

ESMIC

Estimation, monitoring and reduction of plastic pollutants in Latvian-Lithuanian Coastal area via innovative tools and awareness raising

Developed and improved joint cooperation for clean environment by engaging the stakeholders

(T2.1.)

About the Programme

The Interreg V-A Latvia – Lithuania Cross Border Cooperation Programme 2014- 2020 aims to contribute to the sustainable and cohesive socio-economic development of the Programme regions by helping to make them competitive and attractive for living, working and visiting.

The Estimation, monitoring and reduction of plastic pollutants in Latvian-Lithuanian coastal area via innovative tools and awareness raising (ESMIC) project is funded by the European Union. The total project size is 449 574.89 EUR. Out of them co-funding of European Regional Development Fund is 382 138.64 EUR

Introduction

The *Estimation, monitoring and reduction of plastic pollutants in Latvian-Lithuanian coastal area via innovative tools and awareness raising* (ESMIC) project aims to develop a sustainable, cost-effective framework for plastic litter detection, monitoring and management in marine and coastal environments. One of the key activities with in the Project is awareness raising dedicated to key stakeholders (coastal municipalities and agencies responsible for coastal management) and target groups (coastal enterprises working on tourism and hospitality as campsites, restaurants, hotels, event organisers; other enterprises working on coastal management as waste management companies; NGO's and citizen groups active in the field of coastal development and management, educational and awareness raising NGO's and institutions as environmental organisations, schools; regional branches of environmental protection institutions).

Official disclaimer

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One of the key outputs of the ESMIC Project was to pursue a higher public sensitivity of cross border region of LAT-LIT towards marine litter subject and engagement of local communities and key stakeholder. In order to achieve this goal the network among stakeholders dealing with the marine plastic pollution issue needed to be identified and strengthened.

From the beginning of the Project, during the initial meetings, it was decided to have a clear Project identity and develop the Project’s logo and visuals for future activities. This task was lead by the Klaipeda Science and Technology Park, which after the several discussions and consultation with all Consortium have developed the Project logo and dissemination materials (Fig. 1).



Fig. 1. Examples of the Project identity material and visuals.

The strategy to develop Project’s visual identity in the beginning of the implimentation phase allowed consortium to position ESMIC project and stand out during all activities, ranging from awareness raising, stakeholder engagement, workshops, presentations and report prepatration.

During the whole Project implementation phase a stakeholder engagement could be divided in to two parallel branches: general public engagement and decision maker or business engagement. For the general public engagement all Project partners actively participated in giving interviews to the media or general public during the Project related events or events where PPs were invited to participate.

Public exhibitions and posters.

The Project consortium, lead by the Klaipeda University Marine Research Institute (KU MRI), have organised a public exhibition for the Klaipeda city inhabitants and guest at the largest shopping centers in west Lithuania, to raise awareness towards the plastic litter at the local and Baltic Sea beaches. Additionally, by the efforts from Klaipeda Science and Technology park and FEE Latvia, the previously agreed dissemination and awareness raising posters became visible at the local beaches in Latvia and Lithuania. The scientific community was reached by Klaipeda university and Latvian Institute of Aquatic Ecology, Agency of Daugavpils University (LAEI), when during the scientific conferences ESMIC posters were present and presentations on the issues related to the Project were presented.

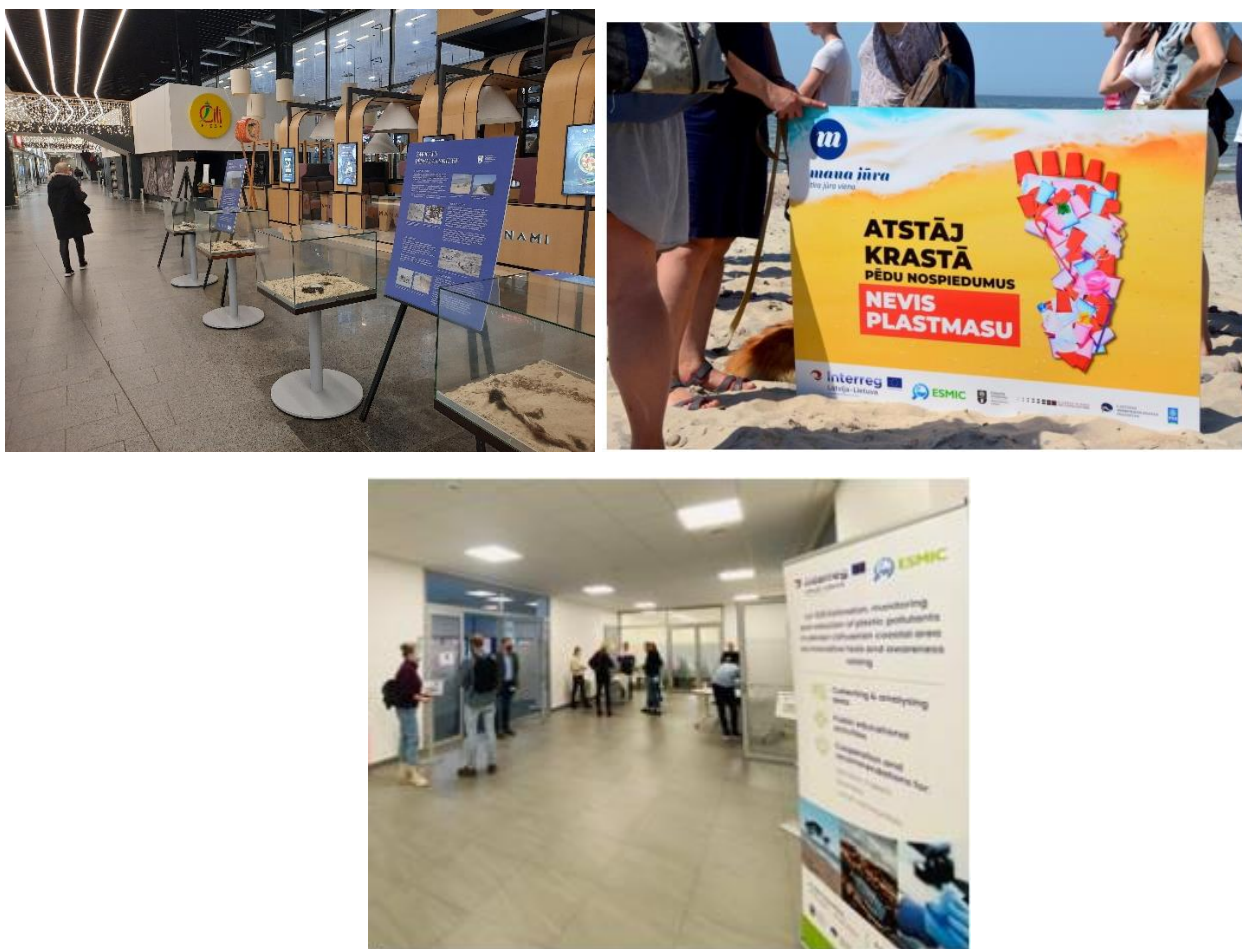


Fig. 2. Examples of ESMIC Project visibility at public areas or events.

Media and social outreach.

A wide and far reaching communication campaign was done during the Project implementation, where all project partners had an opportunity and were able to contribute to the dissemination of the Projects ideas and aims. Due to the Pandemic related restriction a public awareness raising campaign, utilising the KSTP generated posters

awareness raising, a QR code questionnaire was implemented and a citizen science initiative was tested. Besides multiple social media, radio a collaborative effort during the last reporting period and while performing "My Sea Campaign" related activities in Lithuania ESMIC Project was presented via Euronews report on "Smart regions" program.



Fig. 3. Snapshots from a citizen science initiative and an traditional TV interview public engagements.

The Forum and surveys.

The physical meetings and stakeholder, especially decision makers or business representatives was complicated due to the COVID-19 restrictions. However several workshops and public events were organised by FEE Latvia and KU MRI, with the help from other PPs. The vents were able to gather a network of from the largest coastal municipalities with in the coastla LAT-LIT region, also companies and bussineses raging from beach maintainance, Single use Plastic alternative providers to the catering companies (beach and coastal cafes and restaurants both seasonal and permanent, and seasonal vendors).

Durng the Project implementation a surveys on for a municipal stakeholders were designed to include aspects relevant to the project impact and progress of implementation of both SUP Directive and Plastics Strategy in a broader sense. First of all for the interviews focused on perception of the Directives implementation progress locally on the public and stakeholder awareness, and also with regard to impact on beach cleanliness. Secondly the interviews looked into opinions and experiences of municipal stakeholders on main benefits and main hurdles in the process of implementation. Third set of questions focused on the need for further improvements or clarifications both nationally and locally. Final questions targeted the project impact on the local actions (whether project helped municipalities) and also further plans on marine litter prevention initiatives that has been implemented or considered within the municipalities since the Directive entered into force and project has begun.



Fig. 4. Snapshots from local stakeholder engagements during the workshop in Latvia and The FORUM on Single-use plastic in Lithuanian and Latvian (Klaipeda).

My Sea campaign.

The long lasting My Sea Campaign traveled from Latvia to Lithuania and was carried out during the September month in 2022. The public awareness raising campaign gave an opportunity to not only reach general public but also invite local stakeholder to have an onsite discussion on the issues or possible plastic pollution mitigation measures for local municipalities or region.

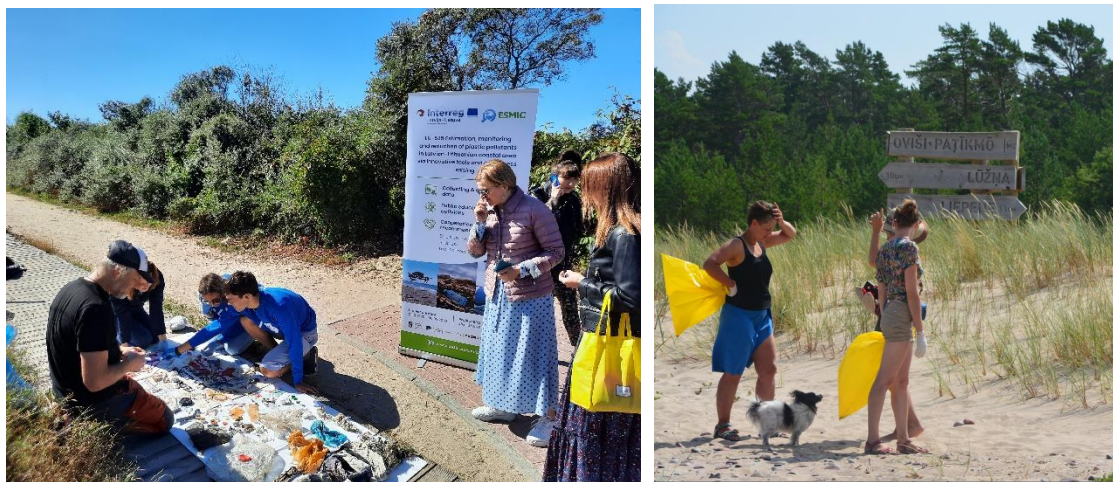


Fig. 5. Pictures from the ESMIC organised “My Sea Campaign” in Latvia and Lithuania.

Model Action Plan for marine litter mitigation.

ESMIC Project culminated with a final Project conference "TOWARDS A HEALTHIER SEA: MARINE LITTER ISSUE" which was held on the 13th of December at Klaipeda University Marine Research Institute. During the conference participants were able to hear and see the experiences and result from whole Project implementation period.

During the final conference and prior during the The Forum “Single-use plastic in Lithuanian and Latvian coastal areas: challenges and solutions” The Model Action plan for marine litter mitigation was presented. The ESMIC consortium, with a lead from FEE Latvia, have elaborated methodology for throughout survey on coastal objects with regards to implementation of SUP Directive and other measures that contribute to plastic litter prevention from tourism and recreational activities. The Model Action plan for marine litter mitigation provide municipalities and a wide range of the local level stakeholders with a broader understanding of practical measures that can

improve the marine litter situation on the small scale (local) or on the international scale (Latvian and Lithuanian coast). The Model Action plan includes a summary of adaptable best practices from around the globe and communication tools (making it possible to use single visual pages as individual info-graphics for communication) with auditories and public (see Annex 1.)

Finally, the prepared Model Action plan is used by local municipalities (especially Klaipeda, Neringa and Liepaja) as consulting tool for organising nature friendlier public events and fairs. Additionally, the developed Model Action Plan supplements Klaipeda Science and Technology Park expertise when developing and implementing other Projects or activities related to the marine environment. Finally, the Model Action Plan enhanced The Foundation for Environmental Education in Latvia efforts in Latvia with a practical and visual representation on the pollution mitigation measures and reduction of the marine litter and single use plastic items in the environment.

Annex. 1. The Model Action plan for marine litter mitigation.

MODEL LOCAL ACTION PLANS



*Initiatives and measures
towards cleaner coast*



This publication has been produced with the financial assistance of the European Union within the project **“Estimation, monitoring and reduction of plastic pollutants in Latvian-Lithuanian coastal area via innovative tools and awareness raising/ ESMIC”** (No: LLI-525). The contents of this publication are the sole responsibility of Foundation of Environmental Education Latvia and can under no circumstances be regarded as reflecting the position of the European Union.

Project **“Estimation, monitoring and reduction of plastic pollutants in Latvian-Lithuanian coastal area via innovative tools and awareness raising/ ESMIC”** aims to develop a sustainable, cost-effective framework for plastic litter detection, monitoring and management in marine and coastal environments. Plastic litter is linked with negative economic, social and ecological consequences and common challenges related to plastic litter are complex: increasing amounts of microplastic, direct harm to the marine biodiversity and negative impacts on recreational activities. Absence of physical coastal borders between Latvia and Lithuania means that actions taken in one country might affect the other. Plastic that accumulates in algal wracks on the shore or in algal scum might be a target area for plastic pollution estimation and mitigation measures. The project aims to link remotely sensed features (Earth observation from space and drones) with marine plastic litter in such areas and suggest a joint and efficient approach for monitoring and management, which can be used by municipalities or national authorities in Lithuania and Latvia. Moreover, in relation with a single-use plastic ban from the year 2021 project aims to screen alternatives to replace single-use plastic, assess environmental, social and economical impact of marine litter pollution and its reduction; engage consumers, retailers, local municipalities, industry representatives,

residents, environmental groups and tourism associations – to ensure broad support of a ban of single plastic use in coastal areas.

This project is funded by the European Union within the Interreg V-A Latvia – Lithuania Cross Border Cooperation Programme 2014-2020. The Programme aims to contribute to the sustainable and cohesive socio-economic development of the Programme regions by helping to make them competitive and attractive for living, working, and visiting.

Project duration: 01.01.2020. – 30.09.2022.

Total projects size is 449 574.87 EUR. Out of them co-funding of European Regional Development Fund is 382 138.64 EUR.



Klaipeda University
Marine Research Institute



LATVIJAS
HIDROEKOLOGIJAS
INSTITŪTS



KLAIPĒDA SCIENCE
AND TECHNOLOGY PARK

Project partners:

Klaipeda University
Klaipeda Science and Technology Park
Latvian Institute of Aquatic Ecology, Agency of Daugavpils University
Foundation for Environmental Education/ FEE Latvia

<https://latlit.eu/esmic/>

<https://europa.eu/>

FOREWORD

Marine litter for a long time has been a slightly neglected issue, but during the last decades with new scientific findings of its impacts and threats, it has risen both to political and practical prominence. Institutions, scientists and governments around the world now are looking for practical steps toward solutions to this problem that has become one of the main challenges for the ocean ecosystems in the twenty-first century. Efforts of stakeholders and citizens to raise awareness about threats and impacts of the marine litter were a crucial reason why nowadays we are more aware of the risks and are actively looking to find and promote solutions and measures.

Many practical answers and most efficient responses to the problem of marine litter lie at a very local level, therefore it is municipalities and local stakeholders that are an essential part of the process of finding the solutions and implementing necessary measures.

Within the project ESMIC we have looked specifically at this problem from the context of the Baltic Sea and specifics of the Latvian and Lithuanian coastline. We have looked into the experiences and elaborated and applied best practices in the Baltic Sea region and around the world and now we can present you this document as a

source of inspiration for action that can be taken by the local level stakeholders – from municipal institutions to businesses and civil society organisations.

We are sure that these ideas and measures for the local actions can lead to practical and successful efforts to tackle marine litter issues on our coasts and contribute to improvements in the situation. For that to happen, though, it is important that every stakeholder takes part in the process – that is why Model Local Action Plan on marine litter is not only addressed to the municipal institutions. The importance of the involvement of every stakeholder – businesses, scientists, NGO's and educational institutions etc. – must not be underestimated.

ESMIC team

INTRODUCTION

Marine litter has become a global concern and an environmental issue that is seriously affecting all the world, particularly the ocean and sea ecosystems. Every year huge amount of litter ends up in the ocean worldwide, causing environmental, economic, health and aesthetic problems. Among the general problem of marine litter, increasing concerns are growing about plastic litter that enters both marine and coastal ecosystems and has recently been identified as a threat with long-term impacts on ecosystem health.

It is important to accept the sometimes inconvenient fact that most marine litter originates from land and the reasons for that are very local. Of course, also rivers act as a major transport pathways for all sizes of litter. Around the Baltic Sea, similarly to what the global trends show, the main fraction of litter is a wide range of plastic materials. The percentage of plastic materials in overall amounts of litter steadily has grown over the last decade. For example, on the Latvian coast the percentage of plastics has increased from around 50% to more than 60% from all the beach litter during the last 10 years. Also, among the top 10 most commonly found litter items on the Baltic Sea coast here, six are made of plastic. A similar situation is common all around the Baltic Sea.

There are many ways how the litter enters into seas – deficiencies in waste management, wastewater treatment problems (including stormwater discharges), waste from the different sectors and businesses due to lacking infrastructure or understanding of the problem and also irresponsible individual actions by the consumers.

These facts put municipalities in a very essential position when looking for solutions and prevention measures. During several last years very impressive amount of the work has been done on an international level to find the right responses to the issue of the marine litter, particularly by the European Commission and other international institutions – from shifting economical focus toward a circular economy approach to restricting the use of certain plastic materials and products.

The cornerstone of environmental policies and actions to tackle the marine litter issues is the [Marine Strategy Framework Directive \(MSFD\)](#) (Directive 2008/56/EC) which requires the European Union Member States to ensure that “properties and quantities of marine litter do not cause harm to the coastal and marine environment”.

Pollution of the seas from plastics and microplastics is also one of the three major areas of the *Strategy for Plastics* (COM (2018) 28 final) adopted by the Commission in 2018; most of the proposed actions are directly or indirectly related to marine litter, including its international dimension.

It is also important to mention first ambitious initiatives against plastic pollution of the oceans which are based on Strategy as *The Directive on Single Use Plastics and fishing gear* (Directive 2019/904) which introduces a set of ambitious measures:

- a ban on selected single-use products made of plastic for which alternatives exist on the market;
- measures to reduce consumption of food containers and beverage cups made of plastic and specific marking and labelling of certain products;
- extended Producer Responsibility schemes covering the cost to clean up litter applied to products such as tobacco filters and fishing gear;
- a 90% separate collection target for plastic bottles by 2029 (77% by 2025) and the introduction of design requirements to connect caps to bottles, as well as a target to incorporate 25% of recycled plastic in PET bottles from 2025 and 30% in all plastic bottles as from 2030.

Also, nationally, governments are looking for improvements in policies and legislation since the issue of marine litter takes more and more central place in public awareness. Nevertheless, many actions still have to be taken

and implemented at the local level. They often provide ideas and resources for simple and cost-efficient measures that are helping to tackle the serious problem.

First of all, of course, municipalities must identify and be aware of the situation in their territory – that can often be done with a help of different stakeholders and through public involvement in clean-up and data gathering initiatives. As the second step in most cases, where possible, to facilitate and coordinate stakeholder contributions to litter prevention initiatives, elaboration of Local Marine Litter Action Plans or integration of marine litter in municipal or regional level Waste Management Plans are beneficial. These two steps provide structure to further efforts on municipal level action towards cleaner coasts and environment.

Due to the differences between municipal management and decision making, though, these steps are not always easy and possible to take instantly. Nevertheless, municipalities can always take further steps and practical actions that ensure beneficial results and litter prevention – from infrastructure improvements and upgrading of the waste management routines to stricter local regulations and restrictions on plastic material use in coastal areas. The range of instruments that can be utilised is very broad; and among them an important place must be given to awareness raising and stakeholder cooperation as well. Within this material, we are trying to provide ideas and examples of best practices that can be applied locally and will help to make Latvian and Lithuanian coasts much cleaner in the future.

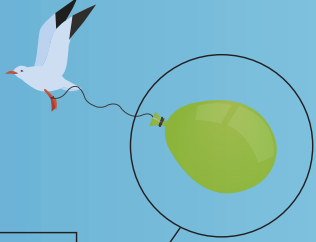
MUNICIPALITIES, PLASTIC WASTE AND MARINE LITTER



LIFE OF PLASTIC ON THE COASTLINE

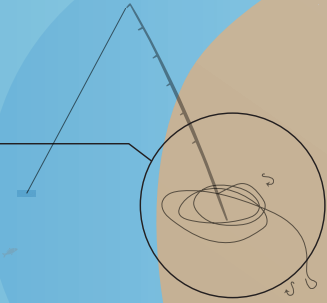
7. BALLOONS

at least 4 years or do not decompose at all depending on type of the particular plastic



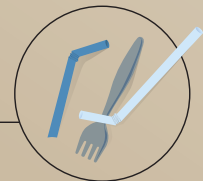
9. FISHING LINE

600 years



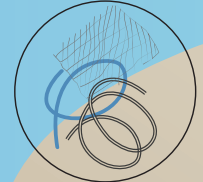
6. PLASTIC STRAWS and other disposable tableware

200 years



4. PLASTIC ROPES (FISHING NETS)

30-40 years



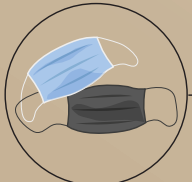
5. FOAM (INSULATION AND PACKAGING)

Up to 500 years or does not compose at all



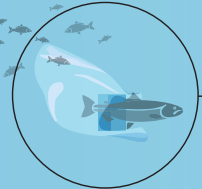
8. PLASTIC BOTTLES

450-1000 years
Usually decomposes slower than plastic bottle itself due to specific type of plastics



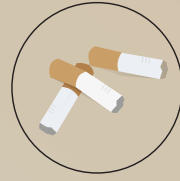
10. MEDICAL FACE MASKS

up to 450 years
Decomposes up to 17300 microfibers



1. PLASTIC BAG

20-1000 years



2. CIGARETTE BUTTS

10-12 years
Decomposes up to 15000 microfibers



3. PLASTIC BOTTLE CAPS

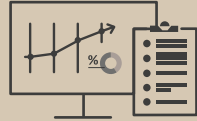
450-1000 years
Usually decomposes slower than plastic bottle itself due to specific type of plastics

LEGEND

Decomposition time



MUNICIPAL ACTIONS FOR CLEAN COAST



1.

Evaluation of the situation in the municipality and creation of a local action plan.



2.

Stricter and binding regulation and responsible control in the beach and coastal area.



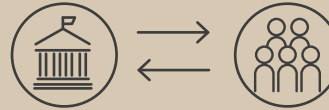
3.

Restrictions on the use of plastics, especially disposables, in coastal and beach areas - commercial facilities, events etc.



4.

Cooperation with the public - environmental education, involvement in cleaning activities, support for local initiatives.



5.

Improvement of beach and coastal areas, choosing the best solutions for waste prevention.



6.

Participation in Blue Flag program, promotion of eco-certification for tourism entrepreneurs.



7.

Broad application of the green procurement practices.



ROADMAP TO LOCAL ACTION PLAN



PORTS AND MARINAS

Improvements in service and repair areas, implementing prevention of waste entering surroundings.

Infrastructure present in ports and marinas to safely manage wastewater, graywater and hazardous waste.

CONSTRUCTION

Regulations and control is in place for the construction sites, ensuring that insulation materials (as foam) and other waste is managed in a responsible way.



CITIES

Waste reception facilities design improvements and adequate quantity and density of their availability, depending on visitor pressures.

Adequate management routines to avoid overflowing of containers.

Improvements in recycling infrastructure availability.



WASTEWATER TREATMENT

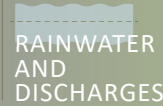
Improvements in wastewater treatment and rainwater management, preventing waste discharges in nature.



RAIN



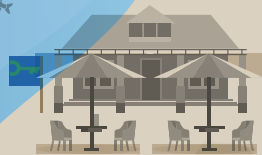
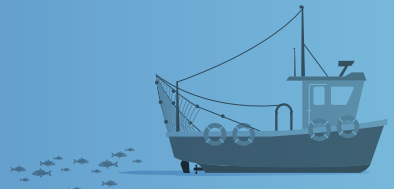
WIND



RAINWATER AND DISCHARGES



RIVERS AND DRAINS



COASTAL RECREATION AND TOURISM

Restriction of single use items in coastal commercial objects and events.

Adequately equipped and managed smoking areas.

Implementation of the best practices of waste prevention- local deposit systems (i.e. for beverage cups), information and education campaigns, participation in ecocertification programmes.



AGRICULTURE

Collection and adequate management (recycling) of plastic film and other items as packaging used in agricultural activities.

HOUSEHOLDS

Educational and awareness campaigns targeting the issue of flushing the hygiene items.



ILLEGAL WASTE DUMPING

Efficient notification and response systems, and involvement of the general public in identification of illegal waste dumping hotspots.



WASTE MANAGEMENT

Disposal of snow in winter from public territories in areas, where litter after melting of snow do not enter in streams and sea.





INDIVIDUAL ACTIONS FOR CLEAN COAST



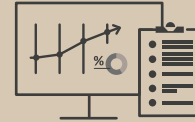
2.

Be an example to others by your actions, avoid the use of disposable tableware and packaging and encourage fellow people to do the same.



1.

Organize activities for local community - educate and explain marine litter waste problems and the need for actions. Ask the field's representatives to join and help.



3.

Help scientists, activists and municipality to gather data about marine litter (ie. Marine Litter Watch).



4.

Suggest solutions to your municipality for marine litter waste problem, which you consider to be needed.



5.

Join the activities of Eco Schools program and promote it among others.



6.

Do not ignore any violation, report it to the persons or institutions in charge.

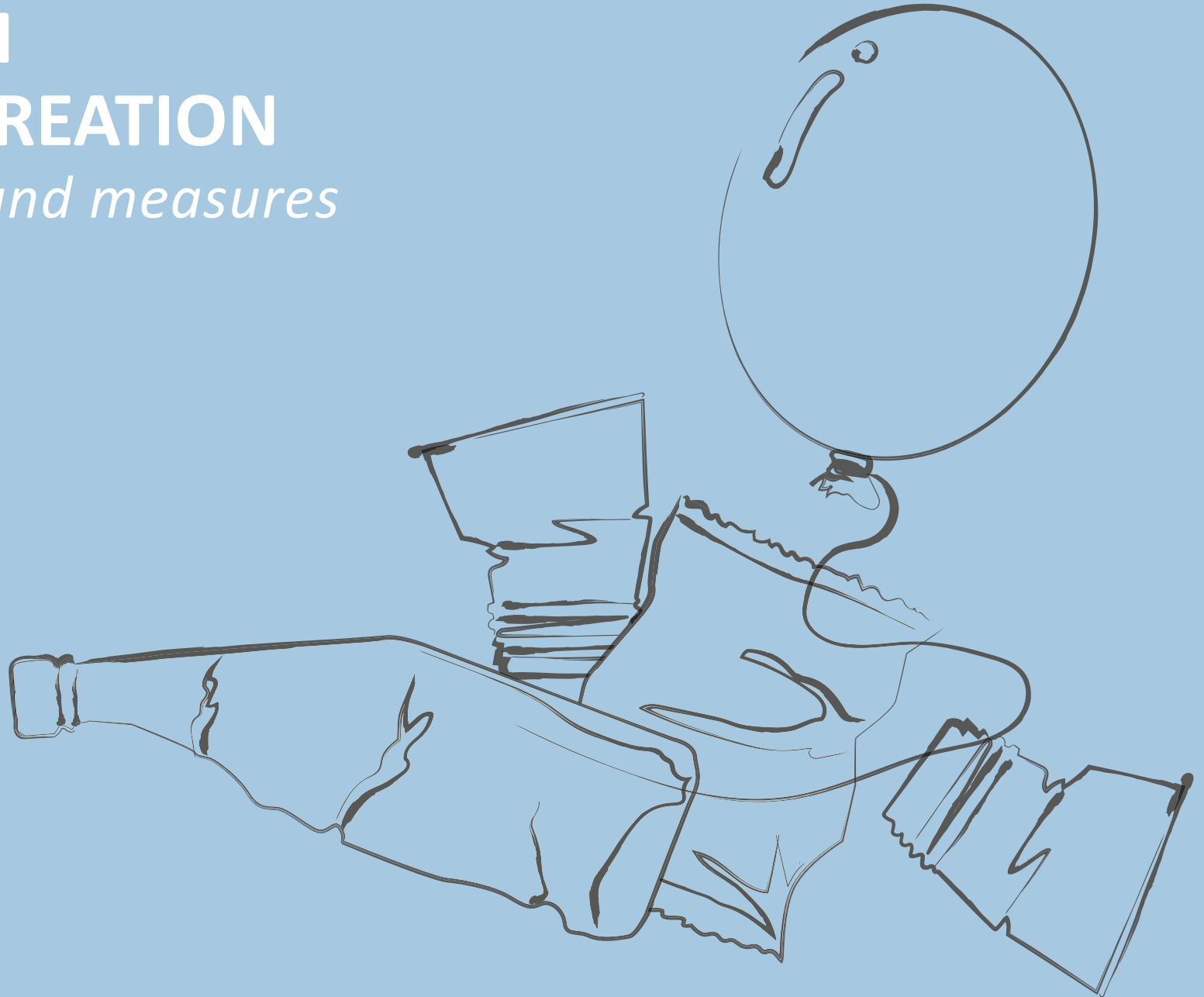


7.

Organize and take part in coastal cleaning activities.

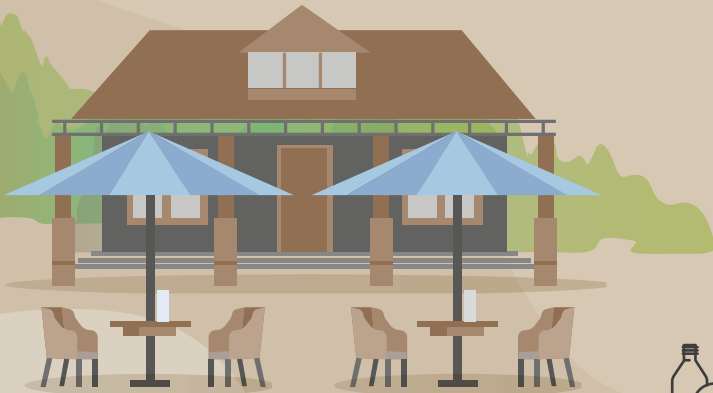
TOURISM AND RECREATION

initiatives and measures



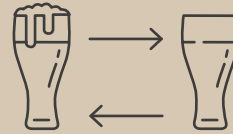


MODEL ACTION PLAN **CAFES AND VENDORS**



1.

Do not sell things that endanger the sea - plastic balloons, plastic short life cycle items and souvenirs.



2.

Implement local deposit cup system.



3.

Offer customers water for free or place a water filling station.



4.

Do not pack takeaway food in plastic or foam containers. Offer and encourage customers to use their own food takeaway containers.



5.

Do not offer disposable tableware.



6.

Take the responsibility about cleanliness around your place.



7.

Help to prevent violations of smoking restrictions in beach and coastal areas.



8.

Educate and encourage clients about responsible behaviour.



MODEL ACTION PLAN **HOTELS AND CAMPSITES**



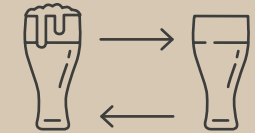
1.

Design adequate waste management (type and design of trash bins, recycling options, information signs, regular emptying of containers according to the load) system for coastal environment.



2.

Offer cafe customers water for free or place a water filling station.



3.

Implement local deposit cup system.



5.

Take responsibility about cleanliness around your place.



6.

Take part in eco-certification programs.



4.

Do not pack takeaway food in plastic or foam containers. Offer and encourage customers to use their own food takeaways containers.



7.

Apply Green procurement principles as broad as possible.

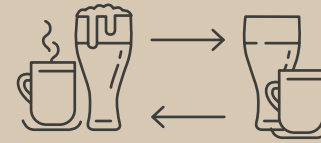


8.

Educate and encourage clients about responsible behaviour.



MODEL ACTION PLAN **EVENTS** AND FESTIVALS



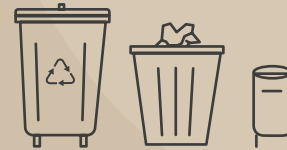
1.

Establish local deposit system for cups and/or cutlery and trays.



2.

Study and follow best practices when planning your event management.



3.

Plan and implement adequate waste management (type and design of trash bins, recycling options, information signs) system.



4.

Restrict selling of short life-cycle and plastic material souvenirs.



5.

Carefully plan and equip smoking areas so that smoking waste do not enter nature.

6.

Place water filling stations and restrict selling of bottled drinking water.



7.

Educate and encourage visitors about responsible behaviour.

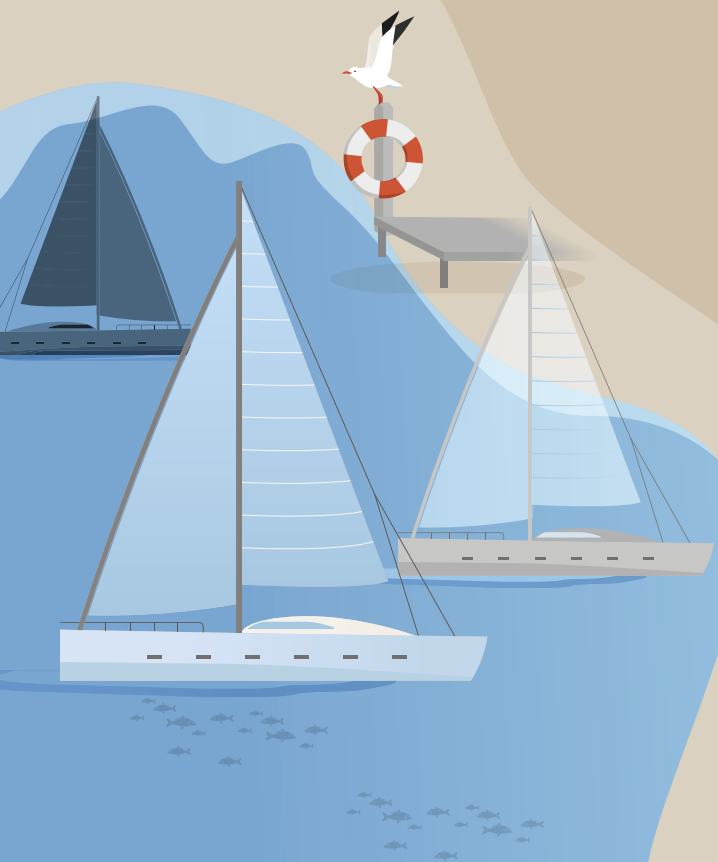


8.

Apply Green procurement as broad as possible for your event.



MODEL ACTION PLAN MARINAS



1.

Design adequate waste management (type and design of trash bins, recycling options, information signs, regular emptying of containers according to the load) system for coastal environment.



3.

Inform clients and guests about litter reduction and prevention options (information signs, icons etc.).



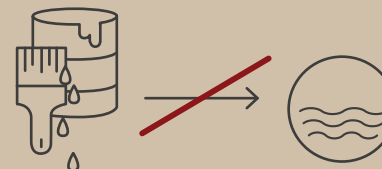
2.

Ensure controlled disposal of sewage and greywater.



4.

Take part in Blue Flag program, implementing a methodology for the environmentally friendly management and operation of the marina.



5.

Properly equip repair and maintenance areas to prevent waste from entering rivers and the sea.



6.

Educate and encourage clients about responsible behaviour.



MODEL ACTION PLAN BEACH VISITORS



1. Do not dispose of waste in nature!



2. Always use recycling facilities, when possible.



3. Avoid using of single-use tableware and packaging.



4. If you see garbage, pick it up and dispose properly.



5. Do not ignore situation, when you see violations.



6. Take your water bottle with you, so that there is no need to buy a new one every time.



7. Give preference to businesses that care about nature.



8. Encourage your friends and family to act responsibly.



BEST PRACTICES

recreation and tourism

The Ballot Bins

The Ballot Bin is a customisable ashtray proven to reduce cigarette butt litter. Each Ballot Bin displays a topical 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. Questions can be easily changed. They can be funny, topical, provocative – whatever works for your audience. In London, UK, The Ballot Bin has proven to reduce cigarette litter on busy streets by 74%.

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

Ashtray-like plastic cups

In Larnaca, Cyprus, ten stands with biodegradable plastic cups are placed at strategic points on the town's busiest beaches. Each stand has written instructions, 100 ashtrays and a special waste bin. Each visitor – smoker – can pick up the plastic ashtray-like cone 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/>
<https://www.blastic.eu/>

Plastic-free public events

In Estonia, Tallin has imposed a city-wide ban on the use of single-use plastic packaging at public events. Some exemptions for compostable plastics are still there, due to the transition towards plastic-free alternatives. The longer-term plan is to move towards the use of reusable and refillable products at public events in the city only.

<https://map.seas-at-risk.org/>

Planning green events

In Estonia, Tartu Nature House created and published a manual for organisers of green events. There is also a Facebook group called “Green events” where best practices on different topics, such as waste prevention and alternatives to single-use plastic products, are shared.

<https://map.seas-at-risk.org/>



I sail, I sort

A French litter prevention organization “Gestes Propres” (“Clean Habits”) runs its “I sail, I sort” campaign every summer since 2012. The goal of the campaign is to raise awareness of the need to adopt the right behaviour in order to reduce marine litter and encourage people to sort their waste on board and bring it all back to marinas, instead of throwing waste overboard. Bags for the waste are provided for boaters.

<http://www.pechpropre.fr>

#GreenerMarinas

The MDL, team of experienced and professionally qualified specialists in all facets of marina development and marina operations, is dedicated to environmental improvement, since the work of marinas has an significant impact on environment. They are constantly working on progress of sustainability activities and long-term investment in innovative eco initiatives across their marinas, so, accordingly, they are sharing their achievements so far and also the practices they have been working on, all within the concept #GreenerMarinas.

<https://www.mdlmarinas.co.uk/greener-marinas/>
https://www.mdlmarinas.co.uk/_assets/

Ocean friendly to go

A simple idea with tremendous impact, that’s how The Surfrider Foundation, NGO in USA, describes “Ocean friendly to go” initiative. It’s based on a very simple concept – restaurants prepare guest orders on reusable dinnerware and allow the customer to transfer the order themselves into their own containers at a designated area, established by restaurant – “A win/win/win solution for restaurants, customers, and our ocean.”

<https://sandiego.surfrider.org/>

Packaging-free shopping label

In Germany the Munich-based NGO Rehab Republic launched the label for packaging-free shopping, now can be found in other areas of the country. It identifies shops and restaurants where goods can be bought without disposable packaging and customers can bring their own reusable containers. Businesses, either it is a shop, restaurant, café, etc., can be recognised by the sticker in their windows and counters, as well as be found online.

<https://map.seas-at-risk.org/wp-content/>



Impact House

A worthwhile example of sustainable hotel can be found in Portugal, Lisbon – Impact House. It's a space where hostel committed with sustainability, a homemade food restaurant, an impact café by the pool and impactful events and gatherings meet. If the idea itself seems to be a lot of work to carry out, then many considerable small ideas and examples of environmentally friendly work and managing can be found there that can help to improve local hotels and help moving towards sustainability and implying other green initiatives.

<https://impactrip.com/impact-house/>

Inn with wildlife

In with Wildlife, initiative by Oceanfront Luxury Resort Inn by the Sea in the USA. Although this resort strive to provide luxury service for their clients which is a high profile goal to achieve, their actions towards sustainability and environmental preservation are to look up to. Fresh, underutilized and vegan local food used in the restaurant, eco-friendly cleaning products, energy and water conservation, recycling, composting of all food waste etc.

Small steps can be taken towards implementing such actions in the work of any size hotel or campsite business.

<https://innbythesea.com/about/green-initiatives>

Green Key

Both two previous examples of best practices in hotel work show that different sort of actions can be implemented in the business work. Another initiative – an eco-certification programe – is Green Key award which is a leading standard of excellence in the field of environmental responsibility and sustainable operation within the tourism industry. Green Key standard provides a list of criteria that has to be implemented in the hotel work in order to receive the award, but taking small steps by implementing at least few of them is already a huge step forward more sustainable hotel work. More information can be found on the official web page <https://www.greenkey.global/>.

HOUSEHOLDS

initiatives and measures





MODEL ACTION PLAN HOUSEHOLDS



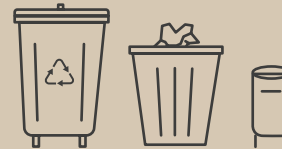
1.

Avoid unrecyclable plastic packaging, where it is possible.



2.

Get your family multi-use water bottles and tableware for days out and events.



4.

Use recycling facilities and encourage neighbours to do so as well.

3.

Do not flush sanitary items in sewerage.



5.

Give preference to businesses that care about environmental issues.



6.

Actively participate in local decision making and propose solutions and actions.



BEST PRACTICES

households

Bag It and Bin It – Don't Flush It

"Bag It and Bin It – Don't Flush It" the awareness campaign which aim was to reduce the incidence of sanitary items and other sewage related debris on beaches and riverbanks in the UK. The campaign was particularly focused on women between 15-45 asking them to not flush products down the toilet but to bag and bin them instead. Distribution of leaflets, stickers and other materials were used to raise awareness, campaign was launched in schools as well.

<https://www.marlisco.eu/>

Reuse Box

New collecting tool for reuse goods was implemented in two cities of Austria, in 2014, within the project "Reuse Box". Citizens can take boxes that are designed and optimised exactly for the goal of filling them with reusable household items, however for them to not become too heavy. Reusable items include books, crockery, tools, toys, sports equipment, electrical appliances etc. As a result, boxes were sorted and a significant amount of useful items were sold in the reuse shops, avoiding the unnecessary increase of waste.

<https://projects2014-2020.interregeurope.eu/>

Cloth nappy subsidies

In Belgium, more and more cities are encouraging parents to invest in washable nappies by offering subsidies. Using washable nappies for infants not only represents financial savings for families, but also visibly reduces the waste caused by disposable nappies. After data comparison, it shows that where subsidies are offered, families can benefit from smaller amount of money per family, claiming back a significant part of what they have spent on washable nappies.

<https://map.seas-at-risk.org/>

Waste segregation, awareness campaign & waste management

IASH, representatives of Hannover Indian Community, carried out a project which goals were particularly based on sensitising and engaging citizens in managing their waste in an environmentally and socially responsible manner (biodegradable, dry recyclables, household hazardous), training the waste collectors and processing biodegradable waste as well. By doing so, sustainable development goals, such as good health and well-being for the communities, sustainable cities and communities and climate action, were addressed.

<https://ias-hannover.de/project/>

MUNICIPAL WASTE

initiatives and measures





MODEL ACTION PLAN MUNICIPAL WASTE MANAGEMENT



1.

Regularly maintain and improve stormwater discharge systems.



4.

Support waste prevention initiatives in local municipality.

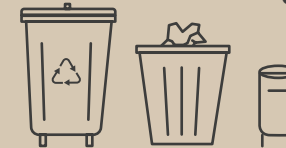


6.

Beach and river cleanup initiatives.

2.

Carefully plan placing and equipping snow dumping sites, ensuring that litter items do not enter water objects.



3.

Take into account eco-design principles when planning placement of waste management and recycling infrastructure (size and type of containers and bins, management intensity, user friendly design).



5.

Attention and regular inspections to littering hotspots.



7.

Incentives to businesses to implement waste prevention measures.



BEST PRACTICES

municipal waste

Nudge, nudge

Nudge theory is the idea that people can be encouraged and influenced to do the right thing, without promised rewards and enforcement. In city of Copenhagen, Denmark, colourful footsteps were painted which lead straight to similarly coloured litter bin. During the trial, sweets were given to pedestrians before and after the footprints were present, counting the number of wrappers left on the street, rather than thrown in the bins. Results represented a significant, positive difference and colourful footsteps showed its potential.

<https://www.zerowastescotland.org.uk/>

Bin it for Good

“Bin it for Good” initiative by “Keep Britain Tidy”, campaign that encourages cleaner streets, as well as people to use litter bins to help raise money for local charities. Initiative aims to incentivize people towards right decisions with the litter by offering local community benefits. Partnering local authorities are setting up “charity bins” where they are most accessible to enable local people to do social good simply by using litter bins. The more litter collected into the bins and less on the ground, the more money charities receive.

<http://www.keepbritaintidy.org/>

Clean-up campaigns

There are plenty of examples of successful clean-up campaigns. An example of general clean-up campaigns is Tallin, Estonia, where every spring the residents of Tallin are welcome to come together in various cleaning events to clean the streets, parks and also beaches. It is organised as a fun activity that includes entertainment and games after the actual cleaning activities, which ensure to be also educating and awareness raising.

Another example is the campaign “My Sea” (*Mana Jūra*) and its green summer expedition in Latvia. Expedition is one month long, during which people are invited to take part in the marine litter monitorings / clean-ups along the coast of the Baltic Sea, meanwhile walking along the coast 10-25 kilometers every day, reaching 500 kilometers of the coastline at the end of the month.

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

<https://www.manajura.lv/>



Municipal water houses

In Italy, there is a well-developed network of over 4000 “water houses” providing both still and sparkling water, typically run by local water service suppliers in order to reduce the amount of litter made from the bottled water (plastic bottles). To control this practice and make it work, some municipalities charge a small amount for service, e.g. a few euro cents per litre, which still makes this option cheaper than bottled water; others adopt a maximum volume per person per week. Started about ten years ago, the practice keeps showing the success in making people drink tap water again.

<https://map.seas-at-risk.org/>

The national fly-tipping reporting tool for land managers

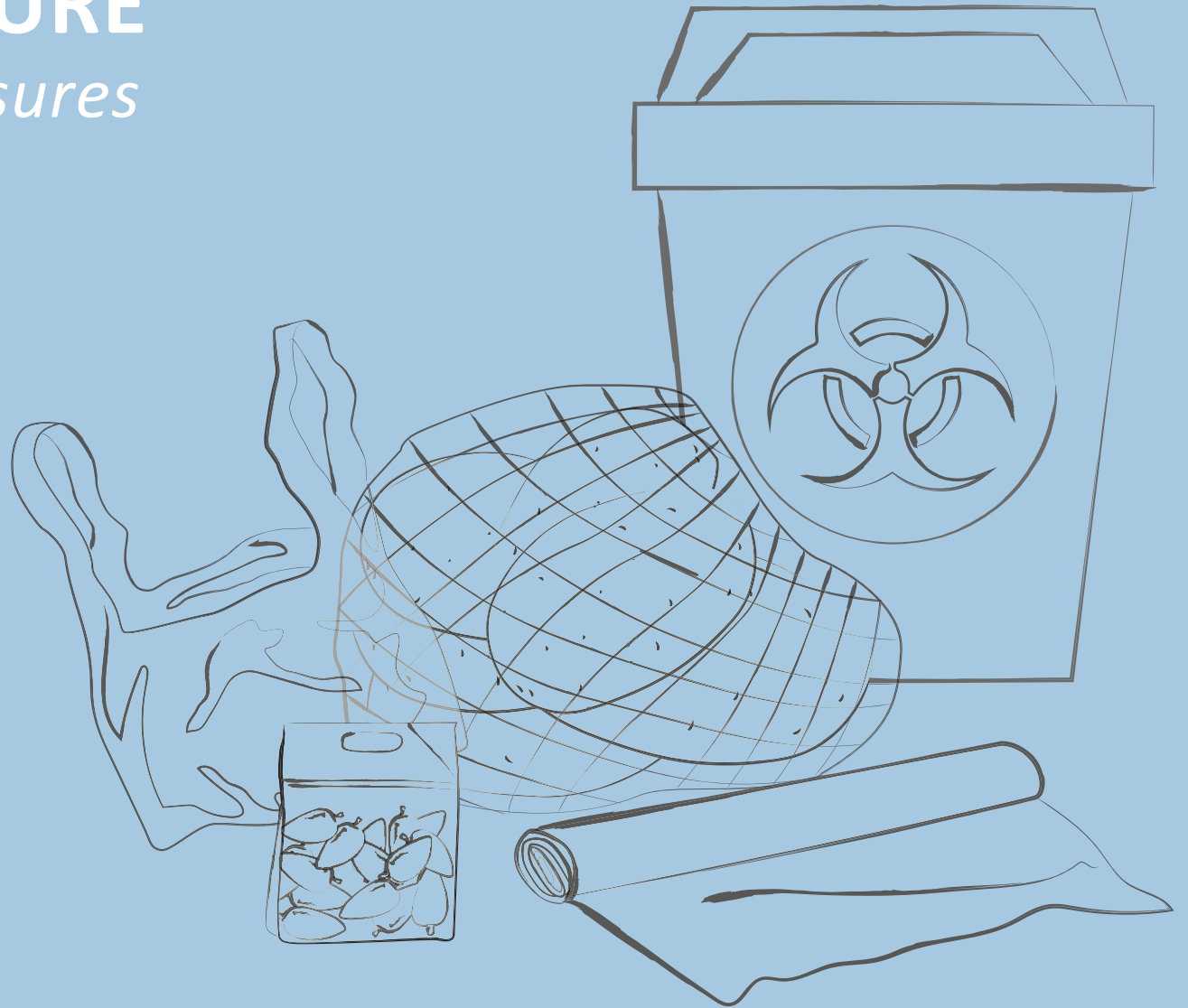
“FlyMapper” is a free tool for reporting and monitoring fly-tipping that has been developed to help local authorities and land managers to tackle fly-tipping more efficiently and effectively. Tool is not designed for the public use, rather an app and web system which allows fly-tipping incidents to be quickly recorded in the field and for the status of each incident to be tracked. Idea was inspired by the fact that each year plenty of incidents of fly-tipping are reported, costing a lot of public money to be cleared up. “FlyMapper” so far is used in Scotland, Wales and England.

<https://www.flymapper.org/>

<https://www.zerowastescotland.org.uk/>

INDUSTRIES AND AGRICULTURE

initiatives and measures



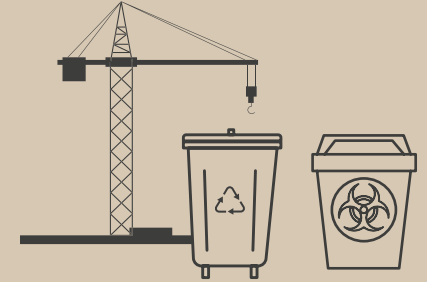


MODEL ACTION PLAN INDUSTRIES AND AGRICULTURE



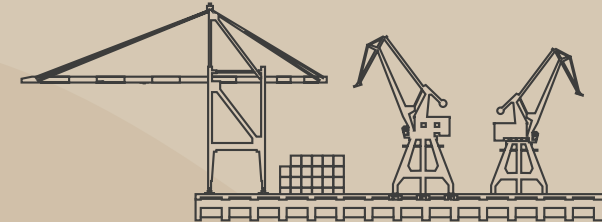
1.

Awareness raising and practical actions to collect agricultural film and plastic packaging.



2.

Attention to proper management of the construction waste.



3.

Waste prevention activities and actions in ports.



4.

Stakeholder cooperation platforms in local community.



5.

Incentives to businesses implementing best practices and waste prevention measures.



BEST PRACTICES

industries and agriculture

Fishing for litter

“Fishing for Litter” is an initiative based on cooperation with fisheries’ associations. Fishermen are asked to voluntarily bring ashore the litter, collected in the nets during the casual fishing operations. Fishermen are not financially compensated for their engagement, but the disposal logistics are for free. Fishermen are provided with special bags to store the collected litter and containers for waste disposal in selected harbours. Later, all litter collected are analyzed in order to investigate waste composition, amount and potential recyclability.

<https://www.marlisco.eu/>

<https://aqua-lit.eu/>

Waste reception point and distribution of waste bins to vessels

In Portugal, back in 2007 and 2008 waste bins were distributed to vessels operating in the Cascais municipality, in order to discourage waste disposal into the sea. Later, the first reception point – Ecopoint – for waste was implemented in the Fishing Port of Cascais, to receive especially the hazardous waste like batteries, oils, oil filters, contaminated packaging etc. The fishermen themselves

are responsible for maintenance of the Ecopoint and waste management, by calling the waste management companies when Ecopoint is full.

<https://www.marlisco.eu/>

A good practice in communication, training and information for farmers: a case from Poland

In the context of environment, agriculture is well known for its use of plastic, and as long as it is not prohibited at all, it is important to raise the awareness and share some good practices to include in the work routines. To do so, an important tool is communication. A case from Poland shows three examples in communication of the problem – using influencers and existing channels of communication, using sale channels, organizing training in cooperation with other entities.

<https://ec.europa.eu/>



Fish & Click

A public research program “Fish & Click” is a part of the INDIGO project. The goal of the program is to collect information on abandoned, lost and discharged fishing gear, both found at the sea and on the seashore. The data is later used to achieve the goal of the project – to develop a biodegradable fishing gear to reduce the total quantity of plastic in the ocean. To achieve the goal of the program, mobile application is developed where anyone – walkers, drivers, boaters – can fill the protocol to log their sighting. The data collected is relevant not only for developing the equipment, but also for being informed and aware of the current situation.

<https://fishandclick.ifremer.fr/about>

Plastic-free airports

Rome’s Fiumicino-Leonardo da Vinci airport has taken on the challenge to become a “plastic-free” international hub. Since airports are producing both plastic and organic waste, the airport has set itself the goal of a progressive reduction of the waste produced. Airport is building a composting plant to transform organic waste made into compost, working on a project to reduce the amount of plastic in the airport and other binding activities, finally, installing PET bottle and aluminium can compacting machines at the security controls in the terminals in order to reduce the amount of liquid waste and ensure that the containers themselves are recovered.

<https://map.seas-at-risk.org/>