

Taking food or drink to-go?

Return the packaging!



Reuse as a solution to plastic pollution



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Best practice and policy recommendations for a plastic-free future for take-away vendors and large events

» WHY ARE SINGLE-USE PLASTIC FOOD AND BEVERAGE CONTAINERS A PROBLEM?



Almost **half of all** human-made waste in the world's oceans is plastic packaging from take-away food and beverages.¹

Disposable containers and packaging for take-away food and drink are also among the most commonly found plastics in Danish nature.² In Denmark, around 300 million single-use plastic cups and 150 million single-use plastic food boxes are used every year.³ The number of disposable coffee cups alone is estimated at 130 million annually.⁴ A significant percentage of these single-use plastics is used in connection with the sale of food and drinks by take-away providers and for large events such as festivals, sports matches, and concerts. They are thrown away after a short period of use, creating large amounts of waste, as well as litter in nature and the marine environment.

» ... AND WHY IS REUSE A SOLUTION?

But it is not a given that single-use containers should be used for take-away services and large events. There is an alternative: re-usable cups, food boxes, and plates that can be returned, cleaned, and used again hundreds - or even thousands - of times. Closed reuse systems, such as deposit return systems, reduce the dependence on single-use plastic and are one of the most effective tools to prevent plastic from ending up in nature, especially in the marine environment.² This eliminates plastic pollution at the source.

CASES: REUSE SYSTEMS FOR TAKE-AWAY FOOD AND DRINK

Among the most apparent alternatives for single-use plastics are reusable to-go coffee cups and food boxes. However, take-away reuse systems can in principle include everything from yoghurt cups to pizza boxes. Existing experience shows that, among other things, local authorities can help drive the development of local reuse solutions for take-aways.



Cities are initiating reuse systems for take-away coffee and food boxes: Freiburg and Bern

Freiburgkoppen v. 2.0: In Freiburg, Germany, the municipal government has driven the development of a reuse system for coffee cups. The project started in 2016 as a response to increasing amounts of waste from disposable cups in the city. With a municipal investment in cups and a deposit system, the Freiburg cup has been distributed to over 130 cafés in the city with 130,000 reusable cups in circulation. In 2021, the system entered a new phase. The municipality of Freiburg decided that the system will be extended to include a reuse solution for food, while also covering an even larger part of the city's market. The city has therefore partnered with a commercial provider (**ReCup**) to handle the task. The choice of the provider has been made in cooperation with the city's restaurant industry. The municipality provides economic support for the establishment of the new system among the city's cafés.⁶

ReCup: <https://recup.de>

Bern & Recircle: In the Swiss city of Bern, a municipally launched reuse campaign became the basis for the establishment of the reuse system and company **Recircle**, which today serves around 1,800 restaurants and cafés in Switzerland and Germany with their reusable take-away solution. Cafés and take-away restaurants can subscribe to the Recircle system and be provided with reusable lunch boxes and coffee cups, which they can offer their customers. Customers pay a CHF 10 deposit to borrow a container and can then keep it for as long as they wish or return it to a Recircle partner (café / restaurant) to get the deposit back. Several cities and regions in Switzerland have actively supported the spread of the system.⁷

Recircle: <https://www.recircle.ch/en/>



Luxembourg government develops deposit system for food containers

In Luxembourg, the state, in cooperation with the hotel and restaurant industry, has established a deposit system for take-away food boxes, **ECObox**. The initiative is part of Luxembourg's National Waste Prevention Programme (**Anti-gaspi**). It is voluntary for restaurants, canteens, and take-away places if they want to participate in the system.

 **ECObox:** <https://ecobox.lu/en/>

 **Anti-gaspi:** <https://antigaspi.lu/>



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Disposable coffee cup. Copenhagen, Denmark.



Reuse solutions on the Danish market

A number of companies offering reusable solutions for take-away food and drink have established themselves on the Danish market, including **Kleenhub**, **New Loop** and **Genkop**. The solutions are not yet widespread on a large scale. See more about barriers to reuse solutions below.

 **Kleenhub:** <https://www.kleenhub.com/>

 **New Loop:** <https://thenewloop.dk/new-loops-historie>

 **Genkop:** <http://genkop.dk/>

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Trash bin with plastic cups. Copenhagen, Denmark.

FACT BOX

Danes are buying more and more from take-away services. The average yearly consumption of take-away food and beverages has increased by more than 40% in the period 2016-2020.

With this increased consumption comes a large use of disposable packaging and disposable tableware.⁵

CASES: REUSE AT LARGE EVENTS

Both at closed events such as concerts and football matches, as well as semi-closed events such as outdoor concerts and sporting events, it is possible to replace disposable packaging with reusable solutions.



4 Danish festivals say goodbye to disposable cups

Roskilde Festival, Northside, Tinderbox, and GRØN Festival replaced single-use beer cups with reusable cups in 2019 in collaboration with Tuborg and the environmental organisation Plastic Change. The new reusable cups are made of polypropylene plastic. Tuborg is responsible for the washing of the cups on site at the festivals with a mobile dishwasher that can handle over 9,000 reusable cups per hour. The initiative is estimated to replace about 2 million single-use plastic cups annually at the four festivals combined.⁸



Municipal bans on the use of disposable cups for events

In 2019, the City of Copenhagen adopted a ban on the use of single-use plastic cups for all major events in the municipality's areas, such as Distortion, CPH Pride, and events in Fælledparken. Instead, event organisers are encouraged to provide a reusable solution which focuses on cleaning and reusing cups. In Flanders, Belgium, similar legislative measures have been adopted. From 2022, it will also be prohibited to use disposable food packaging for all events organised by Flemish local authorities.^{9,10}



Rock without single-use plastic

After 25 years of serving draft beer in single-use plastic, the VEGA venue in Copenhagen has replaced single-use cups with reusable beer cups, from 2021 onwards. Prior to this, VEGA was consuming between 500,000-750,000 single-use plastic cups per year on average. The new reusable mugs can be washed and reused at least 25 times.¹²



Plastic-free football at European stadiums

Several large European football stadiums have decided to phase out the use of disposable cups for beverages. This includes France's national stadium, **Stade de France**, as well as stadiums belonging to the football clubs **Arsenal**, **Manchester City** and **FC Bayern Munich**.¹¹



Case: Reuse Seattle Vision of a comprehensive reuse eco-system

Reuse Seattle is a public-private partnership between the city of Seattle, the city's largest sports and entertainment venues, small and medium-sized restaurants and businesses, and the organisation PR3. The partnership has the stated purpose of transitioning the city's businesses and citizens from single use to reuse systems.

Reuse Seattle: <https://www.reuseseattle.org>

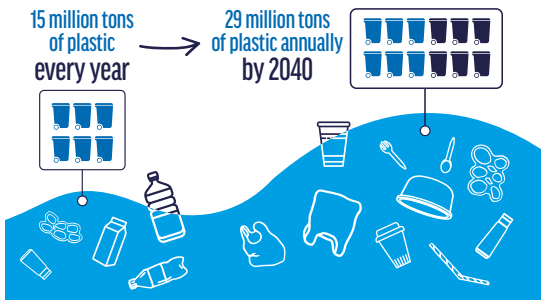
PR3 Standards - RESOLVE: <https://www.resolve.ngo/site-pr3standards.htm>

The project's first initiative was launched in 2022 with the pilot testing of a reusable cup (**R.cup**) for all of the city's major events.¹³ Reuse Seattle is also a testing ground for the development of design standards for reuse systems that can be extended to other cities in the United States or the world.¹⁴



Deposit Return Scheme (DRS) for plastic cups at Tivoli Gardens, Copenhagen, Denmark.

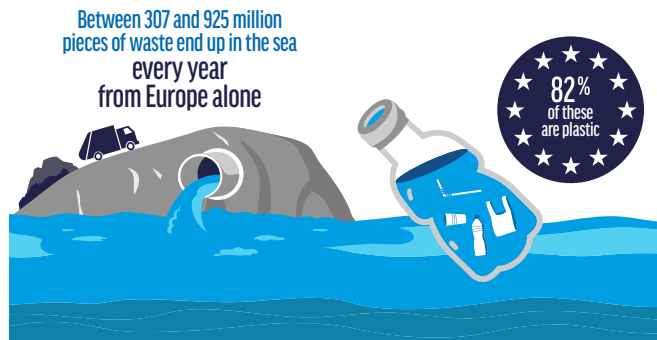
FACT BOX: Plastic Pollution in the ocean



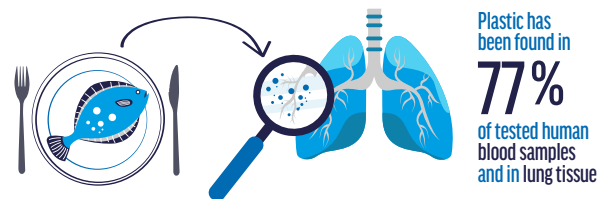
Every year, 15 million tons of plastic are released into the world's oceans.¹⁵ The introduction of plastic to the ocean is expected to grow to 29 million tons annually by 2040 if no action is taken.¹⁶



At least 700 marine species and more than 50 freshwater species have ingested or have become entangled in macroplastics.^{18,19}



Between 307 and 925 million pieces of waste end up in the sea every year from Europe alone. Of these, plastic represents 82%, mainly fragments of single-use products (bottles, packaging, bags).¹⁷



It can take hundreds of years for plastic to decompose in the ocean. The plastic never disappears completely, but over time decomposes into microplastics that, when eaten by marine animals, work their way into the food chain.^{20,21,22} Full knowledge of the related consequences for humans and animals in the long term does not yet exist. New research shows that plastic has been found in 77% of tested human blood samples and in human lung tissue.²³

BARRIERS TO THE EXPANSION OF REUSE SOLUTIONS

Even though both abroad and in Denmark there are reusable solutions for take-away and events, these still make up a small part of total consumption. Every single day, large amounts of disposable cups and food boxes are thrown away after only briefly being used:

The scale and spread of reuse solutions requires that:



Reusable packaging must become the default solution

Today, disposable containers are the standard choice in virtually all cafés, take-away vendors, and at large events. Single-use behaviour and solutions are the current “normal”, which is a central barrier that needs to be overcome to reduce plastic pollution. “Reusing” is a new habit that needs to be adopted, and behavioural change takes time and energy, compared to the apparent convenience of just doing “as you normally do”.

It's of critical importance that users are well-informed about the advantages of the reusable system, how it works, and that it is easy for consumers to take the extra step of returning containers, rather than simply throwing them away as they have always done. Such habits can be changed if the reuse solution is made the standard solution as shown by a Danish study.²⁴ Changing the “default setting” is an effective tool in steering behavioural change. This can be done through new legislation that makes reuse a common requirement for all take-away providers, as introduced in Germany.²⁵



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Disposable food boxes in a supermarket.



The task of developing solutions cannot be shouldered by restaurants and event companies alone

For restaurateurs and take-away providers, it can be a challenge to navigate the jungle of different types of packaging and confidently assess which reuse systems offer the greatest environmental benefit. It can also be difficult and costly to take on the development and implementation of a reuse system on your own.²⁶ Equally, it is hard for individual private actors to ensure broad adherence to the same system across both large and small cafés/restaurants (e.g., coffee chains) in the Danish market. Adherence at scale is needed to make the system easy for both service providers and customers to use. Experience from major Danish festivals demonstrates that large event organisers can achieve significant improvements by joining forces to provide a common solution like the Tuborg Cup. Despite this, there are still many stadiums and concert venues using disposable cups for beer and soda. This indicates that political regulation is needed at local and/or national level to provide the final push needed to make reusable cups mainstream for all major events.



Harmonisation is necessary for the deployment of large-scale reuse

A challenge for take-away vendors is that the current solutions for reusable packaging are fragmented and continue to represent a small share of the overall market. Harmonisation, with a common container design and return system, is needed for reusable take-away packaging to be seriously expanded and replace single-use containers as the standard solution. Harmonisation is necessary to:

- 1) Minimise the development costs of companies and ensure economies of scale associated with production and return logistics;
- 2) Ensure availability and usability for consumers and avoid consumers having to deal with a myriad of different reuse solutions with different forms of payment and return points;
- 3) Ensure that reuse systems comply with both hygiene and environmental requirements.²⁷



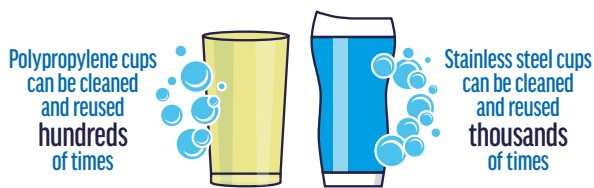
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Take-away coffee cup next to a Danish beach.

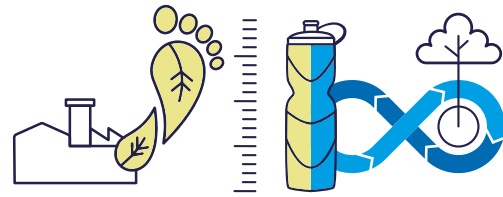
FACT BOX: Reuse is far better than recycling



“Reuse” is a process by which the container retains its physical shape and is used again and again without any preparation other than cleaning. “Recycling” is a process by which the packaging is broken down at a recycling facility and converted into a new product. Very few single-use food and beverage containers are recyclable. Globally, **only 9% of all plastic ever produced** has been recycled.²⁸



A reusable beer cup in stainless steel or polypropylene plastic thus has a “break-even” point of about 6 times. The more times a reusable cup is washed and reused beyond its break-even point, the greater the environmental benefits. Polypropylene cups can be cleaned and reused hundreds of times, and stainless-steel cups thousands of times.³¹



In the production phase, reusable containers will often have a larger environmental footprint (resource and energy utilisation) than disposable containers, because they are made of more durable materials that can withstand cleaning and reuse. But reusable containers quickly become more eco-friendly as soon as they’ve been in circulation a few times. This is shown by studies and life cycle analyses comparing reusable and disposable food and beverage containers.^{15,16,29,30}



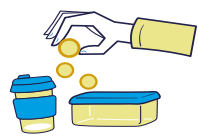
In addition, reusable containers do not end up as litter in nature in the same way as disposable containers do.

How reuse systems work?

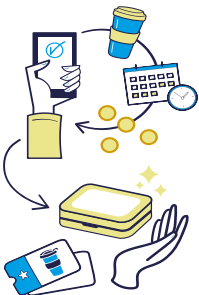
Reuse systems can be developed and implemented in several different ways.

For customers

When buying:



Deposit: Customers pay a deposit - for example, 10 DKK - for a reusable container (cup or lunch box) that can be kept for as long as the customer wishes. The container can be returned at any stage to retrieve the deposit.



Loan (App-based): The customer borrows a container for a set period but pays if the container is not returned within the agreed deadline.

Upon return:



Discount on next purchase: The customer pays a deposit for a reusable container that can be exchanged for a new reusable container on the next purchase, or a token for use the next day (especially useful at music festivals).

Return of take-away packaging can be made to any cafés that are part of the network.

Alternatively, **returns can be made to vending machines** located in the city or within a given area, such as amusement parks/festival sites.

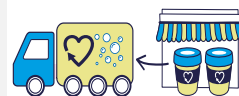
For cafés and event organisers:



Individual reuse containers and washing facilities.



Common system with uniform reuse containers, but cafés/venues are responsible for cleaning the containers themselves on site.



Centralised system with uniform reuse containers and centralised cleaning service provided by a third party.

OCEANA RECOMMENDS

Political support and clear legislation at both local and national level is needed to ensure the necessary scaling of reuse solutions, so that reuse can become the norm.



LOCAL LEVEL: RECOMMENDATIONS FOR LOCAL DECISION-MAKERS

Municipalities, medium-sized and larger cities can play a crucial role in driving innovation and acting as testing grounds for the development and scaling of reuse systems for both take-away and large-scale events. Implementing reuse systems can help to reduce the amount of street litter, make the city cleaner, and minimise costs associated with clean-up. As a municipality, you can, among other things, support the development of reuse systems through funding the transition of local businesses, infrastructure in the form of space for container-return vending machines and cleaning facilities, as well as facilitating knowledge-sharing among key stakeholders, including to stimulate standardisation. Municipalities can also avail of opportunities to implement local requirements for events taking place on municipal land, as has been done in the City of Copenhagen.



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Single use containers in a supermarket shelf.

Oceana recommends that local decision-makers:

- 1) Introduce requirements on the use of reusable containers (cups and food containers) for all events taking place on municipality-controlled property, such as public spaces.
- 2) Establish a reuse system for take-away food and beverages through partnership with local cafés, restaurants, and other stakeholders and by providing financial support and infrastructure.
- 3) Collaborate with other cities/regions for the deployment of similar solutions across the country.



NATIONAL LEVEL: RECOMMENDATIONS FOR NATIONAL DECISION-MAKERS

Changes in national legislation are required for reusable solutions for take-away and large events to become the standard in Denmark. Municipalities can be ideal as testing grounds, but as a municipality there are limits to the obligations and standards which can be imposed on private businesses. A well-functioning, harmonised reuse system – such as for take-away coffee - requires harmonisation across the country, so that a coffee cup used on a train ride can be returned anywhere in the country, regardless of whether the consumer has departed from Aalborg or Copenhagen.

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Oceana recommends that national decision-makers:

- 1) Introduce a national requirement for the use of reusable containers for all major events.
- 2) Introduce a national requirement for take-away providers to offer customers a reusable solution for their take-away food and drinks.
- 3) Establish a national and nationwide reuse return system for take-away containers for food and beverages.

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» ABOUT OCEANA

Oceana is the largest international advocacy organization dedicated solely to ocean conservation. Oceana is rebuilding abundant and biodiverse oceans by winning science-based policies in countries that control one third of the world's wild fish catch. With over 200 victories that stop overfishing, habitat destruction, pollution and killing of threatened species like turtles and sharks, Oceana's campaigns are delivering results. A restored ocean means that one billion people can enjoy a healthy seafood meal, every day, forever. Together, we can save the oceans and help feed the world.

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