio-Eco Company Limited
- Thai Paper Company Limited
- SCG Packaging Public Company Limited
- Thai Bioplastics Industry Association

Restaurant and café sector

- PTT Oil and Retail Business Public Company Limited (Café Amazon)
- Six Brew Coffee Group Company Limited
- CHA THAI International Company Limited
- Kinest Group Company Limited
- Better Moon Guesthouse & café x Refill Station
- Rise Café
- Mink Jaew Hon

Food delivery platforms

- Line Man (Thailand) Company Limited
- GrabTaxi (Thailand) Company Limited
- VELOX Technology (Thailand) Company Limited
- Delivery Hero (Thailand) Company Limited
- Tamsang-Tamsong Application, Institute of Asian Studies, Chulalongkorn University

Civil society and consumer sector

- Phuket Environmental foundation
- Less Plastic Thailand
- I Love Asoke
- TactTakeAction
- The Green Thailand
- Good Food Loop
- Kidkid Company Limited
- Greenery
- Submarine studio

Garbage collector sector

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Foreword

People's lifestyles have changed to accommodate comfort, while the Corona Virus (Covid-19) outbreak has raised hygiene concerns and imposed limitations on dining in restaurants and cafés, resulting in an increase in demand for food delivery and takeaway. When it comes to packing and transporting food to customers, plastic packaging is hard to avoid. Although the Covid-19 pandemic will recede, people around the world, particularly in Thailand, are habitually ordering meals online and preferring takeaway. As a result, the overall proportion of plastic waste in almost every city increased. In Bangkok, plastic waste has surged by more than 60%, with the majority coming from food packaging. Each food delivery generates 5-10 pieces of plastic waste, including a food bag, food box, split condiment sachet, spoon, fork, straw, and sometimes a secondary plastic wrapper.

Most food packaging is not treated properly because contaminated food leftovers are difficult to handle and most consumers do not separate their waste at sources due to a lack of integrated waste management, resulting in plastic waste leaking into the environment. The most efficient approach to address this issue is to reduce plastic consumption at the source, with restaurants and cafés playing a key role in promoting respective measures.

The government has policies in place to encourage the reduction and management of plastic waste, particularly, the Action Plan on Plastic Waste Management Phase 1 (2020-2022), which is part of the Plastic Waste Management Roadmap 2018-2030. In the process of defining strategies to minimise plastic waste from food delivery services, the government signed a Memorandum of Understanding (MOU) with food delivery platforms and allied agencies, the private sector, and academic institutions to encourage the use of eco-friendly packaging instead of single-use plastics in food delivery services. This will support the achievement of other national plans and policies, including the Plastic Waste Management Roadmap 2018-2030, the 20-year National Strategy (2018-2037), the 13th National Economic and Social Development Plan (2023-2027), the Solid Waste Management Master Plan (2016-2021) and the UN Sustainable Development Goals.

1 Plastic waste situation in Thailand

People's lifestyles have changed to accommodate comfort, while the Corona Virus (Covid-19) outbreak has raised hygiene concerns and imposed limitations on dining in restaurants and cafés, resulting in an increase in demand for food delivery and takeaway. When it comes to packing and transporting food to customers, plastic packaging is hard to avoid. Although the Covid-19 pandemic will recede, people around the world, particularly in Thailand, are habitually ordering meals online and preferring takeaway. As a result, the overall proportion of plastic waste in almost every city increased. In Bangkok, plastic waste has surged by more than 60%, with the majority coming from food packaging. Each food delivery generates 5-10 pieces of plastic waste, including a food bag, food box, split condiment sachet, spoon, fork, straw, and sometimes a secondary plastic wrapper.



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2 Plastic waste cycle and its management

The journey of single-use plastics in the food delivery and takeaway sector

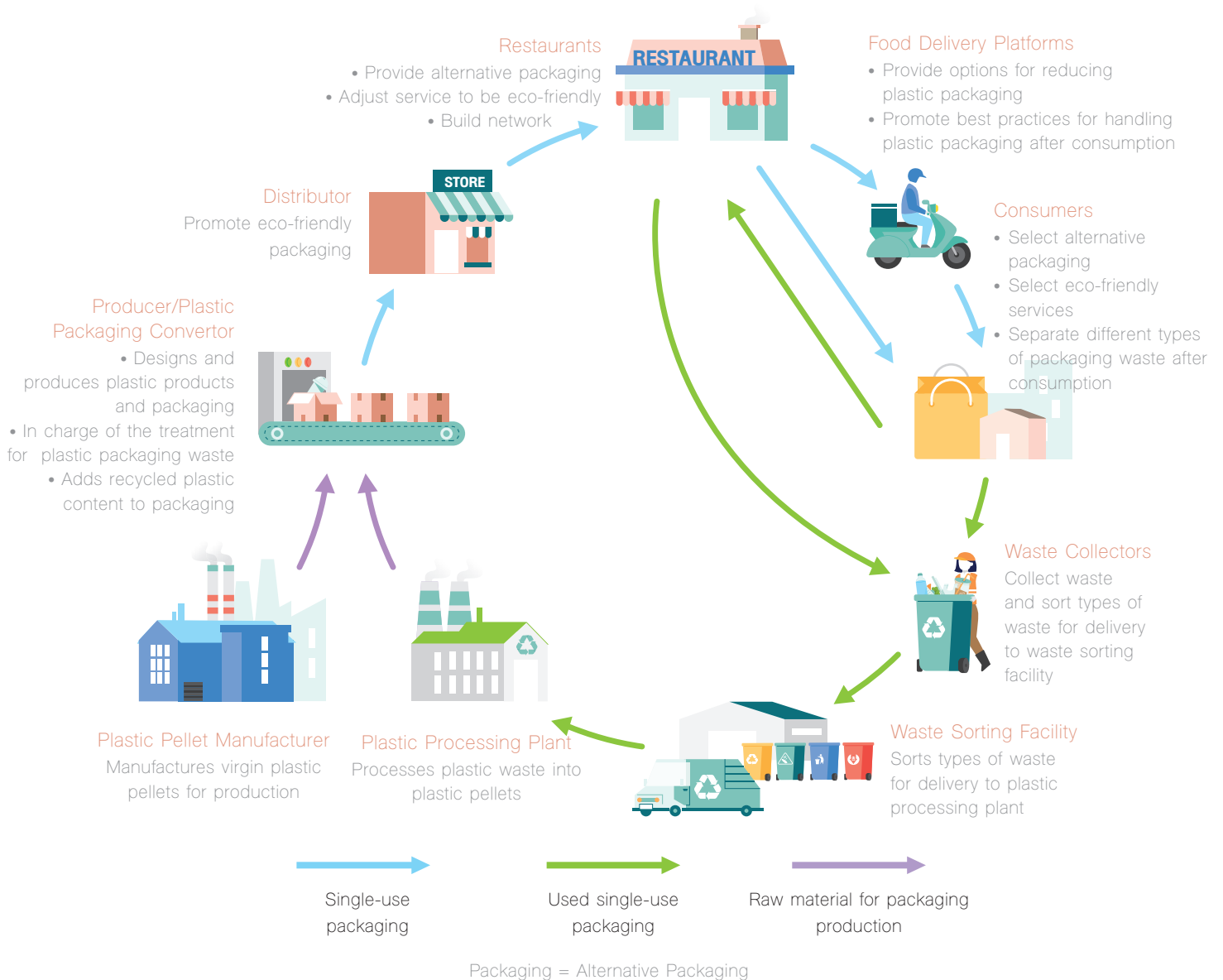


Figure 1 The life cycle concept of single-use plastic waste in a circular economy.

As showed in figure 1, the life cycle of plastic packaging begins with the manufacturing of plastic pellets, followed by the design of plastic packaging, and the distribution of produced plastic packaging to restaurants and cafés. The food delivery platform acts as an intermediary in the food delivery process. After the packaging was used for only a few hours, it enters the waste management process, either for reuse, recycling or disposal. Each process in a life cycle is supervised to ensure that it complies with national or local laws and policies. Restaurants and cafés play an important role in the plastic packaging cycle as they interact with manufacturers, merchants, food suppliers and customers. They have the power to control the market demand of plastic packaging in terms of both quantity and packaging design. In other words, the packaging choices made by restaurants and cafés influence the demand for plastic packaging and more sustainable packaging, which has implications for the post-consumption process or disposal.

Plastic waste management

Prevention, 3Rs (Reduce, Reuse, Recycle), and disposal are the three pillars of effective waste management. This will limit the amount of waste generated along the process. Prevention is simplest way to stop using unnecessary single-use plastics at source. Reduce is about the effort of lowering the amount of material used during the design, production, and consumption stages. Reuse is when plastics are reused without being processed or transformed. Recycle means the process of converting waste materials into new materials and objects. The recovery of energy from waste materials is often included in this concept, in which plastic waste that is not suitable for recycling is used to generate heat or power. The final stage of waste management is disposal of unavoidable waste in a landfill that should be a sanitary landfill site.

The current plastic waste management model in Thailand consists of (1) Landfills: The majority of plastic bags contaminated with food waste that are not economically worth collecting and cleaning for reuse, such as PP,

HDPE, and LDPE plastic bags, and carry-bag, that are long lasting and non-biodegradable usually end up in a landfill. Unmanaged landfill or open dumping is a major concern for this management option. (2) Recycling: As single-use plastic food packaging is frequently contaminated with food waste recycling is a complicated and costly operation. Furthermore, each type of plastic has a different method for feeding back into the recycling system, and it is vital to keep them all segregated. PET drinking water bottles are the most recyclable plastic. (3) Reuse: it covers reusing of packaging or waste materials without processing or transforming, such as reusing of food boxes at home. It is noted that some food packaging is designed for single use. (4) Incineration: Plastic waste that has not been separated is incinerated alongside other solid waste. The majority of incinerators in Thailand are not standardised, resulting in pollution and adverse health impacts. (5) Refuse Derived Fuel (RDF): the production of waste fuel (RDF) is the utilisation of waste as an alternative energy source, particularly in cement-making plants.

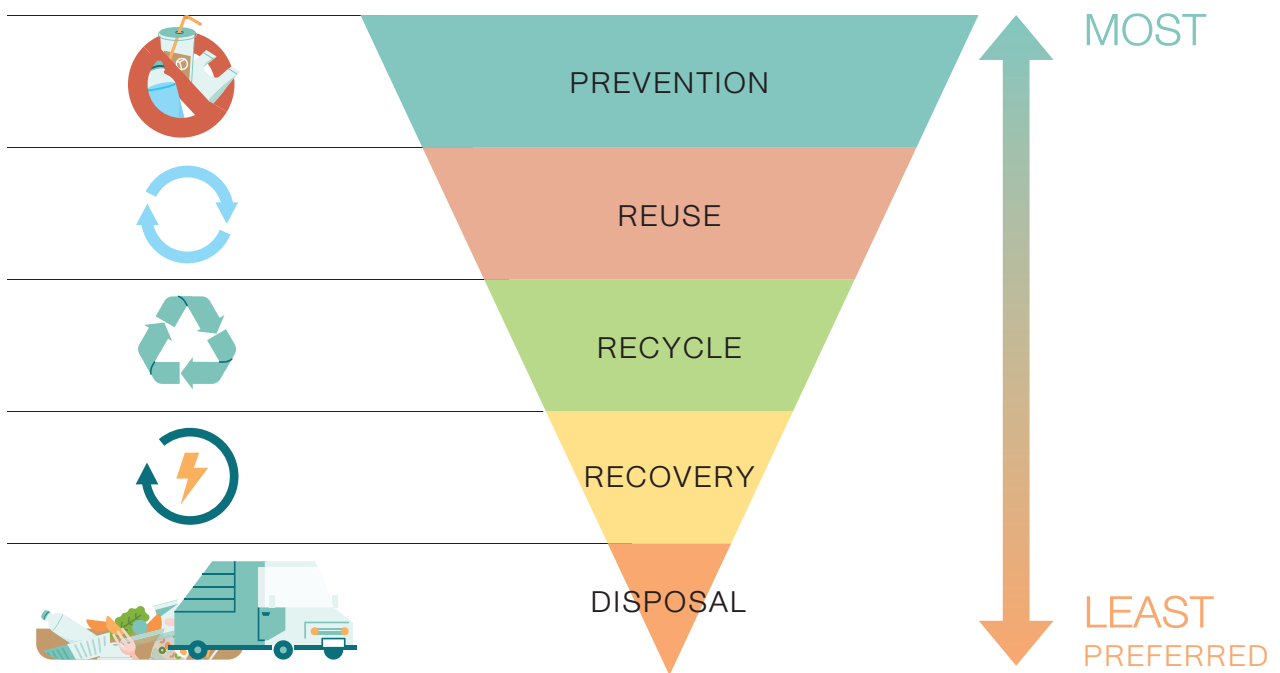
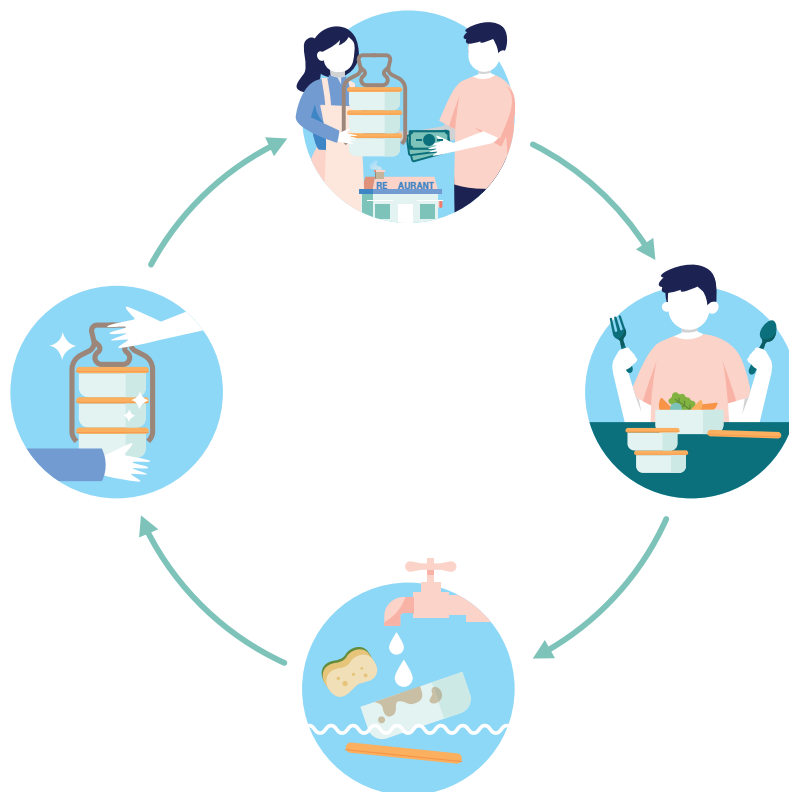


Figure 2 Waste Management Hierarchy

3 Circular economy

Circular economy is a model of production and consumption that involves sharing, leasing, reusing, repairing, refurbishing and recycling of existing materials and products as much as possible, it implies reducing waste to a minimum. The traditional linear economic model is based on a take-make-consume-throw away pattern.

Business models can be adapted to follow circular economy principles, e.g. by introducing “circular design” and producing long-lasting or easy to recycle products; using recycled, bio-based, and recyclable materials as the primary raw material for production; by offering “circular supplies” and creating a deposit-return system for reusable containers for circulation in shops; applying the concept of “Sharing Platforms” that focuses on combining and sharing resources for the greatest efficiency, or a take-back system for single-use packaging for recycling and proper plastic waste management to reduce waste as much as possible, including the encouragement of customers to bring their own (reusable) containers.



4 Examples of single-use plastic reduction in Thailand and other countries

The use of single-use plastics can be reduced through regulations, market mechanisms, voluntary approaches, information sharing and the development of post-consumer packaging management systems. Examples for these approaches are the following:

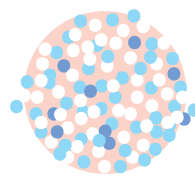
Legislation or rules that support the circular economy from production to post-consumption, such as material control and expanding the scope of producers' responsibility to post-consumer waste management. One example is imposing a ban on certain types of plastic. This strategy has been used on a global scale, as seen in the European Union's Single-Use Plastics Directive. Countries adopting a deposit-return system are, for instance, Denmark, Finland, Germany, Lithuania, the Netherlands, Norway, and Sweden. **In Thailand, seven types of plastic, including cap seal, oxo-degradable, microbeads, thin plastic bags with a thickness of less than 36 microns, styrofoam packaging, single-use plastic cups with a thickness less than 100 microns, and plastic straws will be banned by 2025.**



Cap seal



Oxo-degradable plastic



Microbeads



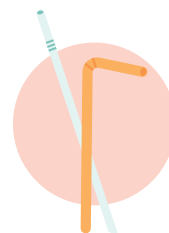
Thin plastic bags with less than 36 microns



Styrofoam packaging



Single-use plastic cups

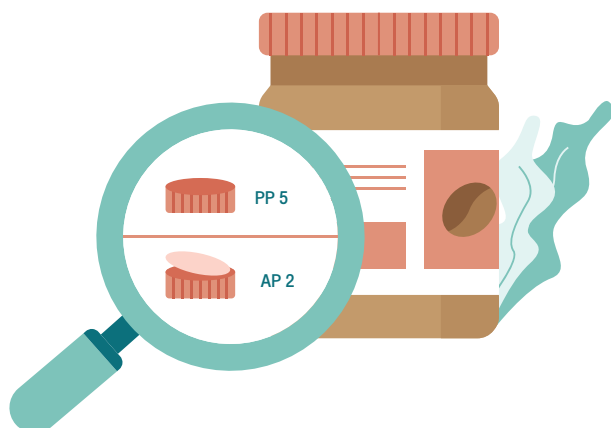


Plastic straws

Voluntary reduction strategy, such as building awareness to voluntarily commit to reduce the use of single-use plastics by switching to alternative packaging; promoting environmentally sustainable and reusable packaging; allowing consumers to bring their own containers for food and drinks, facilitating a deposit return system with a modest deposit for the containers; offering services to collect used packaging for reuse or appropriate management and disposal; providing incentives such as a discount for the next purchase or reward points when bringing reusable containers to the shop. These strategies represent non-legislative options arranged between the government and the manufacturers/retailers.

- Choosing alternative packaging or minimising unnecessary packaging are examples of initiatives to reduce single-use plastic packaging being undertaken worldwide, such as the “Wasteless Delivery project” in Thailand, which is a collaboration between restaurants in the Food Passion network, Grab Food, and Fest, a packaging manufacturer. Restaurants that use reusable containers under return systems are, for example, Locall bkk, Paleo Robbie, and Indy Dish. In UK, India, Belgium, the Netherlands, Germany, Switzerland, and Australia, reusable container deposit-return systems are adopted by food delivery service providers such as DabbaDrop, Dabbawala, Deliveround, Sharepack, Vanilla bean, Ozarka, Ozzi, reBOX, Yumiie, and Returnr.

Market mechanisms are interventions in market demand and supply through incentives or support. For example, the government provides subsidies or tax incentives on sustainable packaging for food delivery services or introduces incentives for shops to use sustainable packaging; restaurants and cafés provide incentives for consumers to reduce their use of single-use plastics. A levy is implemented in South Africa, Belgium, Denmark, Estonia, Finland, Latvia, the Netherlands, France, Italy, and numerous US cities by applying charges for single-use plastics.



The goal of disseminating **information** is to raise awareness and change production and consumption patterns across all sectors. Possible means are public relations, promotion of the green shop label, eco-labelling, displaying material types and methods of handling on food packaging, private green marketing, and network-building to support a circular economy. Restaurants and cafés can communicate internally with employees and externally with customers to ensure that everyone understands the purpose, significance, necessity, and terms of the shop’s efforts to reduce single-use plastics. This simple approach is commonly used today, e.g. by the Grab Food network who displays “green merchants” in the application.

The establishment of a **post-consumption packaging management** system begins with (1) Separating waste into plastics, organic waste, paper, and other materials; (2) Establishing an efficient waste collection, transportation, and storage method; (3) Establishing a cost-effective recycling process for unavoidable plastics and (4) Minimising the amount of waste disposed to landfills. The Central Pattana Group has embraced the idea of recycling used plastic packaging in response to the increased volume of plastic packaging from food delivery services during the Covid-19 pandemic by launching the ‘Rethink – Dump Good Challenge’. The Inthanin Café chain provides a discount to customers who return their used cups. And the Café Amazon shops installed a waste collection point to separate straws, cups, lids, and beverages before transferring the waste to ensure appropriate management.

5

Classification of restaurants to set a benchmark for reducing single-use plastics

Restaurants and cafés should self-assess their capability and interest in reducing single-use plastics according to a classification for Groups A, B or C as shown in the table below. The assessment will guide to the most appropriate method for single-use plastics reduction, as each method is different in difficulties, procedures, and implementation costs.

Group A: Very high level of interest and ready to go (with a high level of capability and interest)

Large-sized restaurants and cafés with several branches, with environmental policies and rules in place. The packaging is ordered in large quantities from the manufacturer. There are stringent hygienic guidelines in place. There is a full-service operation. There is a systematic management approach. Employees are bound by specific rules. There is a client base and consumer communication channels established. There is a Customer Relationship Management system with the financial ability to handle higher costs, such as budgeting for marketing and public relations on a long-term basis.



Group B: Interested and willing to try it out (moderate capacity and willingness to participate)

Medium-sized restaurants and cafés with few or no branches that might only offer a limited service, which is flexible in practice. Employees are likely bound by a set of rules and have their own customers, and a way to communicate with them. The shops are capable of creating a system that allows customers to accumulate points or receive discounts. It has the financial means to absorb some additional costs.



Group C: Interested, but not quite ready (limited possibilities for implementation)

Small-sized restaurants and cafés such as street food outlets and modest cafés with limited service. Cost is the most important factor in choosing packaging. There are no clear guidelines. Lack of financial resources to absorb higher costs.



6 Options for restaurants and cafés to reduce single-use plastics

Restaurant and café owners can reduce the use of single-use plastics by implementing some of the voluntary options listed below.

1

Waste separation at source for appropriate further management and disposal.



- Provide bins for different waste types at the restaurants/cafés.
- Prepare suitable space for waste separation in the restaurants/cafés.
- Communicate waste separation methods to customers by providing recommendations through various channels such as printing on saucers and cup sleeves and putting up signs at waste separation points.
- Provide training to gain a good understanding on waste separation and management for staff in the restaurants/cafés, including food waste, food packaging and others.

Note: Appropriate for all shops (A, B and C) as waste is mostly of the same types and will be easy to separate.

- Remind food preparation staff to ask whether clients want a cutlery or not as lowering the number of cutleries given out on a regular basis will reduce the shop expenses.
- Check client feedback on the food delivery platform to see if they received unwanted cutlery or side dishes/condiments.
- Only provide plastic bag/cutlery/seasoning/straw upon request by client.
- Provide discounts, special gift, or rewarding points when clients refuse to take plastic bags, cutleries or straws.
- Apply additional charges to single-use cutleries and containers to encourage consumers to bring their own reusable items by clearly communicating the reasons to gain the customers' understanding and acceptance.

Note: Appropriate for all shops (A, B and C) as it is easy to implement, easy to turn into habits and reduces expenses.

2

Stop giving away plastic items, if not requested by clients.



3

Avoid or lower unnecessary plastic packaging.



- Avoid or lower the use of
 - Plastic carry-bags with less than 36-microns thickness such as plastic wraps and plastic bags for fruits in shopping malls;
 - Bags with special size/type that are unlikely reusable such as plastic designed for carrying multiple cups;
 - Styrofoam food packaging;
 - Plastic straws;
 - Cups/single-use plastic lids.
- Consider how food can be packaged in a way that it can be transported with fewer packaging, for example side dishes may not require separate packaging.
- Reduce the use of plastic wrapping, sticky tapes, stickers, ribbons, ropes, side tags, and other decorations.

Note:

- Appropriate for all shops (A, B and C) as it is easy to introduce, turn into habits, and reduces expenses.
- Should take hygienic concern into account .

-
- Give customers an instant discount if they bring their own containers, such as personal mugs or food boxes, as long as they follow the shop's guidelines, for example, Group C shops give customers a two-THB discount if they bring their own cups, while Group B and A shops give customers a five-THB and ten-THB discount, respectively.
 - Customers that bring their own containers can earn points to redeem discounts or freebies. This strategy will encourage clients to come back (customer retention).

Note:

- Appropriate for A, B, and C shops.
- There are some hygienic concerns that the customers' containers must be thoroughly cleaned prior to use, particularly during the spread of Covid-19.

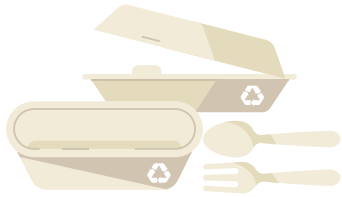
4

Encourage customers to bring their own containers.



5

Opt for more sustainable packaging.



- Use natural or biodegradable packaging for boxes, cups, straws, spoons, forks, and plastic bags with handles.
- Opt for sustainable packaging, for example
 - eco-design packaging, such as a cup with a lift-up cover, a spoon that can also be used as a fork, packaging that can be changed into a spoon or fork;
 - packaging that is easily to transport/carry without using plastic bags;
 - packaging that can be reused in several ways or customers can reuse at home such as thick plastic boxes, glass jars, and paper bags;
 - packaging and utensils completely manufactured with a single type of material (mono-material), which is easier to recycle;
 - packaging that reduces printing, screen labeling, or adding unnecessary elements;
 - easy-to-recycle utensils such as switching from coloured PET beverage bottles to transparent material.

Note:

- Appropriate for A, B, and C shops.
- Should consider the suitability of the packaging for each type of food or beverage, such as container stability, taste retention and food hygiene.
- This approach could lead to increased expenses. The government and food delivery service platforms may consider supporting in the form of tax incentives or discounts.
- Careful consideration should be given in selecting alternative packaging as some types of plastics require separated disposal. The use of plastics containing oxo substances should be avoided.
- Careful consideration should be given in selecting suitable packaging for different types of food and beverage, taking into account its stability, preservation of flavor and transportation hygiene.
- Careful consideration should be given in maintaining customers' expectation in the circumstance that alternative packaging may change food/beverage's image from the existing advertisement.

6

Offer option to borrow and return reusable packaging.



- Provide reusable and durable packaging that is easy to carry and suitable for each food/beverage type.
- Apply a “Pinto Network” for restaurants with customers ordering regular takeaway such as those working in surrounding office buildings or living in nearby accommodations. This will help to keep customers in the long run.
- Prepare a database of regular food delivery/takeaway customers for the ease of sale promotions, information on new menus and the return of used packaging.
- Provide space in the restaurant/café for regular food delivery/takeaway customers to keep their personal containers for reuse.
- Allow customers to return borrowed packaging at any branches or request collection of packaging by delivery services at their location. Customers are required to clean the packaging before returning it and might be subject to a deposit payment (suitable for restaurants with various branches). The drop-off and deposit-refund system should be in the same format everywhere.
- Provide training for staff about the borrow-and-return system and other related project details such as return locations and a borrow-and-return procedure (if any).
- Provide information to customers about the procedure to clean and return used packaging.
- Provide incentives, such as ways to return used packaging and offering discounts or gifts.
- Hire walking/bike delivery persons for food delivery in nearby locations.

Note:

- Appropriate for A, B, and C shops,
- There may be hygienic concerns from customer side. Restaurants/café's can gain the consumers' trust by adopting and communicating a standard container cleaning system. However, under extreme circumstances such as the Covid-19 pandemic, this approach may not be acceptable.
- There should be a survey to learn about the customers' willingness to pay the deposit. The deposit should be high enough for customers to return the container while still low enough for them to join the programme.

7

Provide a channel for returning and properly managing used single-use packaging.



- Establish drop-off facilities where customers can dispose used single-use packaging and shops can collect and prepare the waste for further treatment. Customers may be offered incentives such as discount coupons to redeem. The drop-off facilities should be in the same format everywhere.
- Customers are required to clean the packaging before returning it.
- Buy back or accept a return of some types of plastics such as PET and PE for further use or sale by having restaurants/cafés acting as the intermediate.

This option is suitable for shops that do not provide a wide range of foods. Their products shall put less strain on the container, such as foods with less colour, odor and oiliness, as well as drinks with a limited number of ingredients.

Note:

- Appropriate for A shops.
- Because the installation of a return point may be needed, the shop size must be considered.
- Customers may be curious if the returned packaging is reused to package food or beverages for sale.

Restaurants and cafés should engage in public relations, information dissemination and network-building as follows, to inform customers about their intention to reduce plastics to promote sales, and to attract customers who care about the environment:

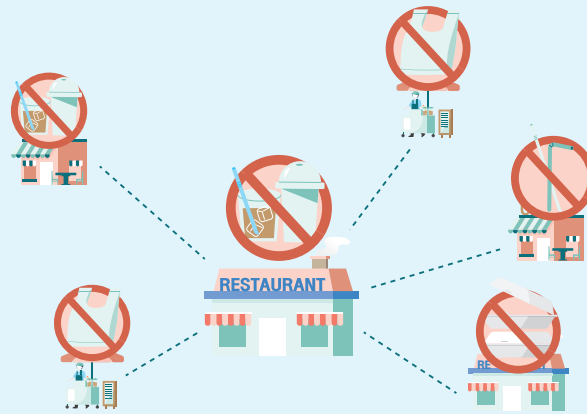


1

Public relations, communication, information, and knowledge dissemination to customers through social networks and other channels, both online and offline.

- Communicate the necessity to reduce single-use plastics in our everyday life and ways that customers can join the restaurants/cafés in doing so by:
 - Informing about post-consumption plastic treatment.
 - Using guidelines developed by government agencies.
 - Developing their own public relations material.
- Provide information for customer on the management of used packaging to ensure appropriate separation and disposal; it can be communicated via online channels or product labels on:
 - The type of plastics to facilitate waste separation.
 - Cleaning and separation requirements.
- Provide information about waste collection points and methods for such waste to be recycled or reused.

Note: Appropriate for all shops (A, B and C) as it is easy to implement and low cost.



2

Building network and collaboration to reduce the use of single-use plastics.

- Collaborate with medium and large-scale manufacturers
 - Group A shops can work with manufacturers to produce packaging that adheres to eco-design principles and is tailored to specific food and beverage categories. Green marketing can be done by restaurants and cafés by using eco- and sustainable packaging and fostering collaboration.
 - Group B and C shops can collaborate with manufacturers to purchase bulk eco- and sustainable packaging at a discount price, which will benefit both shops and manufacturers. Shops may promote the programme in order to improve the shop's and manufacturer's brand image.
- Create a “Pinto network” with customers who order meals from the shops on a regular basis, as well as customers who live nearby.
- Build partnerships with nearby restaurants and cafés to join the “Pinto Network” and create a joint food delivery system.
- Develop a collaboration with a food delivery platform to incentivise sustainable packaging discounts as part of the brand's advertising and public relations strategy.
- Develop a collaboration with civil society and a waste management facility for the disposal of single-use plastics (more information can be found in Chapter 8).
- Apply for a certification or register with relevant government agencies or organisations working in the area of single-use plastic reduction in order to attract more customers supporting green business.
- Build a network with food delivery platforms to offer discounts for the use of eco-friendly packaging and marketing incentive for green restaurants/cafés, such as advertisement credits under the marketing and public relations plan.
- Build a network among green restaurants and cafés for cheaper purchasing of eco-friendly packaging and jointly develop a packaging-return and redeem system for customers.
- Build a network of restaurants/cafés, public sector, civil society and packaging manufacturers to develop packaging standards for each product and use the same type of plastic with the aim to ease separation, collection and disposal.

Note:





- Appropriate for A, B, and C shops
- The form of collaboration will vary depending on the shop's potential.



Alternative packaging for restaurants and cafés

From the various packaging alternatives currently available, restaurants and cafés can select packaging that is suitable for their food type and delivery channel.

Single-use packaging

Type	Characteristic	Price range	Eco-friendly level
Natural materials: banana leaf, bract leaves, morning glory bulbs, krajoed, and lemon-grass.	Suitable for packing food to avoid mixing, such as side dishes. It should be thoroughly cleaned before use. The material may be unstable and not suitable for holding or transporting certain foods or beverages.	Around 1-2 THB	Made from natural materials with minimal processing/transformation, minimal energy consumption: biodegradable. 
Bioplastic-coated paper: boxes, cups or paper tubes	Natural decomposition takes 4-6 months. The packaging form may be unstable and unsuitable for holding certain foods or beverages.	<ul style="list-style-type: none"> • 2.2-4.4 THB for 450 ml box. • 2-2.5 THB for 600 ml box. • 2.38-2.60 THB for 16 oz cup. • 2.36-3.90 THB for 8 oz cup. 	Non-recyclable, biodegradable, made from bioplastic, natural ink used for all printings and screenings. 
Glass bottle/jar	Does not absorb odors or grease, is easy to clean and hygienic. It can handle both hot and cold food, although it is heavier and more likely to break than other materials. It's simple to reuse or recycle.	7-15 THB for 180 ml bottle.	High recycling rate but requires high energy consumption in the production and transportation. 
Bio-based plastic: food boxes/ straws/ cutlery made from plants.	In a "controlled fermentation environment", it can be biodegraded in three months (must be separated from conventional plastics).	<ul style="list-style-type: none"> • 2.25-6 THB for 600 ml box. • 0.30-0.55 THB for a straw 	May be non-biodegradable if not properly separated. 

Reusable package

Type	Characteristic	Price range	Eco-friendly level
Tupperware (LDPE or PP)	Oily stains and odors are easily embedded, cleaning must be done with considerable caution. It is microwaveable.	30-200 THB	Recyclable according to plastic type shown on the packaging, should be reused multiple times.
Glass food box (with lid)	Easy to clean and does not absorb odors, pollutants, or grease. It can handle hot and cold food and is microwaveable, although it is heavier and more likely to break than other materials.	60-300 THB	Recyclable but requires high energy consumption in the production and transportation and, therefore, should be reused multiple times.
Silicone food box/straw/tumbler	It is microwaveable, and flexible, resistant to bending without distortion and durable. However, its elasticity and flexibility may make transport difficult.	70-200 THB	Requires high energy consumption and resources in the production and is difficult to be recycled. Therefore, should maximise its use.
Stainless steel food box	It is durable and does not have any lasting food odors, but it is not microwaveable.	90-300 THB	Durable and recyclable but requires high energy consumption in the production. Therefore, should maximise its use.



8 Initiatives for restaurants and cafés to handle single-use plastic waste

For restaurants and cafés that want to contribute to the improvement plastic packaging management after its use, they can contact various projects or initiatives to send them their plastic waste and provide information about them to their customers to promote and maximise the flow of plastic waste into waste management cycles.



1 Send Plastic Home Project accepts both stretchy and rigid plastics, such as plastic bags, food containers, lids, bottles and films. Cleaned items can be dropped at the drop-off location for further recycling into new products. (Facebook Send Plastic Home Project)



2 (Cycle) Project accepts stretchy plastics, such as plastic bags, cap seals and zip-lock sockets for recycling purposes. Clean and dried plastics can be dropped off at the drop-off location of this project and “Mauwiset (Magic hands) x Won (Cycle) project” has installed “Tung Won Thung” (Plastic-cycle bins) to receive used plastic bags and film at department stores and petrol stations. Every 1 kg of plastics collected will contribute 5 THB to environmental foundations under “Change Plastic to Merit” (When You Recycle) in coordination with the “Send Plastic Home Project” (Facebook Won Project and Magic hands).



3

Less Plastic Thailand

collaborates with the “YOUturn Platform by GC” and accepts rigid plastics, such as drinking bottles, food containers and stretchy plastic, such as plastic bags and films. Consumers can drop off clean plastic waste at “YOUturn Drop Point” or “Drop Point for Clean Plastic” for further upcycling into products, such as PPE for medical staff under the “Bottle separation for helping doctor scheme” (Facebook YOUturn and Less Plastic Thailand Project).



4

Green Road Thailand

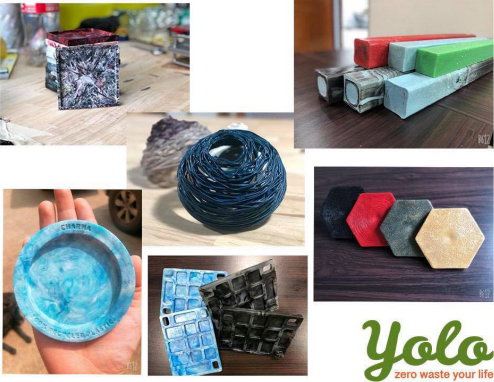
accepts PE and PP plastics, such as hot-food bags, milk bags, stretchy bags, carry bags and bubble wraps to be recycled into a paving block, in which the area of one square meter will require approximately 4,000 plastic bags. (Facebook GREEN ROAD Project)

5

YOLO - Zero Waste Your Life

accepts PP plastic, such as cups, food containers, cosmetic containers, soft cutlery and PS plastic, such as hard cutlery for upcycling into various products, such as saucers, lamps, artificial wood and palettes. (Facebook YOLO - Zero Waste Your Life Project)

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6

N15 technology accepts cleaned plastic waste, such as plastic bags, cups and bubble wraps, to be used for energy production. Consumers can send empty air-dried plastic containers to the project location. (Facebook N15 Technology Project)



7

Extended straw lifespan project accepts used straws for producing straw pillows for patients with bedsoreness. Consumers can send used straws to the “Power for sustainable future foundation” (Facebook Sustainable Power Foundation Project) and “Baan Phai community waste management learning center” (Facebook Baan Pai Waste Management Learning Center Project).

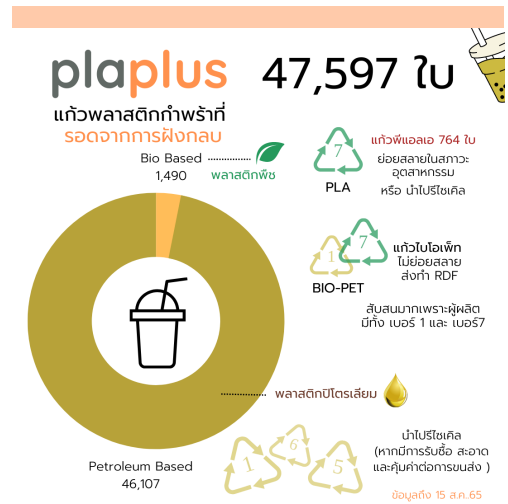
8

Precious Plastic Bangkok Project accepts HDPE plastic, such as plastic bags and PP plastic, such as hot-food plastic bags, for further upcycling into new products. (Facebook Precious Plastic Bangkok Project)



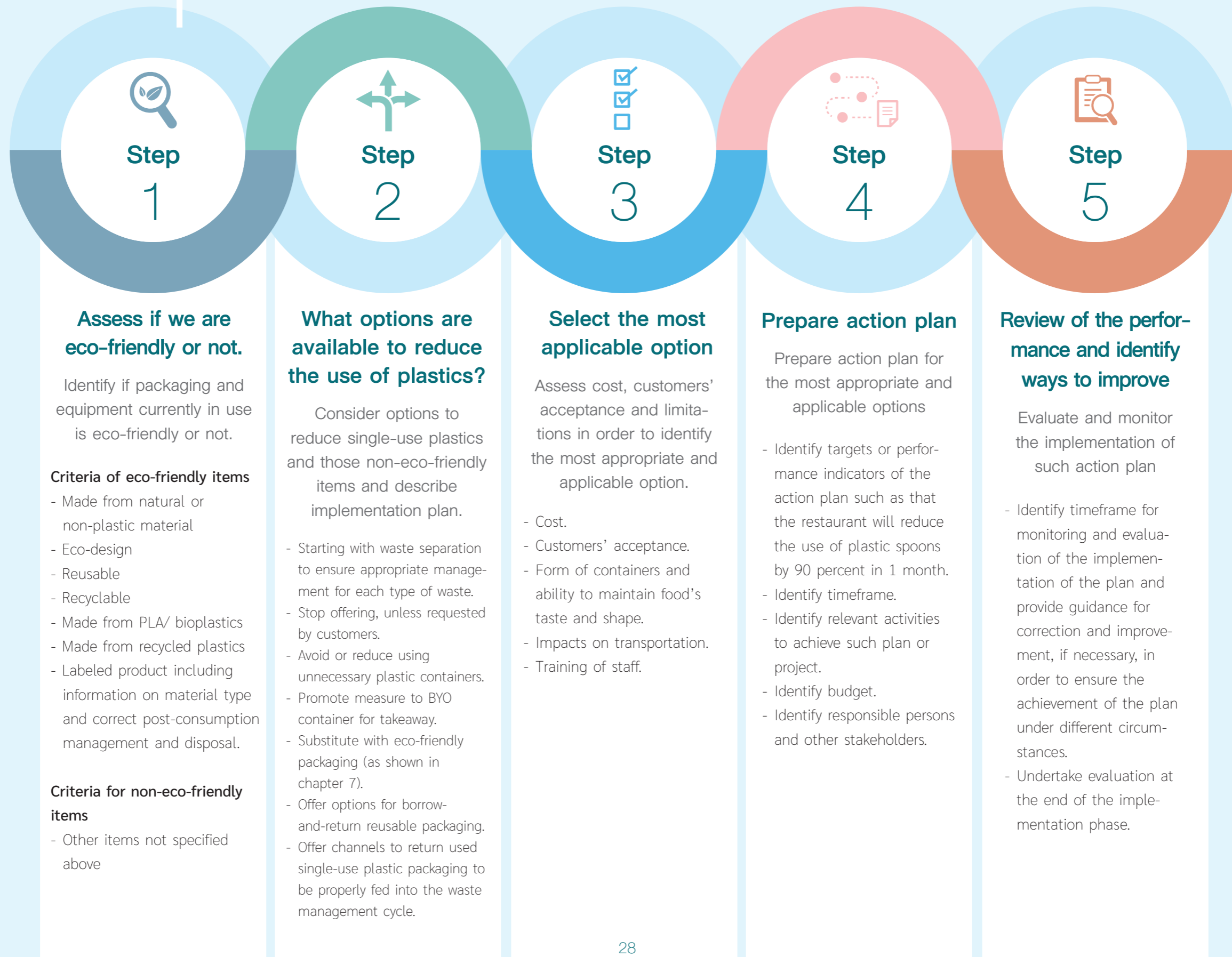


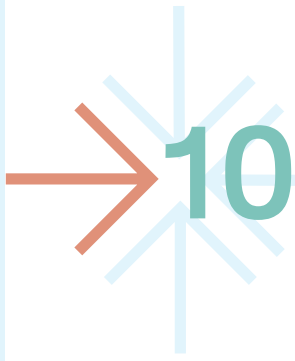
9 **Wishulada** accepts all wastes and by-products to be used for artwork, including plastic lids, soft-drink lids, ring-pull of aluminium cans and soft drinks and bags of cleaning products. In addition, some wastes will be used to make bins for surrounding communities. (Facebook Wishulada Project)



10 **PLA plus** collects and manages all kinds of single-use plastic coffee cups, in cooperation with the initiative N15 Technology and their activity “Drive Thru Clean Energy”. According to the fact that some plastic coffee cups are still recyclable, this initiative aims to reduce the contamination of plastic recycling processes, e.g., they integrate PLA (polylactic acid) coffee cups into decomposition under industrial compost conditions together with organic waste, instead of incineration. (Facebook plaplus.th)

9 Assessment of suitable options for restaurants and cafés





Form for assessing the most suitable option for restaurants and cafés (can be adjusted as appropriate)



Form A

Classify packaging and equipment used in the premise.

Order	Items (a)	Type/Qualification (b)	Eco-friendly (c)	
			Yes	No
1	Plastic bag	General single-use plastic (carry bags)		X
2	Plastic cup	Use of new PET plastic cups that do not contain recycled plastics		X
3	Lid for plastic cup	Single-use PET plastics		X
4	Plastic cutlery	Cutlery made from PS plastics		X
5	Banana leaf for dessert	Natural material	X	

NB: Examples for a better understanding.



Form B

Select applicable options

Consider options to reduce single-use plastics that are non-eco-friendly items and provide action plan										Assess the most appropriate and applicable option			
Order	Item (a)	Options to reduce plastic packaging (d)							Implementation Methods (e)	Consider appropriateness for each option (f)			Selected option
		Separate waste at source (d1)	Stop give away plastics, unless requested (d2)	Avoid/Reduce unnecessary use (d3)	Allow for BYO packaging in takeaway order (d4)	Substitute to eco-friendly packaging (d5)	Borrow-and-return packaging scheme (d6)	Accept used packaging (d7)		Implementation cost (f1)	Customers' acceptance (f2)	Other (Additional)	
1	Plastic bag		X						Not provide plastic bag	No	Acceptable		No provision of plastic bag but give out paper bag, if requested.
						X			Substitute with paper bag	Increase by 5%	Acceptable		
2	Plastic cup				X				Customer can BYO container/packaging	No	Acceptable		Allow customers to BYO container and provide extra reward points. Paper cup as substitute for some beverages.
						X			Expected to substitute by paper cup for some beverages	Increase by 15%	Acceptable		
							X		Customer can borrow packaging by making some deposit	Increase by 15%	Some level of hesitation		
3	Lid for plastic cup								No change	-	-		-
4	Plastic cutlery		X						Stop providing plastic cutlery	No	Acceptable		Stopped providing plastic cutlery
....													

NB: Examples for a better understanding.



Form C

Action plan and monitoring and evaluation

C-1 Develop implementation and monitoring plan

Item no 1 Plastic bags

Implementation guideline	<ol style="list-style-type: none">1. Stop giving away plastic bags for free2. Give away paper bags for handling of some items, if requested3. Apply charges for plastic bags
Target	100% stop of giving away plastic bags (and reduced amount of paper bags)
Timeframe	6 months
Related activities	<ol style="list-style-type: none">1. Apply charges for plastic bags2. Notify customers on the policy at least 2 weeks in advance<ul style="list-style-type: none">• Display notification at the front of the shop and cashier counter• Cashier informs customer about the policy
Budget	5,000 THB
Responsible persons	Mr./Ms. A and B
Monitoring and evaluation date	3 rd and 6 th month
Result	<ul style="list-style-type: none">• At the beginning, customers' response was not very welcoming, especially for new customers who were unaware of the policy.• More regular customers bring their own bags.
Ways to improve	<ul style="list-style-type: none">• Provide additional reward points when customers say no to plastic or paper bags.• Sale of reusable shopping bags.

NB: Examples for a better understanding.

Item no. 2 _____

Implementation guideline

Target

Timeframe

Related activities

Budget

Responsible persons

Monitoring and evaluation date

Result

Ways to improve

C-2 Develop guideline on waste separation in the restaurant/café

Target	100% of staff can separate and manage waste correctly
Timeframe	3 months
Related activities	<ol style="list-style-type: none">1. Training of staff on type of packaging used in the restaurant/café.2. Training of staff on waste separation and management.3. Provide bins for different waste types.4. Provide a suitable bin location for waste sorting and pick up by the waste collectors.
Budget	5,000 THB
Responsible persons	Mr./Ms. A and B
Monitoring and evaluation date	3 rd and 6 th month
Result	<ul style="list-style-type: none">• Staff is confused regarding the separation of some types of waste at the beginning, especially part-time staff who have never sorted waste.• More staff can separate waste correctly as they become familiar with the packaging types used in the restaurant/café.
Ways to improve	<ul style="list-style-type: none">• Introduce a bonus to catalyze the staff's willingness to separate waste correctly.• Organise a team competition to enhance collaboration within the restaurant/café.

NB: Examples for a better understanding.

C-3 Develop guideline for public relations and networking

Guideline/activities for public relations

Guideline/activities for networking
