Marine litter measures to be considered in the testing phase of Plastic Busters MPAs

**PREPARED BY** 

## THE INTERREG MED PLASTIC BUSTERS MPAS PROJECT

https://plasticbustersmpas.interreg-med.eu



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#### **Document Information**

This document (Deliverable 3.6.2) provides a list of shortlisted marine litter measures to be considered for the for the demo projects.

#### Approvals

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## 1. Introduction: the Plastic Busters MPAs in a nutshell

Plastic Busters MPAs, is a 4-year-long Interreg Mediterranean funded project aiming to contribute to maintaining biodiversity and preserving natural ecosystems in pelagic and coastal marine protected areas (MPAs), by defining and implementing a harmonized approach against marine litter. The project entails actions that address the whole management cycle of marine litter, from monitoring and assessment to prevention and mitigation, as well as actions to strengthen networking between and among pelagic and coastal MPAs.

The Plastic Busters MPAs consolidates Mediterranean efforts against marine litter by:

- Diagnosing the impacts of marine litter on biodiversity in MPAs and identifying marine litter 'hotspots';
- Defining and testing tailor-made marine litter surveillance, prevention and mitigation measures in MPAs;
- Developing a common framework of marine litter actions for Interreg Mediterranean regions towards the conservation of biodiversity in Med MPAs.

The Plastic Busters MPAs project deploys the multidisciplinary strategy and common framework of action developed within the Plastic Busters initiative led by the University of Siena and the Sustainable Development Solutions Network Mediterranean. This initiative frames the priority actions needed to tackle marine litter in the Mediterranean and was labelled under the Union for the Mediterranean (UfM) in 2016, capturing the political support of 43 Euro-Mediterranean countries.

## 2. Aim and scope of this document

The overarching aim of this document is to present an overview of best practice marine litter management measures that have been developed to prevent, reduce and mitigate marine litter at international, regional, national and local levels. The inventory of showcases of applied measures aims to establish a common understanding within the project partnership on the recent advances made with regards to marine litter management in order to define/shortlist appropriate marine litter measures to be piloted by managers in Mediterranean Protected Areas, who sadly are at the forefront of the devastating effects of marine litter. This document takes stock and capitalizes upon the work carried out within the Interreg Med ACT4LITTER as explained under Chapter 4.

### 3. Definitions and policy context

Within this document marine litter is defined as any persistent, manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environment. Marine litter can be classified in size classes as follows: macrolitter referring to items above 25mm in the longest dimension; mesolitter from 5mm to 25 mm; and microlitter from 1 $\mu$ m to 5mm (GESAMP, 2019). The later size class is further broken down to large microplastics from 1mm to 5 mm, small microplastics from 1 $\mu$ m to 1mm and eventually to nanoplastics <1  $\mu$ m.

The main legislative frameworks related to marine litter monitoring in the Mediterranean are the EU Marine Strategy Framework Directive (2008/56/EC, 2010/477/EC, 2017/848/EC) and the Barcelona Convention Ecosystem Approach (COP19 IMAP Decision IG.22/7) (see Box 1.1 and Box 1.2).

**Box. 1.1.** The Marine Litter Descriptor, criteria, and respective Indicators within the framework of the EU MSFD.

#### Marine Litter within the EU MSFD

Properties and quantities of marine litter do not cause harm to the coastal and marine environment (Descriptor 10)

**Criteria D10C1 - Primary:** The composition, amount and spatial distribution of litter on the coastline, in the surface layer of the water column, and on the seabed, are at levels that do not cause harm to the coastal and marine environment.

- ✓ amount of litter washed ashore and/or deposited on coastlines, including analysis of its composition, spatial distribution and, where possible, source (10.1.1)
- ✓ amount of litter in the water column (including floating at the surface) and deposited on the seafloor, including analysis of its composition, spatial distribution and, where possible, source (10.1.2)

**Criteria D10C2 - Primary:** The composition, amount and spatial distribution of micro-litter on the coastline, in the surface layer of the water column, and in seabed sediment, are at levels that do not cause harm to the coastal and marine environment.

 ✓ amount, distribution and, where possible, composition of microparticles (in particular microplastics) (10.1.3)

**Criteria D10C3 - Secondary:** The amount of litter and micro-litter ingested by marine animals is at a level that does not adversely affect the health of the species concerned.

✓ amount and composition of litter ingested by marine animals (10.2.1)

**Criteria D10C4 - Secondary:** The number of individuals of each species which are adversely affected due to litter, such as by entanglement, other types of injury or mortality, or health effects.

**Box. 1.2.** The Marine Litter Operational Objectives and respective Indicators within the framework of the Barcelona Convention Ecosystem Approach and the Integrated Monitoring and Assessment Programme (IMAP)

Marine Litter and the Barcelona Convention Ecosystem Approach

**Ecological Objective 10 (EO10):** Marine and coastal litter do not adversely affect the coastal and marine environment.

**IMAP Common Indicator 22:** Trends in the amount of litter washed ashore and/or deposited on coastlines (including analysis of its composition, spatial distribution and, where possible, source).

**IMAP Common Indicator 23:** Trends in the amount of litter in the water column including micro plastics and on the seafloor.

**IMAP Candidate Indicator 24:** Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds, and marine turtles.

The Marine Strategy Framework Directive requires EU Member States to ensure that, by 2020, "properties and quantities of marine litter do not cause harm to the coastal and marine environment". To fight marine litter, Member States have drawn on a number of existing EU laws, notably on waste management, urban waste water or port reception facilities, as well as on international agreements and the action plans of the Regional Sea Conventions. The programmes of measures for marine litter have to be seen in the wider context of developments at EU level, which have led to the adoption of the Circular Economy Package, the European Strategy for Plastics and landmark agreement to slash plastic pollution from single-use items. This agreement signs off on measures that include bans on single-use plastic cutlery, plastic plates, plastic straws, cotton bud sticks made of plastic and plastic balloon sticks. Furthermore, oxodegradable plastics and food containers as well as expanded polystyrene cups are also expected to be banned. These new measures reinforce the application of the 'polluter pays' principle and also impose an Extended Producer Responsibility regime for fishing gear to ensure that manufacturers, and not fishermen, bear the costs of collecting nets lost in the sea.

The Barcelona Convention Regional Plan for Marine Litter Management in the Mediterranean was the first legally-binding plan adopted at Regional Seas Programme level. The Regional Plan provides for a set of measures and implementation timetables to prevent, reduce and mitigate the adverse effects of marine litter on the coastal environment and marine environment. The measures provided in the Regional Plan are of policy, legal, institutional, regulatory (including economic incentive instruments) and technical nature, addressing different aspects of marine litter prevention and management from land and sea-based sources. They impose clear obligations regarding the waste management hierarchy, closure of illegal dumping/dumpsites, shift to sustainable consumption and production patterns, removal of existing marine litter using environmental sound practices, reporting on implementation of measures as well as enforcement of national legislation. A considerable number of measures are to be implemented by the Contracting Parties by 2020 at the latest.

## 4. Inventorying state-of-the-art marine litter measures: methodological approach

Several initiatives carried out at European Regional Seas level have sought to gather information on marine litter state-of-the-art and best practice measures in order to concretely support the implementation of the EU Marine Strategy Framework Directive and the Barcelona Convention Regional Plan for Marine Litter Management in the Mediterranean. In this respect, one of the most recent related initiatives has been the Interreg Med ACT4LITTER project (<u>https://act4litter.interreg-med.eu</u>).

ACT4LITTER sought to offer concrete solutions to Mediterranean MPAs to prevent and mitigate the impacts of marine litter, and in this respect, the project elaborated a comprehensive list of showcases of applied measures that fall within one of the following categories: regulatory policy instruments (command and control instrument) which address waste management issues (solid waste management laws and regulations, etc.); economic or market-based policy instruments (e.g. taxes and tariffs, liability instruments, payment for ecosystem services; subsidies, deposit refund schemes, environmental agreements; voluntary schemes such as EMAS, ISO 14001, Ecolabel, etc.), other voluntary agreements, awareness raising and environmental education campaigns, removal and cleanup actions. ACT4LITTER identified a list of one hundred showcases of marine litter measures, with a particular focus on prevention measures. This list was developed by taking stock of existing measures related reports implemented worldwide as well as with concrete inputs by the ACT4LITTER partner MPAs. All identified measures were grouped into different categories and they were fully mapped in order to provide valuable information with regards to their operationalization on the ground.

The Plastic Busters MPAs project taking stock and capitalizing upon the work carried out within the Interreg Med ACT4LITTER, fine-tuned and enriched the ACT4LITTER list of marine litter measures in order to elaborate a more comprehensive, sophisticated and complete inventory of related showcases (see D.3.6.1).

## 5. Typology of inventoried measures

Working for and from the perspective of an MPA manager, ACT4LITTER classified the measures in three broad categories, taking into consideration the different role the MPA managers can play in their implementation, as implementers, facilitators and promoters (see Table 5.1). In addition all identified measures (reported in Annex I) were grouped into 21 categories. Within Plastic Busters MPAs the typology of these categories was somewhat refined and clear respective definitions have been developed (see Table 5.2).

Table 5.1.	Marine litter	measures	classification	based on the	e different	roles MPA	managers	can play
in their im	plementation.							

Role MPA managers can play	Definition
Implementer	The MPA manager is directly involved in the implementation (design and setup) of a marine litter measure, i.e. the MPA manager designs and sets up a specific marine litter measure; e.g. a clean-up operation.
Facilitator	The MPA manager facilitates other actors to implement a marine litter measure by helping create the enabling conditions, i.e. the MPA manager organizes a capacity building workshop targeting a wide range of stakeholders aiming to enhance their skills to implement best practice marine litter measures.
Promoter	The MPA manager advocates for and/or supports the implementation of a marine litter measure, e.g. the MPA manager carries out advocacy/lobbying work targeting policy/decision makers in order to promote the establishment of an extended producer responsibility scheme for cigarette butts.

No	Measure category	Implementer	Facilitator	Promoter
1	Actions to phase out microplastics			
2	Actions to reduce smoking-related litter items			
3	Adopt-a-beach schemes			
4	Awareness raising campaigns			
5	Banning specific items and activities			
6	Cleanup campaigns and removal actions			
7	Derelict fishing gear management schemes			
8	Design for lifecycle			
9	Eco-labelling and Environmental Management Systems			
10	Fishing for litter schemes			
11	Imposing a fee/tax/levy			
12	Improving and enforcing the solid waste related policies and regulatory frameworks			
13	Improving port reception facilities for the delivery of waste from ships			
14	Improving wastewater management systems			
15	Marking and retrieval of fishing gear			
16	Promoting best practices for recreational fishing			
17	Promoting best practices for tourism and recreation			
18	Promoting extended producer responsibility schemes (e.g. deposit- refund systems)			
19	Promoting the replacement of single- use plastics			
20	Upcycling and/or recycling			
21	Improving solid waste management systems and practices			

 Table 5.2. Marine litter measures categories (adapted from ACT4LITTER).

## 6. Definitions of inventoried measures

The following definitions were elaborated for each category type of measures:

- 1. Actions to phase out microplastics: These refer to lead to a phase-out of microplastics, either by imposing legislative bans on microplastics or by voluntary agreements of industry for their phase-out.
- 2. Actions to reduce smoking-related litter items: These refer to specific actions that can reduce the amount of cigarette butts discarded on beaches i.e. educational and awareness raising activities targeted to community members promoting responsible behaviours; providing smokers with an easily accessible and reusable means to dispose of their cigarette butts responsibly such as cone-ashtrays; development of policies designed to significantly reduce the amount of cigarette butts thrown onto the beach by smokers, including fees and bans or the establishment of an extended producer responsibility schemes for cigarette butts.
- **3.** Adopt-a-beach scheme: This is a measure designed to foster volunteer stewardship by encouraging volunteers to 'adopt' beaches, clean them up and survey them throughout the year, thus collecting valuable marine litter data essential for facilitating effective responses against marine litter. In order to assist the Contracting Parties to reduce marine litter on beaches along the Mediterranean coastline with the active involvement of civil society and public, the UN Environment/MAP has developed guidelines on how to set up an adopt-a-beach scheme.
- **4. Awareness raising campaigns:** This entails wide-ranging activities such as school interventions, communication campaigns, cleanups, workshops, summer schools, exhibitions and others, aiming to deepen public understanding on the issue of marine litter and catalyze change in their perceptions and attitudes towards waste.
- 5. Banning specific items and activities: This entails legislative actions for banning certain items or activities. Indicative examples are the measures foreseen under the upcoming EU Single-Use Plastics Directive that include bans on single-use plastic cutlery, plastic plates, plastic straws, cotton bud sticks made of plastic and plastic balloon sticks as well as oxodegradable plastics, food containers and expanded polystyrene cups.
- 6. Cleanup campaigns and removal actions: This measure refers to cleanup and removal actions implemented at the coast or at sea, with environmental friendly methods.
- 7. Derelict fishing gear management schemes: This measure refers to the involvement of fishermen in the collection and proper management of abandoned, lost and discarded derelict fishing gear. This measure may entail actions related to targeted recovery of 'ghost nets' (accidently lost fishing nets that continue to catch marine organisms as they keep on drifting in the sea or along the bottom, often for very long periods) from the sea, with the direct involvement of fishermen and divers.
- 8. Design for Life Cycle: This approach challenges the product designers to consider the entire life of the product, including its recycling and disposal options. Design-for-life-cycle and ecodesign within a circular economy context are all about smart, innovative and sustainable design solutions with minimal or no waste when a product is consumed, i.e. the design of a push-tap opening of metal beverage cans, the design of lids of beverage bottles or containers attached to bottles with a leash.
- **9. Ecolabelling and Environmental Management Systems:** Ecolabelling is a voluntary method of environmental performance certification and labelling that is practised around the world. An ecolabel identifies products or services proven environmentally preferable overall, within a specific product or service category. An example of ecolabel is the Blue Flag, which is one of

the world's most recognised voluntary eco-labels awarded to beaches, marinas, and sustainable boating tourism operators. In order to qualify for the Blue Flag, a series of stringent environmental, educational, safety, and accessibility criteria must be met and maintained. An indicative example of an Environmental Management System is the ISO 14001:2015.

- **10. Fishing for litter scheme:** This is a measure designed to encourage fishermen to bring ashore litter they catch while performing their daily fishing operations, not only leading to removal of marine litter but also raising awareness on the issue within the fisheries sector and the wider public.
- **11. Imposing a fee/tax/levy:** One of the most common economic instruments used in the waste sector is the application of a tax or levy on waste sent to landfill. Landfill taxes/levies can help to tackle marine litter by increasing the price of landfill to encourage the diversion of waste to other forms of treatment that are higher up in the waste hierarchy, including closed-loop waste-management processes such as recovery, recycling or reuse. Furthermore, taxes/levies can be applied on specific items such as plastic bags.
- **12.** Improving and enforcing the solid waste related policies and regulatory frameworks: This refers to command and control instruments which address waste management issues i.e. solid waste management laws and regulations.
- **13.** Improving port reception facilities for the delivery of waste from ships: To limit and control discharges at sea, ports have to provide adequate facilities to collect all sorts of waste from ships. The relevant international norms are established by the International Convention for the Prevention of Pollution from Ships (MARPOL). However, while MARPOL provides a comprehensive framework, it does not provide effective enforcement mechanisms. In order to ensure a better enforcement of the MARPOL obligations the UN Environment/MAP has developed guidelines on the 'Provision of Reception Facilities in ports and delivery of shipgenerated wastes'.
- **14. Improving wastewater management systems:** This refers to technological solutions and innovations needed in order to ensure that wastewater treatment systems prevent effectively the leakage of microlitter into the environment.
- **15.** Marking and retrieval of fishing gear: Fishing gears are marked to establish their ownership and legality of use. Gear marking is considered as an important tool to reduce abandoned, lost, or discarded fishing gear and to fight illegal, unreported, and unregulated fishing. Traditionally physical marking, inscription, writing, color, shape, and tags have been used for ownership and legality purposes, and buoys, lights, flags, and radar reflectors are used for marking of position. More recently, electronic devices are being used for easier location of the gear from a distance or unlimited tracking, even from the land.
- **16. Promoting best practices for recreational fishing:** This refers to awareness raising and educational activities aimed at promoting the implementation of responsible and environmental sustainable recreational fishing activities that minimize the loss of gear at sea and ensure proper waste disposal. In this respect some countries have developed national codes of practice for recreational fishing.
- 17. Promoting best practices for tourism and recreation: This refers to the promotion of best practices within the tourism and recreation sector with regards to the prevention, reduction, reuse and recycling of waste. Indicative example is the "Responsible Beach Snack Bars" initiative, where beach snack bars voluntarily register on a list and commit themselves to comply with the 'Decalogue of Good Environmental Practices'.

- **18.** Promoting extended producer responsibility schemes: This measure refers to an environmental policy approach, in which a producer's responsibility for a product is extended to the post-consumer stage (waste) of a product's life cycle; i.e. (i) Mandatory take-back system: A system that requires producers to take-back products. This may apply to products that are particularly complex or dangerous to reuse, recycle or dispose. In this case, the producer may include the costs of disposal in the price of the item; (ii) deposit/refund system: A charge is levied when the product is sold and then fully or partly refunded when the good or its container, are returned after use. Such arrangements can be mandatory or instituted on an entirely voluntary basis by producers themselves, where the recovery of items is sufficiently valuable.
- **19. Promoting the replacement of single-use plastics:** Apart from legislative measures, there are voluntary measures that can enhance the abatement of single-use plastics. Voluntary measures at local scale can focus on setting up a deposit-refund scheme for a reusable alternative in collaboration with local businesses. An indicative example is the replacement of single-use coffee cups with reusable ones; customers pay a deposit for the coffee cup, which can be returned at stores that have joined this initiative and can be identified by a distinctive sticker placed on the store window.
- **20.** Upcycling and/or recycling: This entails practices were by-products, waste materials, useless, or unwanted products are converted into new materials or products. Indicative examples include: recycling of packaging materials, upcycling of derelict fishing gear to yarn, using recovered plastic waste from the sea for construction purposes, etc.
- **21. Improving solid waste management systems and practices:** This entails the promotion and implementation of good practices related to solid waste management at local level in order to minimize solid waste leakages in the coastal and marine environment. A sound example is the promotion of closed bins along the coastal roads and beaches, with the ability to separate and pressurize waste.

## 7. Shortlisting measures for the Plastic Busters MPAs demo projects: the methodological approach

Within the ACT4LITTER, a top 10 list of priority actions to curb marine litter in Mediterranean Marine Protected Areas was developed. The measures included in this list were drawn from the MPA-specific marine litter actions plans developed by the Management Bodies of nine Mediterranean coastal and marine protected areas, namely the:

- Kornati National Park (Croatia)
- Miramare MPA and the MAB-UNESCO Biosphere Reserve Miramare and coast of Trieste (Italy)
- MPA of Torre Guaceto (Italy)
- MPA Torre del Cerrano (Italy)
- Axios-Loudias-Aliakmonas Delta National Park (Greece)
- Ebro Delta Nature Park (Spain)
- MPA Cala Ratjada Balearic Islands (Spain)
- Cabo de Gata-Níjar Natural Park/UNESCO Global Geopark Andalucia (Spain)
- Strunjan Landscape Park (Slovenia)

The action plans were developed step-by-step, engaging all stakeholders with the aim to reflect the MPA-specific context and characteristics and define the priority measures towards preventing and mitigating marine litter effectively.

The collective experience of the pilot MPAs set the baseline for a common urgent response by Mediterranean MPAs to deal with the lurking marine litter threat. In an effort to obtain a wider consensus on what actions should be included within a set of no regret measures, the ACT4LITTER conducted a survey to gather feedback from some 110 MPA managers from 17 Mediterranean countries, namely Albania, Algeria, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Monaco, Slovenia, Spain, Tunisia and, Turkey.



*Figure 7.1.* The ACT4LITTER top 10 priority actions to curb marine litter in Mediterranean marine protected areas.

Within the Plastic Busters MPAs a survey was run among the project partners in order to validate the ACT4LITTER top 10 priority measures, while focusing on prevention measures (thus excluding measures dealing with cleanup and removal actions) and considering the policy advances and on going efforts against marine litter. The respondents were asked to 'select/vote' for the top 3 most effective measures to tackle marine litter in Med MPAs according to their expert view.



*Figure 7.2.* The methodological approach for shortlisting measures to be considered for the Plastic Busters MPAs demo projects.

Some twenty two partners from Albania, Croatia, France, Greece, Italy and Spain participated in the survey, with the majority of the respondents coming from Italy (32%) and Greece (27%) as shown in Figure 7.3. The top 5 measures considered to be most effective for dealing with marine litter in MPAs included the following: promoting best practices for tourism and recreation; improving solid waste management systems and practices; promoting the replacement of single-use plastics; banning specific items and activities; implementing awareness raising campaigns (see Fig. 7.4). The promotion of best practices for recreational fishing, the marking and retrieval of fishing gear, adopt-a-beach schemes and actions to reduce smoking related actions were seen as less effective.



Figure 7.3. Percentages of survey responses per country.



Figure 7.4. Survey results with the number of 'votes' each selected measure received.

When comparing the 10 types of measures shortlisted by the Plastic Busters MPAs partners with the ACT4LITTER top 10 priority actions to curb marine litter in Mediterranean marine protected areas we notice that the vast majority of the selected priority measures are the same with the exception of the cleanup and removal actions (given that the project focuses on prevention) and the data collection activities which were not considered in the survey. The adopt-a-beach scheme was not considered to be very effective when comparing it with other measures and it didn't make it to the top 10 list of measures either.

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## 9. List of acronyms

D10	Descriptor 10 (Marine Litter)
EC	European Commission
EcAp	Ecosystem Approach
EU	European Union
GES	Good Environmental Status
IMAP	Integrated Monitoring and Assessment Programme
MAP	Mediterranean Action Plan
MPAs	Marine Protected Areas
MSFD	Marine Strategy Framework Directive
MSFD TG10	MSFD Technical Sub-Group on Marine Litter
UNEP	United Nations Environment Programme

# **10.** Annex I. The ACT4LITTER & PLASTIC BUSTERS MPAS inventory of best practice marine litter measures.

Nº	Prevention measure?	Title of the measure	Brief description	Measure category
M-1	NO	The Ocean Washing-Up Liquid Bottle	A plastic bottle made from bioplastics, recycled plastics and plastics fished from the oceans. The innovative bottle is made from 10% reclaimed ocean plastic.	Upcycling and/or recycling
M-2	NO	Furniture from plastic marine litter	Furniture is created following the principles of circular production and design. They make optimal use of marine litter and of 'waste streams' to produce furniture.	Upcycling and/or recycling
M-3	NO	The "Recyclable Shampoo Bottle" project	This initiative, led by a global shampoo brand, focuses on making a recyclable bottle made from up to 25 % recycled beach plastics.	Upcycling and/or recycling
M-4	YES	Providing an alternative solution to single-use plastic cutlery	This company-led initiative is dedicated to innovative design promoting sustainability. New products are created that, once disposed of, are harmless to the environment. One of these products is 100% biodegradable and compostable cutlery.	Promoting the replacement of single-use plastics
M-5	YES	The "Bag it and Bin it- Don't flush it" campaign	This campaign encourages women between 15 and 45 to bag and bin sanitary items instead of flushing them down the toilet. Campaign materials include a logo, posters, leaflets and stickers. Retailers and manufacturers are asked to apply the logo to products.	Awareness raising campaigns
M-6	YES	The "No more wipes" campaign	This campaign encourages citizens to use a waste bin to collect sanitary items instead of flushing them down the toilet	Awareness raising campaigns
M-7	YES	The "#WeloveWater" campaign	Municipal water supply company and a start-up have launched the '#WeloveWater' campaign to raise public awareness of the fact that the toilet is not a wastebasket where waste like wipes or cigarettes can be flushed down and cause blockages in water treatment plants.	Awareness raising campaigns
M-8	YES	The Operation Clean Sweep campaign	The campaign's goal is to help every plastic resin handling operation implement good housekeeping and pellet, flake, and powder containment practices to work towards achieving zero pellet, flake, and powder loss, protecting the environment and saving valuable resources. Other campaigns: Nurdle free oceans (UK)	Promoting extended producer responsibility schemes
M-10	YES	The "Last Plastic Straw" campaign	The Last Plastic Straw movement seeks to activate citizens through campaigns to push for change in restaurant practices in their local communities to limit and ultimately eliminate the use of plastic straws.	Awareness raising campaigns
M-11	YES	The "Plastic Free Town" Movement	In order to facilitate action, the Plastic Pollution Coalition disseminates guidelines on how to start a bag ban or an EPS ban in a town. In partnership with local organizations, three steps are proposed: audit of common sources of plastic pollution in the community; evaluation and identification of viable, locally sourced alternatives to the sources of plastic pollution; development of a plan to reduce plastic pollution.	Banning specific items and activities
M-12	YES	The "Bring your nets back to shore, Recycle" campaign	The Catalan Waste Agency has carried out a project to manage discarded fishing nets in ports and prevent their disposal at landfills or in the sea. The project placed containers at the Catalan ports. The waste is later managed through waste treatment facilities to valorise the waste (e.g. to make other plastic products).	Derelict fishing gear management schemes
M-13	YES	From Net to Raw Materials	A Danish industry introduced a pioneering invention that makes it possible to separate different types of plastic that are otherwise inseparable. Fishing nets and plastic waste are processed into marketable basic materials.	Derelict fishing gear management schemes
M-14	YES	The Healthy Seas initiative	Healthy Seas transforms fishing nets and other waste into regenerated nylon yarn. In the final step, textile products are created. Non-profit activities include the recovery of fishing nets by volunteer divers and their storage in special facilities, educational campaigns and waste prevention programs.	Derelict fishing gear management schemes
M-15	NO	The Net-works project for collecting and selling discarded nylon fishing	A carpet industry and the Zoological Society of London carried out the Net-works project in the Philippines and Cameroon. This project empowers people in coastal communities to collect and	Derelict fishing gear management

		nets	sell discarded nylon fishing nets, thereby removing these nets from the ocean. The nets are then sold into a global supply chain and recycled into yarn to make carpet tile.	schemes
M-16	YES	Disposal of derelict fishing gear	A cost-free solution to fishermen to dispose of old, derelict (gear that is lost in the marine environment) or unusable fishing gear and to reduce the amount of derelict fishing gear in and around coastal waterways.	Derelict fishing gear management scheme
M-17	YES	The "Do you need a bag?" campaign	A big Department store company led a campaign addresses the impact of carrier bags. The goal was to reduce carrier bag usage by 33% and reduce the environmental impact of the company bags by making them out of recycled polythene. The 'Do you need a bag?' campaign led to profits from the sale of the 5p bags, which were donated to the environmental charity. The result: a 75% reduction in bag usage.	Promoting the replacement of single-use plastics
M-18	YES	The "Plastic Free Communities" campaign	Surfers Against Sewage is an NGO dedicated to improving the condition of surfing beaches. They have launched several initiatives to reduce marine litter (targeted at surfers and other beach users). Plastic Free Communities is a campaign to put the problem of single-use plastic waste on the map, and raise awareness of the growing issue of marine plastic pollution.	Promoting EPR schemes
M-19	YES	The Greener Festivals Movement	An increasing number of artists, companies, venues and festivals are joining initiatives to decrease their environmental impact, including plastic waste, and use these mass events to raise awareness and stimulate mind-set changes	Eco-labelling and Environmental Management Systems
M-20	YES	The Refill Revolution program	Within this programme, reusable steel cups are provided that eliminate the need for single-use plastic cups and bottles.	Promoting the replacement of single-use plastics
M-21	NO	The "Litter Free Thaipusam" campaign	Thaipusam is a Hindu ceremony held each year in Malaysia. The Malaysian Plastic Manufacturers Association organized an anti- litter and recycling campaign called Litter Free Thaipusam in 2015 and 2016. Hundreds of uniformed volunteers were stationed at various checkpoints to guide people to place recyclable materials, including polystyrene foam and food service packaging, into specially marked recycling bins separate from waste bins.	Awareness raising campaign
M-22	YES	The "European Week for Waste Reduction" initiative	The European Week for Waste Reduction project has been developing communication tools to support awareness-raising actions about sustainable resource and waste management.	Awareness raising campaign
M-23	YES	The Antivolabossa device, preventing bin bags from blowing away	Antivolabossa is a device designed to prevent rubbish bags in bins from blowing away and emptying their contents on the street. It serves to prevent the wastage of thousands of rubbish bags and the dirtying of urban spaces. This product is manufactured from the rubber curtains on recycling containers that have had to be replaced. This has been tested in Barcelona.	Improved design of bins
M-24	NO	The Upcycling the Oceans project, turning trash into yarn	The initiative aims to recover plastic from the sea to make casual contemporary clothing. In collaboration with port authorities and fishers associations, containers for the collection of marine litter from trawl fishers have been put in place. Upcycling the Oceans was born in September 2015. The project has collaborated with more than 450 trawl vessels in 32 Mediterranean fishing ports.	Derelict fishing gear management schemes
M-25	NO	The Ecoports project, dealing with waste generated during daily fishing activities	The objectives of the Eco-ports (Ecopuertos) project in Motril (Spain) are: collection, classification and quantification of all the waste generated in the course of daily fishing activities (both produced on board or in the port area), awareness campaigns and clean-up campaigns with schoolchildren, walkers, centres and diving clubs.	Fishing for litter schemes
M-26	NO	The MARVIVA Fishing for Litter project	MARVIVA is fishing for litter project promoted by the Catalan Waste Agency in 14 Catalan fishing ports (in collaboration with Barcelona Fishers Associations and the Port Authorities). The main objectives are to increase knowledge in the amounts, types and sources of marine litter; to raise awareness on marine litter issues and to promote best practices within the fishing industry.	Fishing for litter schemes
M-27	NO	Marking and retrieval of fishing gear	The marking of fishing gear, retrieval and notification of lost gear is part of the UK's department of 'Marine environment and regulations, monitoring and enforcement laws'.	Marking and retrieval of fishing gear
M-28	YES	bag" campaign	the people of Bali to say no to plastic bags in 2013. It has	raising campaign

			become a well-known and inspirational international movement. In 2015 they received confirmation that the government that Bali will become plastic bag and plastic garbage free by 2018.	
M-29	NO	The "My Beach" Initiative	Currently there are 6 stretches of beach in the Netherlands that have implemented the My Beach Initiative. The beaches contain signs, waste bins and flags to inform visitors to collect and dispose their own rubbish but to do the same for any litter washed up on the beach.	Adopt-a-beach schemes
M-30	NO	The "Keepers of the Coast" campaign	'Keepers of the Coast' is a program dedicated to protecting the ocean and beaches from local threats in coastal communities. All through a collective platform of engaged volunteers.	Adopt-a-beach schemes
M-31	YES	The "Responsible Beach Snack Bars" initiative	Beach Snack bars voluntarily register on a list and commit themselves to comply with the 'Decalogue of Good Environmental Practices'. To give emphasis to this campaign, the 'Responsible snack bar award' was also launched for the first time in November 2012.	Promoting best practices for tourism and recreation
M-32	NO	The "Adopt a beach/Sponsor your beach" campaign	The "Sponsor your beach" campaign aims to include schools in the conservation of marine ecosystems as part of the annual teaching activities through the sponsorship of a beach in their municipality.	Adopt-a-beach schemes
M-33	NO	The "I Take Care of My Beach" campaign	Launched in 2014, 'I Take Care of My Beach, (Yo Cuido Mi Playa)' is an initiative from Mexico's National Association of Plastics Industries, designed to enhance awareness of the effects of litter on the marine environment and help clean up Mexico's beaches.	Adopt-a-beach schemes
M-34	YES	The "We win by recycling" initiative, providing businesses with Reverse Vending	A Spanish SME commercialise Reverse Vending Machines (RVMs) to provide certain businesses (mainly retailers) under a franchise agreement and later buy the beverage containers collected. The user is incentivized by receiving money or	Promoting EPR schemes
M-35	YES	Machines Deposit-refund system for beverage packaging	A deposit-refund system pilot project was set up in the tourist village of Cadaqués in Spain (Cap de Creus MPA). It identified and implemented prevention measures related to the establishment of [mandatory] Deposits, Return and Restoration Systems for beverage packaging, prioritizing their recycling when possible.	Promoting EPR schemes
M-36	YES	Deposit-refund system for beverage packaging at UB	The University of Barcelona has put in place a deposit-refund system (Retorna UB) for cold beverage containers. With this system, the beverages sold in vending machines and soda water incorporates a deposit of $\notin$ 0.10, which can be recovered by returning the empty container to the machines.	Promoting EPR schemes
M-37	NO	A floating debris interception device	A floating rubbish bin located in the water at marinas, docks, yacht clubs and commercial ports, collecting all floating rubbish. The water is then pumped back into the marina leaving litter and debris trapped in the catch bag to be disposed of properly.	Cleanup campaigns and removal actions
M-38	NO	The "PVC Pipe Fishing Line Bins" project, collecting discarded fishing	In South Africa, an increase in recreational and subsistence fishing has resulted in an increase in fishing line discarded in the marine environment. To combat this problem, Plastics SA partnered with various stakeholders to place durable plastic bins along the coastline to collect fishing line and associated gear such as fishing hooks.	Derelict fishing gear management schemes
M-39	NO	The "Fishing Line Bin" project, collecting fishing lines	Keep Australia Beautiful are partners on the Fishing Line Bin Project (Department of Biodiversity, Conservation and Attractions- River Guardians). The project aims to encourage the use of bins at fishing spots and reduce litter and harm to marine life.	Derelict fishing gear management schemes
M-40	YES	Best practices for recreational fishing	The Great Barrier Reef Marine Park Authority (GBRMPA- Australia) promotes the use of best environmental practices for recreational fishing	Promoting best practices for recreational fishing
M-41	NO	Realizing floating parks by recycling retrieved plastics found in the river	Plastic waste is collected before it can enter the North Sea. The plastic is used as a building material for floating platforms that are planted to form a recycled park.	Upcycling and/or recycling
M-43	YES	Deposit-refund system for expandable polystyrene boxes used in the fisheries sector	Implementation of a Deposit, Return and Restoration System for expandable polystyrene (EPS) boxes in the fishing sector. The user (fisherman, fish processor, retailer, and consumer) has to pay a deposit for each EPS fish box; when it returned to collection point the deposit is paid back.	Promoting EPR schemes

M-44	YES	The Plastic Bag Levy	In March 2002, the Irish Government introduced a 15 cent levy on plastic shopping bags that were previously provided free of charge to customers at points of sale. The Levy was designed to change consumer behaviour, to give 'pause for thought' & to encourage reusable bags.	Imposing a fee/tax/levy
M-45	YES	The Bag Levy Agreement	On 28th July 2009 the Bag Agreement established a framework for collaboration between the Catalan government and the retail organizations, with the aim of reducing the consumption of disposable carrier bags by 50% by 2012 in relation to the consumption values for 2007. Law 5/2017 prohibits the free delivery of cash bags or home delivery of any plastic material.	Banning specific items and activities
M-46	YES	The Plastic Bag Ban	The Queensland State Government has announced a plan to ban lightweight, single-use plastics bags by July 2018. This includes degradable and biodegradable bags. The ban is due to come into effect on July 1st, 2018.	Banning specific items and activities
M-47	YES	Promoting the use of reusable carrier bags in campsites	Promoting an eco-responsible approach to ecotourism; during their stay, campers are invited to participate through actions like sorting waste or using reusable bags.	Promoting best practices for tourism and recreation
M-49	YES	Separate sanitation networks for wastewater and runoff	Vancouver city is working to eliminate sewage overflows by 2050 with a separated sewer system. Separating storm water from wastewater is better because it eliminates combined sewer overflow, prevents flooding by increasing capacity and allows storm water to be used as a resource.	Improving wastewater management systems
M-51	NO	The Blue Flag initiative	The Blue Flag programme is an initiative of the Foundation for Environmental Education and has the support of the European Commission. The Blue Flag is awarded annually to the beaches and marinas that fulfil a set of criteria: information and environmental education; water quality; environmental management and equipment; and security and services.	Eco-labelling and Environmental Management Systems
M-52	NO	The "Let's Clean Up Europe" campaign	The Let's Clean Up Europe is being in carried out in all European countries. One case study is the one carried in Catalonia.	Cleanup campaigns and removal actions
M-53	YES	Cigarette litter abatement fee	Due to growing concerns over the environmental impact and cost of cleaning up cigarette butts, San Francisco enacted a "cigarette litter abatement fee" of \$.20 per pack sold in St. Francisco, the proceeds of which helps defer the costs of cleaning streets, sidewalks, and public property.	Imposing a fee/tax/levy
M-54	NO	Alternative decking from recycled wood and plastic	U.S. company that manufactures alternative decking from a blend of 95% recycled wood and plastic – sponsors several community-based plastic bag recycling programs at major national grocery and retail chains.	Upcycling and/or recycling
M-55	YES	The "Ocean Friendly Restaurants" programme	As a response to increased plastic pollution in the coastal zone and ocean gyres, Surfrider Foundation Chapters started an Ocean Friendly Restaurants program. A main goal is eliminating EPS foam food ware (aka Styrofoam) because it is a top item found at our beach clean-ups.	Eco-labelling and Environmental Management Systems
M-56	YES	The Clean Boater Program	The Florida Clean Boater Program seeks to educate boaters on the importance of protecting the state's waterways by adopting environmentally friendly practices, including proper trash management, using bilge socks and fuelling collars, and practicing good recycling habits.	Awareness raising campaigns
M-57	YES	Implementing the "Indirect Fee System" for the collection of ship-generated waste	The Cypriot Port Authority has implemented an 'Indirect Fee System' which means that every ship that enters Cypriot ports is charged a fee that gives it the right to dispose of its waste (solid waste, sludge (from burning of fuel) and sewage), regardless of whether or not the ship will actually dispose of any waste.	Improving port reception facilities for the delivery of waste from ships
M-58	NO	The Boat that cleans the Sea	"Battello Spazzamare" is a vessel of the Ministry of the Environment and Protection of Land and Sea for the collection of floating and solid litter in Italian MPAs. This vessel is equipped with a basket situated on the boat, which is used for the collection and stowage of floating litter	Clean-up campaigns and removal actions
M-59	NO	Establishing Waste Reception Points for waste from vessels	In 2007 and 2008, waste bins were distributed to vessels operating in Cascais Municipality, in order to discourage waste disposal into the sea. In 2008, the first reception point (Ecopoint) for waste from vessels was implemented in the Fishing Port of Cascais. The fishermen are responsible for the Ecopoint maintenance and waste management.	Improving port reception facilities for the delivery of waste from ships

M-61	NO	The "Cruise Passenger Fee" initiative for observing ship waste treatment practices	This initiative from the EPA (USA) is charging a passenger fee to put a marine engineer on board cruise ships to observe ship waste treatment practices (as a voluntary agreement with the cruise ship companies).	Imposing a fee/tax/levy
M-62	NO	The "Free drink for a cup full of cigarette butts" campaign	This a campaign (2015) carried out in beach snack bars in Spain aiming to keep the beach clean of cigarettes butts.	Actions to reduce smoking- related litter items
M-66	NO	Tax on boats, for financing measures to manage waste on islands	Municipalities on small Italian islands are authorized to charge passengers on boats landing on their shores an additional tax aimed at financing measures for the islands' collection and disposal of waste.	Imposing a fee/tax/levy
M-67	NO	The Ocean Plastic Recovery Initiative	Under the Ocean Plastic Recovery Initiative, buy-back programmes are carried out focusing on generating alternative income from for collected marine debris. RAW for the Oceans, a fashion range by G-Star Raw and Bionic Yarn, contains yarn made from PET bottles recovered from the oceans.	Upcycling and/or recycling
M-70	YES	The "Keep the Mediterranean Litter Free" campaign	Different types of activities were implemented in several Mediterranean countries such as beach clean-ups, exhibitions and workshops, photo contests, etc The main vehicles of the campaign included a poster/pamphlet presenting the various causes and impacts of marine litter and a publication entitled "Public Awareness for the Management of Marine Litter in the Mediterranean"	Awareness raising campaign
M-71	NO	Distribution of cone- ashtrays to reduce cigarette butts on beaches	The company concessionaire of the beaches in Benidorm (Spain) began the distribution of cone-ashtrays to avoid the presence of butts in the sand.	Actions to reduce smoking- related litter items
M-72	YES	Environmental Management System in tourist facilities	Implementation of an Environmental Management System (EMAS or similar) to prevent littering and other sources of ML in a tourist facility.	Eco-labelling and Environmental Management Systems
M-73	NO	The "Adopt-a-spot" program	The Adopt-a-Spot program in Western Australia is a simple way to mobilize volunteers for a few hours to do their bit for a cleaner environment.	Adopt-a-beach schemes
M-74	NO	Anti-Littering Advertising Campaign	City of Toronto anti-littering ads encourage responsibility of producers by challenging them to increase anti-littering messages on their products, using less harmful products, promote recycling and support anti-beach litter initiatives.	Awareness raising campaign
M-75	YES	The "Beat the MicroBead" campaign, for phasing out microplastics from cosmetics	The 'Beat the Microbead campaign' is supported by 90 NGOs from 38 countries around the world. The latest addition to the campaign seeks to reward cosmetic brands that are 100% free of microplastics in their products, so they can apply to carry the "Zero Plastic Inside" logo.	Actions to phase out microplastics
M-76	YES	The Microbead-Free Waters Act	In USA, Microbead-Free Waters Act of 2015 is as stated: "to amend the Federal Food, Drug, and Cosmetic Act to prohibit the manufacture and introduction or delivery for introduction into interstate commerce of rinse-off cosmetics containing intentionally-added plastic microbeads".	Actions to phase out microplastics
M-77	YES	The disposable cutlery ban	Disposable plastic cutlery (cups, glasses, plates) will be banned in France from 1 January 2020 with the exception of those compostable for home composting.	Imposing a fee/tax/levy
M-79	YES	The Cotton Bud Project	The Cotton Bud Project seeks to engage local concerns over the current environmental issue of plastic cotton bud stems in marine litter, promoting a change to biodegradable material such as paper.	Eco-labelling and Environmental Management Systems
M-80	NO	The Marine Debris and Floatables Management Program via boat- supported clean-up operations	So far in 2016, Philadelphia Water boats have collected 4.8 tons of trash during 72 trips (50 days on the Schuylkill and 22 on the Delaware). All of this is done under Philadelphia Water's Marine Debris and Floatables Management Program.	Clean-up campaigns and removal actions
M-81	NO	The "Dive Against Debris" project	Project AWARE's flagship citizen-science program, Dive Against Debris®, empowers scuba divers to remove marine debris from	Clean-up campaigns and

			the ocean and report data on the types, quantities and locations	removal actions
		The WFO trawls Nets,	The WFO (Waste Free Oceans) trawls nets can protect rivers,	Clean-up
M-86	NO	for cleaning up	inlets and stop any discharge of pollution into main Rivers and	campaigns and
		floating litter	the sea.	removal actions
NA 07	VEC	The "Great British	The Great British Spring Clean is a campaign with a simple aim:	Clean-up
IVI-87	YES	Spring Clean"	to bring people across the country together to clear up the litter	campaigns and removal actions
			In Barcelona and nearby communities, the local councils employ	Clean-up
M-88	NO	Keeping riverbeds	workers to collect waste in the dry rivers. This can be carried out	campaigns and
		and dry rivers clean	as a form of employment for youths and long-term unemployed.	removal actions
		The Diret's Cotton	The Biodiversity Law of France has been amended with a ban on	Banning specific
M-91	YES	I ne Plastic Cotton Bud Ban	plastic-stemmed cotton buds from 1st January 2020. Decree	items and
		Buu bun	plastic stem for domestic use,.	activities
		Targeted outreach	This initiative focuses on the removal of derelict fishing gear and	Derelict fishing
M-93	NO	program to prevent	on educating the local fishing community about the impacts of	gear
		derelict nets and crab	derelict gear	management
			RAPA Vlore (Regional Administration of Protected Areas)	Clean-up
M-94	NO	Dive Against debris	organized awareness-rainsing scuba diving activities to identify	campaign and
		campaign	the hotspots on plastic pollution and collect plastic litter.	removal actions
MOE	NO	Seabed clean-up	Gouraya National Park is very active in seabed cleaning	Clean-up
101-95	NO	operations	operations with all concerned local stakeholders.	removal actions
		Establishing derelict	Within the framework of the IPA-Adriatic DeFishGear project,	Derelict fishing
M-96	NO	fishing gear	derelict fishing gear management schemes were established in	gear
		management	ports and marinas in the Adriatic and Ionian Seas in order to	management
		schemes	This initiative from the Cap Ferrat Natura 2000 site (Nice Côte	schemes
N4 100	VEC	Sewer drains free	d'Azur Metropolis) places signs on the road next to sewer drains	Awareness
IVI-100	TES	from litter	to inform residents of how they are connected to the sea and	raising campaign
			about marine litter.	
		The "Ecogeste in the	The Cote Bleve Marine Park is involved in a campaign for environmental education entitled "Ecogeste in the	Awareness
M-102	NO	Mediterranean"	Mediterranean". The EcoGeste campaign also raises the	raising campaign
		campaign	awareness of all sea users about the issue of marine litter.	0.0
			Since 2016, the Gulf of Lion Marine Park has implemented	Derelict fishing
M-103	NO	Recovery of fishing	several activities related to marine litter. One of these focuses	gear
		nets	value chain for their exploitation.	schemes
			The FEP Varois Group (European Fisheries Fund Group)	Derelict fishing
M-105	NO	Recovery and	implements a measure focused on recycling fishing nets and	gear
		recycling lishing nets	reusing the end product for the fabrication of other products.	schemes
			Legambiente coordinates organizations, schools, tourist hotels,	
			local people and local institutions each year in the awareness	Clean-up
M-106	NO	The Clean Up the	campaign Clean Up the Med, which involves more than 1,500	campaigns and
		ivied campaign	attention to the pollution of the Mediterranean Sea and	removal actions
			motivate communities to work together to change the situation.	
		Removal of floating	Punta Campanella MPA is implementing several measures	Clean-up
M-107	NO	litter	related to marine litter. One of these measures focuses on the	campaigns and
			The Mediterranean Centre for Environmental Monitoring	Clean-up
M-108	NO	Dive against debris	participated in several organized volunteering activities for	campaigns and
			removing garbage from the seafloor.	removal actions
	NO	Improving waste	In Gokova Bay MPA, the municipality put special boats into	Improving waste
M-111	NO	collection on-board	service for litter collection from boats.	on-board
			SMILE – Strategies for Marine Litter and Environmental	
		System to prevent	prevention of sea pollution in coastal areas – is a European	Clean-up
M-114	NO	riverine inputs of	project aiming to decrease marine litter in coastal areas with an	campaigns and
		marine litter	placed at the mouth of the river, will catch the litter transported	removal actions
			from the river to the sea.	
			Within the framework of the IPA-Adriatic DeFishGear project,	Fishing for litter
M-115	NO	Fishing for litter	fishing for litter activities were implemented in the 7 countries	schemes
		Targeted removal of	Within the framework of the IPA-Adriatic DeFishGear project	Clean-un
M-116	NO	ghost nets	the targeted removal of ghost nets was piloted in the countries	campaigns and

			of the Adriatic-Ionian macro region.	removal actions
M-117	YES	Enhancing public awareness and promoting co- responsibility for marine litter in Europe	MARLISCO was a European initiative, which developed and implemented activities across 15 countries. It worked towards raising social awareness and engagement on marine litter, through a combination of approaches (public exhibitions, a video competition, educational and decision-supporting tools, events with stakeholders).	Awareness raising campaign
M-118	NO	Removal of marine litter with a marine litter collection and treatment vessel	The Sea Litter Critters project explored the feasibility of introducing a compact, unmanned, renewables-powered and self-sufficient marine litter collection and treatment vessel to the market, minimising the pollution risks linked to plastic in the sea, where plastic items become brittle and break down into small particles, but basically never dissolve.	Clean-up campaigns and removal actions
M-119	NO	Sea surface marine litter cleaning operations	Sea surface marine litter cleaning is carried out in Turkey by three metropolitan municipalities. Boats gather floating litter every day and sent them to recycling plants.	Clean-up campaigns and removal actions
M-120	NO	The Blue Lid Campaign	It is a social responsibility project that was widespread all over the country (Turkey) for supplying wheelchairs in exchange of plastic bottle lids to those who need a wheelchair but cannot afford to have one.	Upcycling and/or recycling
M-121	NO	The Coastwatch Campaign	Coastwatch is a project with a strong environmental education component. It promotes active citizenship in school communities and allows significant coastal monitoring, including marine litter monitoring and beach clean-ups.	Clean-up campaigns and removal actions
M-123	YES	Setting up a return- refund system for packaging	In 2006 Croatia has accepted the return packaging system model for PET, glass and AI / Fe packaging units (bottles and cans). The refund money that the producers paid to put the packaging on the market goes on the account of the Croatian Fund for environmental protection and energy efficiency.	Promoting EPR schemes
M-124	YES	The Smoking Ban	Ban on smoking at some beach areas (like half of a beach non- smoking). Outdoor bans exist in cities like Tokyo where smoking is not allowed on the streets except in designated areas. In MPA context these areas could be near a beach bar (more potential customers close to it).	Banning specific items and activities
M-125	YES	Installing drinking water fountains to reduce the use of single-use plastic bottles	In Copenhagen (Denmark), 60 drinking fountains have been installed across the city to encourage the use of refillable bottles and to reduce the use of single-use plastic bottles. The Company, who installed the fountains, estimate 1 litre of water from the fountain as a 0.0002 kg CO2 eq. compared to 0.18 kg CO2 eq. from 1 litre of bottles water.	Promoting the replacement of single-use plastics
M-126	YES	The Bottled Water Ban	City of San Francisco has become the first in America to ban the sale of plastic water bottles. On January 20th, 2017 was published Ordinance No. 009-17, amending the Environment Code to restrict the sale or distribution of packaged water on City property.	Banning specific items and activities
M-127	YES	Licensing law obligating the use of reusable containers at public events	There is a clear potential for municipalities to require, under licensing laws, hospitality venues that serve alcoholic and other drinks in outside places, e.g. terraces, pavements, to use reusable (glass or durable plastic) containers rather than disposable containers. Returns could be secured through the implementation of a deposit-refund system. The City of Munich has banned the use of disposable cutlery at large-scale public events ("Münchner Einwegverbot") Vienna also implemented measures, from 1st January 2011, to reduce the environmental impact of events through reducing the use of disposable items.	Promoting the replacement of single-use plastics
M-128	YES	The "ReThink Disposable" program	In California, Clean Water Action is running a "ReThink Disposable" program in which they give advice to restaurants and food outlets in the area as to how switching from using single-use disposable food wares to reusable crockery or environmentally friendly options can both save them money and reduce plastic waste.	Promoting the replacement of single-use plastics
M-129	YES	The LIFE+ DEBAG project to reduce plastic bags use	Throughout the duration of the LIFE Project 'DEBAG – Integrated information and awareness campaign for the reduction of plastic bags in the marine environment' an extensive information campaign will be implemented, targeting the huge ecological footprint of plastic bags in the marine environment. The basic "pilot" of the implementation's actions is the island of Syros.	Awareness raising campaign

M-130	YES	The "Clean River" project	Rivers are a pathway, transport medium, from litter on land to litter in seas. In the Netherlands, the Clean River project (www.ivn.nl/schone-rivieren) has found a way to mobilize and organize the public to participate in a coordinated manner to support riverbank clean-ups.	Clean-up campaigns and removal actions
M-131	YES	The "I sail, I sort" campaign to promote better on-board management of marine litter	Summer campaign that aims to raise awareness of clean habits and on-board sorting in order to prevent marine litter and give our packaging a second life.	Awareness raising campaign
M-132	YES	Installing mobile water stations, to reduce disposable bottle use	In Evanston, Illinois, the City Council has developed a Mobile Water Station, which provides clean tap water at events and can be hired. In 2014 it supplied water at 55 events, reducing disposable 12-ounce bottle use by 99,000	Promoting the replacement of single-use plastics
M-133	YES	Promoting the replacement of single-use plastics with compostable alternatives	Voluntary action of the public sector (central government and municipalities), the private sector and civil society from Costa Rica to promote the replacement of single-use plastic with renewable and compostable alternatives. 'Zona Libre de Plástico' is part of the Waste Management Plan 2016-2021.	Promoting the replacement of single-use plastics
M-139	YES	City of Freiburg alternative to disposable coffee cups	In the city of Freiburg (Germany), customers pay a €1 deposit for the coffee cup, which can be returned to more than 100 participating stores in the city centre. Participating stores have an identifying green sticker in the window.	Promoting the replacement of single-use plastics
M-140	YES	Smoking bans on beaches	Some municipalities in Italy and USA have officially banned smoking from beaches. In Italy, the first municipality that has officially banned smoking from its beaches in 2019 is Bibione, in Veneto. In the USA, people caught using cigarettes, cigars, pipes or electronic cigarettes on beaches will face a fine of up to \$25.	Banning specific items and activities
M-141	YES	Sustainable waste management practices in restaurants and food service operators	The USA National Restaurant Association provides guidelines and support to restaurants and food service operators on how to reduce single-use plastics such as to-go containers, utensils, napkins and bags.	Promoting the replacement of single-use plastics
M-142	YES	Drainage nets to reduce the discharge of rubbish from drainage systems	In March 2018, the City of Kwinana (Australia) installed drainage nets at two locations in Henley Reserve as a trial. The nets were installed in an effort to reduce the discharge of rubbish from drainage systems within the city, in particular areas where road drainage is discharged into public open spaces and reserves. With the trial proving to be a success, the City of Kwinana's Engineering Design Team have identified three other locations within Henley Reserve that will be designed and retrofitted with the nets to capture more debris that would otherwise be washed out into the reserve.	Improving wastewater management and drainage systems
M-143	YES	Single-use plastic straws ban	The State of California has introduced a bill that prohibits a full- service restaurant, from providing single-use plastic straws to consumers unless requested by the consumer. The bill specifies that the first and second violations of these provisions would result in a notice of violation and any subsequent violation would be an infraction punishable by a fine of \$25 for each day the full-service restaurant is in violation, but not to exceed an annual total of \$300.	Promoting the replacement of single-use plastics.
M-144	YES	Plastic waste for free bus ride	Istanbul installed reverse vending machines giving bus tickets in exchange for plastic bottles leading to the collection of 785,084 bottles and aluminum cans for recycling. Currently, the city hosts 96 reverse vending machines; the majority of them are at schools. Three are placed in metro stations, while two others were deployed in public hospitals. In exchange for plastic bottles and aluminum waste, people can get fare credits on their electronic passes. The more they deposit in a machine, the more credits they can get.	Setting up a deposit-refund system
M-145	YES	The Clean Ports Process and Certification	With the purpose of ensuring and promoting sound environmental management for marinas, a certification system has been implemented in France and in Europe. It follows on from the AFNOR Agreement "Clean Harbour Guidelines". The "Clean Harbour Guidelines" certification guarantees that all the steps in the "Clean Harbour Guidelines" process are respected and carried out smoothly. Certification is granted for a period of three years with yearly monitoring assessments.	Eco-labelling and Environmental Management Systems

M-146	YES	Lego's recycling program for unwanted bricks	Danish toymaker Lego is testing a new way for customers to return their unwanted bricks in an effort to move closer to its goal of switching to 100 percent sustainable materials in the next decade. U.S. customers can now print out a mailing label on its site, dump their used Lego bricks in a box and ship them off for free, the company announced. The pieces will be cleaned, put in a box and given to Teach for America, a non profit that will donate them to classrooms across the United States. Some bricks will be also sent to the Boys & Girls Clubs of Boston for its after-school programs.	Promoting extended producer responsibility schemes (e.g. deposit-refund systems)
M-147	YES	Compostable plates made of banana leaves	A group of young Peruvians has launched a project called 'Bio Plant' in order to help the world use less plastic. They have created biodegradable dishes made of banana leaves to reduce environmental pollution caused by excessive disposal of plastic. Every banana leaf plate used instead of a plastic one is one less item polluting our planet. This innovative product can decompose within 2 months – it's completely degraded naturally before the 60 days are up.	Design for lifecycle



#### THE PLASTIC BUSTERS MPAs PARTNERSHIP















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