



**BLASTIC**

PLASTIC WASTE PATHWAYS INTO THE BALTIC SEA

# BLASTIC LMLAP GUIDELINES DOCUMENT

for municipalities working with  
mapping and prioritisation tool

Prepared by Foundation for Environmental Education Latvia  
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## INTRODUCTION

In this report, we propose a selection of marine litter reduction measures most relevant for municipalities, and urban areas in particular.

The selection list consists of 38 creative ideas and practices, and some of them are already introduced in European cities and beyond. We hope that these examples might encourage local municipalities and give them support for development of local action plans for marine litter prevention and reduction.

All measures are structured according to the topical areas based on the sources most relevant for different activities within the municipality's responsibility area (e.g. waste management, street cleaning, wastewater treatment) or economic activities (tourism and recreation, industrial and commercial activities, agriculture) where litter is generated.

Each measure has a short description, including its relation to the European waste hierarchy principle<sup>1</sup>.

## HOW TO USE THIS GUIDELINES

All measures are linked to the most critical litter creating sources within the municipality's responsibility area. In order to find most suitable measures, we suggest to carry out a step by step mapping of the sources and pathways of litter in your municipal area. Identification of litter streams can be carried out by filling the "Checklist of mapping the potential sources of marine litter and prioritization tool". The final stage of the Prioritization tool automatically generates most relevant suggestions for marine litter prevention and reduction by implementing one or more measures from the selection list. In this report the link between the most critical litter creating source and the most relevant measure is defined in the section "Reference to mapping checklist (Q No)". Each litter creating source can be covered by at least one measure. There are several measures which can be attributed to more than one litter creating source within the municipality's responsibility area- please see the indication in the table "Additional measures, described under other sectors".

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<sup>1</sup> <http://ec.europa.eu/environment/waste/framework/>

# B

## RECREATION AND TOURISM

### Measure 1

**Incentives for retailers to avoid selling single use plastics or any disposable items, and motivate introduction of deposit refund schemes, in particular for beverage containers.**



*Relation of measure to the European waste hierarchy*

#### In brief

Municipalities to require, under licensing laws, that venues that serve alcoholic and other drinks in outside places, e.g. terraces, pavements, be obliged to use reusable (glass or durable plastic) containers rather than disposable containers. Returns could be secured through the implementation of a deposit-refund system. In certain events, it is regulated that single use plastics or any disposable items are not allowed.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Economic instrument	Food- and beverage related waste	B8 Waste management system (public beaches)  B9 Waste management system (events)

### Possible examples

#### Sweden

“Vegovision” is a food fair for vegetarian and vegan food that is held every years in 3 different locations in Sweden and attracts about 3000 visitors per event. The organizer of the event has strong regulations on the retailers of the fair and has prohibited the use and distribution of plastic bags and single use plastics. Another example is the "Medieval Week" on Gotland, where the organizer has forbidden food retailers to use single use plastics. Instead, beverages, such as soft drinks are served in recycled, hard plastic cups, which are dispensed and collected during the event. These cups are also for sale, which results in that same cup or glass is used for most drinks throughout the week. Another festival,

"Forsrännningen" is one of Uppsala's major events where students build boats and compete on the river. The construction of the boats and the competition itself attracts many visitors. It has been difficult to replace plastic cups with cardboard. In order to reduce the use of plastic bottles for beer, the organizer has chosen to buy a larger amount of reusable cups of hard plastic that are collected after use, washed and then reused.

### **Tallinn, Estonia**

Since 2017 the City of Tallinn has set a goal to move towards banning the use of disposable plastic cutlery and crockery at large-scale public events that take place in the city. It sets an example itself through public procurement – whenever a professional event organiser is tendered, a criteria is set that the use of disposable plastic cutlery and crockery is not allowed. All other large public events need to ask permits from the municipality and should comply with the restriction for usage of disposable plastic cutlery and crockery. In the future it is planned to ban the use of any disposable cutlery and crockery. It is recommended that the event organisers use reusable items which are made available using a deposit-refund system applied to cups, bottles and plates. Deposit may not be applied to cutlery, as it has been experienced that when people return cups and plates, any cutlery used is usually returned as well. Any other options to shift from using the disposable items to using reusable items are also encouraged and allowed.

### **Munich and Freiburg, Germany**

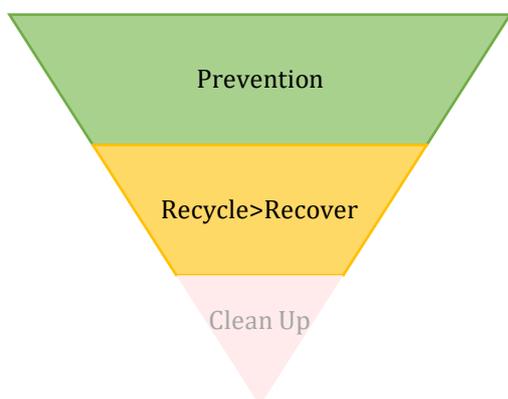
A ban on disposable drink containers and tableware for large scale public events on land owned by the authority has been in place since 1990. The City offers rental of mobile dishwashers and crockery sets. It is estimated that between enforcement and 2004, 50% less waste has been generated by events, and the higher investment of purchasing reusable cups is recovered after 7 to 11 reuses, when washing, street cleaning and disposal is taken into account. The Freiburg Cup is an incentive started by the Council and University of Freiburg, Germany in 2016. The reusable cup has replaced one-use disposable coffee cups in cafes and bakeries across the city, and can be bought for a €1 deposit, and is washed and redistributed by the participating stores.

### **Find out more:**

<http://www.seas-at-risk.org/images/pdf/publications/SeasAtRiskBackgroundreportSingleuseplasticsandmarineenvironment.compressed.pdf>

## Measure 2

### Procurement guidelines to reduce single use plastics or any disposable items.



*Relation of measure to the European waste hierarchy*

#### In brief

Make greater use of public procurement and funding to support plastic waste prevention and separate collection of plastics. Put obligations on event organisers and managers, administrators, or tenants of public beaches, marinas, parks and other public places to use reusable items at events and public places.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Regulatory instrument	Food- and beverage related waste	B8 Waste management system (public beaches)
	Consumption waste	B10 Waste management system (recreational areas)
	Plastic waste	B11 Waste management system (marinas)

#### Possible examples

##### Tallinn, Estonia

Since 2017 the City of Tallinn has set a goal to move towards banning the use of disposable plastic cutlery and crockery at large-scale public events that take place in the city. It sets an example itself through public procurement – whenever a professional event organiser is tendered, a criteria is set that the use of disposable plastic cutlery and crockery is not allowed. All other large public events need to ask permits from the municipality and should comply with the restriction for usage of disposable plastic cutlery and crockery. In the future it is planned to ban the use of any disposable cutlery and crockery. It is

recommended that the event organisers use reusable items which are made available using a deposit-refund system applied to cups, bottles and plates. Deposit may not be applied to cutlery, as it has been experienced that when people return cups and plates, any cutlery used is usually returned as well. Any other options to shift from using the disposable items to using reusable items are also encouraged and allowed.

### **Sweden**

Keep Sweden Tidy (KST) has developed an ECO-Event tool to help and support event organizers in their sustainability work. Since 1999, KST has eco-certified hundreds of festivals, sports events, fairs and meetings, all of which have been assessed and approved in accordance with the KST criteria.

<https://www.hsr.se/miljomarkt-event>

<http://www.seas-at-risk.org/images/pdf/publications/SeasAtRiskBackgroundreportSingleuseplastic sandmarineenvironment.compressed.pdf>

### **Hamburg, Germany**

The City of Hamburg introduced green public procurement rules banning municipal use of a range of plastic based single use products, including coffee capsules, bottles and utensils.

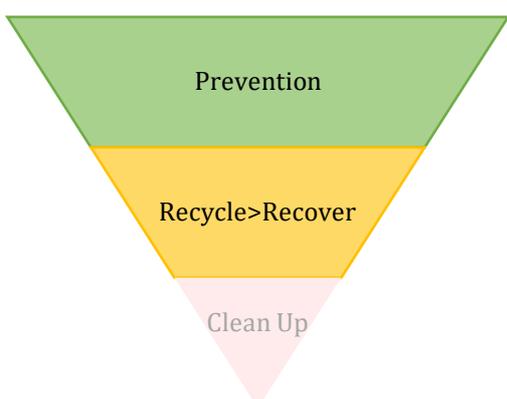
### **Vienna, Austria**

Vienna implemented measures, from 1st January 2011, to drinks being served at events should be served from reusable bulk containers (e.g. barrels, reusable bottles) where these are available in Vienna, and the containers (cups/glasses) must be reusable. When distributing food, reusable tableware and cutlery (e.g. made of glass, ceramic, metal or plastic) must be used. Exceptions can be made for safety reasons. Under such circumstances, items should be made from renewable materials, e.g. wood or cardboard.

<http://www.seas-at-risk.org/images/pdf/publications/SeasAtRiskBackgroundreportSingleuseplastic sandmarineenvironment.compressed.pdf>

## Measure 3

### Arrangement of adequate waste collection infrastructure



*Relation of measure to the European waste hierarchy*

#### In brief

Ensure that the bin design or container design prevents plastic packaging and other waste (e.g. blown away, taken away by birds, etc.) from escaping. Choose between different types of bins: completely open or covered, bins with holes, closed with a cover, with a slit, above the ground or underground. Choice depends on the available budget, local circumstances (e.g. problem of sea gulls), cultural behaviour.

Ensure public drop-off points where people can bring their source-sorted plastic packaging waste. The location of drop-off points is important. They should be strategically placed where people do their daily business and at places where people naturally pass.

Make sure that:

- collection system is easily understandable and user-friendly;
- it is possible to place rigid and flexible plastic packaging together in the same fraction;
- access to discard source-sorted plastic packaging is on a short distance;
- the container has a sufficient volume.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Food- and beverage related waste	B8 Waste management system (public beaches)
	Consumption waste	B10 Waste management system (recreational areas)
	Plastic waste	E15 Packaging waste management (public packaging waste collection system)
		F8 Street cleaning infrastructure (litter bin design)

## Possible examples

### Sweden

The main part of the plastic packaging waste from households is collected through bring systems. FTI (a company in the recycling industry) is in charge of approximately 6,000 unmanned recycling stations throughout Sweden where households can leave a mixed fraction of rigid and flexible plastic packaging waste. The recycling stations are placed at frequently visited areas such as close to shops, petrol stations and in residential areas. There is no rule deciding the number of recycling stations in each municipality, but FTI is obliged to consult with the municipalities about where recycling stations are best suited. The number is decided upon local conditions and the number of citizens. Establishing a new recycling station should also be “environmentally motivated”. The recycling stations may have different design but usually includes separate containers for packaging waste of metal, plastic, paper, colored and transparent glass and newsprint. The containers are emptied by crane trucks or front-loaders on a regular basis depending on the material type.

<http://norden.diva-portal.org/smash/get/diva2:788195/FULLTEXT03.pdf>

FTI in Sweden previously motivated establishment of unmanned recycling stations in areas with at least 500 inhabitants and a supermarket open all year. The decision is rather based on local circumstances. The establishment of a new recycling station can e.g. be motivated if the collection vehicle passes the area on its normal route.

<http://kunststofkringloop.nl/eu-conference-on-plastics/>

## Measure 4

### Arrangement of adequate cleaning of public spaces



*Relation of measure to the European waste hierarchy*

#### In brief

The activities include emptying the rubbish bins, collecting larger pieces of litter from the beach by hand and collection of smaller pieces of litter (e.g. cigarette butts) by a specialized vehicle. Regular waste collection, also in urban peripheries, can reduce fly-tipping. Regular street cleaning include picking up litter to reduce occurrence of wind and rain-borne waste that can become marine litter.

Minding seasonal specifics, e.g., top recreational season, municipal litter services, street cleaning and public waste collection can target to areas particularly near waterways.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Food- and beverage related waste	B8 Waste management system (public beaches)
	Consumption waste	B10 Waste management system (recreational areas)
	Plastic waste	

		<p>E7 Municipal waste management (coverage of waste collection)</p> <p>F4 Street cleaning management (service quality)</p>
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### Possible examples

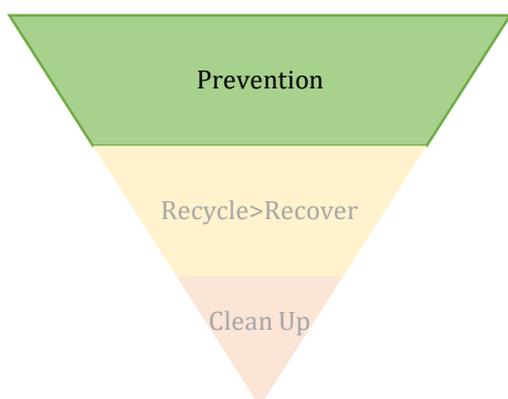
#### Cyprus, Limassol

Cleaning of a stretch of beach covering 3.2 km takes place year round by the Municipality of Limassol. Between April and October, cleaning takes place two times a week, whereas in the off-peak tourist season (November to March) the beach is cleaned only once a week.

[http://www.marlisco.eu/Municipal\\_beach\\_cleaning\\_in\\_Limassol.en.html?articles=municipal-beach-cleaning-in-limassol-cyprus](http://www.marlisco.eu/Municipal_beach_cleaning_in_Limassol.en.html?articles=municipal-beach-cleaning-in-limassol-cyprus)

## Measure 5

### Incentives for smokers to dispose cigarette butts responsibly, ensuring appropriate collection and disposal for cigarette butts (and chewing gums)



*Relation of measure to the European waste hierarchy*

#### In brief

Ensure that ashtrays are available, particularly in areas that are popular for walks (i.e. parks, promenades etc.). Ensure available receptacles in the high-foot-traffic corridors and transition points, as large number of cigarette butts are thrown on the floor by people who are on the go. Ashtrays should be emptied regularly to avoid overflows. If these options don't work, stricter measures, such as penalties, to avoid inappropriate disposal could be considered.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Smoking related waste	B10 Waste management system (recreational areas)  C3 Awareness and behaviour (residents')

		attitude) F7 Street cleaning infrastructure (litter bins for smokers)
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## Possible examples

### Sweden

In 2016 and 2017, two different nudging projects were conducted to try to reduce the number of cigarette butts on the street in Gothenburg. In 2016, ashtrays of three different designs were placed at a number of bus and tram stops in Gothenburg; one black, one orange and one with artistic decoration. In 2017, orange and black ashtrays were set up at a number of stops, and they were combined with a sign of pigeons that urged the smokers to use the ashtray. In some places, decals on the ground were used instead of signs to pay attention to the ashtrays.

#### The "Ballot Bin" example:

The Ballot Bin is a customisable ashtray proven to reduce cigarette butt litter. Each Ballot Bin displays a question and two answers. Smokers vote by putting their cigarette butt in the slots underneath their preferred answer. The litter stacks up behind the clear glass front in two columns, showing which answer is more popular. The questions can be easily changed by the Ballot Bin owner. They can be funny, topical, provocative – whatever works for your audience. Smokers find these ashtrays much more engaging than the alternatives and are more likely to use them.

<https://ballotbin.co.uk/>

### Stockholm, Sweden

The City of Stockholm operates a large number of digitalization projects in order to make Stockholm the world's smartest city. The so-called "Big Belly"-waste baskets are fitted with solar-powered software, mobile devices and sensors that report in real time when they are about to become full and it is time for emptying. They also have built-in technology that packs the waste.

Regular bins need to be emptied 1–3 times per day. As the smart bins are solar powered and pack the waste, they only need to be emptied four times a week. This means fewer garbage collection runs, lower costs and reduced emissions.

<https://international.stockholm.se/governance/smart-and-connected-city/how-the-smart-city-develops/>

<https://bigbelly.com/platform/>

### **The Netherlands**

An innovative project "Crow bar"- trained crows bring a cigarette filter to the Crowbar, where they drop it into the bottom funnel to get it checked.  
<https://www.crowdedcities.com/#thecrowbar>

### **Larnaca, Cyprus**

The Larnaca tourist board, the Cyprus Tourism Organisation and the municipality are placing ten stands with the biodegradable plastic cups at strategic points on the town's busiest beaches. Each stand has written instructions, 100 ashtrays and a special waste bin. Visitors can pick up the plastic ashtray-like cones and stick them in sand or pebbles for the duration of their stay. When leaving, smokers are expected to empty their ashtrays in the bin and put them back on the stand.

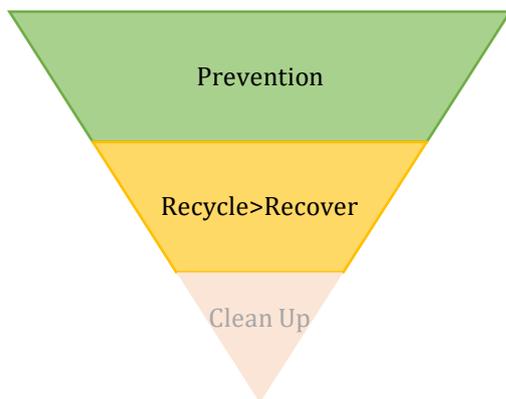
<https://www.togetheryprus.org/en/about-us/>

### **France- Solutions to fix cigarette littering**

[https://www.cleaneuropenetwork.eu/pdf/2017-06-28\\_GP.pdf](https://www.cleaneuropenetwork.eu/pdf/2017-06-28_GP.pdf)

## Measure 6

### Water fountains, re-fill stations in public events, mobile water stations



*Relation of measure to the European waste hierarchy*

#### In brief

Measure aims at reducing the use of plastic bottles and increase accessibility to tap water by introducing new schemes to stimulate the deployment of public water fountains and bottle-refill stations across the city.

#### Possible examples

##### Sweden

Events from marathons to music festivals are infamous for creating huge clean-up operations to tackle the mess left by the crowds of visitors, not least the swathes of plastic cup and bottle litter. "Bluewater" has the products to change that to a bad memory. "Bluewater" hydration stations serving chilled still or sparkling water are designed to generate clean drinking water on site and end the need for single use plastic bottles, cups and other containers.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Food- and beverage related waste  Plastic bottles	B8 Waste management system (public beaches)  B9 Waste management system (outdoor events)  B10 Waste management system (recreational areas)

<https://www.bluewatergroup.com/sv/bluewater-event/>

### **Copenhagen, Denmark**

Approximately 60 drinking fountains have been installed across the city to encourage the use of refillable bottles. HOFOR Utilities Company, who installed the fountains, estimate 1 litre of water from the fountain as a 0.0002 kg CO<sup>2</sup> eq. compared to 0.18 kg CO<sup>2</sup> eq. from 1 litre of bottles water.

<http://www.seas-at-risk.org/images/pdf/publications/SeasAtRiskBackgroundreportSingleuseplastic sandmarineenvironment.compressed.pdf>

### **The USA**

Starting in 2016, the Refill Revolution at Bonnaroo Festival, Tennessee aims to reduce plastic waste by offering festival goers alternative to plastic, by installing water-refill stations and selling reusable bottles and steel cups with carrying straps with incentives such as a free beer. In 2016, 300,000 fewer beer cups were used, and the organisers estimated 800,000 fewer water bottles were used.

In Evanston, Illinois, the City Council has developed a Mobile Water Station, which provides clean tap water at events and can be hired for \$100. In 2014 it supplied water at 55 events, reducing disposable 12-ounce bottle use by 99,000.

<https://www.plasticpollutioncoalition.org/pft/2017/6/12/refill-revolution-at-bonnaroo-diverts-2-mil-plastic-cup-and-water-bottles-from-landfill>

<https://www.banthebottle.net/articles/mobile-water-station-saves-over-99000-single-use-plastic-bottles/>

## Measure 7

### Collection and preventive actions to reduce floating plastic waste



*Relation of measure to the European waste hierarchy*

#### In brief

1. Install a floating barrier at a strategic position on a river mouth to capture floating waste. Installation requires regular maintenance, thus it has to be ensured with personnel that regularly cleans the collected litter and maintains the floating barrier system.
2. Facilitate clean boating habits of boaters who are cruising waterways for recreational or business needs. Encourage harbours to join the eco-certification.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Food- and beverage related waste	B11 Waste management system (marinas)
	Plastic bottles	D4 Waste water treatment (sewer overflow events)
	Consumption waste	
	Plastic waste	

#### Possible examples

##### Turkey

Garbage collection boats gather all sorts of marine litter (plastic bags, balloons, buoys, rope, medical waste, glass and plastic bottles, cigarette lighters, beverage cans, polystyrene, fishing line and nets) almost every day in coordination with their shore team. Collected marine litter is sent to waste repositories and to the recycling plants later.

<http://www.marlisco.eu/sea-surface-marine-litter-cleaning-operation-turkey.en.html?articles=sea-surface-marine-litter-cleaning-operation-turkey>

## France

A floating barrier installed on the Adour river in a strategic position to secure floating waste and to collect it. Collection operations on the barrage takes place regularly.

[http://www.marlisco.eu/Installation\\_of\\_a\\_barrage.en.html](http://www.marlisco.eu/Installation_of_a_barrage.en.html)

Every summer since 2012, Gestes Propres (“Clean Habits”), a French litter prevention organisation, runs its now famous “I Sail, I Sort” campaign. Its objective is to raise awareness of the need to adopt the right behaviour in order to reduce marine litter and, secondly, to encourage people to sort their waste on board (as they do at home) and bring back all their waste to marinas – not throw it overboard. Through the “I Sail, I Sort” campaign, Gestes Propres reached out to around 200,000 thousand boaters – 191,000 in 2016. Along with clear communications, Gestes Propres provides boaters with a special reusable sorting bag for recyclable waste. Automatic dispensers also provide boaters with bags for other waste. In 2017 campaign was rolled out in 50 ports – including 6 ports from Italy and 2 from Monaco.

<https://www.cleaneuropenetwork.eu/fr/blog/eliminating-marine-litter-signature-campaign-gets-boaters-on-board/anv/>

## Sweden

Blue Flag Sweden has been in charge of the Blue Flag program in Sweden since 2014. In each country with Blue Flag, it is a jury who decides which facilities will be forwarded to the International jury for decisions on who can get Blue Flag. The Blue Flag Jury in Sweden consists of experts in the areas of environment, water quality, water safety and port and boating issues.

Blue Flag is run by the non-profit organization Foundation for Environmental Education (FEE) and is an international environmental award in 45 countries around the world. Blue Flag started in France in 1985 and since 1994, Blue Flag has been in Sweden.

Blue Flag is an award and a tool for sustainable development. Today there are criteria for:

- Swimming areas
- Recreational craft ports (guest ports, marinas and boat clubs)

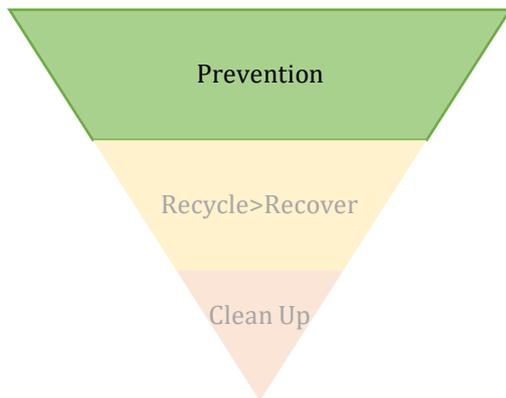
- Boat tour operators (fishing, seal and roller fishing etc.).

In addition, there is Blue Flag for individual boat owners (then called Individual Blue Flag). Blue Flag is designed to provide support and guidance for raising quality of water quality, care and service, environmental education and safety. The criteria are set by FEE.

Blue Flag initiative <http://www.blueflag.global/>

## Measure 8

### Public awareness campaigns/festivals to educate about separate waste collection



*Relation of measure to the European waste hierarchy*

#### In brief

Awareness campaigns can be organised as various initiatives aiming to promote sustainable resource and waste management. It encourages a wide range of audiences (public authorities, private companies, civil society as well as citizens themselves) to get involved.

Proving environmental messages directly at the source of consumption about proper use and disposal of waste and also on available alternatives has a significant impact on reduction of waste. Involve the retail/tourism sector in actions to improve consumer behaviour in relation to plastic bags/bottles. Ensure that information on waste management is available.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Co-management and voluntary initiatives	Food- and beverage related waste	B9 Waste management system (outdoor events)
	Plastic bottles	C5 Awareness and behaviour (litter awareness campaigns)
	Consumption waste	E14 Awareness and behaviour (waste collection and sorting awareness campaigns)
	Plastic waste	

#### Possible examples

##### Sweden

The “Pantamera” campaign is operated by Returpack AB to increase the recycling of cans and PET bottles. “Pantamera” is used by Returpack to

communicate with consumers both in advertising campaigns and in other activities that Returpack runs to increase the recycling of cans and PET bottles in Sweden.

<https://pantamera.nu/pressmedia/kampanjer/>

### **Lichtenvoorde, The Netherlands**

Each year, a growing number of bikers and their fans – more than 200,000 people in 2017 – converge on the small town of Lichtenvoorde in the eastern part of the Netherlands for Europe’s largest motor show festival, Zwarte Cross. The festival was furnished with effective waste-collection “islands”, or clusters of bins, but the real stars of the show were the motorbikes fitted with bins going around the tracks, encouraging consumers to leave their used cups and bottles in the bins.

<https://www.cleaneuropenetwork.eu/fr/blog/zwarte-cross-how-bikers-keep-their-festival-clean/ant/>

### **Uppsala, Sweden**

In order to influence and educate in a fun way about littering and recycling, Uppsala has developed the litter choir that is used in several different contexts, including events.

<https://www.bing.com/videos/search?q=skr%c3%a4pk%c3%b6r&&view=detail&mid=AAF743BA03BFFA0D8967AAF743BA03BFFA0D8967&&FORM=VRDGAR>

**The European Week for Waste Reduction** is an initiative aiming to promote the implementation of awareness-raising actions about sustainable resource and waste management during a single week.

<http://www.ewwr.eu/en/project/main-features>

### **Other examples**

The Global Plastics Alliance:

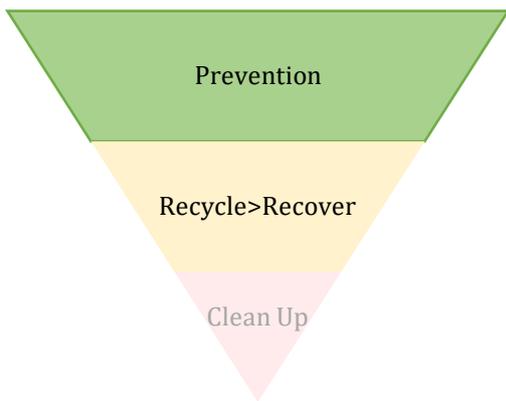
<https://www.marinelittersolutions.com/projects/page/2/?location=all&objective%5B0%5D=raising-awareness>

# C

## GENERAL LITTERING

### Measure 9

#### Encouragement and support of local enterprises to implement measures for waste prevention



*Relation of measure to the European waste hierarchy*

#### **In brief**

Initiate schemes that will give a marketing advantage to any business in your area that adheres to certain prerequisites. For maximum exposure and to ensure sufficient participation, attaching a monetary prize to the scheme could be a good stimulus. In this way, it is a reward to the most successful participants for their efforts.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Economic instrument	Food- and beverage related waste	C3 Awareness and behaviour (residents' attitude)
Co-management and voluntary initiatives	Consumption waste	G4 Awareness and behaviour (awareness of industrial and
	Plastic waste	

		commercial companies)
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## Possible examples

### Spain

The Spanish Biodiversity Foundation (Fundacion Biodiversidad) of the Ministry of Agriculture, Food and the Environment of Spain, prepared a "Decalogue of Good Environmental Practices" and launched a campaign asking beach snack bars (called "chiringuitos" in Spanish) to adopt it by signing a pledge. To give emphasis to this campaign, the "Responsible snack bar award" was also launched for the first time in November 2012. Since then, 6 awards were given with cash prizes to the winners. The cash prize together with the marketing advantage of being a responsible snack bar (they have the right to display the sign), provide economic and market incentives. So far, 526 snack bars have signed the pledge.

[http://www.marlisco.eu/Responsible\\_Snack\\_Bar.en.html?articles=responsible-snack-bar-project-spain](http://www.marlisco.eu/Responsible_Snack_Bar.en.html?articles=responsible-snack-bar-project-spain)

### Australia

The "green table"-certificate honours restaurants and catering firms that meet requirements in sustainable procurement, environmental protection and social engagement. To obtain and retain the label, compliance with set criteria must be shown, e.g. applying a waste management that includes food waste prevention.

[http://rca.asn.au/rca/wp-content/uploads/2017/11/BRF\\_Green\\_Table.pdf](http://rca.asn.au/rca/wp-content/uploads/2017/11/BRF_Green_Table.pdf)

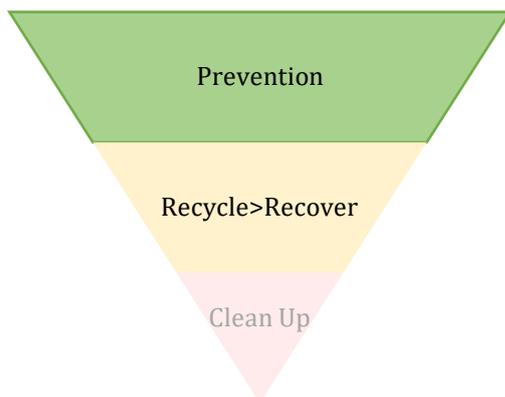
## Measure 10

### Social actions to avoid or substitute particular plastic waste

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Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Economic instrument	Food- and beverage related waste	C5 Awareness and behaviour (litter awareness campaigns)
Co-management and voluntary initiatives	Plastic waste	

#### Possible examples



*Relation of measure to the European waste hierarchy*

#### Sweden

Keep Sweden Tidy (KST) had a campaign in 2017 called "Re-think/re-use" that aimed to reduce the use of plastic bags. Information about the campaign is available on the website.

<https://www.hsr.se/re-thinkre-use>

#### China

The Last Straw Movement in Hong Kong, funded by Sea Shepard Asia, has taken the approach of replacing plastic straws with sustainably produced eucalyptus pulp straws in venues across the city. They sell the straws to venues at cost price,

#### In brief

Providing environmental messages on the proper use and disposal of different types of plastic waste and also on available alternatives directly at the source of consumption has a significant impact on reduction in plastic use.

although they cost more to produce than plastic ones, the movement encourages their sale through awareness campaigns. So far, they have been sold to 26 venues, preventing 303000 plastic straws being used. The aim is to scale this up across Asia.

<http://www.last-straw.org/>

## Measure 11

### Innovative approaches to make bins work better



*Relation of measure to the European waste hierarchy*

#### In brief

Implementing creative solutions to urban recycling can be helpful to reduce littering.

Here are several ideas:

Nudge tactics — promoting the use of litter bins by the message that using the bin look is the right thing to do.

Funnel bins — bins designed for specific areas, such as motorways. The bin's shape is designed for the way it will be used.

Clean graffiti — environmentally-friendly street art that delivers a message or points people towards places they can dispose of their waste.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Economic instrument	Food- and beverage related waste	C5 Awareness and behaviour (litter awareness campaigns)
	Consumption waste	F8 Street cleaning infrastructure (litter bin design)
	Plastic waste	

#### Possible examples

##### Copenhagen, Denmark

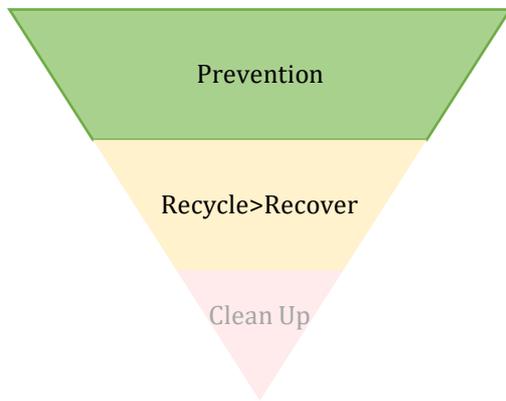
Nudge tactics- In a trial conducted by nudge specialists iNudgeyou, the city painted footsteps which lead straight to a similarly coloured litter bin. During the trial, they handed out sweets to pedestrians before and after the footprints were present, counting the number of wrappers on the street on both occasions. The result? A 46% fall in the number of wrappers ending up on the street. Three

months' later there was still a 26% decrease. Copenhagen has since introduced bright green footprints leading to many of the city's bins. The footprints not-so-subtly suggest that other people have taken this path before.

[https://www.zerowastescotland.org.uk/sites/default/files/ZWS%20guide%20B%20infrastructure\\_AW2.pdf](https://www.zerowastescotland.org.uk/sites/default/files/ZWS%20guide%20B%20infrastructure_AW2.pdf)

## Measure 12

### In-school initiatives to raise awareness on litter challenges



*Relation of measure to the European waste hierarchy*

#### In brief

Litter is a behavioural problem, which should be handled in the school programmes and thus can be tackled through education. In particular, the Eco-School type model works to turn youth into responsible citizens and increase awareness of environmental issues from an early age.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Co-management and voluntary initiatives	Food- and beverage related waste	C3 Awareness and behaviour (residents' attitude)
	Consumption waste	D5 Awareness and behaviour (disposal in toilet)
	Plastic waste	E14 Awareness and behaviour (waste collection and sorting awareness campaigns)

#### Possible examples

**The Eco-Schools programme** was born 20 years ago. In 1994, the programme was first launched in Denmark, Germany, Greece and in the UK. It has since been successfully replicated across the globe. For more information regarding specific case studies, please contact the responsible organisation.

<http://www.stopwaste.org/sites/default/files/Documents/specialevents-swp.pdf>

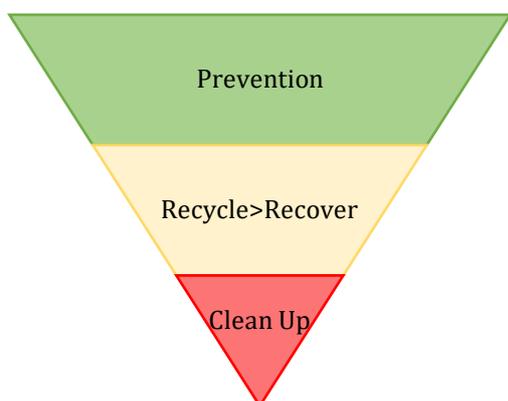
#### Sweden

Keep Sweden Tidy (KST) are running the eco-school program in Sweden, and certifies approximately 2700 schools with the award "Green Flag".

<https://www.hsr.se/valkommen-till-gron-flagg>

## Measure 13

### Community-based clean-up campaigns (awareness combined with effective clean-up actions)



*Relation of measure to the European waste hierarchy*

#### In brief

Develop, promote and support campaigns by assisting and advertising the event, the provision of materials (gloves, refuse sacks, high visibility vests, litter pickers) and co-ordinate the removal and treatment of the collected waste. Implement educational and awareness programs for youngsters (in frames of a seasonal work).

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Co-management and voluntary initiatives	Food- and beverage related waste	C5 Awareness and behaviour (litter awareness campaigns)
	Consumption waste	E14 Awareness and behaviour (waste collection and sorting awareness campaigns)
	Plastic waste	

#### Possible examples

##### Sweden

Keep Sweden Tidy (KST) has a yearly campaign called “Vi Håller Rent”, that aims to engage children in litter activities. KST usually say that it is a behavioural and attitude-changing campaign because it is proved that those who engage in litter activities change attitudes and behaviours once they have gone out and picked litter. This campaign is one of Sweden's largest environmental campaigns and involves between 650,000 to 800,000 participants every year.

A municipality participates in the campaign by:

- Receiving and distributing free materials to participants in the municipality, for example by handing out materials in the municipal building.
- Help participants to get rid of litter they have picked up, for example by extending visiting hours at recycling centres.
- Organize your own activities like competitions or clean ups-event.

<https://www.hsr.se/vi-haller-rent>

<https://www.hsr.se/sites/default/files/vagledning-kommun-vihallerrent.pdf>

Since 2012, KST has an annual beach clean-up campaign, which is now a Facebook campaign that encouraged the public to make their own beach clean-up events at their closest beach. The main objectives of the campaign are to create opinion about marine littering and to address knowledge gaps among the public about marine litter and its consequences in the environment. In 2018, 37 000 persons participated in the campaign. The Nordic Coastal Clean-up Day is the final of our coastal Rescuers campaign that starts earlier in spring. People from all Nordic countries take part in clean-ups on this day.

<https://www.hsr.se/radda-haven-med-oss>

### **Tallinn, Estonia**

The City of Tallinn has organised clean-up campaigns every spring since 2007. During the clean-up campaign, the residents of Tallinn come together in various cleaning events to clean the streets, parks and beaches in Tallinn. The clean-up is organised as fun activity that includes some entertainment and games after the actual cleaning activities. The clean-up activities serve both as actual cleaning as well as awareness raising. In addition, each year, a brochure “ABC of Public Facilities and Maintenance” is updated and made freely available to inform the Tallinn residents among other things about waste collection and management options and facilities. Since 2015 the spring clean-up campaigns are organised in cooperation with Helsinki, Turku and St Petersburg cities.

<https://www.tallinn.ee/heakorraaku/>

## Measure 14

### Public awareness on waste (and waste water) and the impact it can have on marine environment



*Relation of measure to the European waste hierarchy*

#### In brief

Map municipal drains discharging directly to waterways and promote campaigns to remind people that any waste entering drains may go directly to the nearest stream, river, lake, canal, beach or bathing water - causing pollution and killing wildlife.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Food- and beverage related waste	C3 Awareness and behaviour (residents' attitude)
	Consumption waste	C5 Awareness and behaviour (litter awareness campaigns)
	Plastic waste	

#### Possible examples

**"Yellow fish" campaign** is simple project where yellow fish are painted next to drains to remind people that what is put down a drain impacts aquatic life.  
<https://www.gov.uk/government/publications/avoiding-pollution-yellow-fish-scheme>

<https://www.gov.uk/government/publications/avoiding-pollution-yellow-fish-scheme>

#### Amsterdam, The Netherlands

Amsterdam Clean Water was founded in September 2016 by the municipality of Amsterdam, Waternet, Port of Amsterdam, Plastic Soup Foundation,

PlasticsEurope the Netherlands, The Dutch Federation of Rubber and Plastics Industry-NRK and Berenschot, as part of a large central 'clean city' project from the municipality of Amsterdam. It is a long-term program of 3 years targeted to bring structural change in waste management concerning the waters of Amsterdam. The goal of the program is to reduce the amount of litter that ends up in canals and the IJ-River each year. Within the program, several activities and projects are organized each year to raise awareness and create structural solutions.

<https://amsterdamcleanwater.nl/en/>

### **Additional measures, described under other sectors**

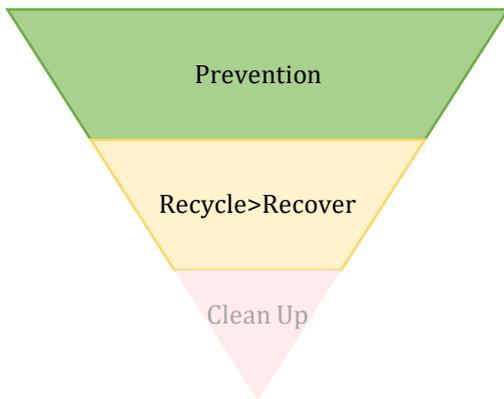
<b>Measure name</b>	<b>For description, please see:</b>
<b>Incentives for smokers to dispose cigarette butts responsibly, ensuring appropriate collection and disposal for cigarette butts (and chewing gums)</b>	<b>B. Recreation and tourism, Measure 5</b>
<b>Public awareness campaigns/festivals to educate about separate collection</b>	<b>B. Recreation and tourism, Measure 8</b>
<b>Diminishing potential environmental risks from historical landfills</b>	<b>E. Waste collection and treatment system, Measure 21</b>
<b>Advancing opportunities of local society to report overflowing and/or damaged bins</b>	<b>F. Cleaning of public spaces, Measure 32</b>
<b>Advancing cooperation with partners and communities to overcome littering challenges</b>	<b>F. Cleaning of public spaces, Measure 33</b>

# D

## SEWERAGE

### Measure 15

#### Grit chambers (or other filtration system) for unconnected drains



*Relation of measure to the European waste hierarchy*

#### In brief

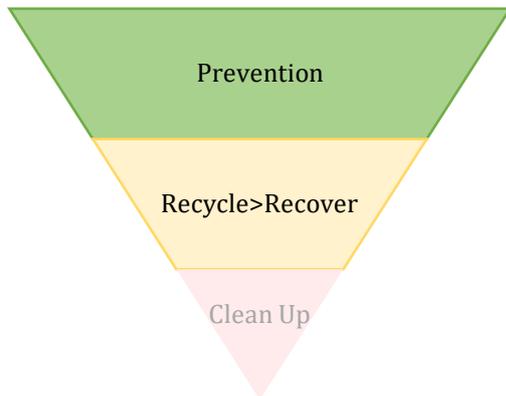
Grit chambers can capture litter before discharge from the system. Fine filters would be needed, however, to capture many types of plastics; moreover, these are likely to need regularly cleaning and maintenance. The objective is to improve the collection of domestic solid waste and waste water through better waste water treatment capacity.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Consumption waste Plastic waste	D3 Waste water treatment (storm water)

## Measure 16

### Building, maintenance and improvement of stormwater management assets, such as litter management at source

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*Relation of measure to the European waste hierarchy*

#### **In brief**

Measure is targeting “unitary” sewage system, which is used for both rainwater runoff from the streets and domestic wastewater. Litter on streets and in other areas can be swept into the sewer network during rainfall. Some litter may accumulate in the sewer network, and then be released during periods of heavy rains. In such heavy rains, moreover, water overflows are released untreated from the system. The objective is to improve the collection of domestic solid waste and waste water through better waste water treatment capacity.

## Measure 17

### Maintenance and cleaning of sewer systems



*Relation of measure to the European waste hierarchy*

#### In brief

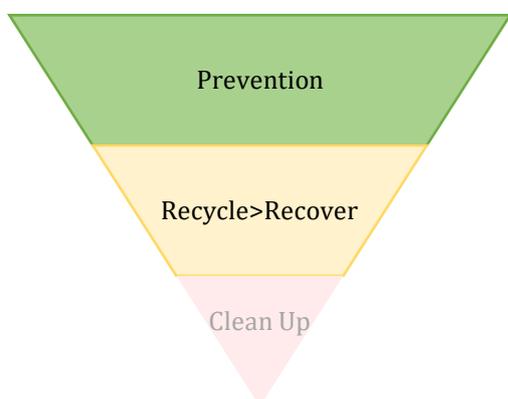
Updating sewers to avoid litter washed from streets and sewage being released during periods of heavy rain. Possibly only relevant to areas with combined drains rather than separate drains between municipal sewage and street run-off. Can either separate sewage (expensive) or increase the capacity of storm tanks. Also can make sure that storm tanks and combined systems are well maintained with no cracks so that if the water table rises, the capacity of system would deal with the storm water.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
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Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Consumption waste Plastic waste	D3 Waste water treatment (storm water)
Technologic solutions, improvement of infrastructure	Consumption waste Plastic waste	D3 Waste water treatment (storm water) D4 Waste water treatment (sewer overflow events)

## Measure 18

### Public awareness on proper disposal of sanitary items and other sewage related litter



*Relation of measure to the European waste hierarchy*

#### In brief

Measure aims to reduce the incidence of sanitary items and other sewage related debris on the beaches and riverbanks. It raises awareness of the problems of sewage related litter and encourages people to dispose personal waste carefully, whether in their own household waste bins or in special disposal bins in public toilets.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Co-management and voluntary initiatives	Consumption waste	D5 Awareness and behaviour (disposal in toilet)

#### Possible examples

##### Sweden

Haninge kommun: campaign on proper disposal of sanitary items

<https://www.haninge.se/siteassets/bygga-bo-och-miljo/vatten-och-avlopp/slang-ratt-i-toalett/infoblad.pdf>

Käppala wastewater treatment: <http://kappala.se/skrap>

##### The UK

"Bag It and Bin It - Don't Flush it" the awareness campaign was particularly focused on women between the ages of 15-45, asking them not to flush products down the toilet but to bag them and bin them instead. In 2002 a schools campaign was launched across 6000 UK schools. It raises awareness of the key issues through distribution of leaflets, stickers and other material to the public.

As part of the campaign, manufacturers and retailers were encouraged to apply the logo and/or message to their products.

**More campaigns:** <http://thinkbeforeyouflush.org/international-links/>

### **Additional measures, described under other sectors**

<b>Measure name</b>	<b>For description, please see:</b>
<b>Collection and preventive actions to reduce floating plastic waste</b>	<b>B. Recreation and tourism, Measure 7</b>
<b>In-school initiatives to raise awareness on litter problems</b>	<b>C. General littering, Measure 12</b>

**Measure 19****Evaluation of performance of contracted waste management companies**

*Relation of measure to the European waste hierarchy*

**In brief**

Contracting can be measured in two different ways. One way is by measuring outcomes (for example, through some measurement of waste generated, or of recycling rates). The other is by using measures that more traditionally relate to questions of service 'quality'. If there is at least a qualitatively characterized relationship between the service quality and the expected outcomes in terms of the waste hierarchy, then quantitative process indicators of service quality can provide useful mechanisms for performance monitoring - for example, for a recycling collection contract, measuring the instances of non-collection for reasons of contrary materials being set-out by the resident could be used as a proxy for the success (or otherwise) of the recycling service. Some contractors are however reluctant to provide quantitative and qualitative information about their recycling channels, considering this to be commercially sensitive information. However, this could be overcome by agreeing on an independent third-party audit, whereby an external partner who is bound by a confidentiality clause.

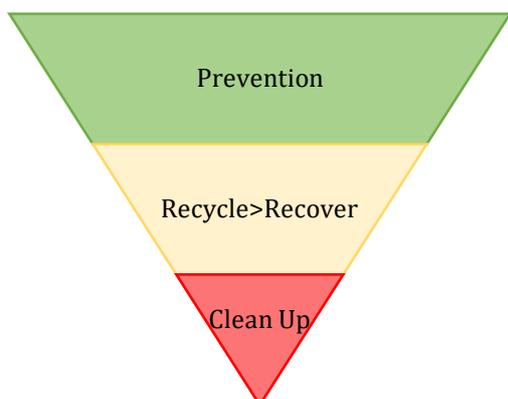
Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Regulatory instrument	Consumption waste Plastic waste	E6 Municipal waste management (municipality responsibility)

**Find out more:** D. Hogg, Dr., et. al. Municipal waste performances contracts. Eunomia, 2014.

## Measure 20

### Development of waste prevention strategies and approaches

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*Relation of measure to the European waste hierarchy*

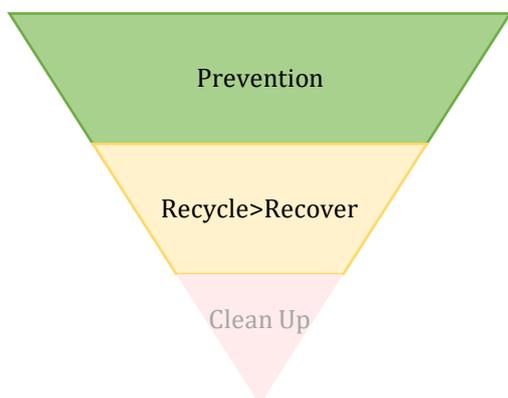
#### **In brief**

Develop and adopt at the municipality level local waste management plan. It is a long term plan that creates the basis for waste management legislation and sets measures for avoiding and reducing waste generation. Plan can contribute to the increase of recycling, for reducing of environmental risks from waste, and for monitoring. Integrate waste prevention strategies into official waste management plans and provide online based information and offer telephone consultation about second-hand shops, waste preventing shopping and repair shops in the region.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Regulatory instrument	All	E8 Municipal waste management (waste management plan)

## Measure 21

### Diminishing potential environmental risks from historical landfills



*Relation of measure to the European waste hierarchy*

#### In brief

Historic landfills, particularly those which are disposed in low-lying coastal areas or in close proximity to coastal areas are posing environmental risks. Historic coastal landfills are affected by erosion and this releases waste. With the anticipated effects of climate change, erosion events are likely to cause larger impact. Alternative sustainable policies, for example, managed realignment, may be preferred. Strategies to mitigate the risk of contaminant release from historic landfills such as excavation and relocation or incineration of waste would be prohibitively expensive for many countries. Therefore, it will be necessary to identify which sites pose the greatest pollution risk in order that resources can be prioritized, and to develop alternative management strategies based on site specific risk.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	All	E9 Historical landfills

#### Possible examples

##### The UK

The Spittles Lane landfill site is located to the immediate east of Lyme Regis in West Dorset. It was actively used unlicensed up to 1974 by predecessor local governments. Since cessation of waste tipping the former landfill site has become overgrown with scrub and woodland. In 2008 a major coastal landslip occurred, bringing large quantities of waste materials onto the foreshore. The work carried out by the authorities consisted of preparation of a management plan to identify the risks posed by the site and explore the management options that were practically available to adequately manage the risks. This concluded that the

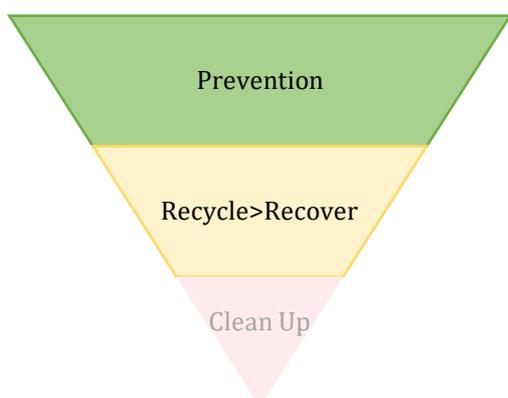
recommended approach, based on knowledge of the waste materials to date, was to leave the waste in situ at the former landfill site and deal with any waste deposited on the foreshore in a controlled manner.

<http://www.cumbria.gov.uk/eLibrary/Content/Internet/538/755/1929/6478/41345121145.pdf>

## Measure 22

### Improvement of technical measures on landfill site

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	All	E10 Operational landfills and waste treatment facilities



*Relation of measure to the European waste hierarchy*

#### In brief

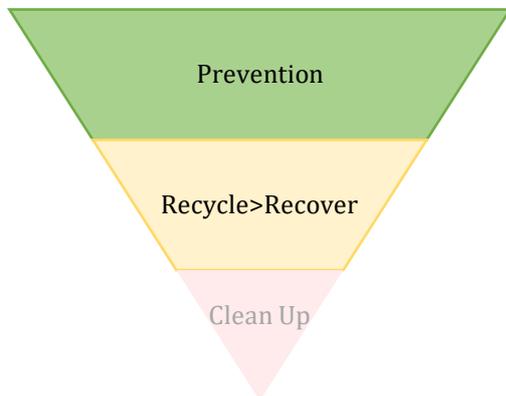
A frequent cause for concern for landfill management is the control of litter. Offsite litter can result in water pollution and can be a nuisance to surrounding property. Depending on site conditions, litter can be difficult to control and manage. However, in almost all cases there are methods available that can keep the offsite impact of litter to a minimum. A site specific strategy should be drawn up to manage the impact of litter. There are several types of measures to decrease litter from occurring off-landfilling site:

- Load control
- Waste handling
- Portable litter screens
- Semi-permanent fencing
- Bunds
- Litter fencing
- Select tipping areas
- Netted areas
- Designated waste transfer areas
- Methods for handling for lightweight waste.

**Find out concrete examples here:** Landfill operational guidelines, ISWA Working Group for Landfill 2010.

## Measure 23

### Zero tolerance approach to littering



*Relation of measure to the European waste hierarchy*

#### In brief

A zero-tolerance approach taken by local government signifies imposing of fines aimed at discouraging anti-social behaviour including the improper discarding of waste and trash. Fines and penalties can focus specifically on beaches, or also on the surrounding environment like sea front, adjacent areas and streets. Enact appropriate penalties to beach littering, especially cigarette butts.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Regulatory instrument		E11 Illegal dumping and fly-tipping
	Consumption waste	E12 Illegal dumping and fly-tipping (incidents)
	Plastic waste	E13 Illegal dumping and fly-tipping (areas and hotspots)
	Smoking related waste	C4 Awareness and behaviour (residents' awareness)

#### Possible examples

##### Sweden

Vasaloppet (an annual long distance cross-country ski race held on the first Sunday of March) has introduced time penalty if a competitor is caught throwing litter on the ground outside the litter zones of the track. The 15 minute time extension affected several skiers, but also managed to reduce the littering during the event of 90%.

Another example is the Trail run Åre Fjällmaraton that has zero tolerance for littering along the entire course. Littering leads to direct disqualification.

### **The UK**

The zero-tolerance approach to dumping rubbish is part of local authorities civic pride campaign to keep the borough's streets clean and green. "Our Streets" campaign was launched after residents told the council more needs to be done to improve their neighbourhoods. As part of the campaign, the council is joining up services such as enforcement and street cleansing into neighbourhood teams to tackle environmental crime. In a further boost for cleanliness in the borough, the number of enforcement officers will be tripled to 30 and the equivalent of 90 street cleansing rounds have been added. Hard hitting stickers have been placed on pavements in streets where people have been fined for offences to get the message across that fly-tipping won't be tolerated.

<https://www.redbridge.gov.uk/news/july/council-takes-zero-tolerance-approach-to-fly-tipping-1000-fines-issued/>

## Measure 24

### Identification and closing of non-compliant landfills and illegal dumpsites close to the freshwater environment



*Relation of measure to the European waste hierarchy*

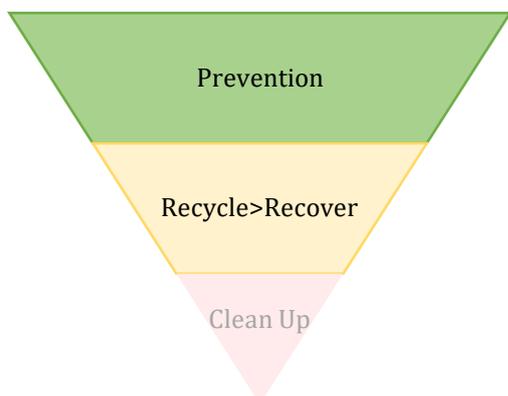
#### **In brief**

The most significant relevance for contributing to the marine litter have the illegal and/or non-compliant landfills and dumpsites located closely or directly at the sea. These should have priority in plans and actions to eradicate and/or rehabilitate non-compliant landfills. Non-compliant landfills are operational in the countries highly dependent on landfilling as the major treatment method for municipal waste and often due to lack of regional landfills and other infrastructure and the leaking collection system.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Regulatory instrument	All	E13 Illegal dumping and fly-tipping (areas and hotspots)

## Measure 25

### Overview on litter and flytipping to estimate the scale of the problem



*Relation of measure to the European waste hierarchy*

#### In brief

Better overview of the scale of the problem, including data collection and control is an important part of fly-tipping prevention because it better equips authorities to track patterns of behaviour and catch offenders. Use reporting and monitoring tools and encourage local public to report on fly-tipping.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Co-management and voluntary initiatives	All	E11 Illegal dumping and fly-tipping  E12 Illegal dumping and fly-tipping (incidents)  E13 Illegal dumping and fly-tipping (areas and hotspots)

#### Possible examples

##### Scotland

The national fly-tipping reporting tool for land managers.

“FlyMapper” is a free tool for reporting and monitoring fly-tipping that has been developed to help Local Authorities and other land managers tackle fly-tipping more efficiently and effectively. It has not been designed to be a public reporting tool. The tool is built as an app and web based system which allows fly-tipping incidents to be quickly and efficiently recorded in the field and for the status of each incident to be tracked. It centralises all the data recorded in an easy to use

website allowing advanced planning, analysis and reporting. Bringing together local incident management with intelligence gathering and reporting for use at both local and national level.

<https://www.zerowastescotland.org.uk/litter-flytipping/flymapper>

## Measure 27

### Deposit scheme for plastic or glass bottles to boost recycling



*Relation of measure to the European waste hierarchy*

#### **In brief**

Introduce a deposit return scheme to increase recycling rates and cut the amount of waste and litter polluting land and sea. Possible variants of a deposit return scheme include cash rewards for returning drinks containers without an upfront deposit. This is often done through a network of 'reverse vending machines', where a plastic or glass bottle, or can, are inserted into the machine, which returns the deposit.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Economic instrument	Plastic or glass bottles	E16 Packaging waste management (deposit system)

## Measure 28

### Borrow and bring back scheme for beach catering business



*Relation of measure to the European waste hierarchy*

#### **In brief**

Foster implementation of voluntary initiatives for beach cafes to replace disposables with reusables. Businesses can provide reusables for in-store dining, as well as encouraging customers to bring their own reusable shopping bags, coffee cups and containers for takeaway purchases. Offer the cardboard boxes that goods come in for customers to carry out their purchases. Serve condiments such as butter, jam, sugar etc. in individual plastic packaging but use reusable dispensers - and avoid food waste too.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Co-management and voluntary initiatives	Plastic or glass bottles Food- and beverage related waste	E16 Packaging waste management (deposit system)

#### **Possible examples**

##### **The UK**

Creative initiative named “Bring one, get one tree” encouraging reusable cups developed by the organisation “Plastic Free July” in Perth's western suburbs. Local cafes sign up and encourage customers to bring reusable cups for takeaway coffees. The scheme is promoted between the cafes, and recordings are being done to find out how many customers bring reusable cups during July.

At the end of the month, the results for each reusable cup used (and disposable cup saved) are gathered from participating cafés and organisers of this campaign donate a native plant to revegetation projects and planting days in the local community.

Campaign has since been run by groups, councils and universities in other locations and overseas resulting in 7,000 trees planted (and cups and lids

avoided)! To run “Bring one, get one tree” in your local area, all of graphic design resources are freely available. There is only a need to source the plants and engage cafes.

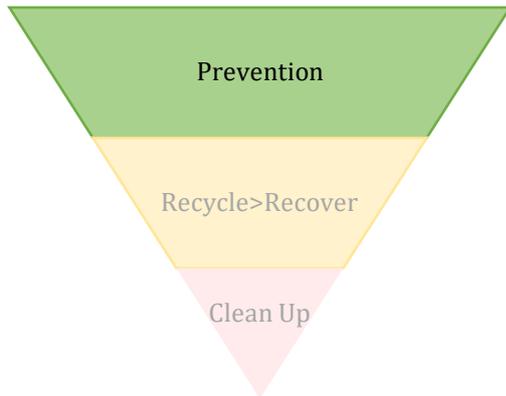
<http://www.plasticfreejuly.org/cafes-shops--food-outlets.html>

# F

## CLEANING OF PUBLIC SPACES

### Measure 29

#### Beach cleanup and river cleanup operations



*Relation of measure to the European waste hierarchy*

#### In brief

Regularly cleaning of (less urban) beaches, using both mechanical and manual methods is one of the measures to reduce marine litter. Usually less frequented type of beaches undergo 1 winter cleaning and in some regions a more regular cleaning in summer. Measure can be also applicable to the river beads which are periodically dry, so they can be subject to fly-tipping. During heavy rains, the accumulation of waste can be washed to sea. Measure can be carried out together with the clean-up campaigns (Measure 13).

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Co-management and voluntary initiatives	All	F4 Street cleaning management (service quality)

#### Possible examples

##### Sweden

The Clean Coast project (Ren Kust) in Bohuslän is a collaboration between Bohuslän's ten coastal municipalities, Gothenburg and Kungsbacka municipality with the goal: a cleaner coast! One of the important tasks has been to develop a common digital map tool that can be used when planning and in the cleaning effort itself. Strandstädarkartan has been running since 2015. Another task is to work for the regulatory system to change so that the coastal municipalities do not have to bear all costs of cleaning beaches themselves. Since 2018, the project is financed from state funding by the Swedish Environmental Protection Agency.

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## Measure 30

### Ensuring that snow dumping does not create litter pollution

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*Relation of measure to the European waste hierarchy*

#### **In brief**

Sea disposal sites has the highest risk of producing marine litter. In addition to surface marine litter, this option can also produce uncontrolled quantities of litter on the seafloor without appropriate prevention measures.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Regulatory instrument	All	F5 Street cleaning management (Snow dumping)

## Measure 31

### Adequate management of litter hotspots



*Relation of measure to the European waste hierarchy*

#### In brief

Hotspots are places where excessive litter tends to accumulate. These could be areas close to pubs, clubs, cafes and takeaways; at transport hubs and bus stops; in commercial areas, car parks or unused land; near to schools and colleges, on roads that connect these places to shops. Hotspots could also be around existing bins, perhaps raising questions over their adequacy in number and type, and ease of access. Feedback from the public can help to develop a broader picture of hotspots, and many local authorities encourage residents to report them online. If current cleansing operations struggle with the added demands of hotspots it may be worthwhile developing a strategy to address them. GIS software allows to map out hotspots, and overlay bin locations and street cleaning routes. This reveals the places where hotspots sit within the regular cleaning schedule.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Plastic or glass bottles Food- and beverage related waste Consumption waste	F6 Street cleaning infrastructure (litter bin network)

#### Possible examples

##### Sweden

Since 2009, Keep Sweden Tidy offer litter measurements in the city environment, in cooperation with a statistics company. Measurements are carried out by the participating municipalities, but training, calculations and summary of results are carried out by Keep Sweden Tidy and the statistic company. One of the outcomes is a map where hotspots of litter are marked. Hotspots close to waters

are of particular interest. With local knowledge, potential litter generators can be identified and specific actions can be implemented.

<https://www.hsr.se/fakta/statistikportal/skrapmatningar-i-stadsmiljo/skrapmatningar-i-stockholm/heatmap-kungsholmen>

**Scotland:** Practical examples on management of litter hotspots, brochure "Binfastructure":

[https://www.zerowastescotland.org.uk/sites/default/files/ZWS%20guide%20Binfastructure\\_AW2.pdf](https://www.zerowastescotland.org.uk/sites/default/files/ZWS%20guide%20Binfastructure_AW2.pdf)

## Measure 32

### Advancing opportunities of local society to report overflowing and/or damaged bins



*Relation of measure to the European waste hierarchy*

#### **In brief**

It might not be feasible to monitor every bin all of the time. But the community can be a great helper, particularly people who want to keep the local environment clean.

People can report if an overflowing bin needs to be emptied sooner than expected, or if damage to a bin has made it unusable.

Make it simple – put a phone number or app name on the side of your bins. If people can quickly report something on their phone, they will.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Plastic or glass bottles	F6 Street cleaning infrastructure (litter bin network)
	Food- and beverage related waste	C3 Awareness and behaviour (residents' attitude)
	Consumption waste	
	Plastic waste	C4 Awareness and behaviour (residents' awareness)

#### **Possible examples**

**Scotland:** Practical examples on the litter bin infrastructure, brochure "9 cornerstones of a litter bin strategy":

<https://www.zerowastescotland.org.uk/litter-flytipping/litter-bin-strategy>

## Measure 33

### Advancing cooperation with partners and communities to overcome littering challenges



*Relation of measure to the European waste hierarchy*

#### In brief

The best bin strategies have the support of the wider community. That might mean consulting with community groups, businesses, schools, environmental agencies, charities, and others.

As a local authority, you might also work with private land owners to encourage them to develop an effective bin strategy. If they don't have a strategy, or any bins, waste from their property could become litter in yours.

Local businesses, especially those who run a take-away food business, may be prepared to contribute towards the cost of new bins near their property, which are then serviced by a local authority.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Co-management and voluntary initiatives	Plastic or glass bottles	F6 Street cleaning infrastructure (litter bin network)
	Food- and beverage related waste	C4 Awareness and behaviour (residents' awareness)
	Consumption waste	G4 Awareness and behaviour (awareness of industrial and commercial companies)

#### Possible examples

**Scotland:** Practical examples on the litter bin infrastructure, brochure "9 cornerstones of a litter bin strategy":

<https://www.zerowastescotland.org.uk/litter-flytipping/litter-bin-strategy>

## The UK

Some local authorities in England work with Keep Britain Tidy and other charities on the "Bin it for Good" initiative. This campaign encourages people to use litter bins to help raise money for local charities. Bin it for Good aims to incentivise people towards doing the right thing with their litter by offering local community benefits. For a period of 3 months, partnering local authorities set up a network of 'charity bins' in a local town centre or high street area to enable local people to do social good simply by putting their litter in the bin.

Keep Britain Tidy provides bin stickers designed in such a way to fit different bin shapes and sizes, and so that they do not obstruct the waste collection access door. For three months, all bins within a defined target area, such as a high street, are transformed into charity collection pots featuring a new local charity or cause each month.

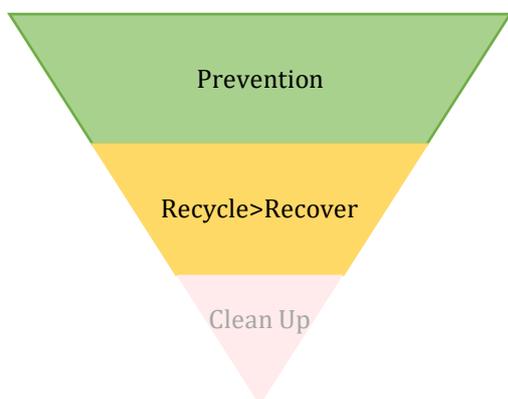
The more litter that goes into the bins, and the less on the ground, the more money the featured charity/cause receives. The project is funded by The Wrigley Company and delivered in partnership with, Keep Britain Tidy and local land managers of the locations where the initiative takes place.

[http://www.keepbritaintidy.org/sites/default/files/resources/KBT\\_Bin\\_it\\_for\\_good\\_2016.pdf](http://www.keepbritaintidy.org/sites/default/files/resources/KBT_Bin_it_for_good_2016.pdf)

<http://neatstreets.co/project/bin-it-for-good/>

## Measure 34

### Improvement of separate waste collection



*Relation of measure to the European waste hierarchy*

#### **In brief**

Ensure proper, uniform and internationally recognisable marking of bins/containers. Effective signing is essential for clarifying which materials can be recycled and where to put them. Make sure signing is easy to read and it is seen from the distance. Utilize color-coded recycling bins, placed next to trash cans. Recycling bins alone may be used as trash bins and trash bins alone will often contain large amounts of recyclable materials. Ideally, place a recycling bin next to every trash can so that recycling becomes convenient, with recycling clearly distinct from the trash container (e.g. colour, shape, top opening, etc.). Label recycling and garbage receptacles with clear, specific wording and text. Photos and images on recycling and trash containers can help people know what to throw away and what to recycle.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Plastic or glass bottles Food- and beverage related waste Plastic waste Consumption waste	F8 Street cleaning infrastructure (litter bin design)

## Measure 35

## Green procurement or specified conditions for construction sites



*Relation of measure to the European waste hierarchy*

**In brief**

A key concern is that plastic waste (especially but not limited to packaging) at construction sites can be blown away by the wind if not properly collected and managed, in particular for construction sites near seashores and rivers. A special clause can be added to the contract specifying that construction companies properly manage their waste flows and in particular prevent litter from being flushed, blown or thrown away. This could be a requirement for obtaining a building permit, or in case of a public client, added directly to the contract. This could also be promoted voluntarily among construction companies. By including requirements about avoiding polluting substances in tendered articles municipalities can contribute to the development of new products with less impact. By offering a market for these new alternatives municipalities can also make them more economically affordable. Thus they can have an impact on the market in general.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Regulatory instrument	Plastic waste	G3 Waste management system (industrial and commercial waste management service quality)  G6 Waste management system (C&D)

### **Possible examples**

For a range of tools and guides for the Scottish construction sector visit:

<http://www.resourceefficientscotland.com/construction>

## Measure 36

### Incentives for supermarkets and retailers like charging the use of bags to minimize carrier bags consumption



*Relation of measure to the European waste hierarchy*

#### In brief

It is important that plastic bags are not delivered for free. If this nevertheless is the case, cashiers should reduce the number of bags delivered for free and optimise the packaging of the purchased goods in bags.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Regulatory instrument	Plastic waste	G4 Awareness and behaviour (awareness of industrial and commercial companies)

#### Possible examples

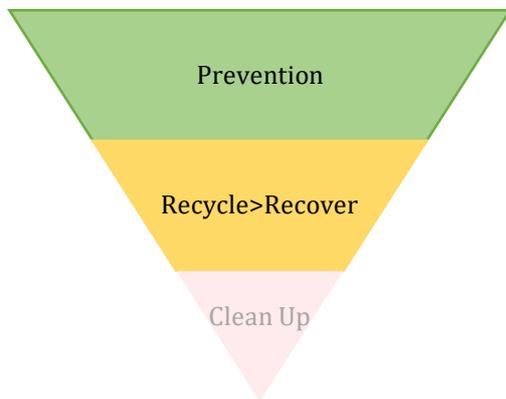
##### The initiative "One Bag"

In 2017, the initiative "One Bag Habit" was launched. Retailers like H & M, KappAhl and Lindex are one of largest promoters and more retail companies have joined the initiative. The initiative wants to contribute to reduced consumption of bags and increased awareness of the bags' negative environmental impact. Therefore, companies pay for their bags and donate the surplus from this sale to various purposes that support sustainable development. All surpluses from the sale of the bags will be used for sustainable development in social or environmental projects. The initiative is a response to an EU directive to reduce the consumption of plastic bags. The companies offer recyclable bags made of more durable materials. The surplus from the sale will go for different purposes that drive sustainable development. Each company chooses itself for what purpose and reports on the results annually, on its website and / or in its annual report.

<http://www.onebaghabit.se/#omonebaghabit>

## Measure 37

### Preventive actions in ports



*Relation of measure to the European waste hierarchy*

#### **In brief**

1. Provide clearly visible information in fishing ports of correct use and disposal of Expanded Polystyrene (EPS) boxes; provide information to the fishermen and other actors involved in fish trade and transport (leaflets, meetings) on importance of correct disposal of EPS boxes; inform fishermen on measures to prevent EPS boxes. Conduct education and outreach campaigns to promote the use of technologies that minimize loss of fishing gear and ghost fishing (incl. technical standards).

2. Optimize logistics of merchant premises in fishing ports to avoid escape of EPS boxes during the trade, transport of fish; provide for intermediate storage facilities for waste collected in fishing ports which allow for waste separation and adequate storage, in particular of EPS boxes to foster recycling.

3. Establish recycling management schemes for EPS fish boxes in ports and local markets close to the coast.

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Plastic waste	G5 Waste management system (ports)
Co-management and voluntary initiatives		

#### **Possible examples**

##### **France**

The French “Cooperative Maritime” with the support of the French government and the French Plastic value chain has started a project named “PECHPROPRE” (pêche propre = clean fishing) was performed in 2017 and the 1st half of 2018 to

address ocean plastics. The scope of the project was to make an inventory of all plastic products used by fisheries and of all collection systems in place to collect those products at the end of their life.

In 2018, the idea was to benchmark the results with solutions for ocean plastics in place within other member states in EU, with coastal borders with North Sea, Atlantic or Mediterranean Sea. First step realized in the end of 2016, has been to inform fishermen and fishery industry to participate in the survey. First results are showing that a large majority of products (fishing nets, ropes, etc..) are made of polyolefins (mainly PE) and of PA. Some collection systems are in place at regional level and some of them have already recycling solutions. Inquiries and questionnaires are to be received to improve the data base.

<http://www.pechpropre.fr>

### **Additional measures, described under other sectors**

<b>Measure name</b>	<b>For description, please see:</b>
<b>Advancing cooperation with partners and communities to overcome littering challenges</b>	<b>F. Cleaning of public spaces, Measure 33</b>

**Measure 38****Awareness about collection and utilization of agricultural film**

*Relation of measure to the European waste hierarchy*

**In brief**

Agricultural film can be a significant source of plastic waste to the environment if it is not collected correctly, and even becomes a source of marine litter in agricultural fields close to the coastline or rivers. The French Agricultural Plastics Committee (CPA) and ADIVALOR have launched project RAFU (recycling of used agriculture films).

Depending on the quality of the regranulate, recycled agricultural film can be reused in film production or other applications such as extrusion and injection moulding (tubes and pipes, containers, etc.).

Type of measure	Type of marine litter targeted	Reference to mapping checklist (Q No)
Technologic solutions, improvement of infrastructure	Plastic waste	H2 Awareness and behaviour (awareness of agricultural sector)
Co-management and voluntary initiatives		H3 Waste management system (agricultural waste management service quality)

# ROAD TO LMLAP FOR YOUR MUNICIPALITY – LESSONS FROM BLASTIC PROJECT

## ***Background information***

Marine litter is up and rising issue of environmental policy all around the globe. Nevertheless, it is still comparatively new issue, where there are many knowledge gaps and both national and international policies are under development. Within the framework of the project's activities, the background survey was carried out looking into municipal situation with regards to marine litter actions around the Baltic Sea.

Despite being one region, there are additional factors that should be taken into account when starting work on tackling marine litter issues and elaboration or implementation of Local Marine Litter Action Plans for municipalities. Main factors we identified were:

- Waste management policy in different countries sets different roles for municipalities. Therefore, not always the municipalities have power to take actions on individual level as the regulations might differ with decision making and management decisions being placed in different levels (regional or national)
- Level of advancement with regards to previous work in the marine litter area of municipalities also differs. There are some municipalities with previous experience and ambitious activities already implemented
- Investment priorities in waste water management and waste management infrastructure also differs from country to country. In order to successfully tackle marine litter issues several prerequisites must be met like adequate and up-to-date systems of communal waste water treatment and waste management (accessibility and density of receptables etc.). Unfortunately, that is still not always the case around the Baltic Sea where Finland, Denmark, Sweden and Germany are in more advanced situation in comparison to Baltic States, Poland and Russia.
- Availability of data for decision making – when using the mapping tool in pilot areas, it was identified that there is still a lack of available sociological and research data with respect to the marine litter situation.

Pilot territories – municipalities of Turku (Finland), Tallinn (Estonia), Sodertälje (Sweden) and Liepāja (Latvia) in project BLASTIC have undertaken the task of testing the mapping and prioritisation tool and elaborating their local action plans.

### ***Outcomes of LMLAP in pilot territories***

The results from the mapping of marine litter sources and pathways in the pilot area of **Södertälje** (Sweden) resulted in three priority areas to be further addressed in the action plan – targeting Illegal dumping and fly-tipping, improvements in street cleaning management service quality and continuous efforts for awareness raising.

On the basis of findings in mapping and prioritisation, Sodertalje municipality set out the action plan by formulating guiding principles of their strategy:

- Good service – discarding waste correctly should be easy for the population and dependable and professional management is important in providing good service.
- Increased collaboration and strengthened exercise of public authority – existing legislation provide the means to face the challenges with illegal dumping and fly-tipping and should be implemented to a larger extent by enforcement
- Knowledge and attitude affecting activities – considered to be a vital measure. Schools as well as the municipality working force of 6,000 employees are the key in the day to day effort to change attitudes. Working in projects, as is common today, is effective, however the action plan states the importance of having a plan at the beginning of projects on how to use the results even after the project is finished as there is a risk that the project results are seen as a parenthesis in societal development.

Each of these principles are accompanied by priority measures and activities. Sodertalje municipality also worked out the set of indicators to review the progress towards the targets and monitor the activities.

In **Liepaja** (Latvia) LMLAP pilot was elaborated after carrying out mapping and prioritisation within the framework of high importance of participation in the Blue Flag programme. In Latvia BF programme have set more stringent national criteria with respect of municipal action towards improvements in marine litter situation and it has become driving force behind municipal action in marine litter.

Within prioritisation process number of areas with improvement potential were identified – situation in municipal beaches and recreational areas and waste

management in public areas (including street cleaning services and litter bin facilities in the public areas) were ranked highest. Also the issues of public areas waste management quality, the storm water discharges and illegal dumping and flytipping were identified as priority areas in mapping task.

Following mapping and prioritisation process and analysis of available marine litter data (beach litter monitoring 2012-2018 data in 2 monitoring stations in Liepaja city), municipality outlined following priorities in their plan:

- Beach and coastal management improvements, preventive actions towards ML discharges
  - o Beach and coastal vendors (cafes and seasonal open-air vendors) – incorporating ban/substitution in municipal licensing of use of single use plastic packaging (priority fractions of plastic straws, dosage packaging, stirring straws etc.)
  - o Public events (beach festivals, gatherings in beach vicinity/Seaside park) – incorporating voluntary or permitting procedures
  - o Additionally, evaluation of the current litter bin design and usability evaluation in context of ML discharge risks will be carried out
- Regarding the problems arising from stormwater discharges and taking into account current technical and financial issues linked to the improvements of rainwater/stormwater discharges, additional information campaigns facilitated by municipality were included in LMLAP
- Finally, improvement of control routines and increased public participation were included in action plan as a response to comparatively high illegal flytipping/dumping incidents still taking place.

In **Tallinn** (Estonia) the municipality also worked on elaboration of LMLAP, using projects mapping and prioritisation tool. It must be highlighted that Estonia plans to introduce requirement for coastal municipalities to include the marine litter issues in municipal waste management plans with changes in Waste Management

- Awareness raising
  - o Organizing awareness-raising activities / reflecting on the issue of prevention and reduction of marine litter in the framework of the municipal information campaigns, strengthening environmental education activities and broader inclusion of marine litter issues in public communication and education. Also, the awareness-enhancing activities (campaigns, etc.) in collaboration with relevant organizations and stakeholders were included in the LMLAP

- Restricting the use of disposal products
  - Replacement of single use products at public events with re-usable ones and introduction of requirements to prevent marine litter on public beaches (i.e. prohibition of disposable products)
- **Implementing technical and regulatory solutions to prevent marine litter**
  - Ensure sufficient density and network of garbage bins in public spaces, Improvements in design for collection facilities in the public area on the shoreside and on the banks of the waterways, looking into improvements of stormwater collection and snow storage places
  - Complement the Waste Management Regulations and Maintenance Rules with requirements that oblige construction companies to implement anti-dumping measures to keep, collect, and dispose of volatile materials and their resulting waste (packaging, thermal insulation material)

In **Turku** (Finland) the list of actions for local action plan has been developed by consulting experts and stake- holders within the process of mapping and prioritisation. In addition, analysis “Cost-effective combination of measures to reduce the loads of plastic marine litter in urban areas: Case Turku region” (Liisa Saikkonen SYKE, Blast-project 2018) has been taken into account.

As a result of the process, the comprehensive list of actions was prepared for further guidance of municipal measures with respect to marine litter. Those actions can be grouped as:

- Regulatory and municipal measures – as ban on single-use plastics in certain events and in certain places (beaches), promoting opportunities of citizens to report overflowing and damaged bins and advancing cooperation with partners, businesses and citizens to overcome littering challenges
- Awareness raising initiatives - increasing public awareness on waste water and the impact it can have on marine environment, awareness raising campaigns on marine litter issues, community-based clean-up campaigns (awareness combined with effective clean-up actions), in-school initiatives to raise awareness on litter problems and increasing public awareness on proper disposal of sanitary items and other sewage related litter
- Infrastructure and waste management improvements – improvements in providing adequate waste collection infrastructure, introduction of smart waste collection solutions for public spaces, innovative approaches to make bins work better, ensuring that snow dumping does not cause litter pollution, incentives for smokers to dispose cigarette butts responsibly (ensuring appropriate collection and disposal for cigarette butts and chewing gums), building, maintenance and improvement of stormwater management assets,

such as litter management at source, installing grit chambers (or other filtration system) for unconnected drains, improved beach cleanup and river cleanup operations and clarification of the conditions for the clean-up of construction sites.

## CROSREFERENCE TABLE

### **Area: B8 Waste management system (public beaches)**

#### **Measures:**

- 1.Incentives for retailers to avoid selling single use plastics or any disposable items, and motivate introduction of deposit refund schemes, in particular for beverage containers
- 2.Procurement guidelines to reduce single use plastics or any disposable items
- 3.Arrangement of adequate waste collection infrastructure
- 4.Arrangement of adequate cleaning of public spaces
- 6.Water fountains, re-fill stations in public events, mobile water stations

### **Area: B9 Waste management system (events)**

#### **Measures:**

- 1.Incentives for retailers to avoid selling single use plastics or any disposable items, and motivate introduction of deposit refund schemes, in particular for beverage containers
- 6.Water fountains, re-fill stations in public events, mobile water stations
- 8.Public awareness campaigns/festivals to educate about separate waste collection

### **Area: B10 Waste management system (recreational areas)**

#### **Measures:**

- 2.Procurement guidelines to reduce single use plastics or any disposable items
- 3.Arrangement of adequate waste collection infrastructure
- 4.Arrangement of adequate cleaning of public spaces
- 5.Incentives for smokers to dispose cigarette butts responsibly, ensuring appropriate collection and disposal for cigarette butts (and chewing gums)
- 6.Water fountains, re-fill stations in public events, mobile water stations

### **Area: B11 Waste management system (marinas)**

#### **Measures:**

- 2.Procurement guidelines to reduce single use plastics or any disposable items
- 7.Collection and preventive actions to reduce floating plastic waste

**Area: C3 Awareness and behavior (residents' attitude)**

**Measures:**

- 5.Incentives for smokers to dispose cigarette butts responsibly, ensuring appropriate collection and disposal for cigarette butts (and chewing gums)
  
- 9.Encouragement and support of local enterprises to implement measures for waste prevention
  
- 12.In-school initiatives to raise awareness on litter challenges
  
- 14.Public awareness on waste (and waste water) and the impact it can have on marine environment
  
- 32.Advancing opportunities of local society to report overflowing and/or damaged bins

**Area: C4 Awareness and behavior (residents' awareness)**

**Measures:**

- 23.Zero tolerance approach to littering
  
- 33.Advancing cooperation with partners and communities to overcome littering challenges

**Area: C5 Awareness and behavior (litter awareness campaigns)**

**Measures:**

- 5.Incentives for smokers to dispose cigarette butts responsibly, ensuring appropriate collection and disposal for cigarette butts (and chewing gums)
  
- 8.Public awareness campaigns/festivals to educate about separate waste collection
  
- 10.Social actions to avoid or substitute particular plastic waste
  
- 11.Innovative approaches to make bins work better
  
- 13.Community-based clean-up campaigns (awareness combined with effective clean-up actions)
  
- 14.Public awareness on waste (and waste water) and the impact it can have on marine environment

**Area: D3 Waste water treatment (storm water)**

**Measures:**

- 15.Grit chambers (or other filtration system) for unconnected drains

16. Building, maintenance and improvement of stormwater management assets, such as litter management at source

17. Maintenance and cleaning of sewer systems

**Area: D4 Waste water treatment (sewer overflow events)**

**Measures:**

7. Collection and preventive actions to reduce floating plastic waste

17. Maintenance and cleaning of sewer systems

**Area: D5 Awareness and behavior (disposal in toilet)**

**Measures:**

12. In-school initiatives to raise awareness on litter challenges

18. Public awareness on proper disposal of sanitary items and other sewage related litter

**Area: E6 Municipal waste management (municipality responsibility)**

**Measures:**

19. Evaluation of performance of contracted waste management companies

**Area: E7 Municipal waste management (coverage of waste collection)**

**Measures:**

4. Arrangement of adequate cleaning of public spaces

**Area: E8 Municipal waste management (waste management plan)**

**Measures:**

20. Development of waste prevention strategies and approaches

**Area: E9 Historical landfills**

**Measures:**

21. Diminishing potential environmental risks from historical landfills

**Area: E10 Operational landfills and waste treatment facilities**

**Measures:**

22. Improvement of technical measures on landfill site

**Area: E11 Illegal dumping and fly-tipping**

**Measures:**

23.Zero tolerance approach to littering

25.Overview on litter and flytipping to estimate the scale of the problem

**Area: E13 Illegal dumping and fly-tipping (areas and hotspots)**

**Measures:**

23.Zero tolerance approach to littering

24.Identification and closing of non-compliant landfills and illegal dumpsites close to the freshwater environment

25.Overview on litter and flytipping to estimate the scale of the problem

**Area: E14 Awareness and behavior (waste collection and sorting awareness campaigns)**

**Measures:**

8.Public awareness campaigns/festivals to educate about separate waste collection

12.In-school initiatives to raise awareness on litter challenges

13.Community-based clean-up campaigns (awareness combined with effective clean-up actions)

**Area: E15 Packaging waste management (public packaging waste collection system)**

**Measures:**

3.Arrangement of adequate waste collection infrastructure

**Area: E16 Packaging waste management (deposit system)**

**Measures:**

27.Deposit scheme for plastic or glass bottles to boost recycling

28.Borrow and bring back scheme for beach catering business

**Area: F4 Street cleaning management (service quality)**

**Measures:**

4.Arrangement of adequate cleaning of public spaces

29.Beach cleanup and river cleanup operations

**Area: F5 Street cleaning management (Snow dumping)**

**Measures:**

30.Ensuring that snow dumping does not create litter pollution

**Area: F6 Street cleaning infrastructure (litter bin network)**

**Measures:**

31.Adequate management of litter hotspots

32.Advancing opportunities of local society to report overflowing and/or damaged bins

33.Advancing cooperation with partners and communities to overcome littering challenges

**Area: F7 Street cleaning infrastructure (litter bins for smokers)**

**Measures:**

5. Incentives for smokers to dispose cigarette butts responsibly, ensuring appropriate collection and disposal for cigarette butts (and chewing gums)

**Area: F8 Street cleaning infrastructure (litter bin design)**

**Measures:**

3.Arrangement of adequate waste collection infrastructure

11.Innovative approaches to make bins work better

34.Improvement of separate waste collection

**Area: G3 Waste management system (industrial and commercial waste management service quality)**

**Measures:**

35.Green procurement or specified conditions for construction sites

**Area: G4 Awareness and behavior (awareness of industrial and commercial companies)**

**Measures:**

9. Encouragement and support of local enterprises to implement measures for waste prevention

33. Advancing cooperation with partners and communities to overcome littering challenges

36. Incentives for supermarkets and retailers like charging the use of bags to minimize carrier bags consumption

**Area: G5 Waste management system (ports)**

**Measures:**

37. Preventive actions in ports

**Area: G6 Waste management system (C&D)**

**Measures:**

35. Green procurement or specified conditions for construction sites

**Area: H2 Awareness and behavior (awareness of agricultural sector)**

**Measures:**

38. Awareness about collection and utilization of agricultural film

**Area: H3 Waste management system (agricultural waste management service quality)**

**Measures:**

38. Awareness about collection and utilization of agricultural film